

## APPENDIX No. II.

## MAGNETIC OBSERVATORY, CHRISTCHURCH.

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DURING the year the Adie magnetographs at Christchurch and the Eschenhagen magnetographs at Amberley have been kept recording, and tables of the values at each hour of the year 1918 have been prepared from the resulting magnetograms for magnetic declination and magnetic horizontal force. Seasonal and yearly vector diagrams and mean monthly, seasonal, and year mean diurnal variations are shown in plotted curves. The increasing mean diurnal range is shown on the monthly diagram for the years 1917 and 1918.

The customary meteorological observations have been made daily, and published for public information. Milne seismograph No. 16 has been kept in good working-condition throughout the year, and the seismograms developed, but pressure of work has prevented the completion of the measurement of the records. The elimination of accidental errors in the vast amount of figuring involved in the compilation of the tables of hourly values has this time taken much longer than usual. The resulting mean values for 1918 are as follows:—

Magnetic declination	..	..	..	..	..	16° 55·7' E. of N.
Magnetic horizontal force	..	..	..	..	..	0·22304 c.g.s. unit.
Magnetic inclination	..	..	..	..	..	68° 06·7' S.
Northerly component	..	..	..	..	..	0·21338 c.g.s. unit.
Easterly component	..	..	..	..	..	0·06495     ,,
Vertical component	..	..	..	..	..	0·55516     ,,
Total magnetic force	..	..	..	..	..	0·59828     ,,