

CLIMATOLOGY

The application of scientific methods in agriculture, industry, commerce, transportation, communications, &c., has created an ever-increasing demand for more detailed statistics of climate and weather. The analysis of early climatological records, a few of which extend back to the middle of last century, provides valuable information relating to a limited number of stations. Through the active co-operation of several other Government Departments, local bodies, and hundreds of voluntary observers, a steady increase in the number of observing stations has been made possible. Grateful acknowledgment of their valuable services is made to these voluntary observers in particular, and to all others who assist in the task of collecting meteorological data.

Climatological Stations.—During the year the number of climatological stations increased by 9 to the present total of 108 (including 12 in Pacific islands). Additions during the year were as follows :—

Marton.	Whakatane.
Maramarua.	Earnsclough.
Oratea.	Greymouth.
Pureora.	Opotiki.
Gwavas.	Pukahanui.
Glenbervie (Whangarei).	

Following a period of overlap with readings from Rotorua Aerodrome, the station which had been maintained by the Tourist Department in Rotorua was closed down. The station at Roslyn, Dunedin, was also closed after an overlap with records from the new station at Musselburgh.

Climatological observations are made daily at 0930 hours and include readings of rainfall, air temperature and humidity, maximum and minimum temperature, and, at selected stations, soil temperatures, duration of sunshine, run of wind, evaporation, and barometric pressure.

Rainfall Stations.—In addition to the rainfall records available from full climatological stations, additional records were received monthly from some 670 rainfall stations, while about 100 private observers supplied copies of their readings at the end of 1947.

The task of finding additional voluntary observers necessary to bring the national network of rainfall stations up to the desired total of 1,100 has been undertaken in conjunction with the Public Works Department and the Catchment Boards. Sites were approved and manual gauges installed at 70 new stations during the year. In addition to the national network of rainfall stations, plans were approved by the Soil Conservation and Rivers Control Council for the inauguration of a subsidized network of rainfall stations, organized by Catchment Boards, to supplement the data from the national network in special areas. Records from the subsidized network are to be forwarded to this Service for analysis and publication.

The installation of additional recording rain-gauges was held up to some extent pending the arrival of new instruments on order. Inquiries have been made in other countries concerning the availability of a suitable long-period-recording rain-and-snow gauge for installation in remote sites near the headwaters of some of our major rivers.

In our efforts to tap additional sources of climatological data we have succeeded in obtaining some valuable series of observations from other Government Departments. In many cases it was found that the use of unsuitable instruments in unsatisfactory exposures made the interpretation of the records very difficult. Further efforts are therefore being made to have uniform methods of observing and recording the basic information adopted throughout the country. In pursuance of this policy, arrangements have been made to take over climatological stations and equipment which were formerly the responsibility of the Public Works Department.