

Magnetic Resurvey.—Field observations were extended into remote parts of Westland and Nelson, where desired consistent results were obtained. Staff shortage in the closing months of the war hindered progress in this work, and resumption, as expected, was delayed when Mr. Beagley and later Miss Bullen were transferred to Apia as Director and Assistant respectively. In October, 1945, Mr. Beagley flew to Apia and back to make intercomparison of magnetic standards.

Canterbury Basement Rocks.—Magnetic reconnaissance with a vertical balance was started during the long University vacation over a considerable area near Oxford Township. A third-year geology student co-operated in making the necessary geological investigations. This scheme, which it is hoped will ultimately cover all the Canterbury Plains, is being done in co-operation with Professor R. S. Allan and Dr. B. H. Mason, of the Geology Department, Canterbury College. Early results indicate that most of the basement rocks do not produce appreciable magnetic anomalies, but in some small areas volcanic rocks have done so. It is clear that geophysical investigations to map the basement rocks of Canterbury will require gravimetric and seismic apparatus suited to the purpose. It is widely recognized that such pieces of apparatus greatly increase the range of fundamental knowledge, which is essential for promoting many economic enterprises, which in their turn depend for success on a sound knowledge of the geological formations encountered.

Recordings.—The full programme of earthquake-recording was maintained under critical conditions. Most interest was attached to some relatively moderate shocks in August which did minor damage about Hanmer Springs. In the last few days of March a brilliant aurora was accompanied by a radio fade-out and a brief but very vigorous magnetic storm. It is doubtful if a more violent magnetic storm has ever been recorded at the Observatory. The cosmic-ray meter was operated as much as supplies permitted, and it is hoped that continuous operation will now be possible again. The demand for climatological data still shows an increase, especially from manufacturing concerns, and the programme of climatological observations is fully maintained to add still more to its value.

METEOROLOGICAL BRANCH

The Meteorological Branch of the Department which was transferred to Air Department, together with the Apia Observatory, at the outbreak of war, has remained under this control during the year. The report of the Meteorological Branch for the year ending 31st March, 1946, will be found in the annual report of the Air Department.

IMPERIAL AGRICULTURAL BUREAUX

The Imperial Agricultural Bureaux have continued to provide a valuable link between scientific workers in various fields of agricultural science, particularly within the various countries of the British Commonwealth. The abstracting *Journals* of the various Bureaux and the *Technical Communications* published periodically provide excellent service. It is expected that an Empire Scientific Conference in London in the near future will make recommendations as to the future of the Bureaux.

In New Zealand co-operation with the Bureaux is maintained through the Department of Scientific and Industrial Research, for which purpose there is a special liaison officer. In addition, contacts with Bureaux and the appropriate fields of research are maintained by official correspondents, who deal with specific inquiries. The Scientific Liaison Officer, London, also has useful contacts with all the Bureaux and is a member of the Council.