

NOTES ON THE WEATHER FOR NOVEMBER 1975

General—November was a cool month marked by a comparative absence of the usual westerly weather and an unusually high frequency of wintry southerly conditions. These cold spells were reported to be retarding growth in some areas, and unsettled weather delayed shearing and haymaking. However, in general farmers found the weather reasonably favourable.

Rainfall—Rainfall was below normal over the greater part of the country by about 25 percent. However, it was mainly above normal east of the North Island ranges, in northern and eastern Northland, Auckland, Wellington, most of Marlborough, and parts of Nelson and Canterbury. Greatest relative excesses were reported in central and southern Hawke's Bay and on the Wairarapa coast. In the last-named area totals were 2 to 3 times the normal value.

Thunderstorms with hail affected some eastern districts of both Islands on the 8th and 12th. At Wigram Aerodrome, Christchurch, on the 12th 27 mm of rain fell in 20 minutes and 33 mm in half an hour. This was the heaviest fall ever recorded in Canterbury for these two durations. Flooding and hail of diameter 1 cm both caused some damage in Christchurch.

Temperatures—Temperatures were below normal from Hamilton southward except in the King Country and parts of Taranaki, and on the West Coast. The departures exceeded 1°C in most of Canterbury and Marlborough, in Wellington and southern Wairarapa, and in most of Manawatu with parts of southern Hawke's Bay.

The days most affected by relatively cold temperatures in southerlies, especially in eastern districts, were the 2nd to the 4th, the 8th to the 10th, the 14th and 15th, the 17th and 18th, and the 20th to the 23rd. On the 21st snow was reported to comparatively low levels in parts of the South Island and also on the road over the Rimutakas between Wellington and Wairarapa. The 22nd was a particularly cold morning in many districts, with air temperatures down to -4°C at Twizel, Mackenzie Country, and Tara Hills, Oamaru.

Sunshine—Sunshine was mainly close to normal. However, it was below normal by 10–20 percent in a few areas, especially eastern districts from Whangarei to Thames, and Manawatu; and above normal by 10–14 percent over most of the Southland plain.

Weather Sequence—At the beginning of November a depression was centred near Campbell Island and the associated trough of low pressure commenced to cross the country from the south-west. Considerable rain was reported on the West Coast. On the following day a small depression formed on the front just west of Cook Strait and moved northward with it until the 4th, while an anticyclone over the south Tasman Sea spread on to the South Island. Cold southerlies soon spread over eastern areas of both Islands and rain affected the whole country, soon clearing however in the south and west of the South Island. Considerable rain was reported in Northland on the 3rd as the depression passed that way. By the 5th the depression had become complex and was centred to the east of the North Island while an anticyclone was centred to the south of the Chatham Islands. Light showers were still being reported in eastern districts.

On the 6th a complex depression covered the central and south Tasman Sea and extended on to the South Island. Rain was reported mainly in the north and west of both Islands. During the following 2 days the depression moved south-eastward and the complex trough associated with it crossed the country. A small disturbance

formed in the trough off the Otago coast and moved north-eastward with it. The trough brought rain to districts east of the ranges with some thunderstorms and hail in places. Temperatures again became wintry in the southerlies. However, the weather soon cleared over the southern half of the South Island. On the following day the trough continued its north-eastward progress and rain was still being reported in Gisborne, Bay of Plenty, Coromandel, Nelson, and Westland.

On the 10th an anticyclone covered the eastern Tasman Sea and New Zealand, with mainly fair weather. During the next 2 days a small depression passed to the south of the country and the associated trough of low pressure moved on to the South Island. Rain soon commenced on the West Coast and in Southland, while temperatures became temporarily warm in the east. However, cold southerlies soon spread once again over Otago and Canterbury bringing some rain to eastern districts with a thunderstorm in Christchurch. On the 13th and 14th the southerlies brought rain and colder temperatures to remaining districts east of the ranges.

On the 15th a large anticyclone covered New Zealand with fair weather. During the next 2 days a trough of low pressure associated with a depression far to the south crossed the country, bringing yet another spell of wintry southerlies to eastern districts of the South Island.

On the 18th a depression was centred to the north and pressures again became comparatively low over the New Zealand area, while anticyclones were centred over the north-west Tasman Sea and to the east of Auckland. On this day some rain was reported in Bay of Plenty, on the West Coast, and in Otago and Southland. During the next 2 days a trough of low pressure crossed the country and a depression developed to the east, while a cell of high pressure developed to the west of Campbell Island. Cold wintry southerlies swept over the country once again, affecting mainly eastern districts but also western districts from Wellington to South Taranaki. As the depression to the east deepened on the 21st light showers were still reported in many of these districts with snow to comparatively low levels. By the 22nd an anticyclone extended over the South Island but a complex depression moved on to the North Island, with considerable rain over the northern half of it. On the following day, with the eastward passage of this depression rain spread over nearly the whole of the North Island. There were considerable falls in Auckland, Coromandel, Bay of Plenty, Gisborne, and Hawke's Bay. Temperatures remained comparatively cold in most districts.

During the 24th and 25th a ridge of high pressure extended on to the country from the north and east, with mainly fair and warmer weather.

For the remainder of the month westerly weather predominated with warm temperatures in the east. During the 26th and 27th a trough of low pressure associated with a depression far to the south crossed the country, bringing rain to most districts west of the ranges, and also to Canterbury and Marlborough. On the 2 following days a deep depression centred far to the south of Tasmania moved eastward, while another trough of low pressure crossed the country. A disturbance formed in this trough over Northland on the 29th, bringing some rain there. In addition, considerable rain was again reported on the West Coast and some on the Southland coast. On the last day of the month an anticyclone moved on to the North Island from the west and the weather was fine, except for further rain in Northland.

J. F. DE LISLE, Director.

(N.Z. MET. S. PUB. 107)

New Zealand Electricity Department—Schedule of Works and Services Contracts for \$20,000 or More in Value

Name of Work	Successful Tenderer	Amount of Tender Accepted
		\$
1. Construction of 17 single-man huts, Inangahua and Westport Glenroy Products Ltd., Blenheim	.. 30,589.80
2. Construction of 17 single-man huts, Inangahua and Westport C. Gibbons Ltd., Nelson	.. 31,450.00

P. W. BLAKELEY, General Manager.