

observations showed that the compass-variations given on the Admiralty charts of that region were considerably in error, the variation being given too small by an amount which would throw a vessel depending entirely upon her compasses off her course by some ten miles in the course of a day's run.

The total number of stations at which magnetic observations have been made in the Dominion up to this time is 309, distributed as follows:—

							Stations.
North Island	..	..	..	..	..	..	123
South Island	..	..	..	..	..	..	152
Stewart Island	..	..	..	..	..	..	2
Chatham Islands	..	..	..	..	..	..	20
Snares Island	..	..	..	..	..	..	1
Auckland Islands	..	..	..	..	..	..	8
Campbell Island	..	..	..	..	..	..	3
							309

A map of portion of the South Island is published herewith showing lines of equal declination and embodying the results of the eleven West Coast stations recently observed.

GENERAL.

Reference must be made to the return of Lieutenant Shackleton's Antarctic Expedition in the "Nimrod," after getting one of their land parties to within a hundred miles of the South Pole and another party to the immediate neighbourhood of the South Magnetic Pole, thus verifying by actual observation the position of the latter as calculated from the magnetic data brought back by the "Discovery" expedition. The dip circle used by the "Nimrod" party was verified here upon their return last March. The explorers, and Lieutenant Shackleton in particular, are to be congratulated upon their magnificent success.

I wish to heartily thank the directors of the many observatories and scientific institutions that have kindly contributed their publications to the library of this Observatory.

In conclusion, I wish to acknowledge the valuable services of my assistant, Mr. B. V. Pemberton, throughout the year.

The magnetograms reproduced are reduced to three-eighths natural size, so that the published curves have the following values of scale:—

Declination curve + 1 mm. = - 3' arc.

Horizontal force curve + 1 mm. = - 0.00012 c.g.s. unit.

Vertical force curve + 1 mm. = - 0.00009 c.g.s. unit.

The Observatory regularly receives copies of seismograms from Alipore Observatory, by direction of the Director-General of Indian Observatories, and from the Royal Alfred Observatory, Mauritius.

HENRY F. SKEY, B.Sc.,
Officer in charge.

RECORDS OF MILNE SEISMOGRAPH NO. 16, AT CHRISTCHURCH.

Latitude: 43° 31' 50" S. Longitude: 172° 37' 18" E. Time employed: Greenwich Mean Civil Time.

Time: G.M.C.T., as stated above. P.T. = Preliminary tremors less than 2mm. complete range; A.T. = After-tremors less than 2mm. complete range; B.E. = Beginning and end of vibrations not less than 2mm.; Amp. = Half-range in millimeters.

Date.	P.T. from	B.	Maxima.		Amp.	E.	A.T. till	B.P.	Remarks.
			From	To					

APRIL, 1908.

	H. m.	H. m.	H. m.	H. m.	Mm.	H. m.	H. m.	Secs.
7	1 26.2	..	1 37.5	..	0.5	..	2 09.6	15.4
10	0 03.6	0 20.0	0 31.8	..	1.55	0 35.4	1 43.6	..
12	9 09.1	..	9 14.8	..	0.1	..	9 25.6	..
12	19 18.4	..	19 36.0	..	0.75	..	19 53.7	..
15	6 06.1	..	6 17.4	..	0.4	..	6 27.8	..
23	0 07.0	0 09.6	0 39.9	..	1.85	0 54.1	2 11.6	..

MAY, 1908.

5	5 28.2	..	6 03.8 and 6 05.4	..	1.0	..	7 08.5	..	Followed by night tremors. Slight.
20	8 00.9	..	8 24.7	..	0.8	..	Indefinite	..	
21	7 19.1	..	..	..	..	..	7 33.6	..

JUNE, 1908.

3	Indefinite	..	21 25.3	..	1.0	..	Indefinite	..	In middle of continuous tremors.
18	1 39.6	..	1 43.7	..	0.25	..	1 54.0	..	