

# UNIVERSITY OF QUEENSLAND

## SEISMOLOGICAL STATION

BRISBANE

Bulletin No. 100

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  E.,  $h = 15$ m.

*Foundation* : Semi-consolidated alluvium of raised river terrace.

### INSTRUMENTS AND CONSTANTS.

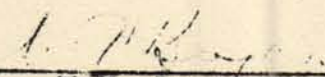
| Instrument.                     | Rate of Recording. | Component. | Free Period. | Damping. | Static Magnification. |
|---------------------------------|--------------------|------------|--------------|----------|-----------------------|
| Milne-Shaw No. 58 (Modified) .. | 16 m.m. per minute | N.—S.      | 12 sec.      | 20 : 1   | 250                   |
| Milne-Shaw No. 60 (Modified) .. | 16 m.m. per minute | E.—W.      | 12 sec.      | 20 : 1   | 250                   |
| 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.  |    |    | UNIT.                                  | REMARKS.                               |
|------------------|--|--|----|----|--|--|
|                  |  | h.   | m. | s. |  |  |
| 1946<br>Jan. 2 X | iPN<br>ePE<br>ePPN<br>iSE<br>eSN               | 14-16-33<br>16-39<br>16-53<br>20-30<br>20-36                     |    |    | M-S<br>"<br>"<br>"<br>"                | 25.09<br>77.37                         |
| " 5 X            | iPE<br>iSE<br>eLjE                             | 22- 1-27<br>5-49<br>7-00   |    |    | M-S<br>"<br>"                          | 56.02                                  |
| " 6              | ePN<br>eSN<br>eLN                              | 22-45-01<br>48-27<br>50-29                                       |    |    | M-S<br>"<br>"                          |  |
| " 7              | ePN<br>ePE<br>eSN<br>iSSN<br>iPN<br>eSN<br>eLN | 6-21-49<br>21-50<br>28-05<br>31-09<br>14-13-37<br>17-04<br>19-00 |    |    | M-S<br>"<br>"<br>"<br>"<br>"<br>"<br>" |  |
| " 11             | iPN<br>iPE<br>iSN<br>iSE<br>eSKSE              | 1-44-12<br>44-13<br>53-04<br>53-05<br>54-00                      |    |    | B<br>M-S<br>B<br>M-S<br>"              | $\Delta = 67.7^{\circ}$<br>H = 1-33-16 |
| " 17             | iPN<br>iPN<br>iPE<br>iSN<br>iSE<br>iPN         | 9-44-15<br>44-15<br>44-16<br>48-11<br>48-12<br>10-50-20          |    |    | M-S<br>B<br>M-S<br>"<br>"<br>B         | $\Delta = 22^{\circ}$<br>H = 9-39-22   |

| DATE.   | PHASE.            | U. T. |    |    | UNIT. | REMARKS.          |
|---------|-------------------|-------|----|----|-------|-------------------|
|         |                   | h.    | m. | s. |       |                   |
| Jan. 18 | eN                | 15    | 45 | 52 | M-S   |                   |
|         | eN                |       | 46 | 44 | "     |                   |
|         | eN                |       | 58 | 10 | "     |                   |
|         | eN                |       | 58 | 12 | B     |                   |
|         | eL                | 16    | 02 | 00 | M-S   |                   |
|         | eL                |       | 04 | 51 | "     |                   |
| " 19    | 1E                | 15    | 43 | 10 | M-S   |                   |
| " 20    | 1PN               | 16    | 58 | 23 | M-S   |                   |
|         | 1SN               | 17    | 02 | 00 | "     |                   |
|         | 1L <sub>1</sub> N |       | 03 | 12 | "     |                   |
| " 21    | 1PN               | 19    | 10 | 45 | B     |                   |
|         | 1PN               | 19    | 10 | 45 | M-S   |                   |
|         | eSN               |       | 14 | 07 | "     |                   |
|         | eL <sub>1</sub> N |       | 15 | 42 | "     |                   |
|         | ePN               | 3     | 14 | 12 | M-S   |                   |
| " 22    | eSN               |       | 18 | 10 | "     |                   |
|         | eL <sub>1</sub> N |       | 20 | 08 | "     |                   |
|         | eN                | 6     | 32 | 40 | M-S   | Microseisms large |
| " 24    | eS?N              |       | 35 | 30 | "     |                   |


---

 W.H. Bryan  
Officer-in-Charge

# UNIVERSITY OF QUEENSLAND SEISMOLOGICAL STATION

BRISBANE

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  E.,  $h = 15$  m. Bulletin No. 101

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   | 250                   |
| 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.  |    |    | UNIT.                                    | REMARKS.   |
|--------|---|--|----|----|--|--|
|        |   | h.   | m. | s. |  |  |
| 1946   |   |  |    |    |  |  |
| Feb. 1 | iS?NE<br>iGN<br>eL <sub>1</sub> N<br>iE                             | 05-15-42<br>18-55<br>20-46<br>22-11  |    |    | M-S<br>"<br>"<br>"                       |  |
| " 12   | iPN<br>iPN<br>iPE<br>iSN<br>eN<br>eN<br>MN<br>eN                    | 06-21-12<br>21-12<br>21-13<br>25-06<br>13-21-26<br>24-05<br>25-15<br>32-24 |    |    | B<br>M-S<br>"<br>"<br>M-S<br>"<br>"<br>" | $\Delta = 21.2^{\circ}$<br>H = 06-16-27<br><br>300 reported killed in Constantine, Algeria, Centre near Barika |
|        | eN<br>MN  | 14-25-14<br>27-25  |    |    | "<br>"                                   |  |
| " 18   | iPN<br>iPE<br>iSE<br>iSN<br>eL <sub>1</sub> E<br>iL <sub>2</sub> NE | 00-21-30<br>21-34<br>25-32<br>25-33<br>26-50<br>28-49                      |    |    | B<br>M-S<br>"<br>"<br>"<br>"             | $\Delta = 22.7^{\circ}$<br>H = 00-16-31  |
| " 19   | iSNE<br>iSSE<br>eL <sub>1</sub> E<br>eSN<br>eE<br>eLN               | 09-23-11<br>24-13<br>26-23<br>16-39-43<br>39-49<br>44-24                   |    |    | M-S<br>"<br>"<br>M-S<br>"<br>"           |  |
| " 20   | eN  | 04-07-17   |    |    | M-S                                      |  |
| " 24   | iPN<br>iSN<br>eGN<br>iL <sub>2</sub> N                              | 09-36-47<br>43-01<br>46-07<br>52-45  |    |    | M-S<br>"<br>"<br>"                       |  |

*W.H. Bryan*  
W.H. Bryan  
Officer in Charge.

# UNIVERSITY OF QUEENSLAND

## SEISMOLOGICAL STATION

BRISBANE

Bulletin No. 101

2139/ 22 April 1946

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  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   | 250                   |
| 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.  |    |  | UNIT.                                   | REMARKS.  |
|--------|---|--|----|--|---|---|
|        |   | h.   | m. | s.                                       |   |   |
| 1946   |   |  |    |  |   |   |
| Feb. 1 | iS?NE<br>iGN<br>eL <sub>1</sub> N<br>iE                             | 05-15-42<br>18-55<br>20-46<br>22-11  |    | M-S<br>"<br>"<br>"                       |   |   |
| " 12   | iPN<br>iPN<br>iPE<br>iSN<br>eN<br>eN<br>MN<br>eN                    | 06-21-12<br>21-12<br>21-13<br>25-06<br>13-21-26<br>24-05<br>25-15<br>32-24 |    | B<br>M-S<br>"<br>"<br>M-S<br>"<br>"<br>" | $\Delta = 21.2^{\circ}$<br>H = 06-16-27 | 300 reported killed in Constantine, Algeria, Centre near Barika |
|        | eN<br>MN  | 11-25-14<br>27-25  |    | "<br>"                                   |   |   |
| " 18   | iPN<br>iPE<br>iSE<br>iSN<br>eL <sub>1</sub> E<br>iL <sub>2</sub> NE | 00-21-30<br>21-34<br>25-32<br>25-33<br>26-50<br>28-49                      |    | B<br>M-S<br>"<br>"<br>"<br>"             | $\Delta = 22.7^{\circ}$<br>H = 00-16-31 |   |
| " 19   | iSNE<br>iSSE<br>eL <sub>1</sub> E<br>eSN<br>eE<br>eLN               | 09-23-11<br>24-13<br>26-23<br>16-39-43<br>39-49<br>44-24                   |    | M-S<br>"<br>"<br>M-S<br>"<br>"           |   |   |
| " 20   | eN  | 04-07-17   |    | M-S                                      |   |   |
| " 24   | iPN<br>iSN<br>eGN<br>iL <sub>2</sub> N                              | 09-36-47<br>43-01<br>46-07<br>52-45  |    | M-S<br>"<br>"<br>"                       |   |   |

*W.H. Bryan*  
W.H. Bryan  
Officer in Charge.

# UNIVERSITY OF QUEENSLAND SEISMOLOGICAL STATION

BRISBANE

Bulletin No. 102.

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  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   | 250                   |
| 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. |    |    | UNIT. | REMARKS.                 |
|--------|-------------------|-------|----|----|-------|--------------------------|
|        |                   | h.    | m. | s. |       |                          |
| 1946   |                   |       |    |    |       |                          |
| Mar. 3 | eSN               | 20    | 56 | 07 | MS    |                          |
| " 7    | iPN               | 15    | 16 | 57 | B     |                          |
|        | iSN               |       | 21 | 20 | MS    |                          |
|        | eSE               |       | 21 | 20 | "     |                          |
| " 12   | iPN               | 06    | 23 | 48 | B     |                          |
| " 13   | eLN               | 00    | 02 | 58 | MS    |                          |
|        | iPN               | 08    | 46 | 15 | MS    |                          |
|        | iPN               |       | 46 | 15 | B     |                          |
|        | i PN              |       | 47 | 03 | MS    | $\lambda = 27.6^{\circ}$ |
|        | i PN              |       | 47 | 05 | B     | $H = 08-40-36$           |
|        | iSN               |       | 50 | 52 | MS    |                          |
|        | ISSN              |       | 52 | 02 | "     |                          |
|        | MN                |       | 57 | 34 | "     |                          |
| " 15   | iPN               | 07    | 50 | 02 | B     |                          |
|        | iPN               |       | 50 | 02 | MS    |                          |
|        | iPPN              |       | 50 | 19 | "     |                          |
|        | iSN               |       | 53 | 40 | "     |                          |
| " 17   | eLN               | 21    | 08 | 09 | MS    |                          |
| " 20   |                   |       |    |    | MS    | Record obscured          |
| " 22   | iPN               | 12    | 44 | 22 | B     |                          |
|        | iSN               |       | 44 | 46 | MS    |                          |
|        | eL <sub>1</sub> N |       | 47 | 00 | "     |                          |
| " 26   | iPN               | 17    | 18 | 27 | B     |                          |
|        | ePN               |       | 18 | 28 | MS    |                          |
|        | iPPN              |       | 19 | 06 | E     |                          |
|        | iS?N              |       | 26 | 05 | MS    |                          |
|        | iN                |       | 28 | 17 | "     |                          |
|        | eL <sub>1</sub> N |       | 36 | 56 | "     |                          |

*C. A. Jones*  
\_\_\_\_\_  
Officer in Charge.

# UNIVERSITY OF QUEENSLAND SEISMOLOGICAL STATION

BRISBANE

Bulletin No. 102.

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  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   | 250                   |
| 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.         |               |               | UNIT. | REMARKS.                 |
|--------|--------|---------------|---------------|---------------|-------|--------------------------|
|        |        | h.            | m.            | s.            |       |                          |
| 1946   |        |               |               |               |       |                          |
| Mar. 3 | eSN    | <del>20</del> | <del>36</del> | <del>07</del> | MS    |                          |
| " 7    | iPN    | <del>15</del> | <del>16</del> | <del>57</del> | B     |                          |
|        | iSN    |               | 21            | 20            | MS    |                          |
|        | eSE    |               | 21            | 20            | "     |                          |
| " 12   | iPN    | <del>06</del> | <del>23</del> | <del>48</del> | B     |                          |
| " 13   | eLN    | <del>00</del> | <del>02</del> | <del>58</del> | MS    |                          |
|        | iPN    | <del>08</del> | <del>46</del> | <del>15</del> | MS    |                          |
|        | iPN    |               | 46            | 15            | B     |                          |
|        | iPN    |               | 47            | 03            | MS    | $\lambda = 27.6^{\circ}$ |
|        | iPN    |               | 47            | 05            | B     | $H = 08-40-36$           |
|        | iSN    |               | 50            | 52            | MS    |                          |
|        | ISSN   |               | 52            | 02            | "     |                          |
|        | MN     |               | 57            | 34            | "     |                          |
| " 15   | iPN    | <del>07</del> | <del>50</del> | <del>02</del> | B     |                          |
|        | iPN    |               | 50            | 02            | MS    |                          |
|        | iPPN   |               | 50            | 19            | "     |                          |
|        | iSN    |               | 53            | 40            | "     |                          |
| " 17   | eLN    | <del>21</del> | <del>08</del> | <del>09</del> | MS    |                          |
| " 20   |        |               |               |               | MS    | Record obscured          |
| " 22   | iPN    | <del>12</del> | <del>41</del> | <del>22</del> | B     |                          |
|        | iSN    |               | 44            | 46            | MS    |                          |
|        | eLN    |               | 47            | 00            | "     |                          |
| " 26   | iPN    | <del>17</del> | <del>18</del> | <del>27</del> | B     |                          |
|        | ePN    |               | 18            | 28            | MS    |                          |
|        | iPPN   |               | 19            | 06            | E     |                          |
|        | iS?N   |               | 26            | 05            | MS    |                          |
|        | iN     |               | 28            | 17            | "     |                          |
|        | eLN    |               | 36            | 56            | "     |                          |

*C. A. Jones*  
\_\_\_\_\_  
Officer in Charge.

# UNIVERSITY OF QUEENSLAND

## SEISMOLOGICAL STATION

BRISBANE

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  E.,  $h = 15$ m.

Foundation : Semi-consolidated alluvium of raised river terrace.

2338

-4 OCT. 1946

INSTRUMENTS AND CONSTANTS.

Bulletin No. 103.

| 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   | 250                   |
| 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. |    |    | UNIT. | REMARKS.                                   |
|--------|-------------------|-------|----|----|-------|--|
|        |                   | h.    | m. | s. |       |  |
| 1946   |                   |       |    |    |       |  |
| Apr. 1 | eN                | 12    | 41 | 44 | B     | Tidal waves destructive in Hawaii, Alaska. |
|        | iPPN              | 42    | 13 |    | B     |  |
|        | iPPN              | 42    | 10 |    | MS    |  |
|        | iSN               | 52    | 18 |    | "     |  |
|        | iSSN              | 59    | 51 |    | "     |  |
|        | iSSSN             | 13    | 05 | 52 | "     |  |
|        | iG(Q)N            | 09    | 40 |    | "     |  |
| " 6    | iPN               | 14    | 20 | 24 | B     |  |
| " 9    | iPN               | 15    | 15 | 48 | B     |  |
| " 11   | iPN               | 02    | 12 | 27 | B     | L waves relatively small in amplitude      |
|        | ePN               | 12    | 27 |    | MS    |  |
|        | iPPN              | 15    | 50 |    | "     |  |
|        | iPPPN             | 17    | 08 |    | "     |  |
|        | eSKSN             | 22    | 42 |    | "     |  |
|        | eSN               | 23    | 00 |    | "     |  |
|        | iSSN              | 28    | 12 |    | "     |  |
|        | eG(Q)N            | 37    | 04 |    | "     |  |
|        | iPN               | 13    | 24 | 41 | B     |  |
|        | ePN               | 24    | 41 |    | MS    |  |
|        | iS(?)N            | 28    | 09 |    | "     |  |
|        | eL <sub>1</sub> N | 29    | 41 |    | "     |  |
| " 13   | iPN               | 06    | 48 | 46 | B     |  |
| " 15   | eE                | 22    | 21 | 30 | MS    |  |
| " 17   | iPN               | 15    | 54 | 13 | B     |  |
|        | iPN               | 54    | 13 |    | MS    |  |
|        | iPE               | 54    | 14 |    | "     |  |
|        | iSN               | 57    | 20 |    | "     |  |
|        | eSN               | 57    | 25 |    | "     |  |

| DATE.   | PHASE. | U. T. |    |    | UNIT. | REMARKS.                                |
|---------|--------|-------|----|----|-------|---|
|         |        | h.    | m. | s. |       |   |
| Apr. 23 | iPN    | 05    | 01 | 21 | B     | $\Delta = 32.9^\circ$<br>$H = 04-54-48$ |
|         | iPN    |       | 01 | 21 | MS    |   |
|         | iPPN   |       | 02 | 09 | "     |   |
|         | iSN    |       | 06 | 35 | "     |   |
|         | iSSN   |       | 08 | 03 | "     |   |
|         | iG(Q)N |       | 08 | 32 | "     |   |
| " 25    | iPN    | 00    | 23 | 39 | B     |   |
| " 26    | iPN    | 19    | 40 | 11 | B     |   |
|         | iPE    |       | 40 | 13 | MS    |   |
|         | eS(?)E |       | 43 | 16 | "     |   |
| " 30    | iPN    | 07    | 23 | 55 | B     |   |
|         | iPN    |       | 23 | 55 | MS    |   |
|         | iSN    |       | 27 | 51 | "     |   |

3650

*O.A. Jones.*

O.A. Jones.

Officer-in-Charge.



# UNIVERSITY OF QUEENSLAND SEISMOLOGICAL STATION

BRISBANE

Bulletin No. 104.

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  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   | 250                   |
| 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.<br>h. m. s.   | UNIT.   | REMARKS.                                   |
|---------------|--|---|---|--|
| 1946<br>May 3 | iPN<br>eN<br>iPN<br>iPN<br>iPN(?)<br>iPN<br>iPN<br>iPN<br>iPN                | <del>21-53-57</del><br>22-03-21<br>05-01<br>05-01<br>09-12<br>25-45<br>28-40<br>52-22<br>23-23-40                               | B<br>MS<br>B<br>MS<br>B<br>"<br>"<br>"<br>"                 | M.S. record obscured                       |
| " 4           | eL E   | 23-42-00  | MS  |  |
| " 6           | eN<br>eE   | 18-13-53<br>15-14   | MS<br>MS  |  |
| " 8           | iPN<br>iPN<br>iSN<br><br>iPN<br>iPN<br>iPPN<br>iSN<br>iSE<br>iPN<br>eE<br>eE | <del>05-30-16<br/>05-30-16<br/>38-25</del><br><br>09-50-53<br>50-53<br>51-24<br>55-40<br>55-42<br>12-49-41<br>53-25<br>15-13-03 | B<br>MS<br>"<br><br>B<br>MS<br>"<br>"<br>"<br>B<br>MS<br>MS | $\Delta = 29^{\circ}$ 3200<br>H = 09-44-54 |
| " 9           | iPN<br>oPN<br>eSN<br><br>iPN<br>iPN  | 04-15-50<br>15-52<br>20-23<br><br>15-35-45<br>23-39-48  | MS<br>13<br>MS<br><br>B<br>B                                |  |

| DATE   | PHASE   | U. T. |    |   | UNIT.                       | REMARKS.   |
|--------|---|-------|----|---|-----------------------------|--|
|        |   | h.    | m. | s.  |                             |  |
| May 10 | iPN   | 11    | 51 | 12  | B                           |  |
| " 11   | iS(?)E<br>eLE   | 17    | 24 | 42<br>28-58                                     | MS<br>"                     |  |
| " 13   | iPN<br>iPE<br>eSNE                                    | 13    | 36 | 55<br>36-55<br>40-09                            | B<br>MS<br>"                |  |
| " 16   | iPN<br>iPN<br>iPPN<br>iSN<br>iL <sub>1</sub> N        | 05    | 29 | 41<br>29-44<br>30-05<br>33-16<br>35-05          | B<br>MS<br>"<br>"<br>"      | $\Delta = 20^\circ$ <i>Uroo</i><br>H = 05-25-09  |
| " 17   | eN  | 07    | 31 | 20  | MS                          |  |
| " 20   | iPN<br>e E  | 02    | 40 | 18<br>13-53-30                                  | B<br>MS                     |  |
| " 21   | iPN<br>ePNE   | 09    | 36 | 23<br>36-23                                     | B<br>MS                     |  |
| " 22   | e N<br>ePN<br>iPN<br>iSN<br>eNE                       | 05    | 24 | 37<br>09-37-30<br>37-31<br>42-37<br>42-57       | MS<br>MS<br>B<br>MS<br>"    |  |
| " 23   | iPN<br>iPN<br>i E<br>i SN<br>eSE<br>iL <sub>1</sub> N | 01    | 33 | 26<br>33-26<br>33-46<br>37-28<br>37-28<br>39-40 | B<br>MS<br>"<br>"<br>"<br>" |  |
| "      | ePN<br>iSN<br>iSE                                     | 11    | 10 | 31<br>14-22<br>14-23                            | B<br>MS<br>"                |  |
| " 29   | iPN   | 19    | 33 | 28  | B                           |  |
| " 30   | iPN<br>ePE<br>eS(?)E<br>iLN                           | 11    | 42 | 56<br>42-56<br>49-17<br>52-39                   | B<br>MS<br>"<br>"           | L waves small in amplitude   |
| " 31   |   |       |    |   | MS                          | Microseisms (stronger in E.W component) very big amplitude and long periods - 20-30 seconds. |

*O. A. Jones*  
O.A. Jones.  
 Officer in Charge.

# UNIVERSITY OF QUEENSLAND SEISMOLOGICAL STATION

BRISBANE

Bulletin No. 105

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  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   | 250                   |
| 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.     |       |       | UNIT. | REMARKS.  |
|----------------|-------------------|-----------|-------|-------|-------|---|
|                |                   | h.        | m.    | s.    |       |   |
| 1946<br>June 1 | <del>iPN</del>    | 08-54-56  | 58-52 | 59-28 | B     | $\Delta = 22^{\circ}$<br>H = 08-52-03<br><br>2450 |
|                | <del>iSE</del>    |           |       |       | M-S   |   |
|                | <del>iSSE</del>   |           |       |       | "     |   |
|                | <del>iGE</del>    |           |       |       | "     |   |
| " 4            | <del>iPN</del>    | 04-50-11  |       |       | B     |   |
|                | <del>iP(?)N</del> | 04-54-09  |       |       | B     |   |
|                | <del>iPN</del>    | 17-47-31  |       |       | B     |   |
|                | ePE               | 47-31     |       |       | M-S   |   |
|                | eLN               | 52-30     |       |       | "     |   |
| " 5            | <del>iPN</del>    | 00-57-40  |       |       | B     |   |
|                | <del>ePN</del>    | 57-40     |       |       | M-S   |   |
|                | <del>iSN</del>    | 01-02-35  |       |       | "     |   |
| 12             | iPN               | 00-42-33. |       |       | B     |   |
|                | iPN               | 08-48-41  |       |       | B     |   |
|                | iPN               | 16-15-55  |       |       | B     |   |
| " 13           | iPN               | 05-05-52  |       |       | B     |   |
| " 15           | iPN               | 18-35-57  |       |       | B     |   |
|                | iPE               | 35-57     |       |       | M-S   |   |
| " 17           | iPN               | 03-32-06  |       |       | B     |   |
|                | iPN               | 08-05-02  |       |       | B     |   |
| " 21           | eLN               | 12-34-20  |       |       | M-S   |   |
| " 24           |                   |           |       |       |       | Large Microseisms                                 |
| " 25           | iPN               | 00-00-51  |       |       | B     | Large Microseisms obscure M-S records.            |

| DATE.   | PHASE.                                 | U. T. |    |  | UNIT.              | REMARKS.                                 |
|---------|--|-------|----|--|--------------------|--|
|         |  | h.    | m. | s.                                     |                    |  |
| June 26 | iPN                                    | 12    | 39 | 26                                     | B                  |  |
| " 27    | iPN<br>ePE<br>eSE<br>eL <sub>1</sub> E | 21    | 45 | 09<br>45-11<br>49-30<br>52-10          | B<br>M-S<br>"<br>" |  |
| " 28    | iPN<br>iPNE<br>iSNE<br>iSSE<br>iG(?)N  | 07    | 17 | 31<br>17-31<br>21-37<br>22-38<br>24-34 | B<br>M-S<br>"<br>" | $\Delta = 23^\circ$<br>H = 07-12-29 2570 |

*O.A. Jones*  


---

 O.A. Jones  
 Officer in Charge

# UNIVERSITY OF QUEENSLAND

## SEISMOLOGICAL STATION

BRISBANE

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  E.,  $h = 15m$  Bulletin No. 106.

*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   | 250                   |
| 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.<br>h. m. s.                                     | UNIT.                  | REMARKS.   |
|-----------------|--|---|------------------------|--|
| 1946.<br>July 1 | iPN<br>iPN<br>ePE<br>iSN<br>iSE<br>iL <sub>1</sub> M | 22-40-29<br>40-29<br>40-30<br>44-37<br>44-39<br>46-52 | B<br>MS<br>"<br>"<br>" | $\Delta = 23.6^{\circ}$<br><br>$H = 22-35-21$  |
| " 2             | iPN  | 04-48-55  | B                      |  |
| " 4             | iPN<br>iPE<br>iN<br>iSNE                             | 07-04-55<br>04-55<br>08-21<br>08-21                   | B<br>MS<br>B<br>MS     | Deep Focus   |
|                 | iPN<br>eSN<br>eL <sub>1</sub> M                      | 09-41-01<br>44-10<br>45-35                            | B<br>MS<br>"           | E.-W. record obscured.<br>by microseisms   |
|                 | ePN<br>ePN<br>iPPN<br>iSN<br>iSSN                    | 14-19-01<br>19-05<br>19-21<br>23-07<br>23-28          | B<br>MS<br>"<br>"      | E.-W. record obscured<br>by microseisms.   |
| " 5             | iPN<br>eLE   | 06-13-22<br>21-50                                     | B<br>MS                |  |
| " 8             | iPN<br>ePN<br>eLNE                                   | 16-53-56<br>53-56<br>17-00-40                         | B<br>MS<br>"           |  |
| " 9             |  |   |                        | Two earthquakes were recorded,<br>but owing to mechanical<br>trouble were not timed. |
| " 12            | iPN<br>iPNE<br>iPPE<br>iSNE                          | 18-52-46<br>52-46<br>53-11<br>56-10                   | B<br>MS<br>"<br>"      | $\Delta = 18.7^{\circ}$<br><br>$H = 18-49-22$  |



| DATE.   | PHASE. | U. T. |    |    | UNIT. | REMARKS.    |
|---------|--------|-------|----|----|-------|-------------|
|         |        | h.    | m. | s. |       |             |
| July 13 | iPN    | 19    | 31 | 48 | B     |             |
| " 23    | iPN    | 17    | 18 | 36 | B     |             |
|         | iPE    |       | 18 | 36 | M.S.  |             |
|         | iPPE   |       | 18 | 57 | "     |             |
|         | iSE    |       | 22 | 12 | "     |             |
|         | eLE    |       | 23 | 40 | "     |             |
| " 24    | iPN    | 11    | 05 | 00 | B     |             |
|         | ePN    |       | 05 | 04 | M.S.  |             |
|         | ePE    |       | 05 | 08 | "     |             |
|         | iPPE   |       | 05 | 18 | "     |             |
|         | iSN    |       | 09 | 03 | "     |             |
|         | eSE    |       | 09 | 05 | "     |             |
| " 25    | eN     | 17    | 04 | 50 | M.S.  |             |
|         | eIN    |       | 20 | 30 | "     |             |
| " 26    | iPN    | 22    | 35 | 49 | B     |             |
|         | iPE    |       | 35 | 49 | M.S.  |             |
|         | iPPE   |       | 36 | 12 | "     | Deep Focus. |
|         | iSE    |       | 39 | 04 | "     |             |
| " 27    | iPN    | 21    | 46 | 53 | B     |             |
|         | ePE    |       | 46 | 54 | M.S.  |             |
|         | iPPE   |       | 47 | 05 | "     |             |
|         | iSE    |       | 50 | 38 | "     |             |

*O. A. Jones.*  
O. A. Jones.

Officer in Charge.

# UNIVERSITY OF QUEENSLAND SEISMOLOGICAL STATION

BRISBANE

Bulletin No. 106.

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  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   | 250                   |
| 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.   |                             |    | UNIT.  | REMARKS. |
|-----------------|--|---|-----------------------------|----|--|----------|
|                 |  | h.  | m.                          | s. |  |          |
| 1946.<br>July 1 | iPN<br>iPN<br>ePE<br>iSN<br>iSE<br>iL <sub>1</sub> M | 22-40-29<br>40-29<br>40-30<br>44-37<br>44-39<br>46-52 | B<br>MS<br>"<br>"<br>"<br>" |    | $\Delta = 23.6^{\circ}$<br><br>H = 22-35-21  |          |
| " 2             | iPN  | 04-40-55  | B                           |    |  |          |
| " 4             | iPN<br>iPNE<br>iM<br>iSNE                            | 07-04-55<br>04-55<br>08-21<br>00-21                   | B<br>MS<br>B<br>MS          |    | Deep Focus   |          |
|                 | iPN<br>eSN<br>eL <sub>1</sub> M                      | 09-41-01<br>44-10<br>45-35                            | B<br>MS<br>"                |    | E.-W. record obscured.<br>by microseisms   |          |
|                 | ePM<br>ePN<br>iPPN<br>iSN<br>iSSN                    | 14-19-01<br>19-05<br>19-21<br>23-07<br>23-28          | B<br>MS<br>"<br>"<br>"      |    | E.-W. record obscured<br>by microseisms.   |          |
| " 5             | iPN<br>eLE   | 06-13-22<br>21-50                                     | B<br>MS                     |    |  |          |
| " 8             | iPN<br>ePN<br>eLNE                                   | 16-53-56<br>53-56<br>17-00-40                         | B<br>MS<br>"                |    |  |          |
| " 9             |  |   |                             |    | Two earthquakes were recorded,<br>but owing to mechanical<br>trouble were not timed. |          |
| " 12            | iPN<br>iPNE<br>iPPE<br>iSNE                          | 18-52-46<br>52-46<br>53-11<br>56-10                   | B<br>MS<br>"<br>"           |    | $\Delta = 18.7^{\circ}$<br>H = 18-49-22  |          |

| DATE.   | PHASE. | U. T. |    |    | UNIT. | REMARKS.    |
|---------|--------|-------|----|----|-------|-------------|
|         |        | h.    | m. | s. |       |             |
| July 13 | iPN    | 19    | 31 | 46 | B     |             |
| " 23    | iPN    | 17    | 18 | 36 | B     |             |
|         | iPE    |       | 18 | 36 | M.S.  |             |
|         | iPPE   |       | 18 | 57 | "     |             |
|         | iSE    |       | 22 | 12 | "     |             |
|         | eLE    |       | 23 | 40 | "     |             |
| " 24    | iPN    | 11    | 06 | 00 | B     |             |
|         | ePN    |       | 05 | 04 | M.S.  |             |
|         | ePE    |       | 05 | 08 | "     |             |
|         | iPPE   |       | 05 | 18 | "     |             |
|         | iSN    |       | 09 | 03 | "     |             |
|         | eSE    |       | 09 | 05 | "     |             |
| " 25    | eN     | 17    | 04 | 50 | M.S.  |             |
|         | eLN    |       | 20 | 30 | "     |             |
| " 26    | iPN    | 22    | 35 | 49 | B     |             |
|         | iPE    |       | 35 | 49 | M.S.  |             |
|         | iPPE   |       | 36 | 12 | "     | Deep Focus. |
|         | iSE    |       | 39 | 04 | "     |             |
| " 27    | iPN    | 21    | 46 | 53 | B     |             |
|         | ePE    |       | 46 | 54 | M.S.  |             |
|         | iPPE   |       | 47 | 05 | "     |             |
|         | iSE    |       | 50 | 38 | "     |             |

*O. A. Jones.*  
O. A. Jones.  
 Officer in Charge.