## THE NEW ZEALAND WEATHER IN SEPTEMBER 1983

General—September was a mild, cloudly, and wet month in most parts of New Zealand, although some eastern North Island areas remained very dry.

Strong winds were more frequent than usual over the whole country, and south-westerlies were more frequent than usual over the North Island. Strong north-westerlies, gusting to around 50 knots on the 10th at Auckland, caused some 20 to 30 boats to break their moorings on the Waitemata Harbour, and also caused numerous power cuts.

Strong to gale force north-westerlies on the 20th, 21st, and 23rd caused disruptions in the Wellington, South Canterbury, Otago, and Southland areas. Power supplies were interrupted, trees and buildings damaged and driving conditions made hazardous. At least 2 people (in Wellington and Ashburton) required hospital treatment after being blown over. Both Wellington the Dunedin airports were closed for a time as a result of high winds.

Heavy snow fell over the Fiordland area during the period 19 to 23 September, resulting in numerous avalanches, one of which killed a Ministry of Works and Development Overseer on the Milford Road. Avalanches and floodwaters also badly damaged Pompolona Hut on the Milford Track.

Good lambing conditions were reported in most North Island areas, but snow and wet weather resulted in heavy losses in some parts of the South Island. Farmers in most areas reported good grass growth although ground conditions remained very dry in some eastern North Island areas.

*Rainfall*—Much of the North Island's east coast experienced another very dry month. Napier recorded only 14 mm of rain, only slightly more than the record low rainfall recorded there in September 1951. A total of 17 mm was recorded at Gisborne, their lowest September rainfall since 1973 and the third lowest in the past 46 years.

On the other hand most of the South Island and western areas of the North Island experienced very high rainfalls. Timaru and Alexandra both received more than 3 times their usual September rainfalls, with Timaru receiving its highest September total since 1946. The 64 mm recorded at Alexandra has only been exceeded in one other September since 1922. The rainfall distribution over the South Island however was rather patchy, with Oamaru recording only about 85 percent of its usual September rain.

Temperatures—With the exception of some inland and western South Island areas, temperatures were warmer than usual over New Zealand during September. Much of the North Island and the north of the South Island had temperatures around 1°C above average, while eastern South Island areas recorded temperatures around 0.5°C warmer than usual. Some inland and western parts of the South Island experienced temperatures around 0.5°C below average.

Temperatures on the 1st and 2nd were close to normal but the following 4 days were cool. Above average temperatures were experienced over the South Island between the 7th and 14th, following by a return to cooler conditions between the 15th and 19th. The North Island however, had below average temperatures for much of the period from the 7th to the 19th.

Temperatures were generally close to average for the rest of the month, although Christchurch recorded a record low maximum of 5.9°C on the 25th.

Sunshine—Although eastern North Island areas and parts of Northland recorded more sunshine than usual during September, most of the country was cloudier than usual. Ohakea and Dunedin airports both recorded their lowest September sunshine totals since readings were first taken (in 1954 and 1962 respectively). Most of the South Island with the exception of Nelson, Marlborough, and North Canterbury, recorded less than 75 percent of the usual September sunshine.

## THE WEATHER SEQUENCE—SEPTEMBER 1983

1-7 September

A complex trough moved across New Zealand during the 1st, bringing rain to western areas from Taranaki southwards, and also to Southland and Otago. The rain eased to showers on the 2nd and on the 3rd the flow turned southerly with the remaining showers clearing. A ridge spread over New Zealand and gave generally dry, cool weather on the 4th, 5th, and 6th, although a weak front crossed the country giving a few showers to areas about the west of the main ranges in both islands. A complex low moved onto the South Island during the 7th and its associated cold front brought rain to much of New Zealand, with heavy falls in areas about the west of the South Island high county. Eastern areas however remained dry. 8–14 September

The weather remained dry in the east on the 8th, but most other areas received further rain as the low and its front moved off the country. Another complex low moved onto New Zealand on the 10th, bringing widespread rain, with some heavy falls. Strong westerlies spread onto the country as this low moved away. Disturbances in the westerlies gave frequent showers to northern and western areas during the 11th, 12th, 13th, and 14th, with a few showers spreading to eastern areas at times.

## 15-21 September

Heavy showers, thunderstorms, and strong winds caused power cuts and disrupted communications at Auckland in the early hours of the 15th. However the weather cleared during the day as a cold southerly flow spread over the country. An anticyclone moved onto the North Island bringing fine weather to most of the country during the 16th, 17th, and 18th, although a few showers were recorded on the western and southern coasts of the South Island.

A cold front moved onto the South Island early on the 19th and brought rain to western areas of both islands before moving off to the east during the following morning. Another cold front moved across the South Island during the 21st preceded by a warm northwesterly flow, and gave rain to much of the country, although only a few showers fell east of the ranges. North-westerly gales ahead of this front caused damage at Wellington and in parts of South Canterbury.

## 20-30 September

The front moved off to the east on the 22nd and an anticyclone moved onto the North Island, bringing fine weather to most of the country, although strong westerlies continued to give showers to western South Island areas. Another front moved onto Fiordland on the 23rd, bringing heavy rain and snow to the area. Strong northwesterlies ahead of the front caused further damage in South Canterbury. A low developed on the front, west of central New Zealand, during the 24th and brought widespread rain to the country before moving off to the east on the 27th. A cool southerly flow spread over the country, bringing clearing weather as the low moved away.

An anticyclone moved onto New Zealand during the 28th and 29th with fine weather in most places. A cold front moved quickly south-east across the South Island on the 29th, bringing showers to areas west of the alps. Another cold front moved onto the South Island early on the 30th and gave rain to western areas of both islands and a few showers to Canterbury.

(N.Z. Mets. Pub. 107)

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