

Hector Observatory.—Seismological Records.

It is intended to publish from time to time in the *New Zealand Gazette* the records of the Milne Seismograph at the Hector Observatory, Wellington, under the charge of Mr. G. Hogben. The Observatory is situated on top of a hill 418 ft. above sea level; the seismograph is installed in a cellar of the Observatory, and is connected with the time-service of the Observatory.

[The records of the Wiechert instruments at Apia, under the charge of Dr. G. Angenheister, now controlled by the Administration of Samoa, will also, by the courtesy of the Administrator, be published as a supplement to the *Gazette*.]

The records of the Wellington instrument for the first six months of the present year are given below.

EARTHQUAKE RECORDS BY MILNE SEISMOGRAPH NO. 20, JANUARY TO JUNE, 1917.

Register from Hector Observatory, Kelburn, Wellington, New Zealand (longitude 11 hours 39 min. 4 sec. east, latitude 41° 17' south). Director of Observatory: C. E. Adams, D.Sc., F.R.A.S. Seismologist: George Hogben, C.M.G., M.A., F.G.S.

Notes relating to preliminary tremors or first phase, P₁; second phase, P₂; third phase or large waves, P₃; duration, D; amplitude, A.

Time is Greenwich civil mean time; it is given in hours, minutes, and decimals of minutes; 0 or 24 h.=midnight.

The boom period is generally maintained at 17 to 18 seconds.

| Date. | Commencement. | Maximum. | Maximum Amplitude. | Duration. | Remarks. |
|------------|--|----------------------------|--------------------|-----------|--|
| 1917. | h. m. | h. m. | mm. | h. m. | |
| 17 Jan. .. | 4 50.3 4 52.3 4 55.6 4 57.5 5 01.4 | 4 56.2 | 0.5 | 0 14.5 | P ₁ . P ₂ . P ₃ . Large waves. P ₄ . P ₅ . D. |
| 20 Jan. .. | 23 26.2 23 44.5 23 46.5 | 23 47.9 | 0.6 | 0 43.5 | P ₁ . P ₂ . P ₃ . Also recorded at Apia. D. |
| 27 Jan. .. | 6 57.5 6 58.5 | 6 58.7 | 1.0 | | P ₁ . P ₃ . |
| 30 Jan. .. | 3 29.4 | | 0.2 | 0 23 | Tremors. Also at Apia. |
| 12 Feb. .. | 9 12.9 9 14.7 9 18.8 9 24.6 9 26.5 | 9 21.3 | 1.0 | | P ₁ . Also at Apia. P ₂ . P ₃ . P ₄ . P ₅ . D. |
| 13 Feb. .. | 4 11.0 | | < 0.2 | 1 00 | Tremors. Also at Apia. |
| 14 Feb. .. | 5 11.0 | | < 0.2 | 0 10 | Tremors. |
| 15 Feb. .. | 1 11.9 1 28.6 1 40.6 | 1 42.5 | 0.3 | 0 20 | P ₁ . P ₂ . P ₃ . D. |
| 20 Feb. .. | 20 00* | | < 0.2 | 0 57 | Tremors. |
| 21 Feb. .. | 0 08.9 | | < 0.2 | 0 9 | " |
| 21 Feb. .. | 10 06.1 10 25.8 10 35.1 | 10 37.7 | 0.4 | | P ₁ . P ₂ . P ₃ . |
| 21 Feb. .. | 14 23.1 | | < 0.2 | 0 9 | |
| 22 Feb. .. | 22 37.6 22 38.2 22 39.8 | 22 40.5 | 20.0 | | P ₁ . P ₂ . P ₃ . Paper changed just after maximum. |
| 26 Feb. .. | 9 08.3 | | < 0.2 | 0 54 | Tremors. Also at Apia. |
| 13 Mar. .. | 3 44.5 3 46.0 3 46.3 | 3 46.5 | 1.0 | | P ₁ . P ₂ . P ₃ . |
| 28 Mar. .. | 5 10.5 5 13.7 5 16.6 | 5 19.7 | 1.0 | | P ₁ . Also at Apia. P ₂ . P ₃ . |
| 1 May .. | 18 30.8 18 33.8 | 18 37.8 18 49.0 | 18.5 25.0 | 1 23 | D. P ₁ . P ₂ . Merge into P ₃ . P ₃ =L.W. Beginning merged in P ₂ maximum. |
| | | | | 2 30* | D. End merged in next earthquake. Also recorded at Apia. |
| 1 May .. | 20 58.3 21 01.0 21 08.8 | 21 13.0 | 4.5 | | P ₁ . Also at Apia. P ₂ . P ₃ . D. |
| 2 May .. | 0 52.0 1 25.0 1 28.8 1 29.8 1 32.2 1 35.0 1 38.2 1 40.2 | 1 32.6 1 40.4 | 2.4 2.5 | 2 11 | P ₁ . P _b or P ₁ . } Beginning uncertain. P _c or P ₁ . } P _d . } P ₃ =L.W. } P _f . } P _g . } P _h . ? Transverse waves. } D. Repeats begin at 2.38; are marked at 2 54.5, 3 17.2, 4 43.3, 5 30.8. } Also at Apia. |
| 2 May .. | 14 17.0 | 14 19.9 | 0.5 | 1 40 | |
| | | | | 0 47 | P ₁ . P ₃ . D. |
| 3 May .. | 0 58.4 | | < 0.2 | 0 04 | Tremors. |
| 3 May .. | 2 43.1 | | < 0.2 | 0 28 | " |
| 3 May .. | 4 16.6 5 17.7 5 28.7 5 33.5 | 5 20.4 5 31.0 5 34.5 | 0.8 0.5 0.5 | | P ₁ . P ₂ . P ₃ . P _d . D. |
| 3 May .. | 9 43.0 | | < 0.2 | 3 09 | Tremors. |
| 3 May .. | 11 27.7 11 30.7 11 40.7 | 11 41.2 | 0.5 0.7 | 0 21 | P ₁ . Also at Apia. P ₂ . P ₃ . D. |

* About.