

## THE WEATHER IN NEW ZEALAND IN APRIL 1983

*General*—April was a cloudy, wet month for most of the country except the south of the South Island.

South-westerly winds were less frequent than usual this month, particularly at Auckland which had the lowest number of winds from this direction for April since 1972. South-westerlies were only slightly less frequent than usual in the south, but there were fewer strong winds there than normal for the time of year.

Pressures were above normal over the whole country, particularly in eastern areas.

Mild, wet conditions led to easing of the drought conditions that had prevailed for several months in northern and eastern areas of the country. Although grass growth was generally reported to be good many farmers reported that they will still be unable to produce sufficient feed for winter and supplementary feeding will continue to be necessary for some time.

*Rainfall*—Rainfall was normal or above normal over the whole country except Fiordland, Southland, some central areas of the North Island and Wairarapa. Most of these areas had between 70 percent and 90 percent of normal rainfall.

Flooding occurred in parts of Nelson, Marlborough and Northern Westland after heavy rainfall on the 14th and 15th. Many stations in these areas had between 125 mm and 200 mm of rain during the 14th with further, lighter falls on the 15th. Return periods for the 24-hour falls were mostly in the order of 5–10 years, with a maximum of 50 years for the 24-hour fall at Wangapeka.

Houses were flooded in Karamea and Market Cross when the Karamea River overflowed and in Canvastown when the Pelorus and Whakamarina Rivers overflowed. Several families were evacuated from these areas. Low-lying farmlands were extensively flooded, and several roads, including State Highway 6, were closed by floods or slips.

*Temperatures*—Temperatures were normal or above normal for the North Island, apart from Wellington, where it was slightly cooler than usual, and normal or above normal in the north and north-east of the South Island. Southern and western areas of the South Island were between 0.5°C and 1.0°C below normal. Farmers from many areas of the country reported very few frosts for the time of year.

There were two very warm spells this month, although these mainly affected eastern regions of the South Island. Between the 6th and 8th mean temperatures were between 5°C and 8°C above average in eastern areas south of Kaikoura. Maximum temperatures of 25°C or above were recorded around Christchurch, Hororata, Timaru and Dunedin. Mean temperatures were 4°C to 6°C above normal in the same areas again on the 11th and 12th, with maximum temperatures above 25°C recorded around Christchurch.

*Sunshine*—Sunshine hours were normal or slightly above normal in parts of Canterbury and in Southland, but below normal elsewhere.

Northern and eastern areas of the North Island were particularly cloudy. Tauranga and Ruakura had their lowest April sunshine totals since 1956 and second lowest since recording began in 1933 and 1937 respectively, while Ohakea and Auckland Airport had their lowest April totals on record, these stations beginning recording in 1954 and 1970 respectively.

Among those stations recording large departures this month were: Tauranga (–69hrs), Rotorua (–66hrs), Ruakura (–60hrs), Auckland (–55hrs), and Gisborne (–51hrs).

## THE WEATHER SEQUENCE—APRIL 1983

## 1–7 April

A cold front lay across central New Zealand on the 1st, with a disturbed westerly flow over the south of the South Island. Rain fell in southern and western areas of both Islands on the 1st and 2nd, as this front and a subsequent one moving in the westerly flow crossed the country. A shallow depression and associated front developed off the west coast of the North Island on the 3rd, bringing rain to central and northern areas of the North Island on the 3rd and heavy rain to the East Cape – Gisborne region on the 4th.

An anticyclone crossed the South Island during the 5th. This was rapidly followed by a complex cold trough, and as this moved onto the country it brought heavy rain to southern and western areas of the South Island on the 6th and much of the North Island on the 7th.

## 8–14 April

Rain continued to fall in the north and south of the country on the 8th and central areas on the 9th as the trough moved off the country. An anticyclone centred off Fiordland began to move onto New Zealand on the 10th and apart from isolated showers in eastern areas of the North Island the weather became fine and cool.

Fine weather continued until the 13th when a cold front moving onto the south-west brought rain to southern and western areas of the South Island. Rain became widespread and heavy over the South Island and south of the North Island on the 14th as the front moved over the country and a trough developed.

## 15–21 April

There was further rainfall over most of the country on the 15th as the trough moved away to the east, with the rain clearing to showers in isolated areas only by the 16th. By the 17th a belt of high pressure across the country brought mainly fine weather, but a small depression with an associated cold front had begun to develop in the Tasman Sea. The front approached the north of the North Island on the 18th, bringing rain to northern and north-western areas of the North Island, with mainly fine weather continuing elsewhere. By the 19th the depression had deepened but still lay to the west of New Zealand. Rain became widespread over the country between the 19th and 21st as this system moved eastwards.

## 22–30 April

An anticyclone over the south of the South Island brought fine weather to the south-west but rain persisted elsewhere on the 22nd. Apart from showers in western areas of the South Island and the east of the North Island the weather was generally fine between the 23rd and 25th. By the 26th the high pressure belt over New Zealand had begun to move away to the east and a deep depression moved eastwards across the Tasman Sea onto New Zealand.

Rain fell over the whole country during the 26th with heavy falls in some western areas. Rainfall was lighter but still widespread on the 27th. By the 28th the depression had moved away to the east and an extensive anticyclone had begun to move onto the country. Apart from isolated falls in western areas of the South Island the weather remained generally fine to the end of the month.

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