

## THE NEW ZEALAND WEATHER DURING JANUARY 1984

*General*—January was a very cool month and while some areas were sunny and dry, others were cloudy and very wet.

Extremely heavy rain in Fiordland and Southland during the 26th caused severe flooding, especially at Invercargill where the worst floods on record were experienced. Damages with the flood have been estimated to be in excess of \$20 million.

South-westerly winds were more frequent than usual over the whole country and there was a marked lack of strong winds, although there were some windy days.

A man drowned in Lake Tarawera on the 2nd when his boat was overturned during strong winds, and 3 people are presumed to have drowned after their small craft was swept out to sea by strong winds in Pailiser Bay.

A severe hailstorm affected parts of Canterbury on the 13th. Stones the "size of small plums" caused damage estimated at about \$1 million in an area 25 km long and 2 km wide between Sheffield and Halkett. Heavy rain on the same day caused surface flooding in Christchurch.

Farmers reported very good conditions for stock and plants over the northern half of the North Island and in the west of the South Island. Over much of the remainder of the country however, rather dry conditions resulted in slow growth.

*Rainfall*—Rainfalls were well above average in Fiordland and Southland, and over the northern half of the North Island. Invercargill had recorded 285 mm (more than 3 times its usual January rainfall), before the Meteorological Office there closed as a result of flooding, on the 27th.

In spite of the incomplete record, this has been Invercargill's wettest month in more than 40 years, and the 24-hour total of 134 mm recorded on 26th is the highest on record. Auckland too, was very wet, recording about 150 percent of its usual January rainfall and its wettest January since 1976. Parts of Canterbury, notably Christchurch, were also much wetter than usual, although rainfalls in this area varied widely; Christchurch received almost twice its average January rainfall while Oamaru and Kaikoura received only 60 percent and 40 percent respectively of their January averages.

The north of the South Island and the southern half of the North Island were also drier than usual, with many areas recording less than half of their normal January rain and Blenheim recording only 20 percent of its average.

*Temperature*—Temperatures were much cooler than usual over most of the country, especially in inland parts of the South Island and some eastern and central North Island areas where they ranged between 1.5°C and 2°C below average. Over the remainder of the country temperatures were between 0.5°C and 1.5°C below average.

Temperatures were fairly consistently below average throughout the month. Between the 13th and the 18th it was particularly cool and many areas record maximum temperatures that were 8°C to 10°C below average.

*Sunshine*—The northern half of the North Island, along with the south of the South Island, was slightly cloudier than usual during January. However, over the remainder of the country it was sunny,

compensating to some extent for the cool temperatures. Wellington and Timaru were particularly sunny, recording 120 percent and 130 percent respectively of their usual January sunshine.

## THE WEATHER SEQUENCE—JANUARY 1984

## 1–7 January

A large anticyclone dominated New Zealand's weather during the first 4 days of 1984, giving fine, although rather cool weather. However, a cold front moved onto Fiordland late on the 4th and then moved north-east. A low formed on the front, west of central New Zealand, on the 5th and moved north to lie near Northland on the 7th. Rain developed over the South Island on the 5th and became widespread on the 6th. During the 7th a ridge spread onto the South Island, bringing fine weather, while the low continued to give rain to the northern half of the North Island.

## 8–14 January

The ridge spread across the remainder of New Zealand and gave fine weather to the whole country during the 8th and 9th. On the 10th a cold front moved onto the South Island and due to the formation of a low over Fiordland, remained slow moving, giving heavy rain to western and southern South Island areas during the 10th and the morning of the 11th. The low and its associated front moved across the North Island during the night of the 11th/12th and the rain became widespread over the North Island but eased over the South Island. Another cold front moved quickly north-east across New Zealand during the 13th, followed by a cold southerly airstream with showers in most areas.

## 15–21 January

Cold southerlies continued to give showers to eastern areas during the 15th, 16th, and 17th, while a complex low lay east of the North Island. This low moved south-west, merging with a trough which had moved rapidly east across the south Tasman Sea on the 18th, resulting in widespread rain over most of the country. During the 19th the trough gradually moved off to the east, but rain persisted, particularly in northern North Island and western South Island areas. An anticyclone spread over the country during the 20th and 21st, and the weather became fine, but remained cool.

## 22–30 January

The anticyclone continued to give fine weather during the 22nd and the morning of the 23rd, but a cold front moved rapidly north-east during the latter part of the 23rd giving fairly widespread rain. Another anticyclone gave fine weather during the 24th and 25th. However a cold front which had moved quickly east across the south Tasman Sea during the 25th became slow moving over Fiordland and Southland on the 26th. Heavy rain commenced falling over the south of the South Island early to the 26th and persisted throughout that day and much of the 27th also, producing record rainfalls in many places and causing extensive flooding in Southland. The front began moving north-east on the 27th, and weakened. A south-westerly flow spread over the country on the 28th, with only a few isolated showers, and during the 29th, 30th and 31st a large anticyclone moved eastwards across New Zealand, giving fine weather in most places although a few showers persisted.

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