# THE WEATHER IN NEW ZEALAND IN OCTOBER 1982

General—October was a cool month for the whole country. In the north north-easterlies were less frequent and south-easterlies more frequent than usual for October, with the frequency of south-westerlies the highest for October for 5 years. Winds were close to average for the month in the South.

Pressures were very low over the whole country, especially eastern areas.

Farmers in the North Island reported adequate grass growth and good stock condition in most areas although the cold weather slowed grass growth. There was sufficient rain to ease the drought in affected areas of the South Island and growth was reported to be good. Frequent frosts and late snow caused problems for some orchardists.

During Labour weekend (23rd-25th) unseasonably heavy snow and gale force winds disrupted sporting activities and closed roads in both the North and South Islands. There were losses among new born lambs in the McKenzie Basin.

A tornado at Hikamutu (south of Taumarunui) on the 5th caused damage estimated in excess of \$30,000 to one farm.

Rainfull—Rainfall totals were below or close to average over the whole country except at North Cape and in the Gisborne – East Cape area in the North Island and the south and east of the South Island where they were well above normal. The Bay of Plenty and much of central New Zealand had less than half their usual October rainfalls, with some areas around Nelson and Motueka receiving less than 30 percent of their normal rainfall.

The drought in eastern areas of the South Island was eased by higher than normal rainfall this month. Much of Otago and parts of Canterbury had more than twice their normal rainfalls. Among those stations with exceptionally high rainfalls (with percent of normal in brackets) were: Akaroa (297%), Purau, Lyttleton (305%), Godley Head (349%), Dunedin Airport (338%), Balmoral (342%), Pinewood, Outram (393%), Taieri (392%), and Mosgiel (446%).

Temperature—Temperatures were 1°C to 2°Cbelow average over the whole country this month. Record low mean temperatures for October were established in places as diverse as Taupo, Gisborne, Ohakea and Invercargill, where records cover 30 years or more, and tooth Blenheim and Westport had their lowest mean October temperatures since 1945.

There were several very cold periods this month. Between the 2nd and 4th temperatures were  $2^{\circ}\text{C}-5^{\circ}\text{C}$  below average in the North Island and up to  $8^{\circ}\text{C}$  below average in the South Island. Frosts were widespread. Mean temperatures were  $5^{\circ}\text{C}-6^{\circ}\text{C}$  below average on the 18th and 19th, with widespread snow in the South Island and Central North Island. On the 23rd temperatures in the South Island were up to  $6^{\circ}\text{C}$  below average, and  $3^{\circ}\text{C}-7^{\circ}\text{C}$  below average for the whole country on the 24th. They remained  $2^{\circ}\text{C}-4^{\circ}\text{C}$  below average except in the west of the South Island, until the 28th. During this period heavy snow fell in inland areas of both Islands and hailstorms were widespread.

Sunshine—Sunshine totals were very close to normal this month. Areas around Wellington, Westport, Nelson and Timaru had 20 to 25 hours more sun than usual for October. The rest of the North Island had average sunshine totals, while the rest of the South Island had slightly less sun than usual.

# THE WEATHER SEQUENCE OCTOBER 1982

### 1-7 October

A complex trough which began to develop in the Tasman Sea at the end of September moved onto New Zealand on the 1st of October. Rain fell over most of the South Island and the north of the North Island on the 1st and on the north and east of the South Island and much of the North Island on the 2nd. Temperatures were very cool. A southerly flow developed over the country on the 3rd as the trough began to move away to the east. Light rain fell in western and southern areas of the South Island and there were isolated falls in the North Island. Temperatures remained cool. Unsettled and showery weather continued in most districts until the 7th as a disturbed west to southwest airstream developed over the country. By the 7th a ridge from an extensive anticyclone in the Tasman Sea had begun to move onto New Zealand, bringing fine weather to all districts.

#### 8-14 October

Apart from some showers in Fiordland, fine weather continued on the 8th, but a disturbed westerly flow developed on the 9th bringing rain to western districts as far north as Ohakea. As fronts within this flow crossed the country on the 10th light rain fell in most areas except those to the east of both Islands. Showers continued in southern and western areas on the 11th and 12th, becoming confined to Fiordland on the 13th as the westerly flow continued over the country. There were heavier falls in the south and west of the South Island on the 14th as a front moved across these areas. Light rain fell in some parts of Northland on the 14th as a front, associated with a small depression near Norfolk Island, moved towards Northland.

### 15-21 October

A trough developed over New Zealand during the 15th and fronts within this trough brought rain to most areas except in central New Zealand. Cold, showery weather became widespread during the 16th and 17th as the trough moved away to the east and was followed by a cold southerly to south-westerly airstream. A complex depression developed in the central Tasman Sea during the 18th and as this moved eastward associated fronts brought heavy rain to the northern half of the North Island. At the same time a small anticyclone centred south-west of New Zealand brought generally fine weather to the South Island and particularly western areas as it moved eastwards between the 18th and 20th. By the 21st a complex trough had begun to move onto the country brining showers to western and northern areas of both Islands.

### 22-31 October

The trough which began to move onto New Zealand during the 21st remained over the country until the 28th. Fronts within this trough crossed the country during the 22nd and 23rd, with widespread rain. A depression developed, within the trough, off the east coast of the South Island on the 24th and there was heavy rain in southern and eastern areas of the South Island, and showers over most of the country. This depression intensified during the 25th and rain became widespread. Temperatures were cold and snow fell in inland areas on the 25th and 26th. By the 27th the trough and depression had begun to move eastward off the country, but showers remained widespread in the east of the South Island and through the North Island. A ridge from an anticyclone centred near Lord Howe Island moved onto the country on the 28th, bringing milder temperatures and fine weather. Although the ridge persisted over the North Island until the end of the month, a disturbed westerly flow developed over the South Island. Fronts within this flow brought showers to isolated areas of both Islands on the 29th and to western and southern areas of the South Island on the 30th and 31st. Temperatures were mild.

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