

THE WEATHER IN NEW ZEALAND IN APRIL 1984

General—April was a dry, sunny month over most of New Zealand. Pressures were very close to normal over the whole country, with lowest pressures to the south and high pressures to both east and west.

There were more winds from a southerly quarter in the north of the country this month while westerlies were slightly more frequent than usual to the south. There were less strong winds over the whole country than usual for April.

A squall line crossed the Ashburton-Christchurch area on the 8th and produced a small tornado in the Rokeby area. Damage was confined to trees, fences and farm outbuildings although there were some hay losses. Hailstorms accompanied the squall. These particularly affected the Ashburton area, where stones up to 2 cm diameter flattened many gardens.

The dry, sunny conditions suited most farmers, especially in areas where high rainfalls in March had replenished soil moisture. Some footrot and scald were reported in wetter areas to the south. Five Jersey cows were killed by lightning near Collingwood on the 26th.

Rainfall—Rainfall for April was below normal for the whole country except in areas in the far south and south-west of the South Island and some central and western areas of the North Island.

Parts of Bay of Plenty, southern Hawke's Bay and Wairarapa were very dry with many stations recording between 10 percent and 20 percent of their normal rainfall. In the South Island coastal areas to the north of Banks Peninsula were exceptionally dry, with many stations recording less than 10 percent of normal rainfall. Among the drier stations were Culverden (0.2 mm), Kaikoura (1 mm), Kaikoura West (2 mm), Spotswood (4 mm) and Glenallen (4 mm). In each case these are the lowest totals on record for April; records began at Glenallen in 1905, Culverden in 1915, Spotswood in 1918, Kaikoura West in 1928 and Kaikoura in 1945.

Temperatures—Mean daily temperatures were normal or above normal over most of the country this month; temperatures in some eastern and central areas of the South Island were up to 1.5°C warmer than usual. Northern and north-eastern areas of the North Island were about 0.5°C cooler than usual.

The period from the 1st to the 7th was very mild. During this time mean temperatures were about 3°C to 5°C above average and maximum temperatures of between 20°C and 25°C were recorded on several days by stations throughout the country. The 7th was particularly mild in some southern areas of the South Island which recorded their warmest April day for 5 years. However, this was immediately followed by a cool spell from the 8th to the 10th, during which snow fell on some South Island high country. Although night-time temperatures were rather cool at times the weather remained mild until the 29th, although cool southerlies affected some areas between the 21st and 23rd. On the 29th and 30th mean temperatures were generally 3°C to 6°C colder than average.

Sunshine—April was sunnier than normal over the whole country except parts of Southland, where sunshine hours were a little below normal. The north of the North Island and eastern areas were particularly sunny. Kaikoura had 201 hours of sunshine, a record for April since records began in 1960, and a total exceeded only once in March during this time. Kaitaia recorded 210 hours, 47 above normal, making this the sunniest April there since 1965 and the second sunniest on record, while Tauranga had 233 hours, 55 hours above normal, the highest for April since 1958 and second highest since the station opened in 1933.

Among other stations to have high sunshine hours this month were: Auckland 193 hours (+33), Rotorua 204 hours (+33), Hamilton 193 hours (+34), Gisborne 194 hours (+32) and Christchurch 194 hours (+44).

THE WEATHER SEQUENCE—APRIL 1984

1-7 April

A trough of low pressure covered New Zealand at the beginning of April and showery weather affected many areas. Showers remained in eastern areas of the North Island on the 2nd as the trough moved eastward and an extensive anticyclone, centred near Tasmania, began to move on to the country. The anticyclone crossed the country during the 3rd and 4th, bringing fine, mild weather to most districts, although showers persisted in Northland and Fiordland. Rain fell in the west and south of the South Island as a disturbed westerly flow developed on the 5th. Light rain spread to western areas of both Islands during the 6th and 7th as a trough developed in the westerly flow and moved on to the country.

8-14 April

By the 8th the trough covered New Zealand and, apart from some eastern areas, light rain became widespread. Temperatures were cool, particularly in the South Island. The rain cleared but temperatures remained cool on the 9th as the trough and its associated frontal system moved away to the east and a cold southerly airstream spread over the country. A ridge from an anticyclone centred near Tasmania began to move on to the north and west of New Zealand during the 10th and the weather became fine over the whole country. Fine, mild conditions continued as the anticyclone moved slowly eastward and became stationary in the mid-Tasman by the 14th. There were a few showers in parts of Southland on the 14th as a westerly airstream developed over the area.

15-21 April

The anticyclone remained stationary and by the 16th a belt of high pressure covered the Tasman Sea and extended well to the east of New Zealand. The resulting south-easterly winds brought showers to some eastern areas of the North Island but in all other areas fine, mild conditions prevailed until the 19th. By the 19th the anticyclone had moved eastward and the centre lay near the Chatham Islands. A cold front lay to the west of the South Island and rain fell in southern and western areas of the South Island and some areas of the North Island. The front crossed the country during the 20th and by the 21st an anticyclone had moved on to the country. The weather again became fine but cool, apart from some showers in the east of the North Island.

22-30 April

The weather continued to be fine until the 24th apart from showers in the east of the North Island. On the 24th a north-westerly flow developed over the south of the South Island and rain fell in south-western areas. This became widespread over the south and west of both islands on the 25th as a cold front within the flow began to move across the country. A complex trough developed behind the front and rain became widespread on the 26th. Temperatures remained mild but became cool on the 27th. Widespread rain fell on the 27th and 28th as disturbed westerlies developed over the country. By the 29th a trough had moved eastward on to New Zealand. Fronts within this trough brought further rain to some northern and western areas of the North Island and the south and west of the South Island on the 29th and 30th.

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