

loan to this Observatory a magnetometer of the latest pattern, for which our thanks are due. This fortunately prevents us feeling the loss of the N.A.B.C. magnetometer lent to the Antarctic Expedition.

MAGNETIC OBSERVATIONS ON THE SOUTHERN ISLANDS.

In November last the scientific expedition organised by the Canterbury Philosophical Institute with assistance from the Government left the Bluff in the Government s.s. "Hinemoa" for the southern islands. The expedition was away three weeks, and the magnetic observers of the expedition were able to determine the magnetic elements at Port Pegasus in Stewart Island, and the Snares, and, besides, at three stations on Campbell Island and at eight stations on the Auckland Islands group. A full discussion of these observations is being prepared for inclusion in the volume to be published next year by the Canterbury Philosophical Institute, which volume will include all the scientific results obtained from the expedition. However, for the use of mariners, it is deemed advisable to publish herewith maps showing the values of the magnetic declination or variation of the compass at points observed at. The instruments used were those belonging to the Observatory.

MAGNETIC OBSERVATIONS ON THE CHATHAM ISLANDS.

A magnetic survey of the Chatham Islands has recently been completed by myself, with the assistance of Mr. E. Kidson, M.Sc., formerly of this Observatory, and afterwards Demonstrator in Physics at Canterbury College, but now of the staff of the Department of Terrestrial Magnetism of the Carnegie Institute of Washington. Observations were obtained in less than two months at twenty stations on the islands, in spite of the almost total absence of roads, which necessitated the employment of a sledge as a conveyance. In the first fifteen of these stations I had the assistance of Mr. Kidson, when, unfortunately, steamer arrangements necessitated his leaving to proceed to Washington. The present intention of his chief is to assign him important magnetic work in South America.

For the convenience of mariners a map is published herewith, showing the values of the magnetic declination or variation of the compass at the points observed at. Further maps showing the various isomagnetic lines and disturbing forces will be published later, with a full discussion.

All magnetic stations on the various islands have been marked in a permanent manner, and permanent marks have been laid down, of which the true bearings have been determined. This will facilitate reobservation at any of these stations in the future.

The observations recently made in extension of our magnetic survey will prove a valuable addition to magnetic science, but there is still much to be done to them in the way of discussion in order that they may yield their fullest and most valuable results. This must be the work of the Observatory in the immediate future.

Altogether the past year has been a very successful one throughout the world for the science of terrestrial magnetism, and we may soon look forward to the completion of the magnetic survey of the globe, a work which, while of inestimable practical value to commerce, will also be of vast importance as a contribution to the treasures of science.

I have to acknowledge the valuable services of my assistant, Mr. B. V. Pemberton, during the past year.

In conclusion, I must return thanks to all the various observatories, institutions, and men of science who have kindly sent reports and scientific publications to this Observatory.

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