

OSAKA JAPAN

January 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory



$\phi = 34^{\circ} 39' N.$ $\lambda = 135^{\circ} 32' E.$ Gr. $h = 3.4m$ Sub-Soil: Sandy Loam (Oldquaternary)

Instrument: Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 |
| A_N : | 30 | - | 0.003 | 20 |
| A_Z : | 15 | - | 0.004 | 20 |

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|--------|------------------------------------|--------|----|---|-------------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 1 | Jan. 2 | P L ME MN F | 21 | 54 | 56.3 55.4 46.8 46.0 05 0.0 | 2.3 3.4 | ± 9 | -0 | | 565 | |
| 2 | " 5 | P S F | 11 | 26 | 44.6 30 54.0 42 40.0 | | | | | 2554 | |
| 3 | " 5 | P L F | 13 | 00 | 34.4 02 01.6 06 40.0 | | | | | 722 | |
| 4 | " 7 | P i L ME MN MZ F | 11 | 28 | 45.8 28 58.5 30 07.8 31 00.6 30 55.4 30 40.6 42 0.0 | 3.4 3.4 2.3 | -9 | ± 9 | ± 6 | 608 | |
| 5 | " 9 | P L ME MN MZ F | 10 | 29 | 00.1 34 55.4 36 20.3 35 51.3 36 21.3 50 0 0 | 3.5 3.7 3.7 | ± 63 | -113 | +27 | 4110 | |
| 6 | " 11 | P L | 8 | 47 | 14.7 47 22.8 | | | | | 60 | |
| 7 | " 11 | P L ME MN MZ F | 8 | 47 | 30.0 47 37.0 46 14.6 47 59.8 48 00.3 54 30.0 | 3.5 3.7 3.8 | -46 | -63 | +25 | 52 | |
| 8 | " 11 | P L ME MN F | 17 | 28 | 53.7 29 03.3 29 06.8 29 07.3 31 10.0 | 0.4 0.4 | +5 | +5 | | 71 | |
| 9 | " 11 | P i L ME MN F | 18 | 39 | 42.0 39 50.1 40 06.4 40 09.4 40 09.2 42 10.0 | 0.9 1.2 | +2 | ± 2 | | 181 | |

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| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|-----|---------|------------------------------------|--------|----|---|-------------------|---------------------|---------------------|---------------------|-----------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 10 | Jan. 15 | P i L ME MN MZ F | 14 | 05 | 12.4 18.7 25.6 27.1 28.6 25.3 0.0 | | | | 98 | | |
| | | | | | | 0.9 0.7 0.4 | -11 | +8 | | | |
| 11 | " 17 | P L F | 7 | 33 | 30.6 37.6 0.0 | | | | 52 | | |
| 12 | " 17 | P L F | 18 | 31 | 00.2 17.1 40.0 | | | | 126 | | |
| 13 | " 20 | P L F | 2 | 02 | 39.1 52.2 0.0 | | | | 840 | | |
| 14 | " 20 | P L F | 15 | 13 | 43.2 45.2 0.0 | | | | 905 | | |
| 15 | " 20 | P L F | 20 | 59 | 37.2 57.0 0.0 | | | | 587 587 | | |
| 16 | " 21 | P L ME MN MZ F | 14 | 44 | 13.2 20.4 03.8 01.9 55.0 20.0 | 1.9 1.9 1.8 | -13 | -16 | +5 | 499 | |
| 17 | " 24 | P S L ME MN F | 3 | 54 | 28.8 52.5 10.3 24.0 48.5 40.0 | 4.4 4.4 | +6 | -8 | | 3599 | |
| 18 | " 27 | P i L ME MN MZ F | 12 | 16 | 25.9 29.0 13.1 55.4 04.2 15.0 0.0 | 1.8 2.1 2.2 | -24 | +25 | +12 | 796 | |
| 19 | " 27 | P L ME MN F | 18 | 42 | 57.4 50.9 22.8 26.5 10.0 | 2.2 3.3 | -7 | -13 | | 397 | |
| 20 | " 29 | P S L ME MN F | 13 | 49 | 49.7 58.4 54.7 02.1 25.2 50.0 | 13.7 15.0 | -47 | +50 | | 3366 | |
| 21 | " 29 | P S L F | 15 | 44 | 59.6 22.1 40.2 50.0 | | | | | 3583 | |

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February 1932

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$\phi = 34^\circ 39' N.$ $\lambda = 135^\circ 32' E.$ Gr. h=3.4m Sub-Soil: Sandy Loam (Oldquaternary)

Instrument: Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)



| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 |
| A_N : | 30 | - | 0.003 | 20 |
| A_z : | 15 | - | 0.004 | 20 |

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 4 | 3.2 | 0.003 | 80 |
| A_z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|------------|-------|--------|----|------|-------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_z μ | | |
| 24 | FebJan. 31 | P | 19 | 48 | 16.9 | | | | 931 | | |
| | | i | | 48 | 50.4 | | | | | | |
| | | L | | 50 | 22.3 | | | | | | |
| | | F | | 57 | 30.0 | | | | | | |
| 25 | Feb. 2 | P | 11 | 00 | 29.3 | | | | 269 | | |
| | | L | | 01 | 05.6 | | | | | | |
| | | ME | | 01 | 24.5 | 3.2 | +19 | | | | |
| | | MN | | 01 | 26.7 | 3.4 | | -31 | | | |
| | | MZ | | 01 | 31.2 | 1.8 | | +10 | | | |
| | | F | | 05 | 50.0 | | | | | | |
| 26 | " 3 | P | 4 | 25 | 04.5 | | | | 292 | | |
| | | L | | 25 | 43.9 | | | | | | |
| | | ME | | 25 | 55.1 | 2.8 | -10 | | | | |
| | | MN | | 26 | 02.6 | 3.2 | | -13 | | | |
| | | MZ | | 25 | 55.4 | 1.9 | | +5 | | | |
| | | F | | 30 | 10.0 | | | | | | |
| 27 | " 3 | P | 7 | 35 | 45.7 | | | | 871 | | |
| | | L | | 37 | 43.1 | | | | | | |
| | | ME | | 38 | 34.1 | 3.2 | +44 | | | | |
| | | MN | | 38 | 06.0 | 3.8 | | +61 | | | |
| | | MZ | | 38 | 29.4 | 2.3 | | -13 | | | |
| | | F | | 47 | 0.0 | | | | | | |
| 28 | " 3 | P | 22 | 03 | 20.7 | | | | 86 | | |
| | | L | | 03 | 32.3 | | | | | | |
| | | ME | | 03 | 54.9 | 0.6 | -8 | | | | |
| | | MN | | 03 | 44.9 | 0.6 | | +9 | | | |
| | | MZ | | 03 | 32.3 | 0.4 | | +1 | | | |
| | | F | | 06 | 0.0 | | | | | | |
| 29 | " 4 | P | 5 | 44 | 56.6 | | | | 583 | | |
| | | L | | 46 | 15.9 | | | | | | |
| | | F | | 49 | 30.0 | | | | | | |
| 30 | " 8 | P | 15 | 23 | 56.2 | | | | 577 | | |
| | | L | | 25 | 14.0 | | | | | | |
| | | MN | | 26 | 1.3 | 2.7 | | +8 | | | |
| | | F | | 31 | 0.0 | | | | | | |
| 31 | " 14 | P | 21 | 33 | 42.1 | | | | 569 | | |
| | | L | | 34 | 58.7 | | | | | | |
| | | ML | | 35 | 35.8 | 1.9 | -8 | | | | |
| | | MN | | 35 | 34.9 | 2.1 | | -11 | | | |
| | | MZ | | 35 | 16.8 | 1.9 | | +5 | | | |
| | | F | | 44 | 30.0 | | | | | | |
| 32 | " 16 | P | 14 | 14 | 03.3 | | | | 497 | | |
| | | L | | 15 | 10.2 | | | | | | |
| | | MN | | 15 | 24.5 | 3.2 | | -8 | | | |
| | | F | | 19 | 40.0 | | | | | | |
| 33 | " 18 | P | 22 | 37 | 31.5 | | | | 302 | | |

OSAKA JAPAN

February 1932

**SEISMOLOGICAL BULLETIN
of the Osaka Meteorological Observatory**International
Seismological
Centre

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|-------|--------|------|------|-------------|----------------|----------------|----------------|------------------|-------------------------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| | Feb. 18 | L | 22 | 38 | 12.1 | | | | | | |
| | | ME | 38 | 43.8 | | 2.4 | +6 | | | | |
| | | MN | 38 | 35.3 | | 2.7 | | -7 | | | |
| | | MZ | 38 | 39.6 | | 2.1 | | | +3 | | |
| | | F | 41 | 40.0 | | | | | | | |
| 34 | " 19 | P | 13 | 26 | 26.9 | | | | | 306 | |
| | | L | 27 | 08.1 | | | | | | | |
| | | ME | 27 | 30.6 | | 3.8 | +72 | | | | |
| | | MN | 27 | 30.8 | | 3.7 | | +120 | | | |
| | | MZ | 27 | 37.9 | | 3.2 | | | -55 | | |
| | | F | 37 | 20.0 | | | | | | | |
| 35 | " 21 | P | 1 | 38 | 17.0 | | | | | 239 | |
| | | L | 38 | 49.1 | | | | | | | |
| | | ME | 39 | 10.5 | | 2.7 | +11 | | | | |
| | | MN | 39 | 11.5 | | 2.1 | | -9 | | | |
| | | MZ | 39 | 17.1 | | 2.2 | | | -8 | | |
| | | F | 45 | 0.0 | | | | | | | |
| 36 | " 21 | P | 15 | 57 | 00.7 | | | | | 611 | |
| | | L | 58 | 23.1 | | | | | | | |
| | | ME | 59 | 35.0 | | 3.5 | +11 | | | | |
| | | MN | 59 | 32.1 | | 3.9 | | -11 | | | |
| | | MZ | 59 | 41.5 | | 2.4 | | | -4 | | |
| | | F | 16 | 04 | 30.0 | | | | | | |
| 37 | " 25 | P | 6 | 10 | 52.5 | | | | | 287 | |
| | | L | 11 | 31.2 | | | | | | | |
| | | ME | 12 | 04.0 | | 3.6 | -11 | | | | |
| | | MN | 12 | 10.0 | | 3.5 | | -11 | | | |
| | | MZ | 12 | 15.3 | | 1.8 | | | -6 | | |
| | | F | 15 | 10.0 | | | | | | | |
| 38 | " 26 | P | 7 | 01 | 55.2 | | | | | 35 | Felt slightly at Osaka. |
| | | i | 01 | 56.1 | | | | | | | |
| | | i | 01 | 56.9 | | | | | | | |
| | | L | 01 | 59.9 | | | | | | | |
| | | ME | 02 | 01.6 | | 0.6 | -81 | | | | |
| | | MN | 02 | 01.6 | | 0.4 | | -100 | | | |
| | | MZ | 02 | 02.3 | | 0.4 | | | +16 | | |
| | | i | 02 | 50.0 | | | | | | | |
| | | F | 05 | 20.0 | | | | | | | |
| 39 | " 28 | P | 3 | 00 | 47.4 | | | | | 364 | |
| | | L | 01 | 36.4 | | | | | | | |
| | | ME | 02 | 00.1 | | 1.7 | -25 | | | | |
| | | MN | 01 | 59.0 | | 1.7 | | -24 | | | |
| | | MZ | 02 | 08.8 | | 1.9 | | | -20 | | |
| | | F | 08 | 0.0 | | | | | | | |

(E N D)

OSAKA JAPAN

March 1932

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$\phi = 34^{\circ} 39' N.$ $\lambda = 135^{\circ} 32' E.$ Gr. h=3.4m Sub-Soil: Sandy Loam (Oldquaternary)

Instrument: Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 |
| A_N : | 30 | - | 0.003 | 20 |
| A_Z : | 15 | - | 0.004 | 20 |

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 6 | 2.0 | 0.005 | 80 |



| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|--------|---|--------|----|---|-------------|----------------|----------------|----------------|------------------|--|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 40 | Mar. 1 | P i L ME MN MZ i F | 7 | 13 | 51.2 52.0 55.2 55.2 55.4 55.2 13.0 17.0 | | | | | 30 | Nara pre- fecture. Felt sli- ghtly at Osaka. |
| 41 | " 1 | P L ME MN MZ i F | 15 | 42 | 53 52.9 43 22.7 43 40.4 43 42.1 43 48.4 44 21.0 47 20.0 | | | | | 221 | |
| 42 | " 7 | P L ME MN MZ F | 17 | 42 | 04.4 41.2 16.2 23.2 13.2 10.0 | | | | | 273 | |
| 43 | " 8 | P i L F | 4 | 36 | 44.7 37 51.6 42 28.5 47 0.0 | | | | | 3941 | |
| 44 | " 15 | P S L ME MN F | 4 | 37 | 17.6 42 04.8 44 11.1 44 20.9 44 22.8 5 00 0.0 | | | | | 3058 | |
| 45 | " 17 | P L ME MN MZ F | 0 | 51 | 49.0 52 41.7 53 34.3 52 02.4 53 19.0 1 06 50.0 | | | | | 391 | |
| 46 | " 19 | P S L F | 11 | 04 | 29.9 08 28.8 11 12.1 25 40.0 | | | | | 2424 | |
| 47 | " 26 | P L | 0 | 04 | 01.3 06 20.7 | | | | | 1314 | |
| 48 | " 26 | P S L | 0 | 07 | 40.1 14 55.0 22 05.1 | | | | | 5598 | |

OSAKA JAPAN

March 1932

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Seismological
Centre

| No. | Date | Phase | G.M.T. h. m. s. | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|-------|--------------------|-------------|----------------|----------------|----------------|------------------|---------|
| | | | | | A_E μ | A_N μ | A_Z μ | | |
| | | ME | 0 29 47.2 | 17.8 | +200 | | | | |
| | | MN | 30 01.2 | 18.8 | | | | | |
| | | F | 40 50.0 | | | | | | |
| 49 | Mar. 26 | P | 1 01 52.2 | | | | | 82 | |
| | | L | 02 03.3 | | | | | | |
| | | F | 02 50.0 | | | | | | |
| 50 | " 26 | P | 9 59 54.0 | | | | | 4311 | |
| | | S | 10 05 58.8 | | | | | | |
| | | L | 08 44.2 | | | | | | |
| | | ME | 13 53.9 | 12.7 | +38 | | | | |
| | | MN | 15 16.8 | 15.5 | | | | | |
| | | F | 30 10.0 | | | | | | |
| | | | (ELD) | | | | | | |

OSAKA JAPAN

April 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

$\phi = 34^{\circ} 39' N.$ $\lambda = 135^{\circ} 32' E.$ Gr. $h = 3.4m$ Sub-Soil : Sandy Loam (Oldquaternary)

Instrument : Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)



| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V | | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 | A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 30 | - | 0.003 | 20 | A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 15 | - | 0.004 | 20 | A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|-------|--------|------|------|-------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 51 | April 4 | P | 19 | 18 | 03.6 | | | | 479 | | |
| | | L | 19 | 08.2 | | | | | | | |
| | | ME | 20 | 02.6 | 4.9 | +221 | | | | | |
| | | MN | 20 | 01.5 | 3.7 | | +394 | | | | |
| | | MZ | 20 | 07.6 | 2.4 | | | +63 | | | |
| | | F | 54 | 40.0 | | | | | | | |
| 52 | " 6 | P | 9 | 14 | 47.5 | | | | 2207 | | |
| | | S | 18 | 28.2 | | | | | | | |
| | | L | 21 | 07.0 | | | | | | | |
| | | ME | 22 | 38.8 | 3.9 | -22 | | | | | |
| | | MN | 22 | 45.8 | 4.1 | | -22 | | | | |
| | | ME | 22 | 28.9 | 3.0 | | | +8 | | | |
| | | F | 32 | 50.0 | | | | | | | |
| 53 | " 11 | P | 18 | 13 | 56.6 | | | | 343 | | |
| | | L | 14 | 42.9 | | | | | | | |
| | | ME | 16 | 03.7 | 3.2 | -25 | | | | | |
| | | MN | 15 | 43.2 | 3.2 | | +25 | | | | |
| | | F | 22 | 20.0 | | | | | | | |
| 54 | " 14 | P | 3 | 38 | 10.8 | | | | 272 | | |
| | | L | 38 | 47.4 | | | | | | | |
| | | ME | 38 | 56.1 | 1.4 | +3 | | | | | |
| | | F | 40 | 30.0 | | | | | | | |
| 55 | " 22 | P | 5 | 06 | 58.2 | | | | 6432 | | |
| | | L | 14 | 57.8 | | | | | | | |
| | | F | 25 | 20.0 | | | | | | | |
| 56 | " 22 | P | 15 | 19 | 29.6 | | | | 114 | | |
| | | L | 19 | 45.0 | | | | | | | |
| | | ME | 20 | 01.7 | 1.2 | +3 | | | | | |
| | | MN | 19 | 52.0 | 1.1 | | +2 | | | | |
| | | F | 21 | 10.0 | | | | | | | |
| 57 | " 22 | P | 16 | 57 | 20.2 | | | | 275 | | |
| | | L | 57 | 57.2 | | | | | | | |
| | | MN | 58 | 26.4 | 3.5 | | +5 | | | | |
| | | F | 17 | 00 | 40.0 | | | | | | |
| 58 | " 23 | P | 14 | 00 | 26.9 | | | | 55 | | |
| | | L | 00 | 34.2 | | | | | | | |
| | | ME | 00 | 34.7 | 0.2 | -5 | | | | | |
| | | MN | 00 | 34.9 | 0.2 | | +5 | | | | |
| | | MZ | 00 | 42.0 | 0.2 | | | -1 | | | |
| | | F | 03 | 30.0 | | | | | | | |
| 59 | " 26 | P | 3 | 42 | 31.2 | | | | 423 | | |
| | | i | 42 | 57.3 | | | | | | | |
| | | L | 43 | 28.2 | | | | | | | |
| | | ME | 43 | 56.1 | 2.2 | +8 | | | | | |
| | | MN | 43 | 53.5 | 2.7 | | +14 | | | | |
| | | MZ | 44 | 08.7 | 2.3 | | | -3 | | | |
| | | F | 46 | 40.0 | | | | | | | |

OSAKA JAPAN

April May 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory



International
Seismological
Centre

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|----------|-------|--------|------|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 60 | April 26 | P | 12 | 37 | 51.3 | | | | 4430 | | |
| | | S | 44 | 02.8 | | | | | | | |
| | | Me | 44 | 40.9 | 3.4 | -5 | | | | | |
| | | MN | 44 | 38.0 | 3.2 | | +3 | | | | |
| | | MZ | 45 | 14.2 | 2.5 | | | +1 | | | |
| | | F | 54 | 0.0 | | | | | | | |
| 61 | " 26 | P | 13 | 34 | 44.2 | | | | 2687 | | |
| | | S | 39 | 03.9 | | | | | | | |
| | | ME | 40 | 23.9 | 3.6 | ±6 | | | | | |
| | | MN | 40 | 25.4 | 3.5 | | -8 | | | | |
| | | MZ | 39 | 26.2 | 2.9 | | | +3 | | | |
| | | F | 51 | 20.0 | | | | | | | |
| 62 | " 28 | P | 3 | 43 | 50.0 | | | | 314 | | |
| | | i | 43 | 56.3 | | | | | | | |
| | | L | 44 | 32.3 | | | | | | | |
| | | ME | 44 | 33.3 | 3.5 | +94 | | | | | |
| | | MN | 44 | 53.5 | 4.0 | | +81 | | | | |
| | | MZ | 45 | 05.2 | 2.2 | | | +58 | | | |
| F | 52 | 30.0 | | | | | | | | | |
| 63 | " 29 | P | 4 | 51 | 44.3 | | | | 77 | | |
| | | L | 51 | 54.7 | | | | | | | |
| | | ME | 51 | 54.8 | 0.4 | +3 | | | | | |
| | | MN | 51 | 54.8 | 0.3 | | +5 | | | | |
| | | F | 53 | 20.0 | | | | | | | |
| 64 | " 29 | P | 8 | 03 | 25.8 | | | | 693 | | |
| | | L | 04 | 59.2 | | | | | | | |
| | | ME | 05 | 33.5 | 3.6 | -8 | | | | | |
| | | MN | 05 | 24.8 | 3.7 | | -13 | | | | |
| | | MZ | 05 | 41.7 | 2.7 | | | +6 | | | |
| | | F | 11 | 40.0 | | | | | | | |
| 65 | " 29 | P | 17 | 36 | 24.5 | | | | 2464 | | |
| | | i | 36 | 53.1 | | | | | | | |
| | | i | 37 | 53.1 | | | | | | | |
| | | S | 40 | 26.9 | | | | | | | |
| | | L | 43 | 00.3 | | | | | | | |
| | | F | 49 | 50.0 | | | | | | | |
| 66 | " 29 | P | 18 | 25 | 14.9 | | | | 2040 | | |
| | | S | 28 | 41.9 | | | | | | | |
| | | L | 31 | 28.3 | | | | | | | |
| | | F | 41 | 50.0 | | | | | | | |
| 67 | May 2 | P | 23 | 30 | 26.6 | | | | 550 | | |
| | | i | 30 | 57.4 | | | | | | | |
| | | i | 30 | 16.8 | | | | | | | |
| | | L | 31 | 40.7 | | | | | | | |
| | | ME | 32 | 55.8 | 2.2 | ±144 | | | | | |
| | | MN | 32 | 08.5 | 2.4 | | -181 | | | | |
| | | MZ | 32 | 40.0 | 2.6 | | | +55 | | | |
| F | 47 | 50.0 | | | | | | | | | |
| 68 | " -4 | P | 5 | 12 | 30.1 | | | | 2455 | | |
| | | L | 16 | 31.6 | | | | | | | |
| | | ME | 16 | 49.4 | 3.5 | ±5 | | | | | |
| | | F | 22 | 30.0 | | | | | | | |
| 69 | " 4 | P | 21 | 04 | 36.0 | | | | 415 | | |
| | | L | 05 | 31.9 | | | | | | | |
| | | MN | 06 | 16.4 | 4.5 | | +3 | | | | |
| | | F | 12 | 20.0 | | | | | | | |
| | | | | | | | | | | | |

OSAKA JAPAN

May 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory



International
Seismological
Centre

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|-----|-------|---|--------|----|--|-------------|---------------------|---------------------|---------------------|-----------|--|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 70 | May 5 | P i i L ME MN MZ F | 4 | 11 | 50.6 52.4 05.8 26.0 29.8 40.8 53.8 10.0 | | | | | 263 | |
| | | | | | | 3.6 | -409 | | | | |
| | | | | | | 3.8 | | -263 | | | |
| | | | | | | 2.4 | | | -125 | | |
| 71 | " 11 | P i i L F | 6 | 54 | 35.1 58.8 32.2 30.8 0.0 | | | | | 3188 | |
| 72 | " 12 | P L ME MN F | 1 | 32 | 05.0 14.2 15.7 15.7 20.0 | | | | | 68 | Wakayama. |
| | | | | | | 0.6 | -3 | | | | |
| | | | | | | 0.6 | | ±5 | | | |
| 73 | " 12 | P i i L ME MN F | 6 | 14 | 53.0 58.0 00.5 53.7 02.0 31.9 10.0 | | | | | 3251 | |
| | | | | | | 4.1 | +6 | | | | |
| | | | | | | 4.2 | | ±8 | | | |
| 74 | " 12 | P L ME MN MZ F | 11 | 59 | 44.8 53.8 54.3 57.7 55.1 20.0 | | | | | 73 | Wakayama. |
| | | | | | | 0.2 | ±8 | | | | |
| | | | | | | 0.2 | | ±6 | | | |
| | | | | | | 0.2 | | | ±1 | | |
| 75 | " 14 | P L ME MN MZ | 13 | 17 | 56.5 36.2 27.4 14.3 15.9 | | | | | 3869 | |
| | | | | | | 27.3 | +3925 | | | | |
| | | | | | | 20.5 | | +2525 | | | |
| | | | | | | 17.0 | | | ±13 | | |
| 76 | " 14 | P L F | 13 | 55 | 37.8 49.3 0.0 | | | | | 3413 | |
| 77 | " 15 | P L ME MN MZ F | 7 | 12 | 47.0 48.4 49.7 49.7 48.4 10.0 | | | | | | 10 Near Sakai Osaka prefecture. Felt slightly. |
| | | | | | | 0.3 | -41 | | | | |
| | | | | | | 0.3 | | +75 | | | |
| | | | | | | 0.3 | | | -25 | | |
| 78 | " 15 | P L F | 7 | 15 | 39.6 41.0 0.0 | | | | | | 10 Near Sakai Osaka prefecture. |

OSAKA JAPAN

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

$\phi = 34^\circ 39' N.$ $\lambda = 135^\circ 32' E.$ Gr. h=3.4m Sub-Soil : Sandy Loam (Oldquaternary)

Instrument : Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)



| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V | | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 | A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 30 | - | 0.003 | 20 | A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 15 | - | 0.004 | 20 | A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|--------|---|--------|----|---|-------------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 9 | May 16 | P L ME MN MZ F | 6 | 05 | 54.4 54.2 13.5 04.0 21.3 40.0 | 1.8 1.8 2.3 | ± 2 | ± 2 | -3 | 511 | |
| | " 17 | P i L F | 13 | 04 | 24.6 37.3 51.0 50.0 | | | | | 1394 | |
| 31 | " 17 | P L F | 17 | 37 | 32.6 22.0 20.0 | | | | | 367 | |
| 32 | " 20 | P i L ME MN MZ F | 11 | 55 | 17.5 46.0 20.7 36.4 51.3 56.3 20.0 | 2.4 2.1 2.1 | -18 | +25 | +8 | 470 | |
| 33 | " 22 | P L F | 17 | 32 | 01.1 02.9 10.0 | | | | | 904 | |
| 34 | " 23 | P L ME MN MZ F | 20 | 18 | 17.4 31.7 58.1 52.6 57.3 20.0 | 0.9 0.9 1.9 | -9 | +8 | ± 6 | 106 | |
| 35 | " 24 | P L ME MN MZ F | 2 | 24 | 50.0 07.4 28.4 38.1 30.5 50.0 | 1.9 1.5 0.4 | ± 8 | +6 | +1 | 129 | |
| 36 | " 26 | P i L ME MN MZ F | 16 | 20 | 02.9 23.2 57.3 56.0 21.2 06.3 00.0 | 5.3 4.1 3.4 | -81 | -181 | +72 | 7488 | |
| 37 | " 26 | P i L ME MN F | 16 | 47 | 16.1 58.7 50.7 10.9 12.1 40.0 | 3.5 5.2 | -5 | -8 | | 4857 | |

OSAKA JAPAN

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

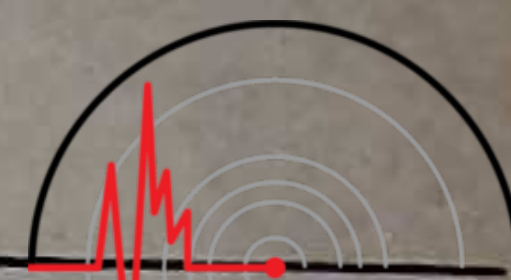


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Centre

| Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|--------|--------------|---------------|----------------|------|-------------|---------------------|---------------------|---------------------|-----------|------------------------|
| | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| May 26 | P | 22 | 31 | 52.9 | | | | | 7546 | |
| | L | 40 | 50.2 | | | | | | | |
| | ME | 42 | 01.3 | 4.3 | ±13 | | | | | |
| | MN | 42 | 12.4 | 4.6 | | +20 | | | | |
| | MZ | 41 | 33.0 | 3.7 | | | ±5 | | | |
| | F | 51 | 20.0 | | | | | | | |
| " 28 | P | 2 | 23 | 00.7 | | | | | 799 | |
| | L | 24 | 48.4 | | | | | | | |
| | ME | 26 | 18.0 | 3.6 | +69 | | | | | |
| | MN | 26 | 16.7 | 4.0 | | +72 | | | | |
| | MZ | 25 | 44.2 | 3.2 | | | +28 | | | |
| | F | 3 | 00 | 00.0 | | | | | | |
| " 28 | P | 5 | 04 | 20.8 | | | | | 711 | |
| | L | 05 | 56.6 | | | | | | | |
| | i | 06 | 55.1 | | | | | | | |
| | F | 20 | 00.0 | | | | | | | |
| " 30 | P | 0 | 02 | 21.8 | | | | | 45 | |
| | L | 02 | 27.8 | | | | | | | |
| | ME | 02 | 27.8 | 0.3 | +5 | | | | | |
| | MN | 02 | 27.8 | 0.3 | | +3 | | | | |
| | F | 05 | 16.0 | | | | | | | |
| | | | | | | | | | | |
| June 1 | P | 17 | 32 | 40.0 | | | | | 68 | |
| | L | 32 | 49.2 | | | | | | | |
| | ME | 32 | 49.3 | 0.4 | -3 | | | | | |
| | MN | 32 | 54.0 | 0.4 | | ±3 | | | | |
| | MZ | 32 | 49.2 | 0.4 | | | +1 | | | |
| | F | 37 | 49. | | | | | | | |
| | F | 34 | 00.0 | | | | | | | |
| | | | | | | | | | | |
| " 1 | P | 19 | 33 | 41.4 | | | | | 86 | Felt slightly at Osaka |
| | i | 33 | 43.1 | | | | | | | |
| | i | 33 | 48.7 | | | | | | | |
| | L | 33 | 53.0 | | | | | | | |
| | ME | 34 | 22.3 | 1.9 | +153 | | | | | |
| | MN | 34 | 12.9 | 1.9 | | +94 | | | | |
| | MZ | 34 | 14.8 | 1.5 | | | -34 | | | |
| | F | 40 | 00.0 | | | | | | | |
| " 1 | P | 22 | 42 | 02.9 | | | | | 100 | |
| | L | 42 | 16.3 | | | | | | | |
| | ME | 42 | 23.1 | 0.8 | +5 | | | | | |
| | MN | 42 | 16.3 | 0.6 | | +5 | | | | |
| | MZ | 42 | 10.8 | 0.6 | | | +1 | | | |
| | F | 44 | 30.0 | | | | | | | |
| | | | | | | | | | | |
| " 3 | P | 0 | 20 | 31.4 | | | | | 666 | |
| | i | 20 | 56.8 | | | | | | | |
| | i | 21 | 10.2 | | | | | | | |
| | L | 22 | 01.2 | | | | | | | |
| | ME | 23 | 38.7 | 3.6 | +50 | | | | | |
| | MN | 22 | 49.7 | 5.3 | | +75 | | | | |
| | MZ | 23 | 12.1 | 2.3 | | | -26 | | | |
| | F | 39 | 20.0 | | | | | | | |
| " 3 | P | 10 | 50 | 41.9 | | | | | 10835 | |
| | i | 54 | 51.6 | | | | | | | |
| | S | 11 | 02 | 16.3 | | | | | | |
| | i | 10 | 04.2 | | | | | | | |
| | L | 20 | 42.0 | | | | | | | |
| | i | 39 | 18.8 | | | | | | | |
| | ME | 56 | 45.5 | 16.8 | ±13 | | | | | |
| | MN | 58 | 43.7 | 26.3 | | +8 | | | | |
| | MZ | 58 | 59.0 | 15.5 | | | +6 | | | |
| | F | 12 | 47 | 40.0 | | | | | | |
| " 3 | P | 13 | 44 | 26.3 | | | | | 921 | |

OSAKA JAPAN

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

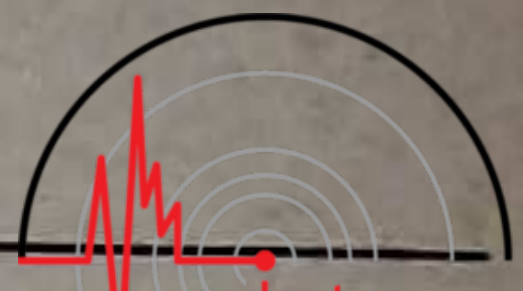


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| Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|--------|-------|--------|----|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| June 3 | P | 13 | 44 | 26.3 | | | | 921 | | |
| | i | | 44 | 56.6 | | | | | | |
| | L | | 46 | 30.4 | | | | | | |
| | ME | | 47 | 11.3 | 1.9 | -8 | | | | |
| | MN | | 47 | 11.3 | 2.5 | | -14 | | | |
| | MZ | | 47 | 11.4 | 1.9 | | | | +5 | |
| | F | | 50 | 40.0 | | | | | | |
| " 4 | P | 2 | 02 | 43.1 | | | | 960 | | |
| | i | | 03 | 04.0 | | | | | | |
| | i | | 03 | 51.1 | | | | | | |
| | L | | 04 | 52.5 | | | | | | |
| | ME | | 06 | 17.0 | 5.2 | +30 | | | | |
| | MN | | 05 | 50.3 | 3.8 | | +31 | | | |
| | MZ | | 05 | 34.0 | 2.9 | | | | -13 | |
| | F | | 14 | 50.0 | | | | | | |
| " 4 | P | 14 | 11 | 16.4 | | | | 68 | | |
| | i | | 11 | 19.9 | | | | | | |
| | L | | 11 | 25.6 | | | | | | |
| | ME | | 11 | 28.2 | 0.4 | +11 | | | | |
| | MN | | 11 | 26.0 | 0.4 | | +6 | | | |
| | MZ | | 11 | 26.0 | 0.3 | | | | -3 | |
| | F | | 19 | 40.0 | | | | | | |
| " 6 | P | 8 | 56 | 14.7 | | | | 8690 | | |
| | S | 9 | 06 | 09.7 | | | | | | |
| | F | | 15 | 00.0 | | | | | | |
| " 8 | P | 6 | 15 | 18.4 | | | | 443 | | |
| | i | | 15 | 37.6 | | | | | | |
| | L | | 16 | 18.1 | | | | | | |
| | ME | | 16 | 54.1 | 2.3 | +38 | | | | |
| | MN | | 16 | 57.8 | 3.4 | | +50 | | | |
| | MZ | | 17 | 39.2 | 2.4 | | | | -25 | |
| | F | | 29 | 30.0 | | | | | | |
| " 8 | P | 8 | 01 | 46.0 | | | | 4197 | | |
| | i | | 02 | 55.9 | | | | | | |
| | L | | 07 | 44.1 | | | | | | |
| | F | | 17 | 20.0 | | | | | | |
| " 8 | P | 10 | 55 | 09.2 | | | | 2738 | | |
| | i | | 55 | 29.1 | | | | | | |
| | S | | 59 | 32.7 | | | | | | |
| | L | | 11 | 02 | 14.4 | | | | | |
| | F | | 08 | 50.0 | | | | | | |
| " 8 | P | 15 | 00 | 25.5 | | | | 2812 | | |
| | i | | 00 | 52.5 | | | | | | |
| | L | | 04 | 54.6 | | | | | | |
| | F | | 17 | 20.0 | | | | | | |
| " 10 | eP | 18 | 08 | 04.4 | | | | 7542 | | |
| | L | | 09 | 44.3 | | | | | | |
| | ME | | 10 | 22.7 | 2.8 | -3 | | | | |
| | MN | | 10 | 24.7 | 2.8 | | -4 | | | |
| | MZ | | 10 | 53.9 | 2.3 | | | | +1 | |
| | F | | 15 | 40.0 | | | | | | |
| " 10 | P | 20 | 27 | 11.4 | | | | 582 | | |
| | L | | 28 | 29.8 | | | | | | |
| | ME | | 29 | 20.2 | 3.9 | +13 | | | | |
| | MN | | 29 | 27.0 | 3.9 | | | | -21 | |
| | MZ | | 29 | 21.5 | 2.4 | | | | +8 | |

OSAKA JAPAN

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory



International
Seismological
Centre

| Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|---------|-------|--------|----|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| June 10 | P | 20 | 38 | 01.5 | | | | 309 | | |
| | L | | 38 | 43.1 | | | | | | |
| | F | | 44 | 50.0 | | | | | | |
| " 11 | P | 16 | 37 | 52.5 | | | | 6 | | |
| | L | | 37 | 53.3 | | | | | | |
| | MN | | 37 | 53.3 | 0.3 | | +2 | | | |
| | F | | 39 | 00.0 | | | | | | |
| " 11 | P | 17 | 04 | 48.5 | | | | 2108 | | |
| | i | | 04 | 59.9 | | | | | | |
| | i | | 05 | 50.1 | | | | | | |
| | S | | 08 | 21.3 | | | | | | |
| | L | | 11 | 57.6 | | | | | | |
| | F | | 24 | 40.0 | | | | | | |
| " 13 | P | 0 | 47 | 22.2 | | | | 565 | | |
| | L | | 48 | 38.3 | | | | | | |
| | ME | | 50 | 11.5 | 2.3 | -5 | | | | |
| | MN | | 49 | 12.0 | 2.8 | | +6 | | | |
| | MZ | | 49 | 10.9 | 2.4 | | | | | |
| | F | | 53 | 00.0 | | | +2 | | | |
| " 13 | P | 21 | 02 | 04.0 | | | | 2648 | | |
| | i | | 02 | 29.9 | | | | | | |
| | i | | 02 | 50.9 | | | | | | |
| | L | | 06 | 20.8 | | | | | | |
| | ME | | 07 | 49.1 | 5.3 | +11 | | | | |
| | MN | | 07 | 49.0 | 5.6 | | +13 | | | |
| | F | | 16 | 50.0 | | | | | | |
| " 14 | P | 6 | 04 | 15.4 | | | | 10505 | | |
| | S | | 15 | 36.0 | | | | | | |
| | F | | 25 | 20.0 | | | | | | |
| " 14 | P | 11 | 25 | 10.5 | | | | 2263 | | |
| | i | | 25 | 27.9 | | | | | | |
| | L | | 28 | 55.8 | | | | | | |
| | ME | | 29 | 23.9 | 4.6 | ±6 | | | | |
| | MN | | 29 | 45.2 | 5.3 | | -8 | | | |
| | F | | 37 | 00.0 | | | | | | |
| " 16 | P | 1 | 26 | 31.3 | | | | 2069 | | |
| | i | | 27 | 16.1 | | | | | | |
| | S | | 30 | 00.2 | | | | | | |
| | L | | 33 | 50.7 | | | | | | |
| | ME | | 35 | 08.4 | 4.6 | ±6 | | | | |
| | MN | | 34 | 52.6 | 5.3 | | ±6 | | | |
| | F | | 44 | 10.0 | | | | | | |
| " 16 | P | 8 | 33 | 20.8 | | | | 468 | | |
| | i | | 33 | 47.4 | | | | | | |
| | L | | 34 | 23.8 | | | | | | |
| | ME | | 34 | 56.0 | 2.1 | -63 | | | | |
| | MN | | 35 | 18.3 | 2.1 | | -79 | | | |
| | F | | 44 | 10.0 | | | | | | |
| " 16 | P | 20 | 18 | 36.3 | | | | 497 | | |
| | L | | 19 | 43.3 | | | | | | |
| | ME | | 20 | 36.6 | 3.6 | -11 | | | | |
| | MN | | 20 | 26.1 | 3.6 | | +15 | | | |
| | MZ | | 20 | 25.9 | 2.0 | | | | | |
| | F | | 25 | 40.0 | | | -6 | | | |
| " 18 | P | 1 | 32 | 28.5 | | | | 374 | | |
| | i | | 32 | 36.4 | | | | | | |
| | L | | 33 | 18.9 | | | | | | |
| | ME | | 33 | 59.4 | 4.0 | +163 | | | | |
| | MN | | 34 | 27.6 | 4.1 | | +216 | | | |
| | MZ | | 34 | 01.4 | 2.4 | | | | | |
| | F | | 49 | 10.0 | | | ±91 | | | |

OSAKA JAPAN

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory



International
Seismological
Centre

| Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|---------|-----------------|--------|------|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| June 18 | P | 10 | 26 | 38.3 | | | | 10815 | | |
| | i | | 30 | 30.8 | | | | | | |
| | S | | 38 | 11.9 | | | | | | |
| | L | 11 | 04 | 10.4 | | | | | | |
| | ME | | 28 | 07.3 | 16.7 | +8 | | | | |
| | MN | | 27 | 14.4 | 17.3 | | +7 | | | |
| | MZ | | 28 | 35.0 | 16.8 | | | | ±1 | |
| F | 12 | 06 | 30.0 | | | | | | | |
| " 19 | P | 15 | 19 | 04.9 | | | | 466 | | |
| | L | | 20 | 07.7 | | | | | | |
| | ME | | 20 | 07.7 | 2.8 | ±5 | | | | |
| | MN | | 20 | 37.8 | 2.8 | | ±5 | | | |
| | MZ | | 20 | 34.5 | 2.4 | | | | ±1 | |
| | F | | 25 | 40.0 | | | | | | |
| " 22 | P | 0 | 37 | 10.7 | | | | 541 | | |
| | i | | 37 | 22.2 | | | | | | |
| | i | | 37 | 34.5 | | | | | | |
| | L | | 38 | 23.6 | | | | | | |
| | ME ₁ | | 39 | 16.1 | 3.4 | -488 | | | | |
| | MN ₁ | | 38 | 37.6 | 2.4 | | ±600 | | | |
| | MZ ₁ | | 39 | 02.8 | 2.6 | | | | +188 | |
| | ME ₂ | | 39 | 47.1 | 2.7 | +502 | | | | |
| | MN ₂ | | 39 | 45.8 | 3.6 | | | | -559 | |
| | MZ ₂ | | 39 | 39.8 | 3.0 | | | | -147 | |
| F | | 54 | 10.0 | | | | | | | |
| " 23 | P | 2 | 19 | 23.0 | | | | 5666 | | |
| | L | | 26 | 41.4 | | | | | | |
| | F | | 32 | 00.0 | | | | | | |
| " 23 | P | 3 | 31 | 39.7 | | | | 488 | | |
| | L | | 32 | 45.5 | | | | | | |
| | F | | 39 | 00.0 | | | | | | |
| " 24 | P | 15 | 59 | 04.1 | | | | 320 | | |
| | L | | 57 | 47.2 | | | | | | |
| | ME | | 58 | 54.3 | 1.8 | -8 | | | | |
| | MN | | 58 | 56.4 | 2.0 | | -11 | | | |
| | F | 16 | 05 | 10.0 | | | | | | |
| " 25 | P | 13 | 33 | 08.9 | | | | 127 | | |
| | L | | 33 | 26.0 | | | | | | |
| | ME | | 33 | 26.4 | 0.2 | -5 | | | | |
| | MN | | 33 | 26.5 | 0.4 | | -5 | | | |
| | F | | 35 | 30.0 | | | | | | |
| " 26 | P | 19 | 22 | 56.3 | | | | 2359 | | |
| | L | | 26 | 50.2 | | | | | | |
| | F | | 35 | 30.0 | | | | | | |
| " 28 | P | 12 | 39 | 46.3 | | | | 508 | | |
| | L | | 40 | 54.9 | | | | | | |
| | F | | 48 | 20.0 | | | | | | |
| " 28 | P | 14 | 53 | 28.6 | | | | 247 | | |
| | L | | 54 | 01.8 | | | | | | |
| | F | | 57 | 20.0 | | | | | | |
| " 29 | P | 18 | 17 | 42.3 | | | | 1019 | | |
| | i | | 17 | 50.3 | | | | | | |
| | i | | 17 | 57.4 | | | | | | |
| | i | | 18 | 20.7 | | | | | | |
| | i | | 19 | 05.5 | | | | | | |
| | L | | 19 | 59.6 | | | | | | |
| | ME | | 21 | 28.2 | 4.1 | +34 | | | | |
| | MN | | 20 | 57.7 | 4.1 | | | | -30 | |
| | MZ | | 20 | 29.8 | 4.1/3.6 | | | | -8 | |
| | F | | 34 | 30.0 | | | | | | |

OSAKA JAPAN July 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

$\phi = 34^{\circ} 39' N.$ $\lambda = 135^{\circ} 32' E.$ Gr. $h = 3.4m$ Sub-Soil : Sandy Loam (Oldquaternary)

Instrument : Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)



| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V | | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 | A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 30 | - | 0.003 | 20 | A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 15 | - | 0.004 | 20 | A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|--------|------------------------------------|--------|----|--|-------------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 129 | July 5 | e.P e.L ME MN i f | 11 | 08 | 01.1 51.6 21.6 21.6 21.7 30.0 | | | | | - | |
| | | | | | | 2.3 2.3 | -3 | ± 2 | | | |
| 130 | " 9 | P S i ME MN MZ F | 13 | 05 | 45.9 31.9 35.8 02.1 01.3 50.1 30.0 | | | | | 6180 | |
| | | | | | | 4.7 4.6 3.6 | -11 | -19 | ± 2 | | |
| 131 | " 10 | P i i S F | 7 | 47 | 26.5 46.9 25.8 55.9 0.0 | | | | | 3696 | |
| 132 | " 11 | P S ME F | 8 | 26 | 45.5 00.5 02.2 ---- | | | | | 2625 | |
| | | | | | | 4.8 | -5 | | | | |
| 133 | " 11 | P L i ME MZ F | 8 | 40 | 26.1 28.2 42.3 57.3 13.4 40.0 | | | | | 461 | |
| | | | | | | 2.3 2.4 | -8 | -6 | | | |
| 134 | " 11 | P i L ME MN F | 14 | 14 | 50.9 56.5 19.4 27.4 20.9 40.0 | | | | | 212 | |
| | | | | | | 0.9 0.9 | -3 | -2 | | | |
| 135 | " 12 | P L ME MN F | 4 | 18 | 50.8 58.8 33.6 24.6 30.0 | | | | | 59 | |
| | | | | | | 1.5 1.1 | -8 | -6 | | | |
| 136 | " 12 | P i S L F | 19 | 37 | 29.1 42.6 09.8 36.6 40.0 | | | | | 2967 | |

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| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|-----|---------|-------|--------|----|------|-------------|---------------------|---------------------|---------------------|----------------------------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 137 | July 15 | P | 23 | 19 | 28.3 | | | | 1337 | | |
| | | i | | 20 | 19.5 | | | | | | |
| | | L | | 21 | 50.0 | | | | | | |
| | | ME | | 22 | 48.5 | 3.2 | -9 | | | | |
| | | MN | | 22 | 40.6 | 3.9 | | -5 | | | |
| F | | 33 | 30.0 | | | | | | | | |
| 138 | " 16 | P | 12 | 15 | 48.8 | | | | 162 | | |
| | | L | | 16 | 10.6 | | | | | | |
| | | F | | 18 | 0.0 | | | | | | |
| 139 | " 16 | P | 13 | 23 | 28.2 | | | | 68 | | |
| | | L | | 23 | 37.4 | | | | | | |
| | | MN | | 23 | 38.0 | 0.4 | | -3 | | | |
| | | F | | 25 | 30.0 | | | | | | |
| 140 | " 16 | P | 17 | 25 | 43.6 | | | | 77 | | |
| | | L | | 25 | 54.0 | | | | | | |
| | | MN | | 25 | 54.0 | 0.4 | | ±1 | | | |
| | | F | | 27 | 20.0 | | | | | | |
| 141 | " 18 | P | 5 | 07 | 17.5 | | | | - | | |
| | | i | | 07 | 35.4 | | | | | | |
| | | e.L | | 08 | 01.5 | | | | | | |
| | | i | | 09 | 39.8 | | | | | | |
| | | i | | 11 | 44.8 | | | | | | |
| | | F | | 20 | 40.0 | | | | | | |
| 142 | " 20 | P | 19 | 50 | 03.1 | | | | 62 | | |
| | | L | | 50 | 11.4 | | | | | | |
| | | ME | | 50 | 12.6 | 0.3 | ±1 | | | | |
| | | MN | | 50 | 11.8 | 0.3 | | ±1 | | | |
| | | F | | 52 | 40.0 | | | | | | |
| 143 | " 20 | P | 20 | 16 | 59.8 | | | | 8508 | | |
| | | I | | 18 | 45.7 | | | | | | |
| | | L | | 26 | 45.7 | | | | | | |
| | | ME | | 26 | 14.3 | 5.4 | ±8 | | | | |
| | | MN | | 27 | 47.5 | 3.6 | | ±14 | | | |
| | | F | | 40 | 50.0 | | | | | | |
| 144 | " 21 | P | 12 | 46 | 46.2 | | | | 4231 | | |
| | | S | | 52 | 46.5 | | | | | | |
| | | L | | 58 | 37.9 | | | | | | |
| | | F | | 13 | 09 | 40.0 | | | | | |
| 145 | " 24 | P | 2 | 54 | 44.3 | | | | 64 | | |
| | | L | | 54 | 52.9 | | | | | | |
| | | ME | | 54 | 53.3 | 0.4 | -11 | | | | |
| | | MN | | 54 | 53.3 | 0.4 | | -9 | | | |
| | | MZ | | 54 | 52.9 | 0.4 | | +2 | | | |
| | | i | | 55 | 07.1 | | | | | | |
| | | F | | 56 | 50.0 | | | | | | |
| 146 | " 24 | P | 19 | 32 | 33.1 | | | | 970 | | |
| | | L | | 34 | 43.7 | | | | | | |
| | | F | | 42 | 0.0 | | | | | | |
| 147 | " 25 | P | 8 | 25 | 26.3 | | | | 276 | N....5 W....1 D..103 | |
| | | i | | 25 | 51.0 | | | | | | |
| | | L | | 26 | 03.4 | | | | | | |
| | | ME | | 26 | 04.0 | 2.3 | ±481 | | | | |
| | | MN | | 26 | 32.6 | 3.2 | | +431 | | | |
| | | MZ | | 26 | 54.6 | 3.6 | | | | | |
| | | F | | 54 | 0.0 | | | | | | |
| | | | | | | | | -181 | | | |
| 148 | " 27 | P | 0 | 32 | 10.4 | | | | 443 | | |

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| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|-------|--------|----|------|-------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 148 | July 27 | L | 0 | 33 | 10.0 | | | | | | |
| | | ME | | 33 | 48.1 | 3.2 | +33 | | | | |
| | | MN | | 33 | 37.2 | 3.9 | | +39 | | | |
| | | MZ | | 33 | 36.1 | 3.3 | | | +31 | | |
| | | F | | 49 | 20.0 | | | | | | |
| 149 | " 27 | e.P | 8 | 41 | 47.4 | | | | | - | |
| | | e.L | | 42 | 16.3 | | | | | | |
| | | F | | 43 | 20.0 | | | | | | |
| 150 | " 27 | P | 21 | 27 | 17.0 | | | | | 4283 | |
| | | L | | 33 | 20.2 | | | | | | |
| | | F | | 49 | 20.0 | | | | | | |
| 151 | " 29 | P | 16 | 37 | 25.7 | | | | | 502 | |
| | | L | | 38 | 33.4 | | | | | | |
| | | ME | | 39 | 01.1 | 3.2 | +6 | | | | |
| | | MN | | 38 | 58.8 | 3.2 | | -5 | | | |
| | | MZ | | 39 | 11.6 | 2.8 | | | +3 | | |
| | | F | | 42 | 40.0 | | | | | | |
| 152 | " 29 | P | 21 | 05 | 17.5 | | | | | - | |
| | | i | | 07 | 37.1 | | | | | | |
| | | i | | 10 | 48.0 | | | | | | |
| | | F | | 20 | 30.0 | | | | | | |
| 153 | " 29 | P | 21 | 54 | 52.9 | | | | | 811 | |
| | | L | | 56 | 42.2 | | | | | | |
| | | ME | | 57 | 38.0 | 3.5 | -6 | | | | |
| | | MN | | 58 | 02.6 | 3.5 | | -6 | | | |
| | | MZ | | 58 | 06.6 | 2.8 | | | +3 | | |
| | | F | | 22 | 06 | 30.0 | | | | | |

(E N D)

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SEISMOLOGICAL BULLETIN
of the Osaka Meteorological Observatory $\phi = 34^{\circ} 39' N.$ $\lambda = 135^{\circ} 32' E.$ Gr. $h = 3.4m$ Sub-Soil : Sandy Loam (Oldquaternary)Instrument : Omori's Seismograph
(Horizontal & Vertical)Wiechert Seismograph
(Horizontal & Vertical)International
Seismological
Centre

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V | | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 | A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 30 | - | 0.003 | 20 | A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 15 | - | 0.004 | 20 | A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|--------|------------------------------------|--------|----|--|-------------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 154 | AUG. 1 | P L ME MN MZ F | 3 | 14 | 16.8 25.7 31.6 35.7 25.7 30.0 | | | | | 66 | |
| 155 | " 1 | P L F | 20 | 58 | 59.0 33.5 50.0 | | | | | 256 | |
| 156 | " 2 | P i L F | 4 | 31 | 17.5 01.6 40.4 30.0 | | | | | 1999 | |
| 157 | " 4 | P i i L F | 6 | 42 | 38.1 17.5 42.8 51.7 10.0 | | | | | 2606 | |
| 158 | " 6 | P L ME MN MZ F | 9 | 22 | 27.3 36.2 50.2 00.3 00.5 0.0 | 1.8 1.2 0.9 | -8 | +11 | +6 | 66 | |
| 159 | " 6 | P i i F | 22 | 46 | 25.3 05.9 21.0 10.0 | | | | | - | |
| 160 | " 8 | P L F | 4 | 26 | 17.6 23.6 20.0 | | | | | 490 | |
| 161 | " 12 | P L F | 3 | 31 | 26.2 22.2 10.0 | | | | | 416 | |
| 162 | " 13 | P I L ME MN MZ F | 29 | 30 | 03.5 08.5 14.6 06.3 07.7 17.7 20.0 | 3.9 3.4 2.2 | +20 | -19 | -16 | 305 | |

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| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | k.m. | Remarks International Seismological Centre |
|-----|---------|-------|--------|----|------|-------------------|---------------------|---------------------|---------------------|------|---|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 163 | Aug. 14 | P | 4 | 45 | 51.1 | 4.9 5.1 | +39 | +41 | | 3996 | |
| | | S | | 51 | 37.9 | | | | | | |
| | | L | | 50 | 30.9 | | | | | | |
| | | ME | | 58 | 03.0 | | | | | | |
| | | MN | | 56 | 51.3 | | | | | | |
| | | F | 5 | 11 | 30.0 | | | | | | |
| 164 | " 14 | P | 10 | 17 | 39.6 | 1.8 2.4 | -6 | +6 | | 373 | |
| | | L | | 18 | 29.8 | | | | | | |
| | | ME | | 19 | 03.7 | | | | | | |
| | | MN | | 18 | 57.0 | | | | | | |
| | | F | | 21 | 50.0 | | | | | | |
| | | | | | | | | | | | |
| 165 | " 14 | P | 12 | 58 | 44.6 | 3.3 2.8 2.1 | -8 | +11 | -6 | 728 | |
| | | L | 13 | 00 | 22.7 | | | | | | |
| | | ME | | 01 | 38.9 | | | | | | |
| | | MN | | 01 | 33.0 | | | | | | |
| | | MZ | | 00 | 55.8 | | | | | | |
| | | F | | 03 | 40.0 | | | | | | |
| 166 | " 14 | P | 17 | 49 | 35.7 | 0.5 | | -4 | | 43 | |
| | | L | | 49 | 41.5 | | | | | | |
| | | MN | | 49 | 50.9 | | | | | | |
| | | F | | 50 | 50.0 | | | | | | |
| 167 | " 18 | P | 18 | 11 | 19.4 | 0.2 0.2 | +1 | +1 | | 48 | |
| | | L | | 11 | 25.8 | | | | | | |
| | | ME | | 11 | 36.8 | | | | | | |
| | | MN | | 11 | 34.7 | | | | | | |
| | | F | | 13 | 0.0 | | | | | | |
| 168 | " 18 | P | 19 | 13 | 27.1 | | | | | 39 | |
| | | L | | 13 | 32.3 | | | | | | |
| | | F | | 14 | 50.0 | | | | | | |
| 169 | " 20 | P | 9 | 41 | 01.8 | 1.8 1.8 | +8 | -8 | | 351 | |
| | | L | | 41 | 49.1 | | | | | | |
| | | ME | | 41 | 58.6 | | | | | | |
| | | MN | | 42 | 14.7 | | | | | | |
| | | F | | 45 | 20.0 | | | | | | |
| 170 | " 20 | P | 14 | 54 | 47.7 | 1.9 1.9 | +6 | +8 | | 271 | |
| | | L | | 55 | 24.2 | | | | | | |
| | | ME | | 56 | 25.5 | | | | | | |
| | | MN | | 55 | 54.7 | | | | | | |
| | | F | | 59 | 40.0 | | | | | | |
| 171 | " 21 | P | 4 | 19 | 16.9 | | | | | 2304 | |
| | | S | | 23 | 05.8 | | | | | | |
| | | L | | 25 | 43.5 | | | | | | |
| | | F | | 47 | 0.0 | | | | | | |
| 172 | " 22 | P | 11 | 15 | 25.9 | 4.1 5.2 3.4 | +85 | -106 | -26 | 1640 | |
| | | L | | 18 | 15.9 | | | | | | |
| | | ME | | 20 | 49.7 | | | | | | |
| | | MN | | 21 | 13.6 | | | | | | |
| | | MZ | | 20 | 50.6 | | | | | | |
| | | F | | 44 | 50.0 | | | | | | |
| 173 | " 22 | P | 11 | 24 | 04.1 | 0.9 0.9 0.3 | +5 | +5 | -2 | 142 | |
| | | L | | 24 | 23.2 | | | | | | |
| | | ME | | 24 | 25.5 | | | | | | |
| | | MN | | 24 | 32.4 | | | | | | |
| | | MZ | | 24 | 33.6 | | | | | | |
| | | F | | 25 | 40.0 | | | | | | |

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$\phi = 34^{\circ} 39' N.$ $\lambda = 135^{\circ} 32' E.$ Gr. h=3.4m Sub-Soil: Sandy Loam (Oldquaternary)

Instrument: Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)



| | T_c | ϵ | $\frac{r}{T_c^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 |
| A_N : | 30 | - | 0.003 | 20 |
| A_Z : | 15 | - | 0.004 | 20 |

| | T_c | ϵ | $\frac{r}{T_c^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|------------------------------------|--------|----|--|-------------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 174 | Aug. 24 | P i i S F | 12 | 15 | 02.0 43.3 02.7 18.6 0.0 | | | | | 3494 | |
| 175 | " 26 | P L ME MN F | 13 | 54 | 58.4 44.5 07.3 12.7 20.0 | 1.8 2.2 | -2 -3 | | | 342 | |
| 176 | Sept. 2 | P e.L ME MN MZ F | 12 | 59 | 34.1 27.3 55.0 53.5 34.2 30.0 | 2.2 2.2 2.2 | -9 -8 | | -5 | 395 | |
| 177 | " 3 | P L ME MN F | 0 | 59 | 24.8 02.4 42.0 09.6 0.0 | 3.4 3.5 | -6 -4 | | | 280 | |
| 178 | " 3 | P i L ME MN MZ F | 10 | 00 | 57.5 05.3 26.5 30.8 53.3 46.9 10.0 | 5.4 5.1 2.8 | +236 -150 | | -78 | 1420 | |
| 179 | " 4 | P L ME MN F | 12 | 30 | 52.3 21.4 10.5 28.5 200 | 3.2 3.2 | -6 +5 | | | 1421 | |
| 180 | " 5 | P L ME MN MZ F | 1 | 02 | 35.3 40.3 40.3 40.3 41.4 20.0 | 0.3 0.3 0.3 | +23 +19 | | +5 | 37 | |
| 181 | " 5 | P L ME MN MZ F | 3 | 09 | 46.8 13.2 37.7 57.6 17.8 0.0 | 4.6 4.3 1.8 | +31 +22 | | +6 | 1394 | |
| 182 | " 9 | P L ME | 13 | 46 | 16.9 25.6 14.5 | 3.7 | +8 | | | 4376 | |

1937

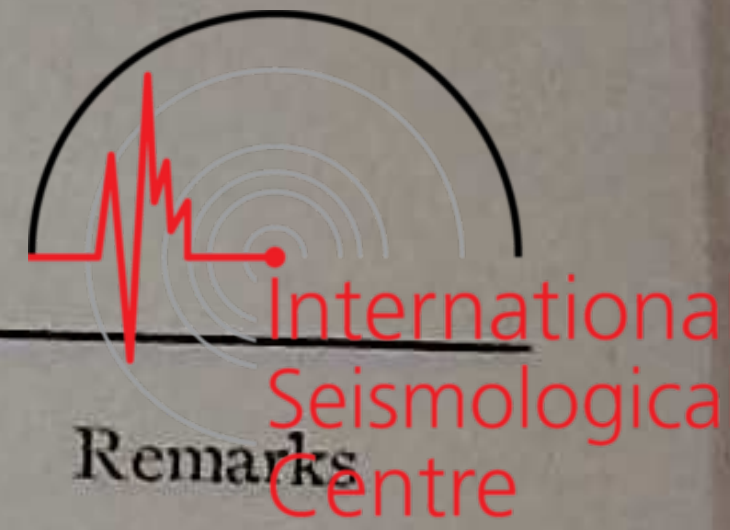
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of the Osaka Meteorological ObservatoryInternational
Seismological
Centre

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|-----|----------|-------|--------|----|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| | | MN | 13 | 54 | 38.5 | 4.1 | | ±8 | | | |
| | | F | 14 | 06 | 40.0 | | | | | | |
| 183 | Sept. 11 | P | 13 | 21 | 08.1 | | | | 1297 | | |
| | | L | | 23 | 25.8 | | | | | | |
| | | F | | 29 | 30.0 | | | | | | |
| 184 | " 11 | P | 14 | 21 | 02.9 | | | | 321 | | |
| | | L | | 21 | 46.1 | | | | | | |
| | | F | | 23 | 40.0 | | | | | | |
| 185 | " 15 | P | 14 | 07 | 16.2 | | | | 669 | | |
| | | L | | 08 | 46.3 | | | | | | |
| | | ME | | 09 | 34.5 | 3.4 | -6 | | | | |
| | | MN | | 09 | 45.2 | 3.8 | | -5 | | | |
| | | F | | 14 | 40.0 | | | | | | |
| 186 | " 16 | P | 6 | 17 | 50.4 | | | | 26 | | |
| | | i | | 17 | 52.1 | | | | | | |
| | | L | | 17 | 53.9 | | | | | | |
| | | ME | | 17 | 55.2 | 0.3 | +14 | | | | |
| | | MN | | 17 | 55.1 | 0.3 | | -11 | | | |
| | | MZ | | 17 | 53.8 | 0.3 | | | -8 | | |
| 187 | " 16 | e.P | ----- | | | | | | - | | |
| | | i | 6 | 17 | 56.4 | | | | | | |
| | | L | | 17 | 57.9 | | | | | | |
| | | ME | | 17 | 58.5 | 0.4 | -8 | | | | |
| | | MN | | 17 | 58.5 | 0.3 | | -6 | | | |
| | | F | | 19 | 20.0 | | | | | | |
| 188 | " 18 | P | 18 | 17 | 46.0 | | | | 511 | | |
| | | L | | 18 | 54.8 | | | | | | |
| | | ME | | 19 | 24.8 | 2.4 | +8 | | | | |
| | | MN | | 19 | 16.2 | 2.8 | | +22 | | | |
| | | MZ | | 19 | 33.9 | 2.5 | | | ±5 | | |
| | | F | | 27 | 30.0 | | | | | | |
| 89 | " 19 | P | 14 | 13 | 39.4 | | | | 487 | | |
| | | L | | 14 | 45.0 | | | | | | |
| | | ME | | 15 | 07.1 | 2.4 | +5 | | | | |
| | | MN | | 15 | 10.3 | 2.4 | | ±5 | | | |
| | | MZ | | 15 | 29.0 | 2.1 | | | ±1 | | |
| | | F | | 18 | 50.0 | | | | | | |
| 190 | " 22 | P | 11 | 00 | 09.5 | | | | 30 | | |
| | | i | | 00 | 12.3 | | | | | | |
| | | L | | 00 | 13.6 | | | | | | |
| | | ME | | 00 | 14.8 | 0.4 | -18 | | | | |
| | | MN | | 00 | 15.0 | 0.4 | | +19 | | | |
| | | MZ | | 00 | 13.6 | 0.2 | | | -4 | | |
| | | F | | 02 | 30.0 | | | | | | |
| 191 | " 23 | P | 14 | 24 | 35.3 | | | | 865 | | |
| | | i | | 24 | 53.7 | | | | | | |
| | | i | | 25 | 02.3 | | | | | | |
| | | i | | 25 | 58.1 | | | | | | |
| | | L | | 26 | 31.9 | | | | | | |
| | | ME | | 27 | 10.7 | 4.9 | +150 | | | | |
| | | MN | | 28 | 04.7 | 4.4 | | -163 | | | |
| | | MZ | | 27 | 35.8 | 3.6 | | | -56 | | |
| | | F | | 54 | 0.0 | | | | | | |
| 192 | " 24 | P | 2 | 31 | 24.7 | | | | 30 | | |
| | | L | | 31 | 28.8 | | | | | | |
| | | ME | | 31 | 28.8 | 0.2 | -11 | | | | |

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| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|-----|----------|-------|--------|---------|------|-------------|---------------------|---------------------|---------------------|-----------|-------------------------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| | | MN | 31 | 28.8 | 0.2 | | | | | | |
| | | MZ | 31 | 28.9 | 0.2 | | | | | | |
| | | F | 33 | 20.6 | | | | | | | |
| 193 | Sept. 26 | P | 10 | 25 05.8 | | | | | | 194 | |
| | | L | | 25 31.9 | | | | | | | |
| | | ME | | 26 05.4 | 1.5 | +2 | | | | | |
| | | MN | | 25 54.4 | 1.5 | | | -3 | | | |
| | | F | | 28 0.0 | | | | | | | |
| 194 | " 26 | P | 19 | 33 00.9 | | | | | | 9360 | |
| | | S | | 43 29.4 | | | | | | | |
| | | L | 20 | 03 31.4 | | | | | | | |
| | | ME | | 09 49.4 | 13.8 | ±6 | | | | | |
| | | MN | | 09 50.3 | 14.6 | | | ±6 | | | |
| | | MZ | | 13 01.8 | 14.2 | | | | | | |
| | | F | | 39 40.0 | | | | | | | |
| 195 | " 29 | P | 3 | 44 34.0 | | | | | | 167 | |
| | | L | | 44 56.5 | | | | | | | |
| | | ME | | 45 21.9 | 1.9 | -3 | | | | | |
| | | MN | | 45 12.1 | 1.9 | | | ±3 | | | |
| | | F | | 49 30.0 | | | | | | | |
| 196 | " 29 | P | 4 | 09 21.5 | | | | | | 213 | |
| | | L | | 09 50.2 | | | | | | | |
| | | ME | | 09 59.5 | 2.5 | ±2 | | | | | |
| | | MN | | 10 26.8 | 2.2 | | | ±1 | | | |
| | | F | | 14 50.0 | | | | | | | |
| 197 | " 29 | P | 6 | 17 10.1 | | | | | | 219 | |
| | | L | | 17 47.6 | | | | | | | |
| | | MN | | 18 04.5 | 1.7 | | | ±1 | | | |
| | | F | | 21 50.0 | | | | | | | |
| 198 | " 29 | P | 6 | 49 56.9 | | | | | | 556 | |
| | | L | | 51 11.8 | | | | | | | |
| | | ME | | 51 51.4 | 2.6 | ±2 | | | | | |
| | | MN | | 51 39.0 | 2.8 | | | +1 | | | |
| | | F | | 54 30.0 | | | | | | | |
| 199 | " 29 | P | 17 | 50 32.1 | | | | | | 6440 | |
| | | S | | 58 32.4 | | | | | | | |
| | | L | 18 | 03 47.3 | | | | | | | |
| | | F | | 39 30.0 | | | | | | | |
| 200 | " 30 | P | 4 | 56 24.8 | | | | | | 358 | |
| | | L | | 57 13.0 | | | | | | | |
| | | ME | | 58 15.9 | 2.8 | +6 | | | | | |
| | | MN | | 58 08.1 | 2.8 | | | +9 | | | |
| | | MZ | | 57 37.2 | 1.9 | | | | | | |
| | | F | 5 | 06 50.0 | | | | | | | |
| 201 | Oct. 1 | P | 6 | 41 54.1 | | | | | | 75 | Felt slightly at Osaka. |
| | | L | | 42 04.2 | | | | | | | |
| | | ME | | 42 07.2 | 0.3 | +11 | | | | | |
| | | MN | | 42 04.2 | 0.3 | | | +11 | | | |
| | | MZ | | 42 08.2 | 0.2 | | | | | | |
| | | i | | 42 27.3 | | | | | | | |
| | | F | | 49 0.0 | | | | | | | |
| 202 | " 1 | P | 15 | 09 56.5 | | | | | | 583 | |
| | | L | | 11 15.7 | | | | | | | |
| | | ME | | 12 15.1 | 3.4 | -31 | | | | | |
| | | MN | | 11 44.9 | 3.8 | | | -38 | | | |
| | | MZ | | 11 34.8 | 3.4 | | | | | | |
| | | F | | 22 50.0 | | | | | | | |

OSAKA JAPAN**SEISMOLOGICAL BULLETIN
of the Osaka Meteorological Observatory**International
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| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|------|-------|--------|----|----|-------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 203 | Oct. | 2 | P | 3 | 31 | 38.6 | | | | 2742 | |
| | | | S | | 36 | 02.4 | | | | | |
| | | | L | | 39 | 01.7 | | | | | |
| | | | F | | 47 | 30.0 | | | | | |
| 204 | " | 5 | P | 14 | 01 | 33.4 | | | | 525 | |
| | | | L | | 02 | 44.2 | | | | | |
| | | | ME | | 03 | 37.1 | 3.9 | -13 | | | |
| | | | MN | | 03 | 14.6 | 3.4 | | +14 | | |
| | | | MZ | | 03 | 30.3 | 2.4 | | | | ± 9 |
| | | | F | | 07 | 50.0 | | | | | |
| 205 | " | 5 | P | 14 | 10 | 10.8 | | | | 495 | |
| | | | L | | 11 | 17.5 | | | | | |
| | | | ME | | 11 | 42.2 | 3.8 | +6 | | | |
| | | | MN | | 11 | 44.2 | 3.8 | | +6 | | |
| | | | MZ | | 11 | 41.8 | 2.2 | | | | +3 |
| | | | F | | 14 | 50.0 | | | | | |
| 206 | " | 6 | P | 4 | 42 | 14.8 | | | | 473 | |
| | | | i | | 42 | 31.9 | | | | | |
| | | | i | | 43 | 13.6 | | | | | |
| | | | L | | 43 | 18.4 | | | | | |
| | | | ME | | 44 | 00.8 | 3.2 | -45 | | | |
| | | | MN | | 44 | 01.7 | 3.2 | | ± 58 | | |
| | | | MZ | | 43 | 47.3 | 2.4 | | | | +36 |
| F | | 57 | 30.0 | | | | | | | | |
| 207 | " | 10 | P | 9 | 04 | 20.9 | | | | 643 | |
| | | | L | | 05 | 47.5 | | | | | |
| | | | ME | | 06 | 44.6 | 2.2 | -13 | | | |
| | | | MN | | 06 | 44.5 | 2.7 | | -19 | | |
| | | | MZ | | 06 | 07.9 | 2.1 | | | | ± 6 |
| | | | F | | 11 | 40.0 | | | | | |

OSAKA JAPAN

October 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

$\phi = 34^\circ 39' N.$ $\lambda = 135^\circ 32' E.$ Gr. $h = 3.4m$ Sub-Soil: Sandy Loam (Oldquaternary)

Instrument: Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)



| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 |
| A_N : | 30 | - | 0.003 | 20 |
| A_Z : | 15 | - | 0.004 | 20 |

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|------------------------------------|--------|----|--|-------------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 208 | Oct. 12 | P i L F | 19 | 40 | 53.7 42.4 08.8 20.0 | | | | | 1911 | |
| 209 | " 14 | P L ME MN F | 5 | 05 | 00.2 28.2 33.3 33.5 00.0 | 2.4 2.0 | -5 | -4 | | 208 | |
| 210 | " 14 | P L ME MN MZ F | 5 | 37 | 07.9 17.7 44.7 41.4 32.3 10.0 | 2.2 2.0 2.0 | ± 5 | ± 5 | +3 | 519 | |
| 211 | " 14 | P L i ME MN MZ F | 12 | 37 | 07.4 53.1 02.3 53.0 25.2 32.3 20.0 | 3.9 3.9 2.0 | +28 | -34 | +9 | 339 | |
| 212 | " 16 | P i L ME MN MZ F | 0 | 10 | 31.2 13.4 01.9 37.7 36.0 54.1 20.0 | 3.3 3.7 2.4 | -24 | +25 | -13 | 673 | |
| 213 | " 16 | P L ME MN MZ F | 2 | 03 | 16.0 26.3 43.9 57.1 59.1 10.0 | 2.8 2.9 2.2 | -9 | ± 8 | +5 | 521 | |
| 214 | " 16 | P i L ME MN F | 12 | 16 | 46.1 39.4 46.5 14.0 25.8 10.0 | 3.8 4.0 | ± 16 | -16 | | 5328 | |
| 215 | " 17 | P L ME MN MZ F | 2 | 01 | 07.4 11.1 11.2 11.6 12.2 0.0 | 0.3 0.3 0.2 | +5 | -11 | -2 | 28 | |

OSAKA JAPAN

October, November

SEISMOLOGICAL BULLETIN

1932

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International
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| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|-----|---------|-------|--------|----|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 216 | Oct. 21 | P | 10 | 48 | 19.1 | | | | 138 | | |
| | | L | | 48 | 37.6 | | | | | | |
| | | ME | | 48 | 49.0 | 0.4 | -4 | | | | |
| | | MN | | 48 | 49.5 | 0.4 | | -5 | | | |
| | | MZ | | 49 | 03.5 | 0.2 | | | | | ±2 |
| | | F | | 50 | 50.0 | | | | | | |
| 217 | " 23 | P | 21 | 31 | 25.2 | | | | 2384 | | |
| | | S | | 35 | 20.8 | | | | | | |
| | | L | | 38 | 09.5 | | | | | | |
| | | F | | 52 | 0.0 | | | | | | |
| 218 | " 25 | P | 17 | 05 | 13.6 | | | | 1380 | | |
| | | L | | 07 | 38.9 | | | | | | |
| | | ME | | 08 | 38.1 | 4.1 | +38 | | | | |
| | | MN | | 07 | 53.0 | 5.0 | | +49 | | | |
| | | MZ | | 08 | 14.8 | 3.4 | | | | | -17 |
| | | F | | 19 | 30.0 | | | | | | |
| 219 | " 27 | P | 11 | 53 | 02.5 | | | | 256 | | |
| | | L | | 53 | 37.0 | | | | | | |
| | | ME | | 54 | 02.3 | 1.8 | -6 | | | | |
| | | MN | | 53 | 52.7 | 2.0 | | -7 | | | |
| | | MZ | | 54 | 11.6 | 1.5 | | | | | ±1 |
| | | F | | 12 | 00 | 0.0 | | | | | |
| 220 | " 30 | P | 1 | 02 | 01.1 | | | | 255 | | |
| | | L | | 02 | 35.5 | | | | | | |
| | | ME | | 02 | 34.9 | 3.4 | ±11 | | | | |
| | | MN | | 03 | 01.4 | 3.3 | | -13 | | | |
| | | MZ | | 02 | 32.6 | 2.4 | | | | | -5 |
| | | F | | 11 | 50.0 | | | | | | |
| 221 | " 30 | P | 20 | 55 | 39.9 | | | | 5300 | | |
| | | S | 21 | 02 | 38.2 | | | | | | |
| | | ME | | 03 | 05.8 | 3.6 | ±9 | | | | |
| | | MN | | 03 | 14.2 | 4.5 | | ±6 | | | |
| | | MZ | | 02 | 43.0 | 2.4 | | | | | ±2 |
| | | F | | 13 | 0.0 | | | | | | |
| 222 | Nov. 3 | P | 19 | 47 | 07.2 | | | | 2351 | | |
| | | i | | 47 | 59.1 | | | | | | |
| | | i | | 50 | 41.5 | | | | | | |
| | | S | | 51 | 00.3 | | | | | | |
| | | ME | | 51 | 42.1 | 5.5 | -8 | | | | |
| | | MN | | 51 | 48.4 | 5.4 | | -13 | | | |
| | | MZ | | 51 | 18.4 | 2.6 | | | | | ±1 |
| | | F | | 20 | 04 | 30.0 | | | | | |
| 223 | " 6 | P | 1 | 33 | 36.6 | | | | 92 | | |
| | | i | | 33 | 38.4 | | | | | | |
| | | L | | 33 | 49.0 | | | | | | |
| | | ME | | 34 | 15.7 | 1.1 | ±13 | | | | |
| | | MN | | 34 | 14.1 | 1.4 | | +14 | | | |
| | | MZ | | 33 | 54.8 | 0.6 | | | | | ±3 |
| | | i | | 35 | 49.5 | | | | | | |
| | | F | | 39 | 40.0 | | | | | | |
| 224 | " 6 | P | 4 | 10 | 02.4 | | | | 76 | | |
| | | i | | 10 | 04.3 | | | | | | |
| | | L | | 10 | 12.6 | | | | | | |
| | | ME | | 10 | 39.8 | 1.1 | +6 | | | | |
| | | MN | | 10 | 29.8 | 0.7 | | -8 | | | |
| | | F | | 14 | 40.0 | | | | | | |
| 225 | " 6 | P | 12 | 51 | 43.9 | | | | 1821 | | |
| | | S | | 54 | 51.0 | | | | | | |
| | | ME | | 55 | 25.0 | | | | | | |

OSAKA JAPAN

November 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory



International
Seismological
Centre

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | △ k.m. | Remarks |
|-----|--------|-------|--------|----|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| | | ME | 12 | 55 | 25.9 | 3.8 | -6 | | | | |
| | | MN | | 55 | 44.9 | 3.7 | | ±5 | | | |
| | | F | 13 | 02 | 0.0 | | | | | | |
| 226 | Nov. 8 | P | 22 | 20 | 13.4 | | | | | 151 | |
| | | L | | 20 | 33.8 | | | | | | |
| | | ME | | 20 | 33.8 | 1.3 | +10 | | | | |
| | | MN | | 20 | 45.5 | 0.7 | | ±3 | | | |
| | | MZ | | 20 | 35.9 | 0.4 | | | -1 | | |
| | | F | | 23 | 10.0 | | | | | | |
| 227 | " 10 | P | 10 | 58 | 02.9 | | | | | 458 | |
| | | L | | 59 | 04.5 | | | | | | |
| | | i | | 59 | 58.0 | | | | | | |
| | | ME | 11 | 01 | 02.3 | 5.5 | ±6 | | | | |
| | | MN | | 01 | 17.1 | 4.9 | | | -8 | | |
| | | F | | 17 | 20.0 | | | | | | |
| 228 | " 10 | P | 11 | 30 | 39.9 | | | | | 86 | |
| | | L | | 30 | 51.5 | | | | | | |
| | | ME | | 31 | 03.1 | 0.9 | +5 | | | | |
| | | MN | | 31 | 04.6 | 0.6 | | | +2 | | |
| | | MZ | | 31 | 15.5 | 0.6 | | | | ±1 | |
| | | F | | 33 | 30.0 | | | | | | |
| 229 | " 13 | P | 4 | 49 | 08.2 | | | | | 742 | |
| | | i | | 49 | 31.8 | | | | | | |
| | | L | | 50 | 48.2 | | | | | | |
| | | i | | 51 | 06.4 | | | | | | |
| | | ME1 | | 51 | 47.7 | 3.9 | -506 | | | | |
| | | MN-1 | | 51 | 24.9 | 3.7 | | | +538 | | |
| | | MZ-1 | | 51 | 40.8 | 3.8 | | | | -150 | |
| | | ME-2 | | 54 | 07.9 | 4.1 | -201 | | | | |
| | | MN-2 | | 54 | 19.8 | 4.4 | | | +300 | | |
| | | MZ-2 | | 54 | 28.1 | 3.6 | | | | + 41 | |
| 230 | " 13 | P | 4 | 59 | 39.2 | | | | | 742 | |
| | | L | 5 | 01 | 19.1 | | | | | | |
| | | ME | | 01 | 33.0 | 5.3 | -59 | | | | |
| | | MN | | 01 | 40.2 | 4.8 | | | -58 | | |
| | | MZ | | 01 | 38.3 | 3.9 | | | | +19 | |
| | | F | | 19 | 10.0 | | | | | | |
| 231 | " 17 | P | 20 | 12 | 55.7 | | | | | 449 | |
| | | L | | 13 | 56.2 | | | | | | |
| | | i | | 14 | 14.7 | | | | | | |
| | | ME | | 14 | 39.5 | 1.8 | -13 | | | | |
| | | MN | | 14 | 41.5 | 1.8 | | | +14 | | |
| | | MZ | | 14 | 36.2 | 1.9 | | | | +6 | |
| | | F | | 20 | 30.0 | | | | | | |
| 232 | " 18 | P | 13 | 52 | 56.8 | | | | | 864 | |
| | | i | | 53 | 49.0 | | | | | | |
| | | L | | 54 | 53.2 | | | | | | |
| | | ME | | 56 | 10.3 | 3.5 | ±6 | | | | |
| | | MN | | 56 | 04.3 | 3.8 | | | ±8 | | |
| | | F | 14 | 07 | 30.0 | | | | | | |
| 233 | " 22 | P | 14 | 58 | 37.0 | | | | | 1594 | |
| | | i | | 59 | 16.3 | | | | | | |
| | | i | | 59 | 45.5 | | | | | | |
| | | L | 15 | 01 | 22.6 | | | | | | |
| | | ME | | 02 | 50.9 | 3.4 | ±3 | | | | |
| | | MN | | 02 | 53.9 | 3.4 | | | +2 | | |
| | | F | | 14 | 30.0 | | | | | | |

OSAKA JAPAN

November
December 1932

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

$\phi = 34^{\circ} 39' N.$ $\lambda = 135^{\circ} 32' E.$ Gr. h = 3.4m Sub-Soil: Sandy Loam (Oldquaternary)

Instrument: Omori's Seismograph
(Horizontal & Vertical)

Wiechert Seismograph
(Horizontal & Vertical)



| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 30 | - | 0.003 | 20 |
| A_N : | 30 | - | 0.003 | 20 |
| A_Z : | 15 | - | 0.004 | 20 |

| | T_0 | ϵ | $\frac{r}{T_0^2}$ | V |
|---------|-------|------------|-------------------|----|
| A_E : | 4 | 3.2 | 0.003 | 80 |
| A_N : | 4 | 3.2 | 0.003 | 80 |
| A_Z : | 6 | 2.0 | 0.005 | 80 |

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|-------|--------|----|---------|----------------------|----------------|----------------|----------------|------------------|---------|
| | | | h. | m. | s. | | A_E μ | A_N μ | A_Z μ | | |
| 234 | Nov. 22 | P | 21 | 32 | 00.1 | 1.0 0.9 | -3 | +3 | | 121 | |
| | | L | | 32 | 16.4 | | | | | | |
| | | i | | 32 | 32.7 | | | | | | |
| | | ME | | 32 | 39.2 | | | | | | |
| | | MN | | 32 | 42.5 | | | | | | |
| | | F | | 34 | 0.0 | | | | | | |
| 235 | " 23 | P | 8 | 58 | 37.9 | 1.9 1.7 | ±5 | ±3 | | 458 | |
| | | L | | 59 | 39.6 | | | | | | |
| | | ME | | 59 | 57.4 | | | | | | |
| | | MN | | 59 | 49.4 | | | | | | |
| | | F | | 9 | 03 30.0 | | | | | | |
| | | | | | | | | | | | |
| 236 | " 26 | P | 4 | 26 | 14.8 | 5.2 3.8 2.3 | -178 | +231 | +56 | 885 | |
| | | i | | 27 | 47.9 | | | | | | |
| | | L | | 28 | 14.1 | | | | | | |
| | | i | | 28 | 47.0 | | | | | | |
| | | ME | | 29 | 18.9 | | | | | | |
| | | MN | | 29 | 41.0 | | | | | | |
| | | MZ | | 29 | 48.5 | | | | | | |
| | | F | | 47 | 0.0 | | | | | | |
| 237 | " 29 | P | 20 | 16 | 41.8 | 1.9 1.9 1.7 | -6 | -6 | ±2 | 166 | |
| | | L | | 17 | 04.2 | | | | | | |
| | | ML | | 17 | 24.7 | | | | | | |
| | | MN | | 17 | 17.4 | | | | | | |
| | | MZ | | 17 | 45.6 | | | | | | |
| | | F | | 22 | 20.0 | | | | | | |
| 238 | Dec. 1 | P | 17 | 42 | 08.9 | 2.0 2.7 2.2 | -53 | +97 | +28 | --- | |
| | | i | | 42 | 20.1 | | | | | | |
| | | i | | 42 | 38.7 | | | | | | |
| | | i | | 43 | 16.6 | | | | | | |
| | | ME | | 43 | 35.7 | | | | | | |
| | | MN | | 43 | 45.9 | | | | | | |
| | | MZ | | 43 | 44.2 | | | | | | |
| | | F | | 54 | 10.0 | | | | | | |
| 239 | " 4 | P | 8 | 18 | 07.8 | 17.9 22.3 21.2 | ±13 | ±13 | ±11 | 6338 | |
| | | i | | 23 | 40.8 | | | | | | |
| | | S | | 26 | 02.2 | | | | | | |
| | | ME | | 34 | 55.4 | | | | | | |
| | | MN | | 31 | 20.3 | | | | | | |
| | | MZ | | 31 | 14.1 | | | | | | |
| | | F | | 52 | 10.0 | | | | | | |
| 240 | " 4 | P | 10 | 40 | 05.0 | 3.9 3.9 2.3 | +12 | +8 | ±3 | 572 | |
| | | L | | 41 | 22.1 | | | | | | |
| | | ME | | 42 | 00.1 | | | | | | |
| | | MN | | 41 | 50.1 | | | | | | |
| | | MZ | | 42 | 37.1 | | | | | | |
| | | F | | 57 | 50.0 | | | | | | |

OSAKA JAPAN

December 1939

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory



International
Seismological
Centre

| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|--------|------------------------------------|--------|----|--|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 241 | Dec. 4 | P L ME MN MZ F | 22 | 42 | 22.0 03.8 59.0 25.8 37.5 50.0 | | | | | 310 | |
| 242 | " 5 | P L ME MN MZ F | 0 | 20 | 21.3 07.5 30.4 37.0 30.8 30.0 | | | | | 343 | |
| 243 | " 5 | P i i i F | 1 | 13 | 15.6 21.7 26.8 53.4 30.0 | | | | | --- | |
| 244 | " 7 | P L ME MN MZ i F | 8 | 57 | 47.8 55.5 56.3 56.1 55.5 49.2 50.0 | | | | | 58 | |
| 245 | " 9 | P i L ME MN MZ F | 4 | 19 | 33.2 34.7 47.8 50.9 51.3 49.7 10.0 | | | | | 109 | |
| 246 | " 15 | P L F | 19 | 37 | 54.4 31.5 20.0 | | | | | 2161 | |
| 247 | " 16 | P i L ME MN i F | 21 | 29 | 19.0 34.4 17.5 45.6 38.7 24.3 10.0 | | | | | 434 | |
| 248 | " 17 | P i L ME MN MZ F | 5 | 10 | 02.9 24.3 37.2 22.4 18.3 06.7 20.0 | | | | | 1473 | |
| 249 | " 17 | P L ME MN F | 8 | 02 | 21.4 32.5 40.4 38.5 20.0 | | | | | 528 | |

OSAKA JAPAN

SEISMOLOGICAL BULLETIN of the Osaka Meteorological Observatory

December 1932



| No. | Date | Phase | G.M.T. | | | Period s | Amplitude | | | Δ k.m. | Remarks |
|-----|---------|-------|--------|----|------|-------------|---------------------|---------------------|---------------------|-----------|---------|
| | | | h. | m. | s. | | A _E μ | A _N μ | A _Z μ | | |
| 250 | Dec. 17 | P | 14 | 05 | 29.7 | | | | 508 | | |
| | | i | | 06 | 20.8 | | | | | | |
| | | L | | 06 | 38.1 | | | | | | |
| | | ME | | 07 | 07.8 | 1.9 | ±5 | | | | |
| | | MN | | 07 | 10.2 | 1.9 | | +5 | | | |
| | | MZ | | 06 | 56.0 | 2.3 | | | | | ±2 |
| | | F | | 12 | 30.0 | | | | | | |
| 251 | " 23 | P | 7 | 47 | 44.3 | | | | 240 | | |
| | | i | | 47 | 58.9 | | | | | | |
| | | L | | 48 | 16.6 | | | | | | |
| | | ME | | 49 | 14.7 | 2.4 | ±5 | | | | |
| | | MN | | 49 | 25.6 | 2.3 | | +5 | | | |
| | | MZ | | 49 | 10.4 | 2.3 | | | | | ±2 |
| | | F | | 54 | 20.0 | | | | | | |
| 252 | " 24 | P | 6 | 37 | 37.7 | | | | 4327 | | |
| | | S | | 43 | 43.5 | | | | | | |
| | | L | | 51 | 26.9 | | | | | | |
| | | F | | 7 | 00 | 10.0 | | | | | |
| 253 | " 25 | P | 2 | 10 | 48.5 | | | | 3172 | | |
| | | S | | 15 | 43.6 | | | | | | |
| | | L | | 18 | 00.5 | | | | | | |
| | | ME | | 22 | 15.5 | 17.3 | +438 | | | | |
| | | MN | | 22 | 13.6 | 16.5 | | +534 | | | |
| | | MZ | | 24 | 56.1 | 14.8 | | | | | +11.9 |
| | | F | | 3 | 26 | 30.0 | | | | | |
| 254 | " 26 | P | 21 | 17 | 30.8 | | | | 740 | | |
| | | L | | 19 | 10.5 | | | | | | |
| | | ME | | 21 | 24.2 | 4.1 | +20 | | | | |
| | | MN | | 21 | 11.6 | 3.6 | | +25 | | | |
| | | MZ | | 20 | 46.9 | 3.4 | | | | | ±5 |
| | | F | | 35 | 0.0 | | | | | | |
| 255 | " 26 | P | 22 | 34 | 21.9 | | | | 1493 | | |
| | | L | | 36 | 58.2 | | | | | | |
| | | ME | | 37 | 46.8 | 3.7 | -25 | | | | |
| | | MN | | 37 | 37.9 | 3.9 | | +38 | | | |
| | | MZ | | 37 | 30.9 | 3.2 | | | | | +9 |
| | | F | | 49 | 0.0 | | | | | | |

(1932 ----- End)