## THE NEW ZEALAND WEATHER IN MAY 1981

General—For most of New Zealand May was a cool, dry, sunny month.

Winds in the north of the country were predominantly from an easterly quarter while to the south south-westerlies were more frequent than usual for this time of the year.

Farmers in the north of the country reported mild conditions with good growth although the effects of the recent facial eczema outbreak were still being felt in some areas. Heavy rain at the end of the month caused serious stock and feed losses in central farming areas while southern districts reported good conditions but with growth slowing rapidly towards the end of the month.

Gales affected most of the country on the 12th and 13th with snowfalls to low levels on the ranges in both islands.

Rainfall—Rainfall was below normal for most of New Zealand except the Wellington province, Wairarapa Valley and around Marlborough Sounds and Farewell Spit. Exceptionally heavy rain in these areas on the 20th lead to widespread local flooding and property damage in some areas. Further rain on the 21st and 22nd in the Wairarapa lead to even more extensive flooding and some heavy stock losses resulted.

Areas around Auckland, Hamilton and Taranaki had less than half their normal rainfall for May. The south-east coast of the South Island also had less than half normal rainfall with some areas around Timaru and Dunedin having less than 25 percent of their usual rain.

Temperature—Temperatures in both islands were close to normal for May.

A warm spell between the 8th and 10th saw temperatures above 20° reported in many parts of the country. On the 8th Dunedin Airport reported 24.0°—the highest for this station for May since the station opened in 1963, while Invercargill's maximum of 19.6° on the same day was the highest for may since 1955. On the 9th, Wellington reached 22.2°C the warmest May temperature since records began in Wellington in 1869.

A cold snap followed quickly and the first snow of the season fell on skifields in both islands on the 12th and 13th. There was a second cold spell between the 23rd and 30th when mean daily temepratures were as much as 5°C below normal. Severe frosts were reported in inland areas of the South Island and about Dunedin.

Sunshine—Sunshine hours were above normal for the whole country except Invercarill and Blenheim, both of which had a deficit of about 15 hours.

The rest of the South Island had between 5 and 30 hours more sunshine than normal for May, while the North Island has between 20 and 40 hours more.

## WEATHER SEQUENCE FOR MAY 1981

An anticyclone which lay in the Tasman Sea to the east of New Zealand at the end of April moved slowly onto and across the country bringing fine, warm weather to most parts of the country for the first six days of May.

A depression developed over Norfolk Island on the 4th and as this moved south rain fell in the far north of the country on the 5th and 6th. This depression and an associated cold front moved further south to lie west of the North Island on the 7th, with rain falling in northern and western districts of both islands, and temperatures remaining warm. Rain continued in western districts throughout the 8th and spread to the east as the front, although now very weak, crossed the country on the 9th.

A trough of low pressure developed in the Tasman on the 8th and by the 10th had moved to cover the South Island, with rain in Westland, Fiorland, and Central Otago. Rain became widespread as a series of cold fronts within this trough crossed the country until the 14th. Cool temperatures were recorded throughout this period, particularly on the 13th and 14th.

An anticyclone over the Tasman Sea brought a clearance to most districts on the 15th and 16th although temperatures remained cooler than normal.

By the 17th a trough had developed over the Southern Tasman Sea and heavy rain fell in Westland and Fiordland. Two cold fronts within this trough moved onto southern New Zealand on the 18th bringing some rain to southern areas. By the 19th the first of the fronts lay across Cook Strait and heavy rain was recorded in the Golden Bay, Nelson, and Blenheim regions. A wave depression developed at this front, on the 20th, with its centre lying west of Taranaki. Rain fell about and north of Cook Strait, with particularly heavy falls recorded around Cape Campbell, Marlborough Sounds, Wellington, and Southern Wairarapa. Rain and gales continued in central and northern areas as the depression moved across the centre of the North Island on the 21st to lie north-east of East Cape on the 22nd. Light rain continued in some eastern and southern parts of the North Island, but an anticyclone centred to the west of Fiordland brought fine weather to most of the South Island. As this anticyclone moved slowly eastward over the next five days, fine, cold weather was recorded over most of the country.

A second anticyclone developed south of Tasmania on the 26th,

A second anticyclone developed south of Tasmania on the 26th, and, with the first anticyclone, now east of the country, formed a belt of high pressure across the South Island. This brought a continuation of the fine, cool weather in all districts to the 30th, except in the far north, where a cold front to the north of the country brought rain to some areas of Northland on the 28th and 20th

some areas of Northland on the 28th and 29th.

A cold front which had been west of Tasmania on the 30th moved quickly eastward to lie west of New Zealand on the 31st. Rain fell over most of the country except northern and some eastern areas of the North Island.

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