

THE WEATHER SEQUENCE FOR JUNE 1981

The anticyclone which covered most of New Zealand at the end of May had moved north-east and intensified by the 1st of June. An extensive warm front developed across the Tasman Sea between a depression south of Australia and the anticyclone north-east of New Zealand. An occluded front lay along the east coast of the North and South Islands. Although this system had weakened by the 2nd, rain continued to fall over most of the country with some heavy falls in western and southern areas.

The depression south of Australia moved eastward and covered New Zealand by the 3rd. The resulting strong north-westerly winds caused high temperatures in eastern areas and rain in northern and western areas. This situation persisted until the 6th, with a slow eastward progression of the anticyclone. By the 6th a complex depression had developed in the central Tasman Sea, and a front associated with this brought rain to the South Island. A succession of fronts within this depression crossed the North Island during the 7th, with some heavy local rainfall. The depression covered the country by the 8th, with centres east and west of the North Island. As it continued to move eastward there was a gradual clearance, affecting most areas by the 10th, and an anticyclone centred near Campbell Island brought clear weather on the 11th.

A trough developed over east Australia on the 11th and moved over the Tasman Sea on the 12th, bringing rain to the north of the North Island. By the 13th it covered most of New Zealand bringing widespread rain to all districts except Westland and Southland but by the 14th rain was falling over the whole country. Associated north-easterly winds caused high temperatures in many places. The anticyclone to the east of the Chatham Islands had become very slow moving and blocked the passage of the trough across New Zealand. Cool, showery conditions continued to the 19th, when an anticyclone in the north-western Tasman Sea brought a general clearance.

An anticyclone over Australia extended a ridge onto the country on the 20th, bringing mainly fair weather, although a small cold front east of Cook Strait brought rain to Wellington and the Wairarapa on the 21st and 22nd.

The anticyclone moved over the Tasman Sea during this interval and was centred south of Fiordland by the 23rd. The strong southerly winds brought rain to the south of the North Island but fine, cold weather to most other districts. The anticyclone intensified and spread over the country bringing dry, cool weather everywhere on the 24th and 25th.

A depression developed over south-east Australia on the 25th, and on the 26th a front associated with this lay off the west coast with rain, widespread, except in southern and eastern districts. By the 28th a broad trough covered the country and fronts within this trough brought showery conditions to many areas on the 28th and 29th. Rain continued in some northern and north-western districts under the influence of a westerly flow across the country on the 30th.

THE NEW ZEALAND WEATHER IN JUNE 1981

June was a mild, cloudy month for most of New Zealand.

North-westerly winds were most frequent in the north of the country while north-easterlies predominated in the south, where the frequency of north-easterlies was the greatest for June in 25 years.

Farmers in many parts of the country reported some grass growth due to the mild weather and a relative lack of frost in many areas, although pasture pugging due to prolonged wet weather has caused some problems. The mild, dry week at the end of the month in Canterbury was ideal for wheat drilling and other cultivation.

Rainfall—Rainfall was above normal in all areas except Blenheim, Southland and South Otago. Parts of the Wairarapa Valley, Westland and Canterbury had over twice their normal rainfalls.

Heavy falls in south Westland on the 2nd caused local flooding and resulted in the Haast Pass road being closed. Some of the heaviest falls on the 2nd were recorded at Bruce Bay (128 mm), Fox Glacier (159 mm), Mahitahi (176 mm) Ross (183 mm) and Whataroa (204 mm).

Parts of the Wairarapa valley were flooded again this month after heavy rain on the 6th and 7th. The soil was still saturated from last month's flooding and severe slips occurred on some properties.

An unusual feature of the rainfall this month had been the higher number of days with more than 1.0 mm of rain. There were more than 20 such days for much of the North Island and approximately 15 days for central and northern areas of the South Island. This is between 3 and 7 days more than usual in all areas. Wet, muddy conditions have resulted.

Although rainfall for Dunedin City was more than twice normal, Dunedin Airport recorded below normal rainfall for the third consecutive month. Invercargill also had less rainfall than normal for June.

Temperatures—Mean temperatures were an average 1.5°C above normal in the North Island and 1.0°C above normal in the South Island this month. Gisborne, 2°C above and Taupo 1.9°C above normal, had their second highest June means since 1937 and 1949 respectively.

Some high temperatures were recorded in eastern areas on the 3rd, during a period of strong north-westerly winds. These included 22.9°C at Gisborne, the highest for June since records began in 1937, 24.3°C at Napier Airport, also the highest recorded there for June, and 23.6°C at Kaikoura, the 2nd highest for June since 1963.

There were two pronounced cold spells this month.

The first, between the 5th and 12th, affected the South Island, with temperatures between 2° and 5° below normal. The second between the 21st and 25th affected the whole country, again with temperatures 2° to 5° below normal.

Sunshine—Sunshine hours were low over the whole country except in Kaitia and Invercargill. Blenheim, with 91 hours sunshine, had its lowest total for any month since 1930, when records began, while Kelburn, with 66 hours had its lowest equal total for any month in the same period.

Stations recording large deficits this month were: Blenheim (−66 hrs), Christchurch (−52 hrs) Gisborne (−51 hrs), Nelson (−47 hrs), Wellington (−39 hrs), Taupo (−34 hrs) and Westport (−32 hrs).

In contrast, Invercargill had 17 hours more sunshine than usual for June.

J. S. HICKMAN, Director.

(N.Z. Met. S. Pub. 107)