

Ref 2607

No. 1.

January 1st to 14th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N. $\lambda = 120^{\circ} 58' 33''$ E. $h = 2.40$ m. Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ξ | $\frac{r}{T_0^2}$ |
|-------|-------|-------|-------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich mean time | | Period | Amplitude | | Δ | Remarks. | |
|-----|-----------|-----------|---------------------------------------|------------------------------------------------------|--|------------------------|-----------|-------|----------|-----------------|--|
| | | | | | | | A_N | A_E | | | |
| 1 | 6 | II_d | eP L M_N M_E F | 13 18 07 18 20 18 29 18 29 24 | | 1 1 | 1,500 | 1,939 | | Southern Luzon. | |
| 2 | 8 | I_v | iP L M_N F | 5 20 15 20 32 20 35 30 | | 1 | 575 | | | Southern Luzon. | |
| 3 | 11 | I | e F | 9 17 41 32 | | | | | | | |
| 4 | 11 | I_v | e F | 13 40 00 46 | | | | | | | |
| 5 | 11 | I_v | eP F | 21 02 42 07 | | | | | | | |
| 6 | <u>12</u> | I_T | eP eS eL M_N M_E F | 9 32 33 36 17 40 00 46 12 49 19 10 52 | | 5-6 7-8 10 11 | 55 | 73 | | | |
| 7 | 12 | I_v | eP L M_N F | 11 12 43 13 05 13 10 15 | | 2-3 | 42 | | | | |
| 8 | 12 | I_v | eP L M_N F | 12 26 37 27 32 27 44 33 | | 3 | 32 | | | Northern Luzon. | |
| 9 | 14 | I_T | eP eS eL M_N M_E F | 4 39 16 41 51 43 45 44 31 45 51 5 07 | | 9 10 | 40 | 33 | | | |

No. 2.

January 15th to 31st, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

 $\phi = 14^{\circ} 34' 41'' \text{N.}$ $\lambda = 120^{\circ} 58' 33'' \text{E.}$ $h = 2.40 \text{ m.}$ Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | δ | $\frac{T}{T_0}$ |
|-------|-------|----------|-----------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich mean time | Period | Amplitude | | Δ | Remarks. |
|-----|------|-----------|--------------------------------|-------------------------------------------|--------|------------|------------|----------|----------------------------------------------------------------------------|
| | | | | | | A_N H | A_E H | | |
| 10 | 15 | I | e F | 19 28 48 20 04 | | | | | |
| 11 | 16 | I | e F | 12 14 28 | | | | | |
| 12 | 18 | I | e F | 10 47 11 02 | | | | | |
| 13 | 20 | I_r | eP L M_F F | 12 09 00 18 00 19 57 52 | 9 | | 16 | | |
| 14 | 20 | I_v | eP L M_N M_F F | 16 43 35 44 16 44 36 45 12 57 | 3 3 | 152 | 177 | | East-southeastern Luxon. |
| 15 | 21 | I | e F | 17 33 55 | | | | | |
| 16 | 23 | I | e F | 0 12 46 20 | | | | | |
| 17 | 23 | II_d | eP L M_N F | 20 11 27 11 45 12 07 22 | 3 | 780 | | | Southern Luxon. |
| 18 | 26 | I | e F | 22 28 22 23 07 | | | | | |
| 19 | 28 | I_v | eP F | 7 41 32 44 | | | | | |
| 20 | 30 | I_r | e F | 3 56 05 6 17 | | | | | |
| 21 | 31 | II_d | eP | 2 05 31 | | | | | Maximum and end lost by the pens thrown off through of the force of shock. |
| 22 | 31 | I | e F | 13 17 51 46 | | | | | |

No. 3.

February 1st to 12th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' N.$ $\lambda = 120^{\circ} 58' 33'' E.$ $h = 2.40 \text{ m.}$ Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ϵ | $\frac{F}{T_0^2}$ |
|-------|-------|------------|-------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich mean time | Period | Amplitude. | | Δ | Remarks. |
|-----|------|-----------|--------------------------------|------------------------------------------|--------|------------|-------|---------------------|----------|
| | | | | | | A_N | A_E | | |
| 23 | 2 | I_v | eP L M_N M_E F | 1 49 24 50 23 50 39 50 39 59 | 4 4 | 75 | 102 | | |
| 24 | 2 | I_v | eP L F | 5 31 30 32 10 43 | | | | Southwestern Luzon. | |
| 25 | 3 | I | e F | 11 49 12 05 | | | | | |
| 26 | 4 | I_v | eP L M_N M_E F | 1 48 31 48 45 48 46 48 48 52 | 1 1 | 80 | 73 | | |
| 27 | 6 | I | e F | 11 51 28 12 20 | | | | | |
| 28 | 6 | I | e F | 14 11 28 | | | | | |
| 29 | 7 | I_v | eP L M_E F | 6 56 24 7 02 00 03 38 35 | 8 | | 16 | | |
| 30 | 8 | I | eP F | 15 44 46 55 | | | | | |
| 31 | 8 | I_v | eP L F | 17 52 49 53 16 18 04 | | | | | |
| 32 | 10 | I | e F | 11 40 12 08 | | | | | |
| 33 | 12 | I | e F | 8 53 9 02 | | | | | |

No. 4.

February 12th to 16th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' N.$ $\lambda = 120^{\circ} 58' 33'' E.$ $h = 2.40 m.$ Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T. | ϵ | $\frac{T}{T_0^2}$ |
|---------|-----|------------|-------------------|
| A_N : | 6.4 | 4.4 | 0.045 |
| A_E : | 6.3 | 3.5 | 0.052 |

| No. | Date. | Character | Phase | Greenwich mean time | Period | Amplitude | | Δ | Remarks. |
|-----|-------|-----------|--------------------------------|--------------------------------------------|----------|----------------|----------------|----------|---------------------|
| | | | | | | A_N μ | A_E μ | | |
| 34 | 12 | I | e F | 9 43 53 | | | | | |
| 35 | 12 | I | e F | 18 37 30 52 | | | | | |
| 36 | 13 | I_v | eP F | 16 17 20 23 | | | | | |
| 37 | 14 | I | e F | 7 16 35 | | | | | |
| 38 | 14 | I_v | eP L F | 7 40 03 40 42 49 | | | | | Northwestern Luzon. |
| 39 | 14 | I_v | eP L F | 12 49 23 49 34 52 | | | | | |
| 40 | 15 | I_v | eP L M_E M_N F | 1 26 22 34 34 34 50 35 07 2 05 | 6 5-6 | 42 | 49 | | |
| 41 | 16 | I_v | eP L M_E F | 1 34 14 34 30 34 32 38 | 0.5 | | 102 | | |
| 42 | 16 | I_v | eP L M_N M_E F | 5 33 52 34 58 35 07 35 07 40 | 5 5 | 75 | 41 | | |
| 43 | 16 | I | e F | 6 08 7 03 | | | | | |
| 44 | 16 | I | e F | 11 34 12 19 | | | | | |

No. 5.

February 17th to 25th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ}34'41''N$ $\lambda = 120^{\circ}58'33''E$ $h = 2.40m$. Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ϵ | $\frac{T}{T_0^2}$ |
|-------|-------|------------|-------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date. | Character | Phase | Greenwich. mean time. | | Period | Amplitude | | Δ | Remarks. |
|-----|-------|-----------|-----------------------------------------------|--------------------------|----------------------------------------------------|----------|-----------|-------|----------|------------------------|
| | | | | | | | A_N | A_E | | |
| 45 | 17 | I_v | eP F | 17 | 15 13 18 | | | | | |
| 46 | 18 | I | e F | 6 | 52 40 7 02 | | | | | |
| 47 | 19 | I_v | eP L F | 4 | 20 13 20 23 23 | | | | | |
| 48 | 20 | I_v | eP eS eL M_N M_E F | 4 | 27 51 29 28 31 08 32 00 32 07 5 04 | 5-6 6 | 50 | | 41 | Northeastern Mindanao. |
| 49 | 20 | I_v | eP eS eL M_N M_E F | 9 | 38 08 39 50 41 15 41 55 41 58 10 34 | 9 8 | 65 | | 41 | Northeastern Mindanao. |
| 50 | 22 | I_v | eP L M_N F | 12 | 04 11 04 36 04 40 14 | 1 | 90 | | | Western Luzon. |
| 51 | 23 | I | e F | 4 | 04 36 25 | | | | | |
| 52 | 24 | I_v | eP eS L M_E M_N F | 11 | 52 18 54 06 55 15 12 00 22 00 40 34 | 9 9 | 48 | | 53 | Western Mindanao. |
| 53 | 24 | I_v | eP L F | 21 | 50 08 50 25 53 | | | | | |

No. 6.

February 26th to 28th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' \text{N}$. $\lambda = 120^{\circ} 58' 33'' \text{E}$. $h = 2.40 \text{m}$. Alhambra.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ϵ | $\frac{r}{T_0}$ |
|-------|-------|------------|-----------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date. | Character | Phase | Greenwich mean time | Period | Amplitude | | Δ | Remarks. |
|-----|-------|-----------|---------------------------------------|-----------------------------------------------------|----------|----------------|----------------|----------|----------|
| | | | | | | A_N μ | A_E μ | | |
| 54 | 26 | I_v | eP L F | 3 38 50 40 55 51 | | | | | |
| 55 | 26 | I_v | eP L M_E F | 4 49 02 50 04 50 17 59 | 5 | | 102 | | |
| 56 | 26 | I_r | eP eS eL M_E M_N F | 5 18 06 23 32 28 23 34 49 35 00 7 03 | 8 8-9 | 45 | 35 | | |
| 57 | 28 | I_r | ePS L F | 6 47 52 50 12 7 35 | | | | | |

M. Sadava H.

No. 7.

March 1st to 13th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory:

$\phi = 14^{\circ} 34' 41'' N.$ $\lambda = 120^{\circ} 58' 33'' E.$ $h = 2.42 m.$ (Altimeter.)

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ϵ | $\frac{1}{T_0^2}$ |
|-------|-------|------------|-------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date | Magnitude | Phase | Greenwich mean time | Period | Amplitude | | Δ | Remarks |
|-----|----------|-----------|------------------------------|----------------------------------------------|--------|----------------|----------------|----------|---------------------|
| | | | | | | A_N μ | A_E μ | | |
| 58 | 4 | I | e F | 13 24 51 | | | | | |
| 59 | 4 | I | eP F | 15 31 00 16 56 | | | | | |
| 60 | 4 | I | e F | 18 40 19 28 | | | | | |
| 61 | <u>6</u> | I_v | eP S L M_N F | 19 14 37 21 55 28 24 44 16 20 24 | 15 | 8 | | | |
| 62 | 6 | I | e F | 20 50 52 21 14 | | | | | |
| 63 | 7 | I_v | iP eS eL M_E F | 11 26 05 27 22 29 16 30 28 51 | 6 | 31 | | | |
| 64 | 7 | I | eP F | 16 02 53 19 | | | | | |
| 65 | 10 | I_v | eP F | 16 30 14 33 | | | | | |
| 66 | 12 | I_v | eP L F | 17 41 48 42 15 45 | | | | | Felt western Luzon. |
| 67 | 13 | I | e F | 4 43 00 5 25 | | | | | |

No. 8.

March 14th to 18th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' N.$ $\lambda = 120^{\circ} 58' 33'' E.$ $h = 2.40 \text{ m.}$ Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ϵ | $\frac{\epsilon}{T_0^2}$ |
|-------|-------|------------|--------------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date. | Character | Phase | Greenwich | | Period | Amplitude | | Δ | Remarks. | |
|-----|-------|-----------|-------------------------------------|-------------------------------------------------------|--|----------------|----------------|----------------|----------|--------------------------------------------------------------|--|
| | | | | mean time. | | | A_N μ | A_E μ | | | |
| 68 | 14 | I_T | eP S L M_E M_N F | 20 06 22 11 47 16 32 23 35 23 42 21 13 | | 13-14 13-14 | 58 | 59 | | Akita Province, Japan. | |
| 69 | 15 | I_V | eP F | 17 16 22 19 | | | | | | | |
| 70 | 16-17 | II_V | eP iL M_N M_E F | 22 44 43 45 32 50 49 50 50 0 22 | | 1-2 1-2 | 1,775 | 918 | | Felt in Samar, Leyte, Panay Islands and south-eastern Luzon. | |
| 71 | 17 | I_V | eP L F | 6 49 12 50 11 59 | | | | | | | |
| 72 | 17 | I_V | eP L M_N F | 16 56 48 58 38 17 00 52 35 | | 7 | 438 | | | | |
| 73 | 18 | I_T | eP eS eL M_E F | 4 29 15 33 00 36 34 39 26 5 34 | | 6-7 | | 29 | | | |
| 74 | 18 | I_T | eP S L M_E F | 6 27 02 30 42 34 00 36 47 7 30 | | 8 | | 13 | | | |

No. 9.

March 18th to 28th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N. $\lambda = 120^{\circ} 58' 33''$ E. $h = 2.40$ m. Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ϵ | $\frac{\epsilon}{T_0^2}$ |
|-------|-------|------------|--------------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date. | Character | Phase | Greenwich | | | Period | Amplitude | | Δ | Remarks. |
|-----|-------|-----------|------------------------|----------------------------------|--|-----|--------|-----------|-------|---------------------|----------|
| | | | | mean time | | | | A_N | A_E | | |
| 75 | 18 | I_v | eP L M_N F | 12 17 15 17 39 17 41 24 | | 1 | 52 | | | | |
| 76 | 21 | I_v | eP F | 15 08 56 14 | | | | | | Northeastern Luzon. | |
| 77 | 22 | I | ePS L M_N F | 18 16 00 18 29 19 29 50 | | 6 | 25 | | | | |
| 78 | 25 | I_v | eP L F | 3 26 21 26 44 29 | | | | | | | |
| 79 | 25 | I | e F | 8 21 33 43 | | | | | | | |
| 80 | 25 | I_v | eP L F | 17 52 12 52 35 56 | | | | | | | |
| 81 | 28 | I_v | eP L M_E F | 7 25 34 25 48 25 51 29 | | 1 | 20 | | | | |
| 82 | 28 | I_v | eP L M_E F | 7 32 24 32 39 32 47 41 | | 1-2 | 49 | | | | |
| 83 | 28 | I_v | eP L F | 8 42 06 42 16 45 | | | | | | | |

No. 10.

March 28th to 31st, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 36' 41''$ N.

$\lambda = 120^{\circ} 58' 33''$ E.

$h = 2.40$ m.

Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | I. | E. | $\frac{I}{E}$ |
|---------|-----|-----|---------------|
| A_N : | 6.4 | 4.4 | 0.045 |
| A_E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich | | Period | Amplitude | | Δ | Remarks |
|-----|------|-----------|---------------------------------------|-------------------------------------------------------|----------|--------|----------------|----------------|----------|---------|
| | | | | mean time | | | A_N μ | A_E μ | | |
| 84 | 25 | I_r | eP L F | 9 18 16 18 28 21 | | | | | | |
| 85 | 28 | I_r | eP eS eL M_N M_E F | 10 49 36 54 54 59 08 11 00 12 01 50 52 | 11 12 | 125 | 82 | | | |
| 86 | 30 | I | e F | 1 01 2 54 | | | | | | |
| 87 | 31 | I | eP L F | 0 29 53 31 30 46 | | | | | | |

M. Padua M.

No. 11.

April 1st to 2nd, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' N$ $\lambda = 120^{\circ} 58' 33'' E$ $h = 2.40 m.$ (Illuvium.)

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | Γ_0 | ϵ | $\frac{r}{T^2}$ |
|---------|------------|------------|-----------------|
| A_N : | 6.4 | 4.4 | 0.045 |
| A_E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich | | Period | Amplitude | | Δ | Remarks. |
|-----|------|-----------|-----------------------|-------------------------------------|--|--------|------------|------------|------------------------------------------|----------|
| | | | | mean time | | | A_N " | A_E " | | |
| 88 | 1 | I_v | eP L M_N F | 22 13 00 13 23 13 26 19 | | 3 | 70 | | Felt in Bolinao and Baguio (W of Luzon). | |
| 89 | 2 | I_v | eP L F | 13 33 49 34 04 38 | | | | | | |
| 90 | 2 | I_v | eP L F | 13 56 11 56 26 14 00 | | | | | | |
| 91 | 2 | II_d | eP L M_N F | 17 49 40 49 55 50 10 18 12 | | 3-4 | 1,250 | | Registered at Ambulong (S of Luzon). | |
| 92 | 2 | I_v | eP F | 18 01 47 04 | | | | | | |
| 93 | 2 | I_v | eP L F | 18 15 43 15 58 20 | | | | | | |
| 94 | 2 | I_v | eP L F | 18 21 32 21 47 25 | | | | | | |
| 95 | 2 | I_v | eP L M_N F | 18 41 07 41 22 41 32 47 | | 1-2 | 65 | | | |
| 96 | 2 | I_v | eP L F | 19 06 06 06 21 10 | | | | | Registered at Ambulong (S of Luzon). | |
| 97 | 2 | I_v | eP F | 20 29 24 32 | | | | | | |

No. 12.

April 2nd to 4th, 1914.

Manila, P.I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N. $\lambda = 120^{\circ} 58' 33''$ E. $h = 2.40$ m. Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T. | E | $\frac{T}{T_0}$ |
|---------|-----|-----|-----------------|
| A_N : | 6.4 | 4.4 | 0.045 |
| A_E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich | | Period | Amplitude | | Δ | Remarks. |
|-----|------|------------|--------------------------------|------------------------------------------|--|------------|-----------|------------|--------------------------------------------------------------|----------|
| | | | | mean time | | | A_N | A_E | | |
| 98 | 2 | I_V | eP L M_N F | 21 04 50 05 05 05 18 12 | | 4 | | 50 | | |
| 99 | 2 | I_V | eP F | 22 28 16 31 | | | | | | |
| 100 | 3 | I_V | eP L M_N F | 0 02 13 02 29 02 45 08 | | 2-3 | | 47 | Registered also by the seismograph of Ambulong (S of Luzon). | |
| 101 | 3 | I_V | eP L M_E F | 3 06 10 06 26 06 33 11 | | 2-3 | | 53 | Do. | |
| 102 | 3 | I_V | eP L M_N F | 5 40 00 40 15 40 23 43 | | 1-2 | | 18 | Do. | |
| 103 | 3 | I_V | eP L M_E M_N F | 6 02 00 02 15 02 22 02 26 18 | | 2-3 2-3 | | 275 290 | Do. | |
| 104 | 3 | I_V | eP L | 9 14 31 14 46 | | | | | End overtaken by following earthquake. | |
| 105 | 3 | I_V | eP L F | 9 15 44 15 59 20 | | | | | | |
| 106 | 3 | I_T I | e F | 21 47 22 32 | | | | | | |
| 107 | 4 | I_V | eP F | 0 57 52 1 01 | | | | | | |

No. 13.

April 4th to 9th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N. $\lambda = 120^{\circ} 58' 33''$ E. $h = 2.40$ m. Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T. | E | $\frac{T}{T_0}$ |
|---------|-----|-----|-----------------|
| A_N : | 6.4 | 4.4 | 0.045 |
| A_E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Char. act. | Phase | Greenwich mean time. | Period. | Amplitude | | Δ | Remarks. |
|-----|------|------------|-----------------------|----------------------------------|---------|------------|------------|----------|----------|
| | | | | | | A_N μ | A_E μ | | |
| 108 | 4 | I_v | eP L F | 0 57 52 58 08 1 01 | | | | | |
| 109 | 4 | I_v | eP F | 2 24 49 29 | | | | | |
| 110 | 4 | I_v | eP F | 9 53 20 56 | | | | | |
| 111 | 4 | I_v | eP L M_N F | 10 24 09 24 25 24 27 31 | 2 | 67 | | | |
| 112 | 4 | I_v | eP F | 18 08 28 12 | | | | | |
| 113 | 4 | I_v | eP F | 18 42 05 45 | | | | | |
| 114 | 4 | I_v | eP F | 20 50 46 53 | | | | | |
| 115 | 5 | I_v | eP F | 6 22 25 25 | | | | | |
| 116 | 7 | I_v | eP F | 18 56 34 59 | | | | | |
| 117 | 8 | I | e F | 12 16 35 | | | | | |
| 118 | 9 | I_T | eP L F | 3 46 30 54 33 4 38 | | | | | |
| 119 | 9 | I | e F | 5 19.2 33 | | | | | |
| 120 | 9 | I | eP F | 9 30 40 55 | | | | | |

No. 14.

April 9th to 24th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' N.$ $\lambda = 120^{\circ} 58' 33'' E.$ $h = 2.40 m.$ *Alluvium.*

Instrument: *Wiechert's static pendulum (1,000 Kg.)*

| | T. | E | $\frac{T}{T_0}$ |
|-------|-----|-----|-----------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich | Period | Amplitude | | Δ | Remarks. |
|-----|------|-----------|---------------------------------------|-------------------------------------------------------|--------------------------|------------|------------|-----------------|----------|
| | | | | mean time | | A_N μ | A_E μ | | |
| 121 | 9 | I_v | eP iL M_N F | 18 08 44 09 10 09 12 16 | 2 | 150 | | | |
| 122 | 10 | I_v | eP F | 5 52 21 55 | | | | | |
| 123 | 11 | I_w | eP eS eL M_E M_N F | 16 39 10 46 03 52 56 57 30 59 09 18 52 | 5-6 10-11 17 12 | 105 | 133 | | |
| 1 | 6 | I | e F | 19 55 20 13 | | | | | |
| | 17 | I_v | eP eL M_E M_N F | 10 54 05 54 30 54 36 54 39 11 12 | 1 1-2 | 260 | 184 | | |
| | | II_v | eP L M_N M_E F | 3 46 37 47 17 47 23 47 23 4 15 | 2-3 3-4 | 600 | 490 | North of Luzon. | |
| 127 | 20 | I_w | eP S M_E M_N F | 13 49 48 58 14 14 14 32 14 44 53 | 17 11 | 10 | 8 | | |
| 128 | 22 | I | e F | 7 21 32 | | | | | |
| 129 | 23 | I | e F | 16 39 51 | | | | | |

No. 15.

April 25th to 30th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N.

$\lambda = 120^{\circ} 58' 33''$ E.

$h = 2.40$ m.

Alluvium.

Instrument: Wiechert's static pendulum (1,000 Kg.)

| | T_0 | ϵ | $\frac{f}{T_0^2}$ |
|---------|-------|------------|-------------------|
| A_N : | 6.4 | 4.4 | 0.045 |
| A_E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich mean time | Period | Amplitude | | Δ | Remarks | |
|-----|------|-----------|--------------------------------|----------------------------------------------|------------|-----------|-------|----------|-------------------------|--|
| | | | | | | A_N | A_E | | | |
| 130 | 25 | I_v | eP L M_N M_E F | 14 39 07 39 53 40 26 40 43 15 01 | 3-4 4-5 | 462 | 300 | | Felt in northern Luzon. | |
| 131 | 27 | I_v | eP L M_E F | 21 38 52 39 04 39 06 46 | 1-2 | | 286 | | | |
| 132 | 28 | I | e F | 11 40 12 08 | | | | | | |
| 133 | 29 | I_v | eP F | 4 37 46 46 | | | | | | |
| 134 | 29 | I_r | e eS eL M_N F | 8 37 39 12 42 08 44 53 9 19 | 9 | 15 | | | | |
| 135 | 30 | I | e F | 10 16 44 | | | | | | |

M. Cordero M.

No. 16.

May 1st. to 19th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' N.$ $\lambda = 120^{\circ} 58' 33'' E.$ $h = 2.40 m.$ (Ilhuvium.)
 Instrument: Wiechert's static pendulum (1,000 Kgs.)

| | T. | S | $\frac{T}{S^2}$ |
|------------------|-----|-----|-----------------|
| A _N : | 6.4 | 4.4 | 0.045 |
| A _E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich mean time | Period | Amplitude | | Δ | Remarks. |
|-----|-------|----------------|--------------------------------|-------------------------------------|--------|-------------------------|-------------------------|----------|----------------------------------------------------------------------------------------------|
| | | | | | | A _N μ | A _E μ | | |
| 136 | 1 | I | e F | 5 43 6 50 | | | | | |
| 137 | 4 | I _v | eP L F | 4 16 46 17 04 21 | | | | | |
| 138 | 9 | I | e M _N F | 0 44 00 53 38 1 22 | 8 | 15 | | | |
| 139 | 12 | I | eP L M _N F | 20 50 03 50 38 50 51 21 06 | 3 | 111 | | | |
| 140 | 14 | I | e F | 0 27 32 52 | | | | | |
| 141 | 14 | I _v | eP L F | 20 47 15 47 29 50 | | | | | |
| 142 | 15 | I _v | eP L F | 12 47 05 47 23 51 | | | | | |
| 143 | 17 | I _v | eP L M _N F | 7 58 00 59 17 59 28 8 22 | 4 | 62 | | | |
| 144 | 18 | I _T | eP L F | 3 22 01 25 48 47 | | | | | From the Horizontal Pen- dulum. Time signal not work- ing in the Wiechert seismograph. |
| 145 | 18-19 | I _T | eP L F | 23 50 41 59 06 0 24 | | | | | Do. |
| | | | M _N | 21 28 | 11 | 40 | | | |

No 17.

May 19th to 25th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N. $\lambda = 120^{\circ} 55' 33''$ E. $h = 2.40$ m. Alluvium.

Instrument: Wiechert's static pendulum (1,000 kgs).

| | T_c | ϵ | $\frac{T}{T_c^2}$ |
|-------|-------|------------|-------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich | | Period | Amplitude | | Δ | Remarks. |
|-----|-------|-----------|----------------------------------|----------------------------------------------|--|------------|----------------|----------------|------------------------------------------------------------------------------------------------------------------|----------|
| | | | | mean time | | | A_N μ | A_E μ | | |
| 146 | 19 | I_v | eP L M_N F | 0 30 54 31 56 32 19 42 | | 7 | 27 | | Felt in northern Luzon. From the Horizontal Pendulum. Time signal not working in the Wiechert seismograph. | |
| 147 | 19 | I | e M_N F | 4 48 25 56 32 5 14 | | 8 | 20 | | From the Horizontal Pendulum. Time signal not working in the Wiechert seismograph. | |
| 148 | 19 | I | e F | 6 44 46 7 05 | | | | | Do. | |
| 149 | 19-20 | I | eP L F | 23 49 26 52 01 0 26 | | | | | Do | |
| 150 | 20 | I_v | eP L M_E M_N F | 14 48 00 48 15 48 23 48 25 15 01 | | 1-2 1-2 | 245 262 | | Felt central Luzon. | |
| 151 | 21 | I_v | eP L F | 4 52 50 56 21 5 23 | | | | | | |
| 152 | 22 | II_v | eP L M_N F | 9 53 55 54 07 55 06 10 21 | | 4-5 | 4075 | | Felt southern Luzon. | |
| 153 | 24 | I | eP L F | 15 02 02 04 11 14 | | | | | | |
| 154 | 25 | I | eP eS eL M_E M_N | 3 15 03 16 58 19 16 21 00 21 28 | | 11 11 | 53 40 | | and overtaken by following earthquake. | |

No. 19.

June 1st. to 19th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N. $\lambda = 120^{\circ} 58' 33''$ E. $h = 2.40$ m. (Aluminium.)

Instrument: Wiechert's static pendulum (1,000 Kgs.)

| | T. | E. | $\frac{T}{E}$ |
|------------------|-----|-----|---------------|
| A _N : | 6.4 | 4.4 | 0.045 |
| A _E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Character | Phase | Greenwich mean time | Period | Amplitude | | Δ | Remarks. |
|-----|------|----------------|---------------------------------------------------|----------------------------------------------|------------|---------------------|---------------------|----------|--------------|
| | | | | | | A _N H | A _E H | | |
| 161 | 2 | I _v | eP L F | 3 45 22 46 10 49 | | | | | |
| 162 | 4 | I _v | eP L F | 3 05 57 06 19 11 | | | | | |
| 163 | 4 | I _v | eP eL M _N M _E F | 15 35 28 36 23 36 48 36 52 16 05 | 4-5 5-6 | 123 | 114 | | Mindoro Sea. |
| 164 | 6 | I _v | eP iL F | 11 43 44 44 06 50 | | | | | |
| 165 | 7 | I _v | eP iL M _N F | 20 33 51 36 39 36 45 57 | 6 | 43 | | | |
| 166 | 9 | I _v | eP L M _N F | 5 28 00 28 24 28 29 33 | 3-4 | 18 | | | |
| 167 | 11 | I | e F | 23 03 25 | | | | | |
| 168 | 12 | I | e F | 8 32 36 51 | | | | | |
| 169 | 14 | I | eP F | 20 21 23 36 | | | | | |
| 170 | | | P | 14 15 00 20 | | | | | |

No. 20.

June 20th to 25th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41'' N.$ $\lambda = 120^{\circ} 58' 33'' E.$ $h = 2.40 m.$ Alkivium.

Instrument: Wiechert's static pendulum (1,000 Kgs.)

| | T_0 | ϵ | $\frac{r}{T_0^2}$ |
|-------|-------|------------|-------------------|
| A_N | 6.4 | 4.4 | 0.045 |
| A_E | 6.3 | 3.5 | 0.052 |

| No. | Date | Ch. cat. | Phase | Greenwich meridian time | Period | Amplitude | | Δ | Remarks. |
|-----|-------|-----------------|----------------|----------------------------|--------|-----------|-------|----------|----------|
| | | | | | | A_N | A_E | | |
| 171 | 20 | I _r | eP | 7 29 44 | | | | | |
| | | | iE | 31 13 | 5 | | | | |
| | | | iN | 34 03 | 9 | | | | |
| | | | eSE | 35 14 | | | | | |
| | | | eSN | 35 24 | | | | | |
| | | | iE | 38 13 | 6 | | | | |
| | | | iN | 39 53 | 7 | | | | |
| | | | eLE | 40 32 | | | | | |
| | | | eLN | 40 50 | | | | | |
| | | | NE | 43 35 | 8 | | 65 | | |
| | | | ME | 43 46 | 8 | 88 | | | |
| F | 9 05 | | | | | | | | |
| 172 | 20 | I _r | eP | 10 33 22 | | | | | |
| | | | L | 42 00 | | | | | |
| | | | F | 11 12 | | | | | |
| 173 | 20-21 | I _r | eP | 23 45 20 | | | | | |
| | | | L | 54 00 | | | | | |
| | | | M _N | 55 41 | 8 | 25 | | | |
| | | | F | 0 22 | | | | | |
| 174 | 21 | I | e | 9 13 25 | | | | | |
| | | | F | 52 | | | | | |
| 175 | 23 | I | e | 11 03 53 | | | | | |
| | | | F | 31 | | | | | |
| 176 | 25 | I _v | eP | 0 11 54 | | | | | |
| | | | L | 12 15 | | | | | |
| | | | M _N | 12 36 | 1 | 75 | | | |
| | | | F | 25 | | | | | |
| 177 | 25 | II _r | eP | 19 13 02 | | | | | |
| | | | iS | 17 48 | | | | | |
| | | | iL | 21 47 | | | | | |
| | | | M _N | 24 44 | 8 | 475 | | | |
| | | | ME | 25 46 | 10 | | 561 | | |
| | | | I | 21 32 | | | | | |

No. 21.

June 26th to 30th, 1914.

Manila, P. I.

Seismological Bulletin of the Observatory.

$\phi = 14^{\circ} 34' 41''$ N. $\lambda = 120^{\circ} 59' 33''$ E. $h = 2.40$ m. Alluvium.

Instrument: Wiechert's static pendulum. (1,000 Kgs.)

| | T. | E | $\frac{T}{T_0}$ |
|------------------|-----|-----|-----------------|
| A _N : | 6.4 | 4.4 | 0.045 |
| A _E : | 6.3 | 3.5 | 0.052 |

| No. | Date | Character. | Phase | Greenwich mean time. | Period | Amplitude | | Δ | Remarks. |
|-----|------|-----------------|---------------------------------------------------|----------------------------------------------|--------|---------------------|---------------------|----------|----------------------------------------|
| | | | | | | A _N μ | A _E μ | | |
| 178 | 26 | I | e | 4 59 53 | | | | | End overtaken by following earthquake. |
| 179 | 26 | I | e F | 6 02 18 36 | | | | | |
| 180 | 28 | I _v | eP I M _N F | 7 32 53 33 10 33 29 39 | 2 | 220 | | | |
| 181 | 28 | I _v | eP I M _N F | 18 44 29 44 43 44 54 50 | 1 | 112 | | | |
| 182 | 30 | II _v | eP eL M _N M _N F | 15 56 15 56 51 56 56 57 08 16 26 | 4 3 | 775 | 989 | | Northern Luzon. |
| 183 | 30 | I _v | eP F | 17 05 28 17 | | | | | Eastern Visayas. |

M. Caderra H.