

The issue of the biennial report for 1877-78 has been held back, so as to include the results for 1879, as economy in printing is thereby effected.

At the request of Government I represented the colony at the Meteorological Conference held in Sydney on the 11th November last.

The following propositions were considered and resolutions adopted at this Conference:—

Propositions for Meteorological Conference.

1. To consider the meteorology of Australia and New Zealand, with a view to united action in its investigation.
2. To consider whether additional first-class stations shall be established, and, if so, in what localities.
3. To consider the desirability of using the same class of instruments at all stations, and making the observations at the same local hour.
4. To consider the desirability of securing the co-operation of the meteorologists of New Zealand and Tasmania in the system of weather telegrams, which now embraces the Colonies of South Australia, Victoria, New South Wales, and Queensland.
5. To consider by what means the weather telegrams may be transmitted and published for public information at an earlier hour than they are at present.
6. To consider whether meteorological stations should be established upon the highest available mountains, for the special study of winds.

Resolutions.

1. That, in view of the great importance which a better knowledge of the movement and origin of strong gales and storms on our coast-lines and neighbouring seas is to the shipping and commercial interest generally, it is desirable to secure, as far as possible, co-operation in all the Australasian Colonies for the investigation of storms, as well as for agricultural and general climatological purposes.
2. That, with the view of giving effect to the foregoing resolution, similar observations and the same form of publication should, as far as possible, be adopted throughout the colonies.
3. That, in order effectively to carry out the objects of the Conference as affirmed in the foregoing resolutions, it is desirable to establish first-class meteorological stations in certain well-selected positions in the several Australasian Colonies, including New Zealand, in addition to those now existing.
4. That the observations taken are to be limited to those for determining atmospheric pressure; maximum and minimum daily temperature of atmosphere, and of insolation and radiation; the average daily amount of moisture, the rainfall and number of rainy days; the force and direction of wind; and amount and character of cloud.
5. That the instruments at each first-class station consist of a mercurial barometer of either the standard or Board of Trade form; thermometers of Kew or approved patterns, compared with standards as frequently as possible; rain-gauges of 8 inches collecting diameter; and wind-gauges of any approved form. The local hours of observation to be 9 a.m., 3 p.m., and 9 p.m. Beaufort's scale of wind to be adopted; the observations to be recorded in equivalents in velocity and pressure.
6. That it is desirable to secure the co-operation of the Governments of Western Australia, New Zealand, and Tasmania in the system of weather telegrams, which now embraces the Colonies of South Australia, Victoria, New South Wales, and Queensland.
7. That, in the opinion of this Conference, it is desirable that weather telegrams and forecasts shall in all cases depend upon the observations used for general meteorological and climatological statistics, and be under the direction of the head of the meteorological department in each colony.
8. (1.) That this Conference, having been informed that the Eastern Extension Telegraph Company will charge half-rates for the transmission of weather reports through the cable connecting Australia and Tasmania, and probably also the cable to New Zealand, recommend that the cost of such reports be defrayed by the participating colonies in equal proportions; and that, in the opinion of this Conference, such cost need not exceed in the aggregate £350 per annum.
- (2.) That, in the opinion of the Conference, this expenditure is justified by the extreme importance to the shipping interest of early information of the approach of dangerous easterly and westerly gales.
9. That the several Governments be requested to cause precedence to be given to the regular weather telegrams and special storm reports.
10. That, in the opinion of this Conference, there should be established in each of the colonies upon a high mountain-peak, a meteorological observatory for the special study of winds and other meteorological phenomena:

	About
South Australia—Mount Lofty	2,500 feet above sea level.
New South Wales—Kiandra	4,600 "
New Zealand—Tauhara, Taupo	4,600 "
Do. Mount Herbert	4,000 "
Tasmania—Mount Wellington	4,000 "
Victoria—Mount Macedon	3,500 "

11. That the interchange of weather statistics, in carrying out the suggestions of this Conference, between the different Australasian stations, should be in the form of a diagram; and that this should not interfere with the printing of statistics by the different colonies in any way they like.

12. That, in the transmission of cablegrams, the reports be generalized from the local weather reports.

For New Zealand the following subdivision into districts is recommended for convenience of reporting:—

- | | | |
|--------|-----------------|--|
| A. ... | N.E. aspect ... | North Cape to East Cape. |
| B. ... | N.W. aspect ... | Cape Maria to West Cape (exclusive of Cook Strait). |
| C. ... | S. aspect ... | West Cape to Moeraki. |
| D. ... | S.E. aspect ... | Moeraki to East Cape (exclusive of Cook Strait). |
| E. ... | Cook Strait ... | Comprising Wanganui, Wellington, Cape Campbell, and Cape Farewell, Nelson. |