# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION

Bulletin No. 148

BRISBANE

$\phi = 27°\ 28'\ 41''$ S.. $\lambda = 153°\ 1'\ 52''$ E., h = 15m.

Foundation: Semi-consolidated alluvium of raised river terrace.

International Seismological Centre

INSTRUMENTS AND CONSTANTS.

| INSTRUMENT. | RATE OF RECORDING. | COMPONENT. | FREE PERIOD. | DAMPING. | STATIC MAGNIFICATION. |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) .. | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) .. | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| 1950 | | | | |
| Jan. 2nd | iPZ | 15-19-08 | B | Dilatation |
| | iPNE | 19-08 | M-S | to south-west. |
| | iSNE | 22-47 | " | Δ = 20Δ |
| " 3rd | iPZ | 03-01-21 | B | Compression |
| | iSNE | 08-51 | M-S | |
| " 5th | | | | Long waves commencing at 11 h. 05 m. |
| " 8th | iPZ | 20-49-02 | B | Compression |
| " 12th | iPZ | 12-11-21 | B | Dilatation |
| | iPE | 11-21 | M-S | |
| | iPN | 11-23 | " | Δ = 26.5° |
| | ipPE | 12-49 | " | |
| | iSNE | 15-29 | " | Depth about 500 km. |
| " 13th | iPZ | 00-16-01 | B | |
| | iPN | 23-57-36 | M-S | |
| | iSNE | 24-01-40 | " | Δ = 23° |
| | iSSE | 02-45 | " | |
| " 15th | i N | 18-02-55 | M-S | |
| | i N | 03-52 | " | |
| | iSN | 06-12 | " | |
| | iPZ | 23-56-59 | B | |
| | iPPN | 57-18 | M-S | Δ = 21.5° |
| | i N | 57-50 | " | |
| | iSN | 24-00-49 | " | |
| " 16th | | | | Long waves commencing about 05 h. 19 m. |
| " 23rd | iPZ | 10-08-20 | B | |
| " 24th | iPZ | 16-51-22 | B | Dilatation |
| | iPNE | 51-24 | M-S | |
| | isPNE | 52-07 | " | ° = 18° |
| | iSNEZ | 54-51 | M-S & B | Depth 100 km. |

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| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Jan. 25th | iPZ | 00-46-12 | B | Dilatation |
| | iPZ | 02-15-15 | B | |
| | iPZ | 08-10-36 | B | |
| " 26th | iPZ | 03-57-30 | B | |
| " 27th | ePE | 19-24-47 | M-S | |
| | i E | 25-27 | " | |
| | iPPE | 26-00 | " | |
| | iSE | 30-04 | " | |
| " 31st | iPZ | 18-54-12 | B | |

International Seismological Centre

O.A. Jones.

O.A. Jones

Officer in Charge

Univ. Q'ld. Seismological Station.

Govt. Printer, Brisbane.")

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 19 January, 1950.

International Seismological Centre

| Date / Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 02 | 02 | 02 | 02 | 02 | 01 | 01 | 01 |
| 2 | 02 | 03 | 02 | 02 | 02 | 02 | 02 | 01 |
| 3 | 01 | 02 | 03 | 02 | 02 | 02 | 02 | 01 |
| 4 | 01 | 01 | 01 | 01 | 02 | 01 | 01 | 00 |
| 5 | 02 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 6 | 01 | 02 | 02 | 02 | 01 | 01 | 02 | 02 |
| 7 | 02 | 02 | 02 | 02 | 01 | 03 | 02 | 01 |
| 8 | 02 | 01 | 01 | 01 | 01 | 01 | 00 | 01 |
| 9 | 01 | 02 | 01 | 01 | 01 | 01 | 01 | 01 |
| 10 | 01 | 02 | 02 | 01 | 01 | 01 | 01 | 00 |
| 11 | 01 | 01 | 02 | 01 | 00 | 01 | 01 | 01 |
| 12 | 02 | 03 | 03 | 03 | 01 | 02 | 01 | 01 |
| 13 | 03 | 04 | 02 | 02 | 02 | 01 | 01 | 01 |
| 14 | 04 | 02 | 02 | 01 | 01 | 02 | 01 | 01 |
| 15 | 02 | 03 | 03 | 02 | | | | |
| 16 | 03 | 02 | 03 | 04 | 02 | 02 | 02 | 03 |
| 17 | 05 | 04 | 05 | 05 | 03 | 04 | 03 | 02 |
| 18 | 05 | 08 | | | 03 | 03 | 04 | 03 |
| 19 | 03 | 06 | 05 | 07 | 02 | 05 | 04 | 04 |
| 20 | 05 | 05 | 04 | 03 | 03 | 03. | 03 | 02 |
| 21 | 03 | 04 | 05 | 04 | 02 | 04 | 05 | 04 |
| 22 | 03 | 03 | 03 | 02 | 03 | 04 | 03 | 02 |
| 23 | 01 | 02 | 02 | 01 | 02 | 01 | 01 | 00 |
| 24 | 01 | 01 | 01 | 00 | 01 | 00 | 01 | 00 |
| 25 | 01 | 00 | 01 | 00 | 01 | 00 | 00 | 01 |
| 26 | 01 | 01 | 01 | 00 | 01 | 01 | 01 | 01 |
| 27 | 01 | 01 | 01 | | 00 | 01 | 01 | 01 |
| 28 | 01 | 01 | | | 02 | 02 | 01 | 01 |
| 29 | 01 | 02 | 01 | | 01 | 02 | 02 | 01 |
| 30 | 02 | 01 | 01 | | 02 | 01 | 01 | 01 |
| 31 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
## BRISBANE

Bulletin No. 149

International Seismological Centre

$\phi = 27°\ 28'\ 41''$ S.. $\lambda = 153°\ 1'\ 52''$ E., $h = 15$m.

Foundation: Semi-consolidated alluvium of raised river terrace.

INSTRUMENTS AND CONSTANTS.

| INSTRUMENT. | RATE OF RECORDING. | COMPONENT. | FREE PERIOD. | DAMPING. | STATIC MAGNIFICATION. |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) .. | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) .. | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|

CORRECTION TO JANUARY 1950 BULLETIN

Under January 15th the readings for two earthquakes are shown as though they were one shock. A line should be drawn between iSN 18-06-12 and iPZ 23-56-59.

| | | | | |
|---|---|---|---|---|
| 1950 | | | | |
| Feb. 1st | ePZ | 14-45-31 | B | |
| | eNE | 47-02 | M-S | |
| | iNE | 51-25 | " | |
| " 2nd | iPZ | 14-45-44 | B | |
| | iPZ | 23-45-~~44~~00 | B | |
| | ePN | 45-10 | M-S | |
| | iSN | 54-15 | " | |
| | eSE | 54-25 | " | |
| " 3rd | iPZ | 00-45-00 | B | Compression |
| | iPZ | 05-03-07 | B | Compression |
| | eNE | 12-24 | M-S | |
| | iPZ | 06-00-33 | B | |
| | i E | 03-05 | M-S | |
| " 5th | iPZ | 01-28-42 | B | |
| | iPN | 28-46 | M-S | |
| | iPE | 28-47 | " | $\Delta = 25°$ |
| | i Z | 28-53 | B | |
| | iPPN | 29-20 | M-S | |
| | ePPE | 29-21 | " | |
| | iSN | 33-02 | " | Correct |
| | iSE | 33-10 | " | |
| | $iL_2N$ | 35-12 | " | |
| " 6th | Long waves commencing at about 23h. 03 m. 30 s. | | | |

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| DATE. | PHASE. | h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Feb. 7th | iPZ | 00-30-10 | B | Compression |
| | ePN | 30-10 | M-S | |
| | iPE | 30-12 | " | Δ = 18.5° |
| | iPPZ | 30-26 | B | |
| | iPPE | 30-28 | M-S | |
| | iPPN | 30-29 | " | Correct |
| | iSN | 33-34 | " | |
| | eSE | 33-37 | " | |
| " 8th | iPN | 15-07-02 | M-S | |
| | iPZ | 07-03 | B | |
| | iSN | 10-39 | " | |
| " 11th | iPZ | 01-34-47 | B | Compression |
| | eSNE | 45-13 | M-S | Δ = 83° |
| | eLN | 02-03-38 | " | |
| | ePE | 11-36-00 | M-S | |
| | iPZ | 36-02 | B | |
| | epPE | 36-52 | M-S | |
| | iPPE | 37-26 | " | |
| | ePPN | 37-29 | " | |
| | i E | 38-33 | " | Δ = 32° |
| | eSNE | 40-56 | " | Depth 250 km. |
| | isSN | 42-33 | " | |
| | esSE | 42-36 | " | |
| | iSSNE | 43-33 | " | |
| " 12th | iPZ | 22-20-14 | B | |
| | iPE | 20-14 | M-S | |
| | iPN | 20-15 | " | |
| | ePPE | 20-56 | " | Δ = 24.5° |
| | iSNE | 24-36 | " | |
| | iSSE | 25-38 | " | |
| | $iL_RN$ | 26-50 | " | Correct |
| | $iL_RE$ | 26-53 | " | |
| " 13th | iPZ | 11-32-01 | B | |
| | ePN | 32-06 | M-S | |
| | i Z | 32-11 | B | Δ = 23° |
| | e E | 32-18 | M-S | |
| | iSN | 36-04 | " | |
| | eSE | 36-04 | " | |
| | $eL_RNE$ | 38-30 | " | |
| " 14th | Long waves commencing about 14 h. 32 m. | | | |
| " 15th | iPZ | 14-47-55 | B | |
| " 20th | Long waves commencing at 18 h. 48 m. 30 s. | | | |
| " 21st | iPZ | 10-10-44 | B | |
| " 25th | iPZ | 10-01-37 | B | |
| | iPZ | 21-18-46 | B | |
| " 28th | iPZ | 10-31-56 | B | Dilatation |
| | iPN | 32-00 | M-S | |
| | ipPN | 33-19 | " | |
| | i Z | 33-50 | B | |
| | i N | 33-55 | M-S | Δ = 76° |
| | iSE | 41-03 | " | Depth 350 km. |
| | iSN | 41-04 | " | |
| | isSE | 43-15 | " | |
| | i E | 47-20 | " | |

O. A. Jones.

O.A. Jones

Officer in Charge

Univ. Q'ld. Seis. Station.

International Seismological Centre

Govt. Printer, Brisbane.

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 20 February, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 00 |
| 2 | 01 | 01 | 01 | 02 | 01 | 00 | 01 | 00 |
| 3 | 01 | 01 | 02 | 02 | 01 | 01 | 01 | 02 |
| 4 | 03 | 03 | 03 | 02 | 02 | 02 | 02 | 01 |
| 5 | 02 | 02 | 01 | 02 | 02 | 01 | 01 | 01 |
| 6 | 02 | 03 | 03 | 02 | 01 | 02 | 01 | 01 |
| 7 | 02 | 02 | 02 | | 02 | 02 | 01 | 01 |
| 8 | 01 | 02 | 02 | 01 | 01 | 01 | 02 | 01 |
| 9 | 02 | 01 | 01 | 01 | 02 | 01 | 01 | 01 |
| 10 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 11 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 12 | 01 | 01 | 01 | 01 | 01 | 01 | 00 | 00 |
| 13 | 01 | 01 | 01 | 01 | 02 | 01 | 01 | 00 |
| 14 | 01 | 01 | 01 | 02 | 01 | 01 | 01 | 01 |
| 15 | 01 | 01 | 02 | 02 | 01 | 01 | 01 | 01 |
| 16 | 02 | 01 | 02 | 01 | 01 | 02 | 01 | 01 |
| 17 | 01 | 02 | 02 | 01 | 02 | 01 | 01 | 01 |
| 18 | 02 | 03 | 03 | 04 | 01 | 02 | 02 | Light Drifted |
| 19 | 03 | | 03 | 02 | | 02 | 02 | 02 |
| 20 | 02 | 02 | 03 | 03 | 03 | 02 | 02 | 02 |
| 21 | 02 | 02 | 01 | 02 | 02 | 01 | 02 | 01 |
| 22 | | | | | 02 | 01 | 01 | 01 |
| 23 | 01 | 01 | 01 | | 01 | 02 | 01 | 01 |
| 24 | 01 | 02 | 02 | 02 | 02 | 02 | 01 | 02 |
| 25 | 02 | 03 | 03 | 02 | 02 | 03 | 03 | 03 |
| 26 | 01 | 02 | 02 | 02 | 02 | 03 | 02 | 02 |
| 27 | | | | | 02 | 02 | 01 | 01 |
| 28 | 01 | 02 | 02 | 01 | 01 | 02 | 01 | 01 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
## BRISBANE

Bulletin No. 150

$\phi = 27°\ 28'\ 41''$ S.. $\lambda = 153°\ 1'\ 52''$ E., h = 15m.

Foundation: Semi-consolidated alluvium of raised river terrace.

International Seismological Centre

INSTRUMENTS AND CONSTANTS.

| INSTRUMENT. | RATE OF RECORDING. | COMPONENT. | FREE PERIOD. | DAMPING. | STATIC MAGNIFICATION. |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) .. | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) .. | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

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| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|

A Sprengnether portable demonstration horizontal component seismograph has been added to the equipment of the University of Queensland Seismological Station. The primary use of this instrument is for lecture demonstration purposes, but, as far as this allows, it will be used for recording purposes. The constants have not yet been determined, but will be given as soon as possible. The instrument is set up along an east-west line and is operating at a period of about 7.2 seconds.

1950

| | | | | | |
|---|---|---|---|---|---|
| March | 1st | iPNE | 08-32-36 | M-S | |
| | | ePZ | 32-37 | B | |
| | | iPPNE | 34-25 | M-S | |
| | | iSNE | 39-38 | " | |
| | | $eL_RE$ | 45-50 | " | |
| | | $eI_RN$ | 46-10 | " | |
| " | 2nd | iPZ | 18-52-58 | B | Compression |
| | | eSE | 19-04-00 | M-S | |
| " | 3rd | iPZ | 10-49-20 | B | |
| | | ePE | 49-22 | M-S | |
| | | iPPE | 50-10 | " | |
| | | iSE | 54-10 | " | $\Delta = 29°$ |
| | | iSSE | 55-27 | " | |
| | | $iL_RE$ | 56-56 | " | |
| " | 4th | iPZN | 06-50-32 | B and M-S | |
| | | eSE | 54-09 | M-S | |
| | | iPZ | 16-01-51 | B | $\Delta = 82°$ |
| | | iSN | 12-12 | M-S | |
| " | 5th | iPZ | 09-28-07 | B | Dilatation |
| | | iPZ | 10-37-35 | B | Dilatation. Long waves commence on M-S records about 10 h. 48 m. 30 s. |

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| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| March 5th (Cont'd) | iPZ | 14-19-52 | B | Compression |
| | iSN | 23-23 | M-S | Δ = 35° |
| | iSZ | 23-25 | B | |
| " 7th | iPZ | 02-16-28 | B | |
| | iPN | 16-29 | M-S | Dilatation |
| | iPE | 16-31 | " | |
| | iPPNE | 18-17 | " | Δ = 48° |
| | iSN | 23-24 | " | |
| | iSSE | 26-44 | " | |
| " 9th | iPZ | 10-23-22 | B | Dilatation |
| " 13th | i E | 19-20-13 | M-S | Long waves commencing |
| | i N | 20-28 | " | at about 19 h. 22 m. |
| " 16th | iPZ | 19-30-05 | B | Δ = 25° |
| | isPZ | 31-27 | " | Depth approx. 250 km. |
| | i E | 31-35 | M-S | |
| | iSZ | 34-09 | B | |
| | iSE | 34-10 | M-S | |
| " 18th | | Long waves | on M-S Records commencing at 05 h. 33 m. | |
| " 25th | iPZ | 07-03-32 | B | Compression |
| | | Long waves | on M-S records commencing at 22 h. 49 m. | |
| " 27th | ePZ | 04-47-12 | B | |
| | ePZ | 06-52-00 | B | |
| | iPZ | 13-16-32 | B | |
| | iSE | 26-45 | M-S & S. | |
| | ePE | 21-27-45 | M-S | Compression |
| | iPZ | 27-47 | B | |
| | iPE | 27-47 | M-S | Δ = 53° |
| | i Z | 29-58 | B | |
| | iSN | 35-12 | M-S | |
| | eSE | 35-13 | M-S | |
| | iSE | 35-14 | B | |
| | iPZ | 22-15-25 | B | |
| " 28th | iPZ | 20-09-11 | B | |
| | iSNE | 13-11 | M-S | |
| " 29th | iPZ | 12-58-38 | B | Dilatation |
| | ePE | 58-44 | M-S | |
| | i E | 59-27 | S | |
| | i E | 59-38 | " | |
| | i E | 13-04-02 | " | |
| | e E | 04-02 | M-S | |
| | $eL_2E$ | 06-49 | " | |
| | iPNE | 17-47-04 | M-S | |
| | iPZ | 47-05 | B | |
| | iPE | 47-06 | S | Δ = 27.5° |
| | ipPN | 47-23 | M-S | Depth 100 km. |
| | ipPE | 47-24 | M-S & S | |
| | ipPZ | 47-28 | B | |
| | iPPE | 47-57 | M-S | |
| | ePPN | 48-00 | " | In minute break |
| | eSN | 51-44 | " | |
| | eSZ | 51-46 | B | |
| | iSE | 51-49 | M-S & S | |
| | isSE | 52-15 | M-S | |
| | isSE | 52-17 | S | |
| | isSN | 52-18 | M-S | |
| | i E | 53-19 | " | |

International Seismological Centre

Govt. Printer, Brisbane.

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| March 30th | iPZ | 15-38-54 | B | |
| | iPZ | 22-05-11 | B | |

International Seismological Centre

O.A. Jones

O.A. Jones

Officer in Charge

# MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 21 March 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | 02 | 02 | | | 02 | 01 | 01 |
| 2 | | | | | 01 | 01 | 00 | 01 |
| 3 | | | | | 01 | 01 | 01 | 01 |
| 4 | 00 | 01 | 02 | 02 | 01 | 02 | 01 | 02 |
| 5 | 03 | 03 | 03 | 03 | 03 | 03 | 02 | 03 |
| 6 | | | | | | | | |
| 7 | 02 | 03 | 02 | | 03 | 02 | 03 | 03 |
| 8 | 04 | A4 | 05 | 04 | 03 | 03 | 04 | 03 |
| 9 | 03 | 03 | 05 | 07 | 05 | 04 | 06 | 06 |
| 10 | 09 | 12 | 14 | 10 | 09 | 15 | 14 | 12 |
| 11 | 07 | 05 | 04 | 02 | 10 | 09 | 04 | 02 |
| 12 | 02 | 02 | 03 | 02 | 03 | 02 | 02 | 02 |
| 13 | 02 | 02 | 03 | 03 | 02 | 03 | 03 | 02 |
| 14 | 03 | 02 | 02 | 02 | 02 | 02 | 01 | 02 |
| 15 | 02 | 02 | 01 | 01 | 01 | 00 | 01 | 01 |
| 16 | | | | | | | | |
| 17 | 01 | 02 | 01 | 01 | 01 | 01 | 01 | 01 |
| 18 | 01 | 01 | 01 | 01 | 00 | 01 | 01 | 01 |
| 19 | 02 | 01 | 01 | 01 | 01 | 00 | 01 | 00 |
| 20 | 02 | 02 | 02 | 01 | 01 | 02 | 02 | 01 |
| 21 | 02 | 03 | 02 | 02 | 02 | 01 | 01 | 01 |
| 22 | 01 | 02 | 02 | 01 | 01 | 01 | 01 | 01 |
| 23 | 02 | 01 | | | 02 | 01 | 01 | 01 |
| 24 | 02 | 03 | 03 | 03 | 02 | 03 | 02 | A2 |
| 25 | 03 | 03 | 03 | 02 | 02 | 03 | 02 | 02 |
| 26 | | | | | 02 | 01 | 01 | 01 |
| 27 | 01 | 01 | 01 | 01 | 02 | 01 | 01 | 01 |
| 28 | 01 | 02 | 02 | 00 | 01 | 01 | 02 | 01 |
| 29 | 02 | 02 | 01 | 01 | 02 | 02 | 01 | 00 |
| 30 | 01 | 01 | 00 | 00 | 01 | 01 | 01 | 00 |
| 31 | 01 | 00 | 01 | 01 | 01 | 01 | 00 | 00 |

SPRENGNETHER INSTRUMENT

| | | | | |
|---|---|---|---|---|
| 24 | 14 | 15 | 20 | 16 |
| 25 | 15 | 16 | 15 | 13 |
| 26 | 10 | 10 | 14 | 13 |
| 27 | 10 | 11 | 20 | 15 |
| 28 | 15 | 18 | 18 | 14 |
| 29 | 12 | 12 | 13 | 12 |
| 30 | 11 | 12 | 15 | 13 |
| 31 | 15 | 14 | 10 | 12 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

Bulletin No. 151

International Seismological Centre

$\phi = 27°\ 28'\ 41''$ S.. $\lambda = 153°\ 1'\ 52''$ E., $h = 15$m.

Foundation: Semi-consolidated alluvium of raised river terrace.

INSTRUMENTS AND CONSTANTS.

| INSTRUMENT. | RATE OF RECORDING. | COMPONENT. | FREE PERIOD. | DAMPING. | STATIC MAGNIFICATION. |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) .. | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) .. | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| CORRECTION: The new Sprengnether Seismograph is set up on a N-S line recording the E-W component, not on an E-W line as previously stated. | | | | |
| 1950 | | | | |
| April 2nd | iPZ | 20-02-39 | B | Dilatation |
| | iSN | 06-34 | M-S | |
| | eSE | 06-37 | M-S and S | |
| " 3rd | iPZ | 06-36-23 | B | Dilatation |
| | iPE | 36-24 | M-S | |
| | ePN | 36-26 | " | |
| | esPZ | 37-07 | B | |
| | isPE | 37-08 | M-S | |
| | i E | 37-24 | M-S | $\Delta = 17.5°$ |
| | iSN | 39-33 | " | Depth about 150 km. |
| | iSE | 39-34 | " | |
| | eSZ | 39-35 | B | |
| | i N | 40-21 | M-S | |
| | e E | 40-25 | " | |
| " 4th | iPZ | 10-25-58 | B | Dilatation |
| | ePZ | 18-57-17 | B | |
| | e Z | 19-00-42 | " | |
| " 5th | ePZE | 19-50-52 | B and S | |
| | iP*Z | 51-06.6 | B | $\Delta = 6.8°$. |
| | ePgZ | 51-22 | " | $H_{s-p}$ 19h. 49m. 12.7s. |
| | iSZ | 52-07.8 | " | |
| | iS*Z | 52-28.8 | " | Felt in Mackay district, Queensland |
| | iSgZ | 52-48 | " | |
| | i E | 52-50 | S | |
| " 8th | iPZ | 11-37-39 | B | Compression |
| | i Z | 38-31 | | |
| | iPZ | 12-14-38 | B | Dilatation |

Govt. Printer, Brisbane.(20)

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| April 9th | iPZ | 07-43-31 | B | |
| | iPZ | 20-53-39 | B | |
| " 10th | iPZ | 06-14-04 | B | Dilatation |
| | iSNE | 21-45 | M-S | |
| " 14th | e E | 20-21-16 | M-S | |
| | eNE | 23-12 | " | |
| | eNE | 28-35 | " | |
| " 19th | iPZ | 16-13-29 | B | Compression |
| | iNZ | 19-20 | " | |
| | e N | 21-15 | M-S | |
| | iPZ | 14-42-54 | B | |
| " 25th | iPZ | 01-00-12 | B | |
| | i Z | 00-29 | " | |
| | iSE | 04-25 | M-S | |
| " 26th | iPZNE | 07-15-22 | B, M-S and S | Dilatation |
| | i Z | 15-38 | B | |
| | i Z | 16-39 | " | |
| | iPPN | 17-31 | M-S | |
| | eSE | 24-03 | S | |
| | eSN | 24-03 | M-S | |
| " 29th | iPZ | 20-25-59 | B | Dilatation |
| | iPN | 26-00 | M-S | |
| | ePE | 26-00 | " | |
| | eSNE | 29-21 | " | |
| " 30th | Long waves commencing about 11-03-30 on M-S. | | | |

O.A. Jones.

O.A. Jones

Officer in Charge

Univ. Q'ld. Seismological Station.

International Seismological Centre

t, Printer, Brisbane.(6)

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 22 April, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 2 | 02 | 02 | 01 | 01 | 01 | 01 | 02 | 01 |
| 3 | 01 | 02 | 01 | 02 | 01 | 01 | 01 | 01 |
| 4 | 02 | 02 | 02 | 01 | 00 | 01 | 01 | 01 |
| 5 | 01 | 01 | 01 | 02 | 01 | 01 | 01 | 01 |
| 6 | 02 | 02 | 01 | 02 | 01 | 02 | 01 | 01 |
| 7 | 02 | 02 | 02 | 02 | - | 02 | 01 | 02 |
| 8 | 01 | 01 | 02 | 01 | 02 | 01 | 02 | 02 |
| 9 | 02 | 01 | 02 | 01 | 03 | 02 | 02 | 02 |
| 10 | 01 | 02 | 01 | 02 | 01 | 02 | 01 | 01 |
| 11 | | No Record | | | - | 02 | 02 | 02 |
| 12 | 02 | 02 | 02 | 02 | 01 | 01 | 02 | 02 |
| 13 | | | | | | | | |
| 14 | - | 02 | 01 | 01 | 02 | 01 | 01 | 01 |
| 15 | 01 | 01 | 01 | 01 | 01 | 02 | 01 | 01 |
| 16 | 01 | 01 | 01 | 01 | 00 | 01 | 01 | 01 |
| 17 | - | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 18 | 01 | 01 | 02 | 02 | 01 | 01 | 02 | 01 |
| 19 | 01 | 01 | 01 | 01 | - | 01 | 01 | 01 |
| 20 | 01 | 01 | 02 | 02 | 01 | 02 | 02 | 01 |
| 21 | 02 | 02 | 04 | 03 | 02 | 02 | 03 | 03 |
| 22 | 04 | 03 | 02 | 02 | - | 05 | 02 | 01 |
| 23 | 02 | 01 | 01 | 01 | 02 | 01 | 02 | 02 |
| 24 | - | 01 | 02 | 01 | 02 | 01 | 02 | 02 |
| 25 | - | 01 | 01 | 01 | - | 02 | 01 | 01 |
| 26 | 01 | 01 | 01 | 01 | - | - | 01 | 02 |
| 27 | 01 | 01 | 01 | 02 | No Record | | | |
| 28 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 29 | 01 | 02 | 02 | 01 | 02 | 01 | 01 | 01 |
| 30 | - | 01 | 01 | 01 | - | 01 | 01 | 01 |

SPRENGNETHER

# MICROSEISM AMPLITUDES ~~(Milne-Shaw Seismographs)~~

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 22 April, 1950

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component E-W 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 05 | 06 | 07 | 06 | | | | |
| 2 | 05 | 05 | 07 | 05 | | | | |
| 3 | No Records | | | | | | | |
| 4 | No Records | | | | | | | |
| 5 | 06 | 06 | 07 | 06 | | | | |
| 6 | 06. | 08 | 09 | 09 | | | | |
| 7 | No Records | | | | | | | |
| 8 | 08 | 07 | 08 | 09 | | | | |
| 9 | 06 | 06 | 07 | 05 | | | | |
| 10 | 06 | 06 | 08 | 10 | | | | |
| 11 | - | 13 | 15 | 11 | | | | |
| 12 | - | - | 11 | 10 | | | | |
| 13 | - | 08 | 09 | 09 | | | | |
| 14 | No Records | | | | | | | |
| 15 | 10 | 10 | 10 | 11 | | | | |
| 16 | No Records | | | | | | | |
| 17 | - | 10 | 11 | 10 | | | | |
| 18 | 09 | 08 | 09 | 05 | | | | |
| 19 | 05 | 06 | 07 | 06 | | | | |
| 20 | No Record | | | | | | | |
| 21 | No Record | | | | | | | |
| 22 | No Record | | | | | | | |
| 23 | No Record | | | | | | | |
| 24 | No Record | | | | | | | |
| 25 | No Record | | | | | | | |
| 26 | - | 08 | 07 | 08 | | | | |
| 27 | 10 | 06 | 07 | 07 | | | | |
| 28 | No Record | | | | | | | |
| 29 | 09 | 10 | 10 | 07 | | | | |
| 30 | 06 | 06 | 07 | 07 | | | | |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

$\phi = 27°\ 28'\ 41''$ S., $\lambda = 153°\ 1'\ 52''$ E., h = 15m. Bulletin No. 158

International Seismological Centre

Foundation: Semi-consolidated alluvium of raised river terrace.

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| 1950 | | | | |
| May 1st | iPZ | 13-29-47 | B | Dilatation |
| " 7th | iPNZ | 06-42-11 | M-S and B | Dilatation |
| | iPPZ | 43-01 | B | |
| | iPPN | 43-02 | M-S | |
| | eSZ | 47-10 | B | $\Delta = 30.4°$ |
| | iSNE | 47-11 | M-S and S | |
| | $iL_RN$ | 49-50 | M-S | |
| " 10th | iPNZ | 10-24-44 | M-S and B | Dilatation |
| | iPPN | 25-22 | M-S | |
| | iSN | 28-50 | " | |
| " 12th | iPZ | 16-47-02 | B | |
| | ePZ | 17-26-19 | B | |
| | ePZ | 21-26-40 | B | |
| | iSN | 30-56 | M-S | |
| | iSE | 30-58 | M-S and S | $\Delta = 24.5°$ |
| | iSSN | 31-34 | M-S | |
| | i N | 34-06 | " | |
| | i E | 34-42 | S | |
| " 13th | iPZ | 05-12-04 | B | Dilatation |
| | iPZ | 14-50-10 | B | Dilatation |
| | i Z | 50-19 | " | |
| | i Z | 50-32 | " | |
| | i Z | 51-00 | " | |
| " 15th | iPZ | 15-53-07 | B | Dilatation |
| | e Z | 54-01 | " | |
| | ePZ | 16-00-18 | B | |
| | e Z | 01-12 | " | |

W.F. & CO.

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| ay 16th | 1PZ | 15-36-06 | B | Dilatation |
| | ePE | 36-06 | S | |
| | i E | 38-38 | " | |
| | 1PZE | 17-26-37 | B and M-S | Compression |
| | ePE | 26-37 | S | |
| | 1PN | 26-38 | M-S | |
| | 1ZN | 26-42 | B and M-S | |
| | e E | 26-43 | S | |
| | 1ZN | 26-54 | B and M-S | |
| | i E | 26-58 | S | $\Delta S-P = 22^{\circ}$ |
| | isPE | 27-19 | " | Depth about 150 km. |
| | isPN | 27-20 | M-S | |
| | i Z | 27-29 | B | |
| | i N | 28-05 | M-S | |
| | 1SN | 30-36 | " | |
| | 1SZE | 30-37 | B and S | |
| | 1SE | 30-38 | M-S | |
| | i E | 30-58 | S | |
| | esSN | 31-24 | M-S | |
| " 17th | iPZ | 11-57-05 | B | Compression |
| | i Z | 58-59 | " | |
| | e N | 58-59 | M-S | |
| | ipPZ | 59-38 | B | |
| | epPN | 59-38 | M-S | |
| | ePZ | 18-17-05 | B | |
| | iPNE | 17-06 | M-S | |
| | i Z | 17-07 | B | |
| | iPPN | 17-19 | M-S | Epicentre in N-E quadrant |
| | iSZNE | 20-19 | B and M-S | |
| | i Z | 20-25 | B | $\Delta_{S-P} = 17.9^{\circ}$ |
| | iSSE | 20-46 | M-S | |
| | $iL_RE$ | 21-39 | " | |
| | $iI_RN$ | 21-40 | " | |
| | i N | 22-34 | " | |
| | $iP_cS$?E | 25-24 | " | |
| " 19th | ePZ | 02-42-00 | B | Epicentre in N-E quadrant |
| | iPE | 42-01 | S | |
| | iSZNE | 45-12 | B, M-S and S | $\Delta_{S-P} = 17.5^{\circ}$ |
| | iSSZE | 45-22 | B and S | |
| | iPZ | 07-09-17 | B | Epicentre in N-E quadrant |
| | iPNE | 09-18 | M-S and S | |
| | iPPNE | 09-36 | M-S and S | $\Delta_{S-P} = 17.5^{\circ}$ |
| | eSNE | 12-28 | M-S | |
| | iSSE | 12-38 | M-S and S | |
| | $iL_RNE$ | 13-23 | M-S and S | |
| | iPZ | 08-20-38 | B | Compression |
| | ePZ | 19-21-10 | B | |
| | ePZ | 21-18-29 | B | |
| " 20th | ePZ | 14-40-46 | B | |
| | ePZ | 17-23-43 | B | |

International Seismological Centre

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| May 21st | ePZ | 08-55-23 | B | |
| | ePZ | 13-39-44 | B | |
| | iPZ | 21-44-57 | B | Dilatation |
| | iPZE | 21-46-37 | B and M-S | Dilatation |
| | ePN | 46-37 | M-S | |
| | iSN | 49-51 | " | $\Delta_{S-P}$ = 17.6° |
| | eSE | 49-51 | " | |
| | iPE | 23-18-27 | M-S | Compression |
| | iPZN | 18-28 | B and M-S | $\Delta_{S-P}$ = 17.8° |
| | iSNE | 21-41 | M-S | |
| " 22nd | iPZ | 07-17-59 | B | Dilatation |
| | iPZ | 20-20-05 | B | Dilatation |
| | ePNE | 20-07 | M-S | |
| | epPNE | 20-15 | " | |
| | isPNE | 20-43 | " | $\Delta$ = 19° Ca. |
| | iSN | 23-30 | " | Depth 100 km. Ca. |
| | eSE | 23-32 | " | |
| " 24th | iPNE | 03-59-51 | M-S | |
| | iNE | 04-00-00 | " | $\Delta$ = 18° Ca. |
| | iSN | 04-03-03 | " | Deeper than normal |
| | iSE | 03-04 | " | |
| " 25th | iPZNE | 18-42-45 | B and M-S | Epicentre in N-W quadrant |
| | epPE | 43-08 | M-S | |
| | iPPNE | 44-21 | " | $\Delta$ = 42.5° |
| | iSE | 48-50 | " | Depth about 100 km. |
| | iSN | 48-52 | " | |
| | iN | 49-21 | " | |
| | 1PZ | 20-12-46 | B | Dilatation |
| " 26th | 1PZ | 01-21-04 | B | Compression |
| | ePZ | 01-44-27 | B | |
| | 1PZ | 01-59-28 | B | Dilatation |
| | i Z | 02-00-25 | " | |
| | i Z | 00-47 | " | |
| | 1PZ | 02-08-17 | B | Dilatation |
| | i Z | 09-00 | " | |
| | ePZ | 03-02-41 | B | |
| | 1PZ | 04-53-53 | B | |
| | ePZ | 06-35-55 | B | |
| | ePZ | 07-45-53 | B | |
| | 1PZ | 09-56-58 | B | Dilatation |
| | 1PZ | 14-41-40 | B | Dilatation |
| | i Z | 43-07 | " | |
| | ePZ | 17-35-24 | B | |
| | 1PZ | 17-43-10 | B | Compression |
| | 1PN | 43-11 | M-S | $\Delta_{S-P}$ = 45° |
| | iSE | 46-45 | " | |
| " 27th | 1PZ | 10-50-17 | B | Compression |
| | 1PNE | 50-18 | M-S and S | |
| | iPZ | 11-48-39 | B | Compression |
| | iPE | 48-40 | M-S and S | |
| | iPPZE | 48-51 | B and S | |
| | iPPE | 48-53 | M-S | $\Delta_{S-P}$ = 20° |
| | eSE | 52-15 | " | |

International Seismological Centre

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| May 27th (Cont'd) | ePZ | 12-10-48 | B | |
| | ePZ | 12-43-11 | B and S | |
| | iPE | 43-13 | M-S | |
| | i Z | 44-22 | B and S | |
| | i Z | 46-29 | B | |
| | iPZ | 14-32-17 | B | |
| | i Z | 35-14 | " | $\Delta = 28^{\circ}$ |
| | i Z | 35-54 | " | Depth 600 km. |
| | iSE | 36-20 | M-S | |
| | iPZ | 14-38-02 | B | Compression |
| " 28th | iPZN | 01-40-36 | B and M-S | |
| | iPE | 40-37 | S | Epicentre in N-E |
| | iPPZ | 40-56 | B | Quadrant |
| | i Z | 41-17 | " | $\Delta_{S-P} = 17^{\circ}$ |
| | i Z | 41-35 | " | |
| | iSN | 43-50 | M-S | |
| | iSE | 43-52 | S | |
| | iSZ | 43-55 | B | |
| | i Z | 47-15 | " | |
| | i N | 46-00 | M-S | |
| " 29th | iPZ | 09-44-16 | B | Dilatation |
| | i Z | 44-32 | " | |
| " 30th | ePE. | 15-09-00 | M-S | |
| | iPZE | 09-01 | B and S | Compression |
| | i E | 10-38 | S | |
| | iSE | 11-43 | M-S | |
| | iSE | 11-47 | S | |
| | eSN | 11-47 | M-S | |
| | iZE | 12-58 | B and S | |
| | iPZ | 15-14-50 | B | Dilatation |
| | iPZ | 18-35-04 | B | Dilatation |
| | iPE | 35-05 | S | |
| | ePZ | 22-03-17 | B | |
| " 31st | ePZ | 03-58-18 | B | |
| | ePZ | 11-27-09 | B | |
| | ePZ | 13-23-22 | B | |
| | ePZ | 19-29-49 | B | |
| | ePZ | 20-03-32 | B | |

International Seismological Centre

O.A. Jones.

O.A. Jones

Officer in Charge

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 23 — May 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component | | | | E-W Component | | | |
|---|---|---|---|---|---|---|---|---|
| | 0 | 6 | 12 | 18 | 0 | 6 | 12 | 18 |
| 1 | 00 | 01 | 02 | 01 | - | 00 | 01 | 01 |
| 2 | 02 | 02 | 02 | 02 | 02 | 01 | 01 | 01 |
| 3 | 01 | 02 | 02 | 01 | 01 | 02 | 01 | 01 |
| 4 | 01 | 01 | 01 | 01 | - | - | 01 | 01 |
| 5 | 02 | 02 | 02 | 03 | 01 | 02 | 02 | 02 |
| 6 | 04 | 03 | 02 | 03 | 02 | 02 | 03 | 03 |
| 7 | - | 03 | 03 | 02 | - | - | 02 | 01 |
| 8 | 02 | 02 | 01 | 01 | 01 | 01 | 02 | 01 |
| 9 | 02 | 01 | 02 | 02 | 02 | 01 | 01 | 01 |
| 10 | 01 | 01 | 01 | 02 | 01 | 01 | 01 | 01 |
| 11 | 02 | 01 | 02 | 01 | 02 | 02 | 02 | 02 |
| 12 | 01 | 02 | 03 | 02 | 01 | 02 | 03 | 03 |
| 13 | 03 | 03 | 03 | 04 | 03 | 02 | 03 | 02 |
| 14 | 02 | 01 | 01 | 01 | - | - | 01 | 01 |
| 15 | - | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 16 | 01 | 01 | 01 | 01 | - | 01 | 01 | 01 |
| 17 | 01 | 02 | 02 | 02 | 01 | 02 | 02 | 02 |
| 18 | 02 | 02 | 01 | 02 | 02 | 01 | 01 | 01 |
| 19 | 02 | 01 | 01 | 01 | 02 | 01 | 01 | 01 |
| 20 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 21 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 22 | 01 | 00 | 01 | 00 | 01 | 01 | 00 | 00 |
| 23 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 24 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 25 | 01 | 02 | 02 | 01 | 01 | 01 | 02 | 02 |
| 26 | - | 02 | 02 | 02 | - | 02 | 02 | 02 |
| 27 | - | - | - | - | 01 | - | 01 | 01 |
| 28 | 01 | 01 | 01 | 01 | 02 | - | - | 01 |
| 29 | 01 | 01 | 01 | 02 | 02 | 01 | 02 | 02 |
| 30 | 01 | 01 | 01 | 01 | - | 01 | 01 | 01 |
| 31 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |

SPRENGNETTER

# MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

International Seismological Centre

MICROSEISM SUPPLEMENT No. 23 May, 1950.

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | No Record | | |
| 2 | | | | | | No Record | | |
| 3 | | | | | | No Record | | |
| 4 | | | | | | No Record | | |
| 5 | | | | | 09 | 16 | 15 | 16 |
| 6 | | | | | 18 | 16 | 18 | 20 |
| 7 | | | | | 25 | 25 | 18 | 17 |
| 8 | | | | | 16 | 14 | 13 | 12 |
| 9 | | | | | 12 | 13 | 12 | 13 |
| 10 | | | | | - | 13 | 11 | 13 |
| 11 | | | | | 14 | 10 | 13 | 15 |
| 12 | | | | | 12 | 11 | 10 | 09 |
| 13 | | | | | 13 | 11 | 14 | 15 |
| 14 | | | | | - | 12 | 11 | 08 |
| 15 | | | | | - | - | 10 | 09 |
| 16 | | | | | - | 08 | 05 | 05 |
| 17 | | | | | | No Record | | |
| 18 | | | | | - | - | 06 | 07 |
| 19 | | | | | 10 | 13 | 10 | 07 |
| 20 | | | | | | No Record | | |
| 21 | | | | | | No Record | | |
| 22 | | | | | | No Record | | |
| 23 | | | | | 06 | 04 | 04 | 04 |
| 24 | | | | | | No Record | | |
| 25 | | | | | | No Record | | |
| 26 | | | | | - | 12 | 10 | 09 |
| 27 | | | | | 08 | 10 | 10 | 07 |
| 28 | | | | | 08 | 08 | 07 | 07 |
| 29 | | | | | 06 | 09 | 08 | 09 |
| 30 | | | | | 07 | 06 | 06 | 05 |
| 31 | | | | | 04 | 04 | 05 | 04 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

$\phi$ = 27° 28′ 41″ S., $\lambda$ = 153° 1′ 52″ E., h = 15m. Bulletin No. 1[illegible]

International Seismological Centre

Foundation: Semi-consolidated alluvium of raised river terrace.

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| 1950 | | | | |
| June 2nd | iPZ | 12-49-50 | B | Dilatation |
| " 3rd | ePZ | 21-45-39 | B | |
| " 4th | ePZ | 00-36-59 | B | |
| | iPZ | 00-57-09 | B | Compression U.S.C.G.S. reports New Hebrides Islands region, H. = 00.53.19 |
| | iPZ | 01-43-57 | B | Compression |
| | eSNE | 48-31 | M-S,S | U.S.C.G.S. reports off N-E coast of New Guinea, H. = 01.38.28. |
| | ePZ | 03-02-42 | B | |
| | ePZ | 06-42-33 | B | Compression |
| | ePZ | 07-37-51 | B | U.S.C.G.S. reports 7° N. |
| | iSN | 44-11 | M-S | 126° E, H. = 07.29.44 |
| | eSE | 44-11 | " | |
| | ePZ | 08-06-08 | B | U.S.C.G.S. reports 7° N. 126° E, H. = 07.58.02. |
| | ePZ | 10-35-15 | B | |
| | iPZ | 14-09-34 | B | Dilatation |
| | iPZ | 15-22-16 | B | |
| | i E | 22-40 | S | U.S.C.G.S. reports 21° S. |
| | iSZNE | 25-25 | B,M-S | 170½° E, and h = about |
| | eSE | 25-25 | S | 100 km. H. = 15.18.20. |
| | iNE | 26-16 | M-S,S | |
| " 10th | ePZ | 04-26-34 | B | Dilatation. U.S.C.G.S. reports 18° S. 156° E, H. = 04.22.06 |

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| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| June 11th | ePZ | 11-48-34 | B | |
| | ePZ | 13-20-39 | B | |
| | ePZ | 22-17-18 | B | Dilatation |
| | e N | 17-24 | M-S | U.S.C.G.S. reports about |
| | ePPN | 18-14 | " | 1200 miles S-W of New Zealand, |
| | iSE | 22-29 | " | H = 22.11.12. |
| | $iL_RN$ | 25-21 | " | |
| " 12th | ePZ | 05-05-35 | B | U.S.C.G.S. reports Eastern Batavia region, H = 04.57.36. |
| | ePZ | 05-34-44 | B | |
| | iPZN | 14-13-52 | B,M-S | Dilatation |
| | ePE | 13-54 | M-S | U.S.C.G.S. reports 10°S |
| | ePPE | 14-23 | " | 153½° E, H. = 14.09.44. |
| | eSNEZ | 17-31 | M-S,B | |
| " 14th | ePZ | 03-50-29 | B | U.S.C.G.S. reports 18½° S. 174½° W., H. = 03.44.10. |
| | iPZNE | 04-46-08 | B,M-S,S | Dilatation. |
| | ePPNE | 46-19 | M-S,S | $\Delta_{S-P}$ = 19° |
| | i Z | 46-46 | B | U.S.C.G.S. reports 17°S. |
| | eN | 46-46 | M-S | 168° E., H.= 04.41.59. |
| | iSE | 49-36 | S | |
| | iSN | 49-37 | M-S | |
| | eSE | 49-38 | " | |
| | iPZ | 06-45-32 | B | U.S.C.G.S. reports 20° S. 168° E., H. = 06.41.50. |
| | iPZ | 08-14-31 | B | Dilatation U.S.C.G.S. reports 17°S. 165° E., H.= 08.10.46. |
| | iPZ | 08-29-16 | B | U.S.C.G.S. reports 11° S. 166° E., and h = about 200 km., H. = 08.24.54. |
| | iPZ | 09-25-16 | B | Dilatation |
| " 15th | iPZ | 21-11-49 | B | Compression |
| " 17th | iPZ | 16-01-14 | B | Compression |
| | eSN | 06-20 | M-S | |
| " 18th | iPN | 10-14-41 | B | Dilatation |
| " 19th | Earth tremor felt on about 09 hours U.T. | | Atherton Tableland, North Queensland Not recorded at Brisbane. | |
| | iPN | 12-45-03 | M-S | Compression |
| | iSN | 51-38 | " | Time marks recorded on N-S |
| | iSSN | 53-59 | " | M-S only. Times may be ± |
| | i N | 54-54 | " | 1 m. 2 s. |
| | i N | 55-20 | " | U.S.C.G.S. reports 8° S. 112° E., H. = 12.36.58. |
| " 21st | iPNEZ | 06-58-31 | B,M-S,S | Epicentre in N-E quadrant |
| | iPPZ | 58-43 | B | $\Delta_{S-P}$ = 18° |
| | iPPN | 58-44 | M-S | U.S.C.G.S. reports 21° S. |
| | iPPPZ | 58-57 | B | 169° E., H. = 06.55.39 |
| | iPPPN | 58-59 | M-S | |
| | iSNE | 07-01-45 | M-S,S | |
| | iSZ | 01-47 | B | |
| | iSSZ | 02-00 | " | |
| | $iL_RNEZ$ | 03-16 | B,M-S | |
| | ePE | 10-00-23 | S | Dilatation |
| | iPZ | 00-24 | B | |
| | ePN | 00-24 | M-S | U.S.C.G.S. reports 3½° S. |
| | iNE | 00-36 | M-S,S | 147° E. H. = 09.56.00 |
| | iSN | 04-44 | M-S | |
| | iSE | 04-45 | S | |
| | iNE | 05-40 | M-S | |
| | iPZ | 14-08-53 | B | Dilatation |

International Seismological Centre

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS |
|---|---|---|---|---|
| June 24th | ePZ | 09-06-25 | B | |
| | iPZ | 22-28-21 | B | Epicentre in N-E quadrant |
| | iPNE | 28-22 | M-S | U.S.C.G.S. reports 19½° S. |
| | iPE | 28-23 | S | 168½° E. H. = 22.25.31. |
| | eSZ | 31-32 | B | |
| | iSN | 31-33 | M-S | |
| | iSE | 31-35 | " | |
| | iSSZ | 31-42 | " | |
| " 25th | ePE | 11-12-34 | M-S | Compression |
| | iPZ | 12-35 | B | U.S.C.G.S. reports 5°N. 127° E., |
| | i E | 13-05 | M-S | H. = 11.05.51. |
| | iSE | 18-42 | " | |
| | iSN | 18-43 | " | |
| | i N | 19-05 | " | |
| | iPZ | 15-47-14 | B | Compression |
| | iPZ | 21-00-20 | B | Compression |
| " 26th | ePZ | 00-37-45 | B | U.S.C.G.S. reports New Caledonia region, H. = 00.34.39. |
| | iPZ | 01-18-33 | B | Dilatation |
| | iPZ | 15-23-01 | B | Compression |
| | iPZ | 21-11-06 | B | Dilatation<br>U.S.C.G.S. reports New Caledonia region, H. = 21.07.58. |
| " 28th | iPZ | 14-47-56 | B | Dilatation |
| | iPZ | 16-53-38 | B | Dilatation |
| " 30th | iPZ | 00-22-54 | B | Compression<br>U.S.C.G.S. reports Solomon Islands region, H. = 00.18.04. |

O.A. Jones.

O.A. Jones

Officer in Charge.

International Seismological Centre

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 24 June, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 01 | 01 | 00 | 00 | - | 01 | 01 | 00 |
| 2 | 01 | 01 | 00 | 01 | 01 | 01 | 01 | 01 |
| 3 | - | 01 | 01 | 01 | - | 01 | 02 | 01 |
| 4 | 01 | 01 | 02 | 01 | 01 | 02 | 01 | 01 |
| 5 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 6 | 01 | 01 | 01 | 02 | 01 | 02 | 01 | 01 |
| 7 | 01 | 01 | - | - | 02 | 02 | - | - |
| 8 | | | Microseisms marked by movement | | | | | |
| 9 | | | of building due to high winds. | | | | | |
| 10 | 02 | 01 | 02 | 01 | - | 02 | 02 | 02 |
| 11 | 01 | 02 | 01 | 01 | 01 | 01 | 01 | 01 |
| 12 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 13 | 01 | 02 | 02 | 02 | No Record | | | |
| 14 | 02 | 01 | 01 | 01 | 01 | 02 | 01 | 01 |
| 15 | 01 | 01 | 02 | 02 | 01 | 02 | 01 | 01 |
| 16 | Microseisms marked by movement of building due to high wind | | | | | | | |
| 17 | - | 02 | 03 | 02 | - | 02 | 02 | 02 |
| 18 | 02 | 03 | 02 | 02 | 02 | 01 | 02 | 02 |
| 19 | - | - | 02 | 02 | No Record | | | |
| 20 | 02 | 02 | 01 | 01 | 01 | 01 | 02 | 01 |
| 21 | 01 | 01 | 01 | 01 | 01 | 01 | - | 01 |
| 22 | 02 | 02 | - | - | 02 | 02 | - | - |
| 23 | 03 | 03 | 04 | 04 | 02 | 02 | 03 | 03 |
| 24 | 05 | 05 | 06 | 04 | 04 | 05 | 05 | 04 |
| 25 | 04 | 03 | 04 | 03 | 04 | 03 | 03 | 02 |
| 26 | 03 | 02 | 02 | 02 | 02 | - | - | - |
| 27 | 02 | 03 | 04 | 04 | No Record | | | |
| 28 | 03 | 03 | 04 | 03 | 02 | 03 | 03 | 02 |
| 29 | 03 | 03 | 04 | 03 | 02 | 03 | 02 | 02 |
| 30 | 02 | 03 | 02 | 02 | 02 | 02 | 01 | 01 |

SPRENGNETHER

# MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 24 June, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 06 | 04 | 05 | 05 |
| 2 | | | | | 04 | 04 | 03 | - |
| 3 | | | | | - | 04 | 04 | 04 |
| 4 | | | | | 04 | 05 | 03 | 03 |
| 5 | | | | | 03 | 04 | 04 | 05 |
| 6 | | | | | 04 | 05 | 05 | 06 |
| 7 | | | | | No Record | | | |
| 8 | | | | | No Record | | | |
| 9 | | | | | No Record | | | |
| 10 | | | | | 06 | 08 | 09 | 07 |
| 11 | | | | | 05 | 05 | 06 | 07 |
| 12 | | | | | 06 | 06 | 06 | 07 |
| 13 | | | | | 07 | 08 | 09 | 09 |
| 14 | | | | | 08 | 08 | 06 | 07 |
| 15 | | | | | No Record | | | |
| 16 | | | | | 08 | - | - | 10 |
| 17 | | | | | 11 | 09 | 10 | 09 |
| 18 | | | | | 10 | 11 | 10 | 12 |
| 19 | | | | | No Record | | | |
| 20 | | | | | 07 | 10 | 12 | 11 |
| 21 | | | | | 09 | 09 | 08 | 09 |
| 22 | | | | | 08 | 10 | 13 | 16 |
| 23 | | | | | 15 | 17 | 18 | 22 |
| 24 | | | | | 28 | 33 | 36 | 28 |
| 25 | | | | | 23 | 16 | 17 | 14 |
| 26 | | | | | 12 | 13 | 12 | 11 |
| 27 | | | | | 13 | 12 | 12 | 13 |
| 28 | | | | | 15 | 16 | 16 | 16 |
| 29 | | | | | 13 | 17 | 10 | 12 |
| 30 | | | | | 09 | 11 | 11 | 14 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

$\phi$ = 27° 28′ 41″ S., $\lambda$ = 153° 1′ 52″ E., h = 15m. Bulletin No. 254

Foundation: Semi-consolidated alluvium of raised river terrace.

International Seismological Centre

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| 1950 | | | | |
| In this and subsequent bulletins the clarity of phases is indicated by prefacing the phases by e, i or ei in accordance with the recommendation of the Oslo meeting of the International Seismological Association as published in Earthquake Notes Vol. XX, Nos. 5-6, p. 50. | | | | |
| July 1st | iPZ | 00-58-14 | B | |
| " 3rd | ePZ | 02-03-18 | B | |
| | iPE | 03-20 | S | |
| | ePE | 03-20 | M-S | |
| | e N | 03-25 | " | |
| | iSN | 06-43 | " | |
| | eSE | 06-45 | S | |
| | iPZ | 10-10-51 | B | $\Delta$ = 38° |
| | iPN | 10-51 | M-S | U.S.C.G.S. reports 8° N., |
| | iPE | 10-53 | M-S, S | 141½° S., and |
| | iPPN | 12-16 | M-S | H= 10.03.36. |
| | iSNE | 16-43 | M-S,S | |
| | iPZ | 12-35-03 | B | Dilatation |
| | ePE | 35-03 | S | U.S.C.G.S. reports Tonga Islands region H = 12.29.33 h = about 200 km. |
| " 4th | iPZ | 17-25-39 | B | Compression |
| " 5th | iPZ | 00-41-25 | B | Compression |
| | iPZNE | 03-38-46 | B,M-S,S | Epicentre in N-E quadrant |
| | i Z | 41-31 | B | U.S.C.G.S. reports 19° S, |
| | i E | 41-34 | S | 168° E, H = 03.34.59. |
| | eSN | 41-47 | M-S | |
| | i N | 42-03 | " | |
| | e E | 42-12 | S | |
| | $eL_RE$ | 43-40 | " | |
| | $eL_RN$ | 43-56 | M-S | |
| | ePZ | 11-01-54 | B | |
| | iPZ | 15-52-08 | B | Compression |
| | i Z | 52-25 | " | |
| | iPZ | 20-41-15 | B | Dilatation |

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| July 7th | iPZ | 02-35-56 | B | Compression |
| | i Z | 36-16 | " | |
| | iPZNE | 16-51-19 | B,M-S,S | Epicentre in N-E quadrant |
| | iPPZNE | 51-31 | B,M-S | $\Delta_{S-P}$ = 19° U.S.C.G.S. reports |
| | iSZNE | 54-59 | B,M-S,S | 11° S., 163½° E., H = 16.46.55. |
| | iPZ | 16-58-36 | B | Compression |
| | i Z | 58-47 | " | U.S.C.G.S. reports 11° S., |
| | eSZ | 17-02-21 | " | 163° E., H = 16.54.10. |
| | ePZ | 17-12-31 | B | |
| | ePZ | 17-17-57 | B | |
| | ePZ | 20-19-38 | B | |
| " 8th | ePZ | 03-36-59 | B | U.S.C.G.S. reports Kermadec |
| | i Z | 37-32 | " | Islands region |
| | iPZN | 19-52-20 | B,M-S,S | Epicentre in N-E quadrant |
| | iPE | 52-21 | M-S | |
| | iSE | 56-02 | " | (in minute break) |
| | iSN | 56-03 | " | $\Delta_{S-P}$ = 21° Ca. |
| " 9th | iPE | 00-07-24 | M-S,S | Epicentre in N-E quadrant |
| | iPZN | 07-25 | B,M-S | U.S.C.G.S. reports 10° S. |
| | iSNE | 11-05 | M-S,S | 161° E. and H = 00.03.02. |
| | i Z | 04-57-57 | B | |
| | i Z | 04-59-50 | B | |
| | e N | 59-52 | M-S | |
| | i E | 59-55 | S | |
| | i Z | 05-00-00 | B | |
| | i Z | 00-11 | " | |
| | i Z | 05-07-57 | B | |
| | i Z | 08-07-37 | B | |
| " 10th | iPZE | 13-56-19 | B,S | Compression $\Delta_{S-P}$ = 27° |
| | iSNE | 14-00-15 | M-S,S | U.S.C.G.S. reports 21° S, |
| | e N | 03-08 | M-S | 178½° W., H = 13.51.20. |
| | e E | 03-10 | " | and h = about 600 km. |
| | i E | 03-12 | S | |
| | i N | 06-05 | M-S | |
| | e N | 10-03 | " | |
| " 12th | iPZ | 11-54-09 | B | Dilatation |
| | ePE | 54-09 | S | |
| | iPZ | 15-59-04 | B | |
| " 13th | ePZ | 03-11-51 | B | |
| | i Z | 12-42 | " | |
| " 15th | iPZ | 15-51-19 | B | Dilatation |
| " 17th | ePZ | 15-00-15 | B | |
| | iPZ | 20-21-02 | B | Compression |
| | iPE | 21-01 | M-S,S | (In minute break) |
| | i E | 21-13 | S | $\Delta_{S-P}$ = 17.6° |
| | i E | 21-14 | M-S | No long waves |
| | i E | 21-31 | " | U.S.C.G.S. reports 20½° S. |
| | eSE | 24-10 | M-S,S | 171° E, H = 20.17.50 |
| | iSZ | 24-12 | B | |
| | i E | 24-19 | M-S,S | |
| | i Z | 24-21 | B | |
| | iSSE | 24-29 | M-S | |
| " 18th | iPZ | 00-30-52 | B | Dilatation |
| | i Z | 31-08 | " | |
| | iPZ | 15-34-09 | B | Dilatation |

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Govt. Printer, Brisbane.

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| July 20th | iPZ | 09-34-43 | B | Epicentre in N-E quadrant |
| | iPNE | 34-44 | M-S | |
| | i Z | 34-50 | B | $\Delta_{S-P}$ = 22.1° |
| | iNE | 35-40 | M-S | U.S.C.G.S. reports 17° S. |
| | iSNE | 38-40 | " | 174° E, and H = 09.30.48. |
| | iNE | 39-14 | " | |
| | i E | 39-44 | " | |
| " 21st | iPZE | 07-23-29 | B, S | Dilatation |
| | eSN | 28-17 | S,M-S | U.S.C.G.S. reports Kermadec Islands region, H = 07.18.55 |
| | iPZE | 20-35-18 | B, S | Dilatation |
| | iPN | 35-19 | M-S | U.S.C.G.S. reports 15½° S. |
| | iPE | 35-20 | " | 168½° E, and H = 20.32.01. |
| | eSZ | 38-50 | B | |
| Note: From July 22nd to August 28th times recorded are one minute slow due to incorrect transmission of the hour mark from the chronometer to the instruments. On August 29th timing was quite unreliable. Times are correct on and after August 30th. | | | | |
| " 22nd | iPZ | 23-11-29 | B | Dilatation |
| | iPE | 11-29 | S | |
| | iPNE | 11-30 | M-S | $\Delta_{S-P}$ = 19.8° |
| | iNE | 11-41 | M-S,S | U.S.C.G.S. reports New Hebrides |
| | i Z | 11-44 | B | Island region, H = 23.07.45 |
| | iPPZ | 11-56 | " | |
| | iSE | 15-03 | M-S | |
| | iSZN | 15-04 | B,M-S | |
| | iSE | 15-05 | S | |
| | $iL_RNE$ | 16-07 | M-S | |
| " 23rd | iPZE | 13-59-05 | B, S | Dilatation |
| | iPZ | 15-53-52 | B | Dilatation |
| | iPE | 53-53 | S | $\Delta_{S-P}$ = 20° |
| | ePNE | 53-54 | M-S | U.S.C.G.S. reports 16° S. |
| | i Z | 54-01 | B | 165° E. and H = 15.50.06. |
| | iSZNE | 57-30 | B,M-S,S | |
| | iSE | 57-33 | M-S | |
| " 27th | iPZ | 17-34-34 | B | Compression U.S.C.G.S. reports 17° S. 179° W, H = 17.30.29. |
| " 28th | iPZE | 04-58-42 | B,S | Epicentre in N-E quadrant |
| | ePE | 58-43 | M-S | $\Delta_{S-P}$ = 20° |
| | iSE | 05-02-20 | M-S,S | U.S.C.G.S. reports 13° S. 167° E., H = 04.55.13. |
| | iPZ | 05-26-53 | B | Dilatation |
| " 29th | iPE | 16-52-22 | M-S,S | Epicentre in N-E quadrant |
| | i P | 53-02 | M-S | $\Delta_{H-P}$ = 39.1° |
| | i E | 54-11 | " | |
| | e E | 57-55 | M-S,S | U.S.C.G.S. reports 2½° N. |
| | iSE | 58-09 | M-S,S | 127½° E. and H = 16.45.56. |
| | i E | 59-04 | M-S | |
| | iSSE | 17-00-56 | " | |
| | iPZ | 23-52-45 | B | Epicentre in N-E quadrant |
| | ePE | 52-51 | M-S,S | $\Delta_{S-P}$ = 22° |
| | iPPE | 53-07 | M-S | U.S.C.G.S. reports 6° S. |
| | iSE | 56-40 | M-S,S | 155° E, H = 23.48.58. |
| " 30th | iPZ | 14-31-33 | B | Dilatation |
| | i Z | 33-55 | " | |

International Seismological Centre

O.A. Jones.

O.A. Jones

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 25 July, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 02 | 03 | 03 | 02 | 01 | 01 | 02 | 01 |
| 2 | 02 | 02 | 01 | 01 | 01 | 01 | 01 | 01 |
| 3 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 4 | 01 | 01 | 01 | 01 | 00 | 01 | 00 | 00 |
| 5 | 00 | 01 | 01 | 01 | 00 | 00 | 00 | 01 |
| 6 | 00 | 01 | 01 | 02 | 00 | 01 | 01 | 01 |
| 7 | 01 | 02 | 02 | 02 | 01 | 01 | 01 | 01 |
| 8 | 01 | 01 | 01 | 01 | 01 | 01 | 00 | 01 |
| 9 | 01 | 01 | 02 | 02 | 01 | 01 | 02 | 01 |
| 10 | 01 | 02 | 03 | 02 | 01 | 01 | 02 | 01 |
| 11 | 02 | 01 | 01 | 02 | 01 | 01 | 01 | 01 |
| 12 | 01 | 02 | 02 | 02 | 01 | 01 | 02 | 02 |
| 13 | 02 | 02 | 02 | 02 | 02 | 01 | 01 | 01 |
| 14 | 01 | 02 | 02 | 01 | 01 | 02 | 01 | 01 |
| 15 | | No Record | | | 01 | 01 | 01 | 01 |
| 16 | | No Record | | | 01 | 01 | 02 | 02 |
| 17 | | No Record | | | 02 | 02 | 02 | 03 |
| 18 | | No Record | | | 03 | 02 | 02 | 02 |
| 19 | - | - | 04 | 04 | 01 | 02 | 03 | 02 |
| 20 | 02 | 02 | 02 | 02 | 01 | 01 | 01 | 02 |
| 21 | 03 | 02 | 02 | 03 | 02 | 02 | 01 | 02 |
| 22 | 02 | 02 | 02 | 01 | 02 | 02 | 01 | 01 |
| 23 | 01 | 02 | 01 | 02 | 01 | 01 | 01 | 01 |
| 24 | | No Record | | | 02 | 02 | 02 | 02 |
| 25 | 03 | 03 | 03 | 02 | 02 | 02 | 01 | 02 |
| 26 | 02 | 03 | 02 | 02 | 02 | 02 | 01 | 01 |
| 27 | 01 | 01 | 01 | 01 | 01 | 02 | 01 | 01 |
| 28 | | No Record | | | 01 | 01 | 01 | 01 |
| 29 | 02 | 03 | 02 | 03 | 01 | 01 | 02 | 02 |
| 30 | 02 | 02 | 02 | 02 | 01 | 01 | 01 | 01 |
| 31 | 01 | 02 | 01 | 01 | 01 | 01 | 00 | 01 |

SPRENGNETHER

# MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 25 July, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 11 | 20 | 14 | 16 |
| 2 | | | | | 17 | 12 | 11 | 12 |
| 3 | | | | | 08 | 09 | 07 | 07 |
| 4 | | | | | No Record | | | |
| 5 | | | | | 06 | 05 | 05 | 06 |
| 6 | | | | | 05 | 04 | 06 | 07 |
| 7 | | | | | 07 | 06 | 06 | 05 |
| 8 | | | | | 06 | 08 | 07 | 06 |
| 9 | | | | | 06 | 10 | 10 | 09 |
| 10 | | | | | 10 | 09 | 11 | 10 |
| 11 | | | | | 09 | 08 | 11 | 10 |
| 12 | | | | | 11 | 10 | 11 | 15 |
| 13 | | | | | No Record | | | |
| 14 | | | | | 13 | 12 | 10 | 10 |
| 15 | | | | | 11 | 12 | 10 | 11 |
| 16 | | | | | 12 | 10 | 09 | 14 |
| 17 | | | | | 15 | 17 | 20 | 17 |
| 18 | | | | | 18 | 17 | 19 | 19 |
| 19 | | | | | 16 | 17 | 17 | 15 |
| 20 | | | | | No Record | | | |
| 21 | | | | | 08 | 07 | 07 | 07 |
| 22 | | | | | 06 | 07 | 06 | 07 |
| 23 | | | | | 07 | 06 | 07 | 09 |
| 24 | | | | | 15 | 17 | 21 | 22 |
| 25 | | | | | 23 | 22 | 21 | 19 |
| 26 | | | | | 17 | 14 | 12 | 11 |
| 27 | | | | | 09 | 09 | 12 | 11 |
| 28 | | | | | 12 | 10 | 10 | 11 |
| 29 | | | | | 12 | 11 | 16 | 15 |
| 30 | | | | | 14 | 15 | 14 | 12 |
| 31 | | | | | 10 | 07 | 08 | 07 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

$\phi$ = 27° 28′ 41″ S., $\lambda$ = 153° 1′ 52″ E., h = 15m. Bulletin No. 155

International Seismological Centre

Foundation: Semi-consolidated alluvium of raised river terrace.

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| Note: From August 1st to August 29th inclusive times recorded are one minute slow due to incorrect transmission of the hour mark from the clock to the records. Times are correct on and after August 30th. | | | | |
| 1950 Aug. | 1st | iPZ 00-16-54Ca | B | Confused by mechanical movement. Compression |
| | | iPE 16-54 | S | |
| | | ePNE 16-55 | M-S | $\Delta_{S-P}$ = 20° |
| | | iSE 20-33 | S | |
| | | eSN 20-35 | M-S | |
| | | eSE 20-36 | " | |
| | | iPZ 14-05-34 | B | Dilatation |
| " | 2nd | iPZ 10-56-47 | B | Dilatation |
| | | ePNE 56-47 | M-S | |
| | | ipPZ 57-06 | B | $\Delta$ = 41° h = about 100 km. |
| | | epPNE 57-06 | M-S | U.S.C.G.S. reports 12° N. 143° E. |
| | | iSZN 11-02-49 | B,M-S | slightly deeper than normal |
| | | eSE 02-49 | M-S | H = 10.50.07 |
| | | isSN 03-29 | " | |
| " | 3rd | iPZ 15-33-27 | B | Dilatation |
| | | i Z 33-34 | " | $\Delta$ = 41° Ca |
| | | iSE 39-33 | M-S | U.S.C.G.S. reports Mariana Is. |
| | | iSZ 39-34 | B | region. H = 15.26.38. |
| | | oSN 39-35 | M-S | |
| " | 5th | iPZ 03-09-28 | B | Dilatation |
| | | iPNEZ 09-21-05 | M-S,S,B | Compression from south-east |
| | | isP?NEZ 21-45 | M-S,S,B | $\Delta_{S-P}$ = 24° |
| | | eSNE 25-22 | M-S,S | U.S.C.G.S. reports 50° S. 164° E. H = 09.16.48. |
| " | 7th | ePZ 02-51-44 | B | Compression from north-west. |
| | | iPN 51-45 | M-S | |
| | | i Z 51-46 | B | |
| | | iPE 51-46 | M-S,S | $\Delta_{S-P}$ = 40.8° |
| | | i E 52-12 | M-S | U.S.C.G.S. reports 6° N. |
| | | iPPNE 53-28 | " | 126° E. H = 02.44.44. |
| | | i Z 57-49 | B | $\Delta_{H-P}$ = 43.2° |
| | | iSN 57-55 | M-S | |

W.F. & CO.

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Aug. 7th (Cont'd) | iPZNE | 15-53-45 | B,M-S,S | Compression from North-west |
| | i Z | 53-50 | B | $\Delta_{S-P}$ = 38.7° |
| | iPPZNE | 55-14 | B,M-S | U.S.C.G.S. reports |
| | iSNZ | 59-34 | M-S,S | 1° N., 126° E., H = 15.47.23. |
| " 9th | iPZ | 14-21-33 | B | Compression |
| | iPZ | 18-48-25 | B | Dilatation U.S.C.G.S. reports Santa Cruz Islands Region H = 18.45.06. |
| " 10th | ePZ | 17-57-49 | B | U.S.C.G.S. reports 20° S. 168° E. H. = 17.55.08. |
| | iPZ | 19-23-12 | B | Dilatation |
| | ePN | 23-12 | M-S | $\Delta_{S-P}$ = 22° Ca Depth about 100 km. |
| | ipPNZ | 23-24 | M-S,B | U.S.C.G.S. reports |
| | epPE | 23-25 | M-S,S | Solomon Islands region, |
| | i Z | 23-46 | B | H = 19.19.30 |
| | iSNZ | 27-03 | M-S,B | |
| | iSE | 27-05 | S | |
| | eSE | 27-05 | M-S | |
| | isSN | 27-32 | " | |
| " 11th | iPZ | 10-26-24 | B | Compression. U.S.C.G.S. reports 17° S., 169° E, H = 10.23.11. |
| | iPZ | 11-17-18 | B | Compression |
| | ePZ | 20-25-46 | B | U.S.C.G.S. reports Tonga Islands region, H = 20.20.52. |
| " 12th | iPZ | 10-48-34 | B | Dilatation. U.S.C.G.S. reports Kermadec Islands region. H. = 10.44.18. |
| | ePZ | 15-13-45 | B | |
| | iPZ | 16-13-19 | B | Compression. U.S.C.G.S. reports New Hebrides Islands Region, H = 16.10.16 |
| | iPZ | 19-03-08 | B | Compression |
| | iPPZ | 03-15 | B | |
| | eSZ | 06-18 | B | |
| " 13th | iPZ | 09-08-23 | B | Compression |
| " 14th | iPZ | 13-20-03 | B | Compression. Possibly mechanical. |
| | iPKP?Z | 23-09-07 | B | U.S.C.G.S. reports |
| | i Z | 09-15 | " | 27° S., 62½° W. H = 22.51.28, h = about 700 km. |
| " 15th | eiPZE | 14-20-26 | B,M-S,S | $\Delta_{S-P}$ = 77.3° |
| | eiPN | 20-27 | M-S | U.S.C.G.S. reports |
| | iSN | 30-04 | " | 28½° N., 97° E., |
| | iSZE | 30-06 | B,M-S | H = 14.09.30. |
| | iPZ | 14-38-22 | B | Dilatation |
| | iPZ | 14-44-36 | B | Compression |
| | iPZ | 15-02-27 | B | Compression |
| | iPZ | 15-12-13 | B | Compression |
| | iPZ | 15-27-27 | B | Dilatation |

International Seismological Centre

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Aug. 15th | ePZ | 15-34-51 | B | |
| | iPZ | 15-37-20 | B | Dilatation U.S.C.G.S. reports 28½° N. 97° E. aftershock H = 15.26.15. |
| | iPZ | 17-07-54 | B | U.S.C.G.S. reports South-eastern Tibet, H = 16.55.36. |
| | iPZ | 18-49-45 | B | U.S.C.G.S. reports 28½° N., 97° E. Aftershock. H = 18.38.45. |
| | iPZ | 20-09-45 | B | U.S.C.G.S. reports 28½° N., 97° E. Aftershock H = 19.58.48. |
| | iPZ | 21-53-19 | B | U.S.C.G.S. reports 27° N., 92° E. H = 21.42.23. |
| | iPZ | 21-53-31 | B | |
| | iPZ | 22-21-09 | B | Compression. U.S.C.G.S. reports 28½° N., 97° E. Aftershock H = 22.10.11 |
| " 16th | iPZ | 04-44-14 | B | |
| | iPZ | 05-53-04 | B | Dilatation. |
| | iPZ | 15-40-40 | B | Compression. U.S.C.G.S. reports 28½° N, 97° E. Aftershock H = 15.29.25. |
| | iPZ | 18-02-43 | B | Compression. U.S.C.G.S. reports 28½° N., 97° E. Aftershock H = 17.51.35. |
| | iPZ | 20-20-14 | B | Dilatation |
| " 17th | iPZ | 05-37-24 | B | Compression |
| | iPZ | 14-28-07 | B | Dilatation |
| | iPZ<br>iPE<br>iPN<br>ipPE<br>isPZ<br>isPNE<br>iSN<br>i E | 16-19-08<br>19-10<br>19-11<br>20-26<br>21-54<br>21-55<br>22-54<br>25-56 | B<br>S<br>M-S<br>S<br>B<br>M-S,S<br>M-S,S<br>S | Compression<br>$\Delta_{pP-P} = 25°$<br>Depth about 600 km.<br>U.S.C.G.S. reports 21° S. 180° E. H = 16.15.22, h = about 600 km. |
| | iPZE<br>iSE<br>eSN | 16-22-56<br>25-53<br>25-53 | B,M-S,S<br>S<br>M-S | Compression |
| " 18th | iPZ | 01-18-57 | B | Compression. U.S.C.G.S. reports 28½° N., 97° E. Aftershock. H = 01.07.49. |
| | iPZ | 17-09-57 | B | Compression. U.S.C.G.S. reports 28½° N. 97° E. Aftershock. H = 16.58.49 |
| | iPZ | 22-28-51 | B | Dilatation. U.S.C.G.S. reports 28½° N., 97° E. Aftershock. H = 22.17.45. |
| " 19th | iPZ | 06-54-33 | B | Dilatation |
| " 20th | iPZ | 09-14-47 | B | Compression. U.S.C.G.S. reports south-eastern Tibet. H = 09.03.37. |
| | iPZ | 14-59-16 | B | Compression |
| | iPZ | 16-11-41 | B | Dilatation |

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Govt. Printer, Brisbane (%)

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Aug. 20th (Cont'd) | iPZN | 23-37-34 | B,M-S | Compression. U.S.C.G.S. |
| | iPPZ | 37-48 | B | reports 15° S., 167° E. |
| | iSN | 41-01 | M-S | H = 23.34.19. |
| | iSZ | 41-06 | B | $\Delta_{S-P}$ = 19° |
| " 21st | iPZ | 06-02-23 | B | Compression U.S.C.G.S. reports 28½° N., 97° E. Aftershock. H = 05.51.29. |
| " 22nd | ePZ | 02-33-49 | B | U.S.C.G.S. reports S.-E. Tibet. H = 02.22.38. |
| | ePZ | 06-54-34 | B | U.S.C.G.S. reports 31° N., 94° E. H = 06.43.18. |
| | iPZ | 13-13-13 | B | Dilatation. U.S.C.G.S. reports 28½° N., 97° E. Aftershock. H = 13.22.20. |
| " 23rd | iPZ | 03-20-27 | B | Compression. U.S.C.G.S. reports 29½° N., 95° E. H = 03.09.19. |
| | iPZ | 18-57-57 | B | Compression. |
| | i Z | 58-07 | " | U.S.C.G.S. reports 28½° N., |
| | i Z | 58-16 | " | 97° E. Aftershock |
| | i Z | 19-00-31 | " | H = 18.46.57. |
| " 24th | iPZ | 01-38-43 | B | U.S.C.G.S. reports 28½° N., 97° E. Aftershock. H = 01.27.45. |
| " 26th | iPZ | 07-15-25 | B | Compression. U.S.C.G.S. reports 19° S., 170° E. H = 07.12.29. h = about 100 km. |
| " 27th | eiPZ | 07-23-43 | B | Compression |
| | i Z | 24-09 | " | |
| | i Z | 24-34 | " | |
| | i Z | 24-45 | " | |
| " 28th | ePZ | 07-17-27 | B | Complicated by mechanical movement. |
| Note: Times reported should be correct from the 30th onwards. | | | | |
| " 30th | iPZ | 06-57-33 | B | Compression |
| | ePNE | 57-34 | M-S | $\Delta_{S-P}$ = 32½° |
| | e E | 58-35 | " | U.S.C.G.S. reports 3½° S., |
| | iPPZNE | 58-52 | B, M-S | 130½° E. H = 06.51-03. |
| | iSN | 07-02-53 | M-S | |
| | eSE | 02-53 | " | |
| | ePZ | 08-14-52 | B | |
| | iPZN | 09-17-40 | B,M-S | Compression |
| | i Z | 18-11 | B | $\Delta_{S-P}$ = 17.7° |
| | iSN | 20-53 | M-S | U.S.C.G.S. reports 19° S., 168° E. H = 09.13-49. |
| | iPZ | 09-28-28 | B | Compression. U.S.C.G.S. reports New Hebrides Is. region. H = 09.24-35. |
| | iPZ | 16-25-54 | B | Dilatation |
| | eiPZ | 23-17-56 | B | U.S.C.G.S. reports New |
| | iPE | 17-57 | S | Hebrides Island Region. H = 23.13.53. |
| " 31st | eiPN | 07-13-34 | M-S | $\Delta_{S-P}$ = 41.2° |
| | iPE | 13-34 | S | U.S.C.G.S. reports 6° N., |
| | iPP?NE | 15-17 | M-S,S | 126° E. H = 07.05.35. |
| | iSE | 19-45 | S | |
| | eSN | 19-45 | M-S | |
| | $iL_QNE$ | 23-12 | M-S,S | D.A. Jones. |

International Seismological Centre

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 26 August, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 01 | 02 | 02 | 01 | 00 | 00 | 01 | 00 |
| 2 | 01 | 02 | 03 | 03 | 01 | 01 | 03 | 01 |
| 3 | 02 | - | 03 | 02 | 00 | 00 | 01 | 02 |
| 4 | 02 | 03 | 02 | 01 | 02 | 01 | 01 | 00 |
| 5 | 03 | 01 | 00 | 01 | 01 | 01 | 01 | 01 |
| 6 | 01 | 01 | 01 | 00 | 00 | ..No.....Record..... | | |
| 7 | - | 01 | 01 | 01 | 00 | 00 | 01 | 00 |
| 8 | 00 | 01 | 02 | 02 | 00 | 01 | 01 | 01 |
| 9 | 02 | 01 | 01 | 01 | 00 | 01 | 00 | 01 |
| 10 | 01 | 03 | 02 | 02 | 01 | 02 | 01 | 01 |
| 11 | 01 | 01 | 02 | 01 | 00 | 01 | 01 | 01 |
| 12 | 02 | 02 | 01 | 01 | 01 | 01 | 02 | 02 |
| 13 | 03 | 03 | 02 | 03 | .....No.....Record..... | | | |
| 14 | 04 | 03 | 02 | 02 | 00 | 01 | 01 | 03 |
| 15 | | | | | | | | |
| 16 | 03 | 01 | 03 | 02 | 00 | 02 | 01 | 02 |
| 17 | 03 | 02 | 02 | 03 | 01 | ..... | | 02 |
| 18 | 03 | 04 | 02 | 01 | .....No.....Record..... | | | |
| 19 | 02 | 02 | 02 | 01 | .....No.....Record..... | | | |
| 20 | 01 | 01 | 01 | 01 | .....No.....Record..... | | | |
| 21 | 02 | 01 | 02 | 02 | 01 | 00 | 00 | 01 |
| 22 | 01 | 02 | 01 | 01 | 01 | 00 | 00 | 00 |
| 23 | 01 | 01 | 02 | 02 | 00 | 00 | 01 | 01 |
| 24 | 01 | 02 | 02 | 03 | 01 | 01 | 02 | 02 |
| 25 | 02 | 03 | 02 | 01 | 02 | 01 | 01 | 00 |
| 26 | 03 | 02 | 02 | 02 | 00 | 01 | 00 | 00 |
| 27 | 03 | 02 | 01 | 02 | 01 | 00 | 01 | 01 |
| 28 | 01 | 02 | 03 | 02 | 01 | 02 | 02 | 01 |
| 29 | 03 | 04 | 02 | 03 | 02 | 02 | 01 | 01 |
| 30 | 02 | 02 | 03 | 02 | 02 | 02 | ..... | |
| 31 | 02 | 02 | 02 | 03 | 01 | 01 | ..... | |

SPRENGNETHER

# MICROSEISM AMPLITUDES ~~(Milne-Shaw~~ Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 26, August, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 06 | 05 | 06 | 06 |
| 2 | | | | | 07 | 06 | - | - |
| 3 | | | | | .....No..... | | Record..... | |
| 4 | | | | | 08 | 08 | 08 | 09 |
| 5 | | | | | 11 | 09 | 07 | 10 |
| 6 | | | | | - | - | 17 | 16 |
| 7 | | | | | 08 | 06 | 05 | 06 |
| 8 | | | | | 05 | 05 | 05 | 04 |
| 9 | | | | | .....No..... | | Record..... | |
| 10 | | | | | - | 06 | 12 | 10 |
| 11 | | | | | 05 | 05 | 05 | 04 |
| 12 | | | | | 07 | 08 | 07 | 05 |
| 13 | | | | | 07 | 06 | 07 | 10 |
| 14 | | | | | 08 | 06 | 09 | 08 |
| 15 | | | | | | | | |
| 16 | | | | | 05 | 07 | 08 | 07 |
| 17 | | | | | 10 | 10 | 14 | 14 |
| 18 | | | | | 09 | 15 | 15 | 10 |
| 19 | | | | | 12 | 10 | 06 | 07 |
| 20 | | | | | 08 | 06 | 06 | 07 |
| 21 | | | | | .....No..... | | Record..... | |
| 22 | | | | | .....No..... | | Record..... | |
| 23 | | | | | 08 | 06 | 06 | 06 |
| 24 | | | | | 06 | 09 | 05 | 13 |
| 25 | | | | | 12 | 11 | 10 | 09 |
| 26 | | | | | 07 | 08 | 09 | 07 |
| 27 | | | | | 08 | 05 | 08 | 08 |
| 28 | | | | | 12 | 15 | 18 | 20 |
| 29 | | | | | 13 | 15 | 11 | 08 |
| 30 | | | | | .....No..... | | Record..... | |
| 31 | | | | | .....No..... | | Record..... | |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

156.

$\phi = 27°\ 28'\ 41''$ S., $\lambda = 153°\ 1'\ 52''$ E., h = 15m. Bulletin No.....

International Seismological Centre

Foundation: Semi-consolidated alluvium of raised river terrace.

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| 1950 | | | | |
| Sept. 1st | iPZ | 02-57-41 | B | U.S.C.G.S. - Indian Ocean, about 700 miles west of Sumatra; H = 02-46-55 |
| | iPZ | 07-24-07 | B | Dilatation |
| | ePZ | 13-58-43 | B | |
| | ePZ | 14-39-58 | B | |
| " 2nd | e E | 13-31-45 | S | |
| | e E | 34-43 | " | |
| | e N | 34-57 | M-S | |
| " 3rd | iPZNE | 04-09-39 | B,M-S | Dilatation |
| | i Z | 09-45 | B | $\Delta_{S-P}$ = 20° U.S.C.G.S. - |
| | iSN | 13-17 | M-S | 11° S. 162½°E.;H = 04-05-15. |
| | eSZE | 13-17 | B,M-S | |
| " 4th | iPZ | 07-34-28 | B | Dilatation |
| " 5th | iPZ | 03-09-22 | B | Dilatation |
| | ePZ | 09-34-28 | B | |
| | iPZ | 17-36-07 | B | Dilatation |
| " 7th | iPZ | 00-24-31 | B | Dilatation |
| | i Z | 15-02-45 | B | |
| | i Z | 04-13 | " | |
| | eNE | 04-28 | M-S | |
| | iZE | 04-29 | B,S | |
| " 8th | iPZ | 07-03-25 | B | Dilatation $\Delta_{P-H}$ = 27° Ca. |
| | iPPZ | 04-42 | " | U.S.C.G.S. reports Fiji Is. region. h = 600 km. H = 06-58-30. |
| " 9th | ePZ | 09-16-50 | B | |
| | iPZ | 10-26-49 | B | Compression |
| | e1PE | 26-50 | S | $\Delta_{S-P}$ = 24.4° |
| | ePE | 26-54 | M-S | |
| | iPPZ | 27-31 | B | |
| | ePPE | 27-32 | M-S | U.S.C.G.S. - 4° S. 153° E., H = 10.21.40. $\Delta_{P-H}$ = 23.5° |
| | eSE | 31-02 | M-S,S | (in minute break) |
| | iSZ | 31-06 | B | |

| DATE. | PHASE. | G.M.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Sept. 9th (Cont'd). | iPZ | 13-05-31 | B | Compression |
| | iPZE | 14-31-51 | B | Compression |
| | iPE | 31-52 | S | $\Delta_{S-P}$ = 19.5° Ca. |
| | iPPZE | 32-17 | B,S | U.S.C.G.S. - 19° S., 169½° |
| | iSE | 35-22 | S | E., H = 14.27.47. |
| | eSE | 35-25 | M-S | $\Delta_{P-H}$ = 17.5° |
| " 10th | iPZ | 03-31-54 | B | Compression. $\Delta_{P-H}$ = 64° U.S.C.G.S. reports. 35° N, 140° E., H = 03-21-20. |
| | iPZ | 14-36-52 | B | Compression |
| | iPZE | 15-20-19 | B,S | Compression $\Delta_{S-P}$ = 19° |
| | iZE | 21-02 | B,M-S | U.S.C.G.S. - 14° S. 167° |
| | iSE | 23-45 | M-S | E., H = 15.15.57. |
| " 12th | iPZE | 11-10-40 | B,S | Compression |
| " 13th | iPZE | 20-46-57 | B,S | Compression |
| | e Z | 51-30 | B | U.S.C.G.S. - New Hebrides Islands region, H = 20.43.10. |
| " 14th | iPE | 09-13-13 | S | $\Delta_{S-P}$ = 38°, h = about |
| | ePN | 13-13 | M-S | 200 km. U.S.C.G.S. - |
| | iNE | 14-36 | M-S,S | Halmahera Islands region, |
| | iSN | 18-56 | M-S,S | H = 09.06.08, h = about |
| | iSSN | 21-29 | M-S | 200 km. |
| | i E | 21-40 | S | |
| " 15th | iPZE | 14-20-24 | B | Dilatation, U.S.C.G.S. reports 13° S. 176° W., H = 14.14.30, h = 100 km. |
| | iPZ | 19-11-15 | B | Compression. U.S.C.G.S. reports 16° S. 175° E, H = 19.05.08, h = 250 km. |
| " 17th | iPZ | 13-04-10 | B | Compression. |
| " 18th | iPZ | 11-13-18 | B | Compression |
| " 19th | iPNEZ | 20-35-50 | M-S,S,B | Records indicate compress- |
| | iPPNE | 36-50 | M-S | ion from south-east and |
| | iPPE | 36-52 | S | $\Delta_{S-P}$ = 29.3°, but |
| | iPPPN | 37-03 | M-S | U.S.C.G.S. - 2° S., 138½° |
| | iSNEZ | 40-36 | M-S,B | E., H = 20.29.48. |
| | iSSN | 42-23 | M-S | $\Delta_{P-H}$ = 29.3° |
| | iSSE | 42-25 | " | |
| | iL$_R$NE | 43-34 | " | |
| | iP?NEZ | 20-45-28 | M-S,B | Compression |
| " 20th | iPZ | 00-39-19 | B | Dilatation. U.S.C.G.S. |
| | i Z | 39-22 | " | reports 4° S., 157° E. |
| | iP$_c$P?ZNE | 42-51 | B,M-S,S | $\Delta$ = 24° |
| | eP$_c$P?E | 42-52 | M-S | |
| " 21st | iPZ | 16-03-46 | B | Dilatation |
| | iPPZ | 04-36 | " | $\Delta$ = 51° Ca. |
| | ePPE | 04-36 | S | |
| | iSZ | 11-00 | B | |
| | eSE | 11-05 | S | |
| | ePNE | 16-13-07 | M-S,S | |
| " 22nd | iPZ | 01-48-45 | B | Compression. Possibly U.S.C.G.S. 47½° N., 153° E. h = 150 km. |
| | ePZ | 07-04-25 | B | |
| | iPZ | 11-22-14 | B | Dilatation |
| | iPZ | 13-01-12 | B | Compression |
| | iPZ | 23-58-55 | B | Dilatation $\Delta_{S-P}$ = 29.3 h = about 450 km. |
| " 23rd | ePNE | 59-00 | M-S | (in minute break) U.S.C.G.S. - |
| | iSNE | 00-03-20 | M-S,S | 18° S. 177° W., H = 23-53- |

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| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Sept. 23rd | See * below. | | | |
| Sept. 24th | ePZ | 08-27-52 | B | |
| " 25th | eiPZ | 02-58-16 | B | |
| | i Z | 58-22 | " | |
| | i Z | 03-00-05 | | |
| " 26th | iPZ | 23-24-18 | B | Confused by mechanical movement |
| " 27th | iPE | 08-28-54 | M-S | Compression |
| | ePN | 28-54 | " | $\Delta$S-P = 24.1° |
| | iPZE | 28-55 | B, S | |
| | iSE | 33-05 | S | Apparently not 18½° S., |
| | iSNE | 33-07 | M-S | 175° E. (H = 08.23.58) as reported by U.S.C.G.S. |
| " 28th | iPZ | 03-39-38 | B | Comprossion. Confused by mechanical movement. U.S. C.G.S. reports. 23° N., 121° E., H = 03.29.36. |
| | iPZ | 13-30-13 | B | Compression |
| | ePNE | 30-13 | M-S,S | $\Delta$S-P = 23° |
| | i Z | 30-22 | B | U.S.C.G.S. - 5° S. 151° E., |
| | i Z | 30-44 | " | H = 13.25.11. |
| | e Z | 34-11 | B | |
| | eiSNE | 34-14 | M-S,S | |
| | eSE | 34-16 | M-S | |
| " 29th | Long waves at | 07-00-30 | M-S (N & E) | probably L waves of U.S.C. |
| | | 06-20 | " " | G.S. report. 19° N., 107° W., |
| | | 22-30 | " " | H = 06.32.14. |
| " 30th | ePZE | 07-41-02 | B,S | Start in minute break. |
| | iZE | 41-11 | B,S | U.S.C.G.S. - 28° N., 94° E, H = 07.28.54. |
| | ePZ | 08-44-48 | B | Possibly mechanical |
| | i E | 45-04 | | |
| | iPZ | 08-46-32 | B | Dilatation |
| | i Z | 46-41 | " | |
| * " 23rd | ePZ | 16-55-00 | B | In minute break |
| | iPZ | 17-27-52 | B | Dilatation |
| | ePZ | 18-33-30 | B | |
| | iPZ | 18-47-00 | B | In minute break |

O.A. Jones

O.A. Jones

Officer in Charge

International Seismological Centre

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 27 September, 1950.

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component | | | | E-W Component | | | |
|---|---|---|---|---|---|---|---|---|
| | 0 | 6 | 12 | 18 | 0 | 6 | 12 | 18 |
| 1 | 03 | 03 | 02 | 04 | 01 | 02 | 01 | 02 |
| 2 | 04 | 03 | 04 | 01 | 02 | 03 | - | - |
| 3 | 01 | 02 | 01 | 03 | ..... No ..... Record ..... | | | |
| 4 | 01 | 02 | 01 | 01 | ..... No ..... Record ..... | | | |
| 5 | 02 | 01 | 01 | 02 | ..... No ..... Record ..... | | | |
| 6 | ..... No ..... Record ..... | | | | ..... No ..... Record ..... | | | |
| 7 | 01 | 01 | 01 | 01 | 00 | 00 | 01 | 01 |
| 8 | 01 | 00 | 01 | 02 | 01 | 01 | 01 | 01 |
| 9 | ..... No ..... Record ..... | | | | 01 | 00 | 01 | 02 |
| 10 | ..... No ..... Record ..... | | | | 03 | 02 | 03 | 01 |
| 11 | 01 | 00 | 00 | 01 | 00 | 01 | 01 | 00 |
| 12 | 01 | 01 | 00 | 00 | 01 | 00 | 00 | 01 |
| 13 | 01 | 01 | 02 | 01 | 00 | 01 | 01 | 01 |
| 14 | 02 | 01 | 01 | 02 | ..... No ..... Record .... | | | |
| 15 | 00 | 01 | 01 | 02 | 02 | 01 | 01 | - |
| 16 | 02 | 01 | 01 | 02 | 01 | 01 | 02 | 01 |
| 17 | 01 | 00 | 00 | 02 | 01 | 01 | 00 | 01 |
| 18 | 01 | 02 | 01 | 02 | 01 | 01 | 02 | 00 |
| 19 | 01 | 02 | 01 | 01 | 00 | 01 | 00 | 00 |
| 20 | 01 | 01 | 00 | 00 | 00 | 01 | 02 | 00 |
| 21 | 01 | 01 | 00 | 01 | 01 | 01 | 00 | 00 |
| 22 | 00 | 00 | 01 | 00 | 00 | 00 | 00 | 00 |
| 23 | 00 | 01 | 01 | 00 | 00 | 00 | 01 | 01 |
| 24 | ..... No ..... Record ..... | | | | 01 | 01 | 00 | 01 |
| 25 | 00 | 01 | 01 | 02 | 01 | 01 | 02 | 01 |
| 26 | 02 | 01 | 01 | 02 | 02 | 02 | 01 | 02 |
| 27 | 03 | 02 | 01 | 01 | 01 | 01 | 02 | 02 |
| 28 | 02 | 02 | 01 | 01 | 01 | 01 | 02 | 02 |
| 29 | 02 | 02 | 02 | 01 | 01 | 00 | 01 | 01 |
| 30 | 01 | 02 | 02 | 02 | 02 | 01 | 02 | 01 |

SPRENGNETHER

# MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 26 — September, 1950

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | ..... | No.... | Record.... | |
| 2 | | | | | 10 | 15 | 14 | 12 |
| 3 | | | | | ..... | No..... | Record.... | |
| 4 | | | | | ..... | No..... | Record.... | |
| 5 | | | | | ..... | No..... | Record.... | |
| 6 | | | | | ..... | No..... | Record.... | |
| 7 | | | | | 08 | 05 | 07 | 07 |
| 8 | | | | | 05 | 09 | 05 | 08 |
| 9 | | | | | 06 | 07 | 12 | 09 |
| 10 | | | | | 17 | 10 | 15 | 08 |
| 11 | | | | | 08 | 05 | 06 | 07 |
| 12 | | | | | 07 | 05 | 05 | 07 |
| 13 | | | | | 06 | 08 | 10 | 09 |
| 14 | | | | | 08 | 09 | 10 | 15 |
| 15 | | | | | 08 | 11 | 06 | 12 |
| 16 | | | | | 09 | 08 | 07 | 05 |
| 17 | | | | | 06 | 11 | 12 | 09 |
| 18 | | | | | 08 | 14 | 15 | 10 |
| 19 | | | | | 08 | 10 | 10 | 11 |
| 20 | | | | | 10 | 11 | 11 | 10 |
| 21 | | | | | - | - | 07 | 07 |
| 22 | | | | | 08 | 08 | 08 | 07 |
| 23 | | | | | 08 | 04 | 04 | 06 |
| 24 | | | | | ..... | No..... | Record.... | |
| 25 | | | | | 06 | 07 | 07 | 10 |
| 26 | | | | | 10 | 11 | 07 | 09 |
| 27 | | | | | 11 | 10 | 11 | 08 |
| 28 | | | | | 06 | 07 | 10 | 08 |
| 29 | | | | | 07 | 08 | 12 | 07 |
| 30 | | | | | 12 | 06 | 09 | 07 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

$\phi = 27°\ 28'\ 41''$ S., $\lambda = 153°\ 1'\ 52''$ E., h = 15m. Bulletin No. 157

International Seismological Centre

Foundation: Semi-consolidated alluvium of raised river terrace.

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| 1950. | | | | |
| 2nd Oct. | iPZ | 18-44-10 | B | Compression |
| 4th " | iPZE | 17-15-11 | B,S | U.S.C.G.S. - New Hebrides Islands Region. H = 17-11-17 |
| | eNE | 15-11 | M-S | |
| | ePE | 18-05-42 | S | |
| | ePZ | 18-05-44 | B | |
| | iPE | 18-08-07 | S | |
| | eiPZ | 08-08 | B | $\Delta_{S-P}$ = 19°, H = 18-03-46 |
| | iSNE | 11-35 | M-S,S | U.S.C.G.S. reports 19° S., 169° E., H = 18-03-23 |
| 5th " | iPZ | 00-45-18 | B | Compression from North East. |
| | iPN | 45-20 | M-S | U.S.C.G.S. reports 18½° S., 170° E, H = 00-41-07. |
| | iPPZ | 45-29 | B | |
| | iPPNE | 45-31 | M-S | |
| | eSN | 48-37 | " | |
| | iSSZNE | 48-48 | B,M-S | |
| 10th " | iPZ | 13-30-25 | B | Compression |
| | iPZE | 18-47-04 | B,S | Dilatation |
| | ePNE | 47-07 | M-S | $\Delta_{S-P}$ = 22.7° Ca. |
| | iPPZ | 47-26 | B | |
| | iPPE | 47-28 | S | Wellington reports widely |
| | ePPN | 47-29 | M-S | felt in South Westland and |
| | iSZE | 51-05 | B,S | Otago. |
| | iSNE | 51-07 | M-S | |
| | iPZE | 23-20-27 | B,S | Dilatation, U.S.C.G.S. reports 17° S, 179° W., h = 600 Km. H = 23-15-21 |
| 11th " | iPZ | 13-48-24 | B | Compression |
| 12th " | iPZ | 18-05-17 | B | Compression |
| | ePE | 23-55-12 | M-S | Confused by mechanical |
| | i Z | 56-08 | | movements |

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| | | h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| 13th Oct. | iPZ | 14-37-32 | B | Dilatation U.S.C.G.S. Reports 10° S, 166° E., H = 14-32-38. |
| | iPZ | 17-43-03 | B | Compression |
| | iPZ | 20-24-39 | B | Compression |
| 14th " | ePZ | 05-04-27 | B | U.S.C.G.S. 5° S, 150½° E., H = 04-59-26. |
| 15th " | iPZ | 15-19-49 | B | Dilatation |
| | iPZNE | 16-04-15 | B,M-S,S | Dilatation from north-east $\Delta_{S-P}$ = 20° U.S.C.G.S. reports 10° S, 160°E. |
| | iSNE | 07-54 | M-S,S | H = 15-59-53 |
| | eSSE | 08-48 | M-S,S | |
| | $eL_RE$ | 09-18 | M-S | |
| | iPZ | 17-13-09 | B | Dilatation |
| 17th " | ePE | 16-39-34 | M-S | $\Delta_{S-P}$ = 18° U.S.C.G.S. reports |
| | eiPZ | 39-36 | B | 13° S, 165° E., H = 16-35-17. |
| | ePNE | 39-37 | M-S,S | |
| | eSN | 43-07 | M-S | |
| | eSE | 43-09 | M-S,S | |
| | eSZ | 43-10 | B | |
| 19th " | iPZ | 09-56-47 | B | Compression U.S.C.G.S. reports 32° S, 178° W. H = 09-51-20 |
| | ePE | 56-48 | S | |
| | eNE | 10-01-26 | M-S | Microseisms large |
| 21st " | ePZ | 03-07-51 | B | |
| | iPZ | 04-19-20 | B | Compression |
| | ePE | 19-20 | M-S,B | |
| | iPPE | 20-32 | S | $\Delta_{S-P}$ = 31½° |
| | iSE | 24-26 | M-S,S | U.S.C.G.S. reports 18½° S, |
| | $iL_RE$ | 28-20 | M-S,S | 174° W., H = 04-12-59. |
| | iPZ | 06-11-44 | B | Compression |
| | iPZ | 16-05-37 | B | Dilatation. U.S.C.G.S. reports 11½° S, 167° E, H = 16-00-50 $\Delta_{P-H}$ = 20½° |
| 22nd " | iPZ | 11-38-58 | B | Dilatation |
| | ePZ | 18-59-00 | B | U.S.C.G.S. - New Hebrides Islands Region H = 18-54-35. |
| 23rd " | e Z | 12-15-46 | B | |
| | e Z | 16-31-08 | B | |
| | e E | 33-32 | M-S | Long waves possibly Guatemala foreshock reported by U.S.C.G.S. |
| | e N | 38-17 | M-S | at 14½° N, 92° W. H = 15-03-40 |
| | e E | 17-29-29 | S | and main shock H = 16-13-24 |
| | eiZ | 21-31-29 | B | |
| 24th " | iPZE | 01-50-51 | B,S | Dilatation U.S.C.G.S. - |
| | ePNE | 50-51 | M-S | Kormadec Islands Region, H = 01-45-25 |
| | ePZ | 04-49-24 | B | Confused by mechanical movements |
| | iPZE | 22-34-25 | B,S | Dilatation |
| 25th " | iPZ | 02-23-15 | B | Compression |
| | eNE | 32-10 | M-S,S | |
| | iPZ | 07-13-15 | B | Compression. U.S.C.G.S. reports 26° N, 125½° E, H = 07-03-17, h = 100 km., $\Delta_{P-H}$ = 59.4° |
| | iPZE | 08-48-54 | B,S | Dilatation. $\Delta_{P-H}$ = 21.6° |
| | ePE | 49-00 | M-S | U.S.C.G.S. reports 6½° S, 155°E, H = 08-44-07. |
| | iPZ | 11-58-31 | B | Dilatation |

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| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| 26th Oct. | iPE | 03-55-25 | S | |
| | eiPZ | 55-25 | B | |
| | ePNE | 55-25 | M-S | $\Delta_{S-P}$ = 27.2° Ca. |
| | eSE | 04-00-00 | S | |
| | eSE | 04-00-03 | M-S | in minute break |
| | eNE | 00-07 | M-S | U.S.C.G.S. reports |
| | | | | H = 03-49-55, 32° S, 178° W |
| | | | | Fore shock of H = 15-38-43 |
| | iPZE | 07-14-46 | B,M-S,S | Compression |
| | ePN | 14-48 | M-S | U.S.C.G.S. reports 11° S; |
| | eSNE | 17-58 | " | 171° E, and H = 07-10-42, |
| | eSE | 17-59 | S | that is $\Delta$ = 24.5°, but |
| | | | | $\Delta_{S-P}$ and $\Delta_{P-H}$ = 17.6° |
| | iPZ | 11-59-22 | B | Compression |
| | eiPZ | 15-44-15 | B | Dilatation ? |
| | iPE | 44-16 | S | U.S.C.G.S. reports 32° S, |
| | ePNE | 44-17 | M-S | 178° W. H = 15-38-43. |
| | i Z | 44-28 | B | P-H = 5'-33"; $\Delta_{P-H}$ = 25.5° |
| | iSE | 48-53 | S | S-P = 4'-22"; $\Delta_{S-P}$ = 25.2° |
| | eSE | 48-53 | M-S | |
| 27th " | iPZ | 06-06-59 | B | Dilatation, U.S.C.G.S. reports |
| | | | | $11\frac{1}{2}$° N, 139° E. |
| | iPZNE | 21-32-54 | B,S,M-S | Dilatation. U.S.C.G.S. reports |
| | iPPZ | 33-05 | B | H = 21-28-41, 15° S, 167° E, |
| | iPPPN? | 33-13 | M-S,S | $\Delta_{P-H}$ = $18\frac{1}{2}$° |
| | iPPPE? | 33-14 | M-S | |
| | iPPPZ? | 33-15 | B | |
| | iSNE | 36-17 | M-S,S | |
| | eSE | 36-17 | M-S | |
| | iPZ | 22-30-42 | B | Compression. U.S.C.G.S. reports |
| | | | | H = 22-24-53. 23° S, 177° W. |
| 28th " | eiPE | 09-11-11 | S | Dilatation. $\Delta_{S-P}$ = 25.5 |
| | ePE | 11-11 | M-S | |
| | iPZ | 11-12 | B | U.S.C.G.S. report. |
| | eSE | 15-36 | S | H = 09-05-38. 32° S, $177\frac{1}{2}$° W. |
| | eSNE | 15-41 | M-S | |
| | ePZ | 17-27-44 | B | |
| | ePZ | 18-10-31 | B | |
| 30th " | iPZ | 07-49-14 | B | Dilatation |
| | iPZ | 13-54-47 | B | Dilatation $\Delta_{S-P}$ = 19° |
| | ePE | 54-48 | S | U.S.C.G.S. H = 13-50-22 |
| | iSNE | 58-18 | M-S,S | 11° S, 163° E. |
| 31st | iPZ | 16-28-51 | B | Compression |
| | iPZ | 17-47-47 | B | Compression |

O.A. Jones.

O.A. Jones
Officer in Charge.

International Seismological Centre

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 27 October, 1950

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | 01 | 01 | 01 | 00 | 02 | 02 | 01 | 00 |
| 2 | 01 | 02 | 01 | 01 | 00 | 01 | 00 | 00 |
| 3 | 01 | 01 | 02 | 01 | 01 | 01 | 01 | 01 |
| 4 | 01 | 01 | 02 | 01 | 00 | 01 | 02 | 01 |
| 5 | ----------No | Record---------- | | | ----------No Record---------- | | | |
| 6 | ----------No | Record---------- | | | ----------No Record---------- | | | |
| 7 | ----------No | Record---------- | | | ----------No Record---------- | | | |
| 8 | ----------No | Record---------- | | | ----------No Record---------- | | | |
| 9 | - | - | 01 | 01 | ----------No Record---------- | | | |
| 10 | 01 | 02 | 01 | 00 | 02 | 02 | 01 | 01 |
| 11 | 01 | 01 | 01 | 01 | 01 | 01 | 00 | 00 |
| 12 | 01 | 00 | 01 | 01 | 01 | 00 | 00 | 00 |
| 13 | 01 | 01 | 01 | 02 | 01 | 02 | 02 | 02 |
| 14 | 02 | 01 | 00 | 00 | 01 | 01 | 01 | 01 |
| 15 | 02 | 01 | 00 | 00 | 01 | 01 | 02 | 00 |
| 16 | No time breaks | | | | 01 | 01 | 01 | 00 |
| 17 | 00 | 01 | 00 | 00 | 01 | 01 | 00 | 00 |
| 18 | 00 | 00 | 01 | 00 | 01 | 00 | 00 | 01 |
| 19 | 02 | 02 | 03 | 04 | 03 | 03 | 03 | 04 |
| 20 | 02 | 02 | 01 | 01 | 02 | 02 | 01 | 01 |
| 21 | 01 | - | - | - | 01 | 01 | 01 | 00 |
| 22 | - | 01 | 01 | 00 | 00 | 00 | 00 | 00 |
| 23 | 01 | 00 | 00 | 00 | 00 | 00 | 01 | 00 |
| 24 | 01 | 02 | 00 | 00 | 01 | 00 | 00 | 00 |
| 25 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| 26 | 01 | 00 | 00 | 00 | 00 | 01 | 00 | 00 |
| 27 | 01 | 00 | 01 | 00 | 00 | 01 | 00 | 00 |
| 28 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 |
| 29 | 00 | 01 | 01 | 01 | 00 | 01 | 00 | 01 |
| 30 | 01 | 01 | 00 | - | 01 | 01 | 00 | 01 |
| 31 | 02 | 01 | 00 | 02 | 01 | 00 | 01 | 01 |

SPRENGNETHER

# MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 27 October, 1950

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 04 | 07 | 07 | 04 |
| 2 | | | | | 09 | 03 | 04 | 04 |
| 3 | | | | | 07 | 08 | 08 | 07 |
| 4 | | | | | 06 | 06 | 05 | 07 |
| 5 | | | | | ---------No Record--------- | | | |
| 6 | | | | | 10 | 07 | 10 | 08 |
| 7 | | | | | 07 | 09 | 07 | 08 |
| 8 | | | | | 04 | 05 | 10 | 17 |
| 9 | | | | | 11 | 13 | 14 | 12 |
| 10 | | | | | 11 | 10 | 09 | 07 |
| 11 | | | | | 05 | 09 | 09 | 07 |
| 12 | | | | | 08 | 07 | 05 | 05 |
| 13 | | | | | 07 | 10 | 10 | 12 |
| 14 | | | | | 11 | 10 | 11 | 10 |
| 15 | | | | | 09 | 08 | 10 | 07 |
| 16 | | | | | 05 | 06 | 05 | 05 |
| 17 | | | | | 06 | 07 | 05 | 06 |
| 18 | | | | | 04 | 05 | 06 | 07 |
| 19 | | | | | 08 | 09 | 16 | 20 |
| 20 | | | | | ---------No Record--------- | | | |
| 21 | | | | | 09 | 05 | 06 | 05 |
| 22 | | | | | 04 | 05 | 05 | 05 |
| 23 | | | | | 04 | 05 | 05 | E. QUAKE |
| 24 | | | | | 07 | 03 | 03 | 03 |
| 25 | | | | | 05 | 03 | 05 | 05 |
| 26 | | | | | 06 | 05 | 04 | 03 |
| 27 | | | | | 04 | 05 | 04 | 04 |
| 28 | | | | | 03 | 04 | 03 | 04 |
| 29 | | | | | 03 | 04 | 04 | 04 |
| 30 | | | | | 04 | 05 | 04 | 06 |
| 31 | | | | | 05 | 06 | 05 | 05 |

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

$\phi$ = 27° 28′ 41″ S., $\lambda$ = 153° 1′ 52″ E., h = 15m. Bulletin No. 158

Foundation: Semi-consolidated alluvium of raised river terrace.

International Seismological Centre

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| 1950 Nov. 2nd | iPZNE | 15-34-06 | B,M-S,S | Dilatation from north-west. $\Delta_{P-H}$ = 30.6°. Later phases confused by over-lapping traces. U.S.C.G.S.- 6° S, 129½° E., H = 15-27-49. |
| | ePZ | 16-16-43 | B | |
| | iPZ | 18-20-20 | B | Compression |
| | ePE | 20-21 | S | $\Delta_{S-P}$ = 30.6° |
| | e E | 23-38 | = | U.S.C.G.S. - aftershock of |
| | eSZE | 25-16 | B,S | Banda Sea earthquake (6° S, 129½° E.), H = 18-14-03. |
| | ePZ | 22-22-17 | B | |
| " 4th | iPZE | 07-26-54 | B,M-S,S | |
| | isPE | 27-36 | M-S,S | U.S.C.G.S. - 15° S, 167° E. |
| | eSE | 30-18 | M-S,S | H = 07-22-50 and h = about |
| | i Z | 30-25 | B | 200 km. |
| | i E | 30-27 | S | |
| | i E | 30-29 | M-S | |
| " 6th | iPZ | 22-26-42 | B | Dilatation |
| | eiPN | 26-42 | M-S | |
| | eiPE | 26-45 | " | $\Delta_{S-P}$ = 20° |
| | iPE | 26-45 | S | U.S.C.G.S. - 7½° S, 155½° E |
| | eiSNEZ | 30-30 | B,M-S | H = 22-22-05 |
| | iSE | 30-31 | S | |
| " 7th | iPZ | 06-29-18 | B | Compression |
| | ePE | 29-19 | S | $\Delta_{S-P}$ = 20.9° Ca. |
| | i Z | 29-24 | B | U.S.C.G.S. - Solomon |
| | iPPZ | 29-34 | B | Islands region, H = 06-24-37 |
| | eSE | 33-03 | S | |
| | eSNE | 33-07 | M-S | |
| | iPZ | 17-32-37 | B | Dilatation |
| | i Z | 33-11 | " | |

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Nov. 8th | iPZEN | 02-03-07 | B,M-S,S | Dilatation $\Delta_{P-H_o}$ = 17.1° U.S.C.G.S. - 18° S., 168° E. H = 01-59-06. |
| | iPZEN | 02-22-31 | B,M-S,S | Dilatation |
| | iPE | 22-33 | M-S | $\Delta_{S-P}$ = 19.4° |
| | eSE | 26-05 | " | U.S.C.G.S. - 9½° S, 159½° E. |
| | eSN | 26-08 | " | H = 02-18-09. |
| | i E | 26-13 | " | |
| | i N | 26-14 | " | |
| | iPZN | 02-40-22 | B,M-S | Dilatation (in coda of previous shock) U.S.C.G.S. - aftershock of previous earthquake. H = 02-35-59, but $\Delta_{P-H}$ = 21° |
| | iPZ | 02-52-24 | B | Compression (in coda of previous shock). U.S.C.G.S. - aftershock of above. H = 02-48-01. $\Delta_{P-H}$ = 19.4° |
| | iPZ | 06-45-30 | B | Compression |
| | ePNE | 45-30 | M-S,S | $\Delta_{S-P}$ = 19.4° |
| | eSE | 49-05 | M-S | U.S.C.G.S. - aftershock of |
| | iSNE | 49-06 | M-S,S | above. H = 06-41-06. |
| | iPZ | 11-53-43 | B | Compression |
| | ePNE | 53-44 | M-S | U.S.C.G.S. - aftershock of |
| | ePE | 53-45 | S | above. H = 11-49-22, $\Delta_{P-H}$ = 19° |
| | iPZ | 11-57-52 | B | Compression. U.S.C.G.S. - aftershock of above, H = 11-53-30, $\Delta_{P-H}$ = 19° |
| | iPZ | 14-13-14 | B | Compression. U.S.C.G.S. - Aftershock of above, H = 14-08-50, $\Delta_{P-H}$ = 21° |
| Nov. 9th | iPZ | 12-12-12 | B | Compression |
| | i Z | 12-34 | " | U.S.C.G.S. - Aftershock of above, H = 12-07-46, $\Delta_{P-H}$ = 19.4° |
| Nov. 10th | iPZ | 05-07-54 | B | Compression |
| | ePE | 07-54 | S | U.S.C.G.S. - 16° S, 176° W., |
| | iPP?ZE | 09-02 | B,S | H = 05-02-05, h = about 350 km. $\Delta_{P-H}$ = 31.1°. |
| Nov. 11th | iPN | 03-43-03 | M-S | |
| | iPZ | 43-04 | B | Dilatation |
| | ePE | 43-09 | M-S,S | $\Delta_{S-P}$ = 22.1° |
| | i Z | 43-19 | B | U.S.C.G.S. - 6° S, 148° E, |
| | iPP?E | 43-38 | S | H = 03-38-07. |
| | iSN | 47-02 | M-S | (in minute break) |
| | iSE | 47-04 | M-S,S | |
| | i E | 47-30 | S | |
| | iSSE | 47-49 | " | |
| | ePE | 22-22-07 | S | |
| | eSN | 22-09 | M-S | |
| | iPZ | 22-09 | B | Dilatation |
| | iSE | 25-44 | M-S | |
| | iSE | 25-45 | S | |
| | eSN | 25-45 | M-S | |
| Nov. 13th | ePZ | 07-00-07 | B | |

International Seismological Centre

t. Printer, Brisbane.)

| DATE. | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Nov. 14th | ePZ | 04-28-04 | B | |
| | iPNE | 28-04 | M-S,S | |
| | i Z | 28-06 | B | $\Delta_{S-P}$ = 18.6° |
| | iSNE | 31-35 | M-S,S | U.S.C.G.S. - 11° S, 161° E., |
| | eSZ | 31-35 | M-S | H = 04-23-46 |
| | ePZ | 04-36-18 | B | |
| | iPE | 36-18 | B,M-S,S | $\Delta_{S-P}$ = 18.6° |
| | ePN | 36-18 | M-S | U.S.C.G.S. - 11° S, 161° E. |
| | iSN | 39-46 | " | H = 04-32-00 |
| | eSZE | 39-46 | B,M-S | |
| | iPZNE | 08-36-51 | B,M-S,S | Compression. $\Delta_{S-P}$ = 19.1° |
| | iSE | 40-26 | S | U.S.C.G.S. - 11° S, 161° E, |
| | eSZ | 40-27 | B | H = 08-32-34. |
| " 15th | ePZ | 08-06-14 | B | |
| " 16th | iPZ | 07-13-06 | B | Compression. U.S.C.G.S. - Solomon Is. region, H = 07-08-29. |
| | iPZ | 09-01-12 | B | Dilatation |
| | iPZ | 13-17-26 | B | Dilatation. U.S.C.G.S. - 32° S, 180°. |
| " 21st | iPZ | 22-26-40 | B | Dilatation |
| | ePE | 26-40 | M-S | |
| | e E | 26-48 | S | |
| | eSE | 31-10 | M-S | U.S.C.G.S. - 3½° S, 147° E, |
| | eSE | 31-12 | S | H = 22-21-18. |
| " 22nd | iPZ | 10-28-51 | B | Dilatation. U.S.C.G.S. - 51° N. 176° W. |
| " 23rd | iPZ | 07-07-44 | B | Compression |
| " 24th | iPZ | 13-10-26 | B | Dilatation |
| | e E | 11-40 | M-S,S | U.S.C.G.S. - 15° S, 173° W, |
| | eLE | 16-00 | M-S | H = 13-03-43 |
| | eLE | 20-31-00 | M-S,S | U.S.C.G.S. - 15° S, 173° W. H = 20-18-48. |
| " 26th | iPZ | 07-13-27 | B | Dilatation |
| " 28th | iPZ | 11-29-30 | B | Compression |
| " 29th | ePE | 18-42-26 | M-S,S | |
| | iPZ | 42-26 | B | Dilatation |
| | iSE | 47-44 | S | $\Delta_{S-P}$ = 33.5° |
| | eSE | 47-45 | M-S | U.S.C.G.S. - 4° S, 128½° E, H = 18-35-47. |

O.A. Jones

O.A. Jones

Officer in Charge

Univ. Q'ld. Seismological Station.

International Seismological Centre

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 29 November, 1950.

International Seismological Centre

| Hour G.M.T. / Date | N-S Component | | | | E-W Component | | | |
|---|---|---|---|---|---|---|---|---|
| | 0 | 6 | 12 | 18 | 0 | 6 | 12 | 18 |
| 1 | 01 | 01 | 02 | 04 | 01 | 01 | 02 | 03 |
| 2 | 01 | 00 | 00 | 00 | 01 | 01 | 00 | 00 |
| 3 | ..... | No time | breaks | ..... | 01 | 01 | 01 | 02 |
| 4 | ..... | No time | breaks | ..... | 02 | 04 | 03 | 03 |
| 5 | ..... | ..... | No | Records | ..... | ..... | ..... | ..... |
| 6 | ... | Trace too | faint to | read.. | 01 | 03 | 02 | 01 |
| 7 | 02 | 01 | 00 | 01 | 01 | 02 | 01 | 00 |
| 8 | 00 | 00 | Quake | 01 | 01 | 01 | 01 | 01 |
| 9 | 01 | 01 | 01 | 01 | 00 | 01 | 01 | 01 |
| 10 | - | - | 01 | 02 | 02 | 02 | 01 | 02 |
| 11 | 02 | 02 | 01 | 01 | 01 | 02 | 01 | 01 |
| 12 | 01 | 02 | 01 | 01 | 01 | 02 | No | Record |
| 13 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 14 | 01 | 02 | 01 | 01 | 01 | 01 | 01 | 01 |
| 15 | 01 | 01 | 00 | 01 | 01 | 00 | 00 | 00 |
| 16 | 01 | 01 | 01 | 01 | 00 | 01 | 01 | 01 |
| 17 | ..... | No Record | ..... | | 01 | 02 | 02 | 02 |
| 18 | ..... | No Record | ..... | | 02 | 01 | 01 | 01 |
| 19 | ..... | No Record | ..... | | 01 | 01 | 01 | 01 |
| 20 | 01 | 01 | 01 | 00 | 01 | 01 | 00 | 00 |
| 21 | 01 | 00 | 00 | 00 | 00 | 00 | 01 | 01 |
| 22 | 00 | 01 | 01 | 01 | 00 | 01 | 01 | 01 |
| 23 | 01 | 00 | 01 | 01 | 00 | 00 | 01 | 01 |
| 24 | ..... | No Record | ..... | | 01 | 00 | 00 | 00 |
| 25 | ..... | No Record | ..... | | 01 | 01 | 01 | 01 |
| 26 | 01 | 02 | 03 | 02 | 01 | 02 | 02 | 02 |
| 27 | 01 | 01 | 01 | 01 | 02 | 01 | 01 | 01 |
| 28 | - | - | 01 | 00 | 01 | 01 | 02 | 01 |
| 29 | 00 | 01 | 00 | 00 | 01 | 01 | 01 | 00 |
| 30 | 01 | 00 | 00 | 01 | 00 | 00 | 00 | 01 |

SPRENGNETHER

# MICROSEISM AMPLITUDES (~~Milne-Shaw Seismographs~~)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 29 — November, 1950

International Seismological Centre

| Date \ Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 08 | 07 | 09 | 17 |
| 2 | | | | | 06 | 07 | 06 | Quake |
| 3 | | | | | 07 | 09 | 06 | 13 |
| 4 | | | | | 08 | 16 | 24 | 20 |
| 5 | | | | | ..... | No | Record..... | |
| 6 | | | | | 04 | 10 | 06 | 05 |
| 7 | | | | | 03 | 05 | 07 | 06 |
| 8 | | | | | 05 | 05 | 07 | 04 |
| 9 | | | | | 05 | 04 | 06 | 05 |
| 10 | | | | | 05 | 05 | 06 | 07 |
| 11 | | | | | 06 | 07 | 05 | 06 |
| 12 | | | | | 06 | 06 | 05 | 05 |
| 13 | | | | | 06 | 08 | 07 | 07 |
| 14 | | | | | 05 | 05 | 04 | 05 |
| 15 | | | | | 04 | 06 | 05 | 06 |
| 16 | | | | | 09 | 08 | 08 | 09 |
| 17 | | | | | 10 | 11 | 12 | 15 |
| 18 | | | | | 14 | 12 | 10 | 07 |
| 19 | | | | | 07 | 08 | 07 | 06 |
| 20 | | | | | 05 | 05 | 04 | 03 |
| 21 | | | | | 04 | 03 | 02 | 03 |
| 22 | | | | | 03 | 02 | 03 | 03 |
| 23 | | | | | 02 | 03 | 04 | 04 |
| 24 | | | | | 03 | 05 | 04 | 04 |
| 25 | | | | | 05 | 05 | 04 | 06 |
| 26 | | | | | 08 | 18 | 17 | 11 |
| 27 | | | | | 12 | 09 | 07 | 06 |
| 28 | | | | | ..No Record.. | | 08 | 07 |
| 29 | | | | | 06 | 04 | 04 | 05 |
| 30 | | | | | 04 | 03 | 04 | 02 |

Note — The large microseisms on the 4th were caused by a 60 m.p.h. gale affecting the building in which the instruments are housed.

# UNIVERSITY OF QUEENSLAND
## SEISMOLOGICAL STATION
### BRISBANE

$\phi$ = 27° 28′ 41″ S., $\lambda$ = 153° 1′ 52″ E., h = 15m. Bulletin No. 159

Foundation: Semi-consolidated alluvium of raised river terrace.

International Seismological Centre

INSTRUMENTS AND CONSTANTS

| INSTRUMENT | RATE OF RECORDING | COMPONENT | FREE PERIOD | DAMPING | STATIC MAGNIFICATION |
|---|---|---|---|---|---|
| Milne-Shaw No. 58 (Modified) . | 16 m.m. per minute | N.—S. | 12 sec. | 20 : 1 | 250 |
| Milne-Shaw No. 60 (Modified) . | 16 m.m. per minute | E.—W. | 12 sec. | 20 : 1 | |
| Benioff No. 12 .. .. .. .. | 15 m.m. per minute | N.—S. | 1.5 sec. | | |
| Benioff No. 11 .. .. .. .. | 15 m.m. per minute | E.—W. | 1.5 sec. | | |
| Benioff No. 13 .. .. .. .. | 15 m.m. per minute | Vertical | 1.5 sec. | | |
| Sprengnether No. 374 . .. .. | 50 m.m. per minute | E.—W. | 7.2 sec. | | |

Time is correct to the nearest second and is checked daily against radio-signals giving Eastern Australian Standard Time.

The station is maintained and operated by the University of Queensland assisted by grants from the Commonwealth Council for Scientific and Industrial Research.

| DATE | PHASE | U.T. h. m. s. | UNIT | REMARKS |
|---|---|---|---|---|
| 1950. | | | | |
| Dec. 1st | iPZ | 10-22-15 | B | Dilatation |
| | iPKPZ | 15-11-25 | B | Dilatation |
| | ePKPNE | 11-25 | M-S | U.S.C.G.S. - 14° N. 47° W. |
| | ePKPE | 11-27 | S | H. = 14.51.00. |
| | ePPE | 15-04 | " | h = about 100 km. |
| | oPPE | 15-05 | M-S | |
| | iPZ | 17-27-13 | B | Dilatation |
| " 2nd | iPZNE | 16-21-18 | B,M-S,S | Dilatation to N.E. |
| | eSNE | 24-33 | M-S | U.S.C.G.S. - 17° S. 168° E. |
| | iSE | 24-33 | S | H = 16.17.10 |
| | iPZ | 17-30-49 | B | Dilatation |
| | ePN | 30-49 | M-S | |
| | eSN | 35-07 | " | |
| | iPZNE | 19-55-34 | B,M-S,S | Dilatation to N.E. |
| | iPPN | 55-42 | M-S | $\Delta_{S-P}$ = 16.2° U.S.C.G.S. - |
| | iPPE | 55-44 | " | 18° S. 167° E. |
| | iSE | 58-30 | " | H = 19.51.45. |
| | iSSNE | 58-43 | " | |
| | ePE | 22-21-57 | M-S | U.S.C.G.S. - 18° S. 167° E. H = 22.18.07. |
| " 3rd | iPE | 03-11-46 | S | $\Delta_{S-P}$ = 17° |
| | ePE | 11-47 | M-S | U.S.C.G.S. - 17½° S. 167° E. |
| | eSN | 14-49 | " | H = 03.07.44. |
| | iSE | 14-51 | S | |
| | iPZ | 06-39-05 | B | Compression |
| | iPZ | 07-51-24 | B | Compression to S.W. |
| | iPNE | 51-25 | M-S,S | $\Delta_{P-H}$ = 16.6° |
| | eSN | 54-22 | M-S | U.S.C.G.S. - 17½° S. 167° E. |
| | e E | 54-33 | " | H = 07.47.03. |
| | iLN | 56-07 | " | |
| | ePZ | 08-25-57 | B | U.S.C.G.S. - New Hebrides Islands region, H = 08.22.10 |
| | iPZ | 09-44-02 | B | Compression U.S.C.G.S. - New Hebrides Islands region H = 09.40.09. |

W.F. & CO.

| DATE | PHASE. | U.T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Dec. 3rd (Cont'd) | ePZ | 13-30-51 | B | U.S.C.G.S. - New Hebrides Islands region, H = 13.26.55 |
| | ePZ | 20-29-12 | B | U.S.C.G.S. - New Hebrides Islands Region, H = 20.25.18 |
| " 4th | ePZ | 07-41-54 | B | |
| | iPNE | 41-55 | M-S,S | |
| | i E | 42-54 | M-S,S | U.S.C.G.S. - 18° S. 167° E., |
| | eSNE | 44-42 | M-S | H = 07-38-02, aftershock |
| | eSE | 44-46 | S | of 2nd H = 19.51.45. |
| | iSSN | 45-08 | M-S | |
| | iSSE | 45-09 | S | |
| | $iL_RN$ | 46-19 | M-S | |
| | $eL_RE$ | 46-22 | " | |
| | iPZ | 10-21-53 | B | Dilatation, U.S.C.G.S. - 18° S, 167° E., aftershock of 2nd, H = 19.51.45. |
| | iPZ | 11-11-34 | B | Dilatation, U.S.C.G.S. - 18° S, 167° E., aftershock of 2nd, H = 19.51.45. |
| | iPZ | 16-32-58 | B | Compression |
| | iPN | 32-59 | M-S | U.S.C.G.S. - 5° S, 153½° E., |
| | iPE | 33-00 | M-S,S | H = 16.28.01 and |
| | ipPE | 33-22 | M-S | h = about 100 km. |
| | ipPN | 33-23 | " | |
| | iSNE | 37-03 | " | |
| | ePZ | 20-16-02 | B | ] in minute break |
| | iPNE | 16-02 | M-S | ] |
| | iPE | 16-02 | S | U.S.C.G.S. - 18° S, 167° E., |
| | eSN | 19-10 | M-S | aftershock 2nd, |
| | eSE | 19-13 | S | H = 19.51.45. |
| | iPZ | 21-11-06 | B. | Dilatation |
| " 5th | iPZ | 08-46-58 | B,S | Dilatation |
| | eSNE | 49-58 | M-S | U.S.C.G.S. - 17½° S, 167° E, H = 08.43.05. |
| | iPZE | 12-09-48 | B,S | Dilatation |
| | eSE | 12-41 | S | U.S.C.G.S. - 18° S, 166½° E, |
| | iSSE | 13-07 | M-S | H = 12.06.04 |
| | iPZNE | 16-56-06 | B,M-S | Dilatation |
| | eiPE | 56-06 | S | |
| | i E | 56-07 | S | $\Delta S-P = 16.8°$ |
| | iSN | 59-15 | M-S | |
| | eSE | 59-15 | M-S,S | U.S.C.G.S. - 17½° S, 166½° E. |
| | eSSE | 59-32 | S | H = 16.52.16. |
| " 6th | ePE | 03-41-38 | S,M-S | |
| | eSE | 45-05 | S | |
| | eSNE | 45-06 | M-S | |
| | ePN | 04-04-48 | M-S | |
| | iPE | 04-50 | S | |
| | ePE | 04-50 | M-S | |
| | iPZ | 07-22-30 | B | Dilatation. U.S.C.G.S. - 17½° S, 167° E, H = 07.18.37. |
| | iPZ | 13-36-00 | B. | Compression |
| | iPZNE | 16-57-51 | B,M-S,S | Dilatation |
| | eSE | 17-00-41 | S | U.S.C.G.S. - 17½° S, 167° E, H = 07.18.37. |
| | iPZE | 21-09-52 | B,S | Dilatation. U.S.C.G.S. - New Hebrides Islands Region, H = 21.06.03. |
| " 7th | iPZ | 22-03-15 | B | Dilatation |

International Seismological Centre

| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| Dec. 8th | iPZ | 01-02-31 | B | Dilatation. U.S.C.G.S. - New Hebrides Islands Region, H = 00.58.37. |
| | iPZ | 07-14-53 | B | Dilatation. U.S.C.G.S. - 23° S, 178° W., H = 07.09.12. |
| | ePZ | 09-02-54 | B | U.S.C.G.S. - New Hebrides Islands Region, H = 08.58.55 |
| | iPZ | 12-56-37 | B | Dilatation U.S.C.G.S. - Samoa Islands Region, H = 12.49.57. |
| | iPZ | 15-35-30 | B | Compression. U.S.C.G.S. - 17° S., 167° E., H = 15.31.37 |
| " 9th | iPZ | 03-26-50 | B | Dilatation |
| | ePZ | 16-40-00 | B | (in minute break) |
| | iPZ | 17-50-19 | B | Dilatation. U.S.C.G.S. - 17° S, 168° E., H = 17.46.19 |
| | ePZNE | 21-53-36 | B,M-S,S | |
| | e Z | 57-53 | B | $\Delta_{SKS-P}$ = 116.5° |
| | ePPNE | 58-13 | M-S,S | h = about 200 km. |
| | i E | 58-48 | S | U.S.C.G.S. - 24° S., 67½° W., |
| | iNE | 58-51 | M-S | H = 21.38.56 and |
| | iSKSE | 22-03-50 | " | h = about 200 km. |
| | iSKSN | 03-57 | " | |
| | iNE | 04-27 | " | |
| | iSPNE | 08-15 | M-S,S | |
| " 10th | iPPZE | 03-10-33 | B,S | Dilatation |
| | ePPNE | 10-33 | M-S | |
| | eSKSNE | 16-13 | " | U.S.C.G.S. - 14½° S., 76½° W., |
| | eSKSE | 16-15 | S | H = 02.50.40 and |
| | ePSE | 19-52 | " | h = about 60 km. |
| | eNE | 20-22 | M-S,S | |
| | e N | 27-05 | M-S | |
| | iPZ | 05-13-22 | B | Compression. U.S.C.G.S. - Solomon Islands Region, H = 05.08.58. |
| | iPZ | 09-08-02 | B | (in minute break) |
| | eiPZ | 10-36-07 | B | |
| | eiPZ | 11-20-43 | B | |
| | ePNE | 20-43 | M-S | |
| | eSNE | 24-04 | M-S | |
| | iSE | 24-05 | S | |
| | iPZE | 13-28-11 | B,M-S,S | Dilatation |
| | ePN | 28-11 | M-S | U.S.C.G.S. - 28½° S, 179° W., |
| | ipPNE | 29-05 | " | H = 13.23.10 and |
| | $iP_cPN$ | 31-32 | " | h = about 300 km. |
| | iSNE | 32-10 | " | |
| | i Z | 34-40 | B | |
| | iPZ | 14-10-56 | B | Compression |
| " 14th | iPE | 00-36-03 | S | U.S.C.G.S. - 19° S., 171° E., H = 00.31.53. |
| | iPZE | 01-58-39 | B,M-S,S | Dilatation U.S.C.G.S. - 19½° S., 176° W., H = 01.53.47, h = about 200 km. |
| | iPZ | 10-54-09 | B | Dilatation |
| | iPZ | 11-22-30 | B | Dilatation |
| | iPZ | 11-53-03 | B | Dilatation |
| | ePZ | 11-42-18 | B | |

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| DATE. | PHASE. | U. T. h. m. s. | UNIT. | REMARKS. |
|---|---|---|---|---|
| 14th Dec. (Cont'd) | ePPZ | 14-35-24 | B | |
| | ePPE | 35-25 | M-S,S | U.S.C.G.S. - 17° N., 98° W., |
| | eSKSE | 41-11 | S | H = 14.15.50 |
| | e E | 41-22 | M-S | |
| | iPSE | 45-21 | " | |
| | eSSE | 51-30 | " | |
| | $eL_RE$ | 15-08-14 | " | |
| " 16th | iPZ | 15-24-20 | B | Compression |
| | ePE | 24-22 | S | $\Delta_{S-P}$ = 20° |
| | iSE | 28-03 | " | |
| " 18th | iPE | 02-35-08 | S | |
| | ePNE | 35-09 | M-S | $\Delta_{S-P}$ = 27.2° |
| | iSE | 39-38 | S | |
| | eSNE | 39-38 | M-S | |
| | ePNE | 15-51-21 | M-S,S | U.S.C.G.S. - Flores Sea, |
| | eSNE | 56-42 | M-S | H = 15.44.15. |
| | eSE | 56-45 | S | |
| " 20th | ePZ | 08-21-26 | B | |
| " 22nd | eiPZ | 09-21-48 | B | U.S.C.G.S. - Nicobar |
| | i Z | 22-06 | " | Islands Region, |
| | eSNE | 30-53 | M-S,S | H = 09.10.36. |
| | ePZ | 17-39-15 | B | |
| " 23rd | ePZ | 07-33-37 | B | |
| | eiPZ | 08-53-17 | B | |
| | iPZ | 09-03-53 | B | Dilatation. U.S.C.G.S. - Northern Honshu, Japan, H = 08.53.00. |
| | eiPZ | 17-51-07 | B | U.S.C.G.S. - 20° S., 179° W., H = 17.46.14 and h = about 600 km. |
| " 24th | iPZ | 20-40-44 | B | Dilatation. U.S.C.G.S. - 18° S., 168° E., H = 20.36.47. |
| " 26th | eiPZ | 21-09-05 | B | |
| " 28th | eiPZ | 22-50-07 | B | U.S.C.G.S. - 23° N., 143° E., H = 22.41.14, h = about 100 km. |
| " 30th | iPZ | 06-48-29 | B | Compression |
| | ePE | 48-29 | M-S,S | U.S.C.G.S. - Kermadec |
| | i E | 51-10 | S | Islands Region, |
| | e E | 51-10 | M-S | h = about 100 km. |
| | iSE | 53-04 | S | |
| | eSE | 53-04 | M-S | |
| | iPZE | 21-20-37 | B;S | Dilatation |
| | iSZE | 25-19 | B,S | U.S.C.G.S. - Fiji Islands Region, H = 21.14.53 and h = about 300 km. |

O. A. Jones

O.A. Jones

Officer in Charge, Seis. Station.

International Seismological Centre

## MICROSEISM AMPLITUDES (Milne-Shaw Seismographs)

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 30 December, 1950.

International Seismological Centre

| Date / Hour G.M.T. | N-S Component 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1950 Dec. 1 | 01 | 00 | 00 | 01 | 00 | 00 | 01 | 01 |
| 2 | 01 | 01 | 01 | 00 | 01 | 01 | 01 | 01 |
| 3 | 01 | 01 | 02 | 01 | 02 | 02 | 01 | 01 |
| 4 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 00 |
| 5 | 01 | 01 | 01 | 00 | 01 | 02 | 02 | 01 |
| 6 | 00 | 01 | 01 | 01 | 00 | 00 | 00 | 01 |
| 7 | 01 | 01 | 01 | 01 | 01 | 01 | 00 | 01 |
| 8 | 01 | 02 | 02 | 03 | 01 | 02 | 02 | 02 |
| 9 | 03 | 02 | 02 | 02 | 02 | 02 | 02 | 01 |
| 10 | 01 | 01 | 02 | 02 | 01 | 02 | 01 | 02 |
| 11 | 02 | 02 | 02 | 02 | 02 | 02 | 03 | 02 |
| 12 | 01 | 01 | 01 | 02 | 01 | 01 | 01 | 01 |
| 13 | 01 | 01 | 00 | 01 | 01 | 02 | 01 | 01 |
| 14 | - - - - - No Record - - - - - | | | | 01 | 01 | 01 | 01 |
| 15 | 02 | 02 | 01 | 01 | 02 | 01 | 01 | 01 |
| 16 | 01 | 02 | 02 | 01 | 01 | 01 | 02 | 02 |
| 17 | 02 | 02 | 02 | 01 | 02 | 01 | 02 | 01 |
| 18 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 19 | 01 | 00 | 01 | 01 | 01 | 01 | 01 | 01 |
| 20 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 0 |
| 21 | 02 | 01 | 02 | 01 | 02 | 01 | 01 | 01 |
| 22 | 02 | 01 | 01 | 02 | 02 | 02 | 02 | 02 |
| 23 | 01 | 01 | 02 | 02 | 02 | 01 | 02 | 02 |
| 24 | 01 | 01 | 01 | 02 | 01 | 01 | 02 | 02 |
| 25 | 02 | 01 | 02 | 02 | 02 | 02 | 02 | 02 |
| 26 | 01 | 02 | 02 | 01 | 01 | 02 | 02 | 02 |
| 27 | 02 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 28 | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |
| 29 | 01 | 01 | 01 | 00 | 01 | 01 | 01 | 01 |
| 30 | - - - - - No Record - - - - - | | | | 01 | 01 | 01 | 00 |
| 31 | 00 | 01 | 01 | 01 | 01 | 01 | 01 | 01 |

SPRENGNETHER

# MICROSEISM AMPLITUDES ~~(Milne-Shaw Seismographs)~~

(to nearest tenth of a millimetre)

MICROSEISM SUPPLEMENT No. 30 December, 1950.

International Seismological Centre

| Date | N-S Component Hour G.M.T. 0 | 6 | 12 | 18 | E-W Component 0 | 6 | 12 | 18 |
|---|---|---|---|---|---|---|---|---|
| 1950 Dec. 1 | | | | | 05 | 05 | 06 | 05 |
| 2 | | | | | 07 | 06 | 05 | 08 |
| 3 | | | | | 06 | 06 | 05 | 06 |
| 4 | | | | | 07 | 07 | 06 | 06 |
| 5 | | | | | 05 | 06 | 06 | 05 |
| 6 | | | | | 04 | 05 | 03 | 04 |
| 7 | | | | | 04 | 05 | 04 | 05 |
| 8 | | | | | 06 | 06 | 08 | 08 |
| 9 | | | | | 12 | 13 | 11 | 09 |
| 10 | | | | | - | 08 | 09 | 09 |
| 11 | | | | | 08 | 06 | 05 | 06 |
| 12 | | | | | 08 | 07 | 04 | 06 |
| 13 | | | | | 07 | 06 | 09 | 10 |
| 14 | | | | | 08 | 07 | 11 | 10 |
| 15 | | | | | 12 | 13 | 08 | 07 |
| 16 | | | | | 07 | 07 | 06 | 05 |
| 17 | | | | | 05 | 06 | 06 | 07 |
| 18 | | | | | 06 | 05 | 06 | 06 |
| 19 | | | | | 06 | 04 | 05 | 05 |
| 20 | | | | | 06 | 07 | 08 | 09 |
| 21 | | | | | 09 | 07 | 08 | 08 |
| 22 | | | | | 09 | 10 | 11 | 12 |
| 23 | | | | | 10 | 11 | 10 | 12 |
| 24 | | | | | 09 | 09 | 10 | 16 |
| 25 | | | | | 14 | 12 | 14 | 11 |
| 26 | | | | | 13 | 10 | 10 | 11 |
| 27 | | | | | 09 | 08 | 05 | 06 |
| 28 | | | | | 07 | 05 | 04 | 04 |
| 29 | | | | | 06 | 06 | 05 | 05 |
| 30 | | | | | 04 | 03 | 05 | 04 |
| 31 | | | | | 04 | 04 | 03 | 04 |