## NOTES ON THE WEATHER FOR JANUARY 1976

General-January was unusually cloudy and wet in the North Island. Pastures were greener than usual and it was a good month for milk production. However, crops and fruit were adversely affected by the rain and lack of sun; and it was a bad month for haymaking.

A small local tornado caused some damage at Wairoa on the 1st.

Rainfall-Rainfall was above normal over nearly the whole of the North Island and also over the northern half of the South Island. It was more than double the normal value over Northland, Auckland, and northern Waikato, besides Nelson and the Marlborough Sounds. It was more than 4 times the normal value over consider-able areas of Northland. Auckland's total of 237 mm was the highest for January in 124 years of record. By contrast, rainfall was less than half the normal value over

Central Otago and north-western Southland.

In Northland and Auckland nearly all the rain fell during the 8 days 8–15 January. The 8th was the wetterst day in the north, with 122 mm at Kaitaia Aerodrome. Further south the 12th was the wettest, with 188 mm at Warkworth. Considerable flooding was reported in many parts of Northland and Auckland. The 26th was a particularly wet day in Marlborough, with falls up to 179 mm. Serious flooding was reported in the Rai Valley.

*Temperatures*—Mean temperatures were mainly  $\frac{1}{2}$ °c above normal in the North Island and the same amount below normal in the South Island. The last 2 days of the month were the coldest, with maximum temperatures over most of the South Island 5–10°c below normal.

Sunshine—Sunshine was below normal except in Southland, Otago, and the Mackenzie Country of Canterbury. The deficiency amounted mainly to 40-70 hours and was greatest in King Country and Manawatu. The lowest totals recorded were 139 hours at Palmerston North and 140 hours at Te Kuiti and Greymouth. In the North Island sunshine was the lowest for January since 1956.

Weather Sequence-At the beginning of January a depression was centred near Auckland and pressures were high over the Tasman Sea and to the east of the South Island. Considerable rain was reported in eastern districts of the North Island, Marlborough, and Canterbury. Temperatures were cold. On the follow-ing day, as the depression moved southward the rain became lighter. By the 3rd the depression was centred east of the South Island and the weather was mainly fair for 3 days, besides being warmer on the 5th. However, some rain was reported on the 5th in Fiordland and South Westland. During the 6th and 7th an anticyclone spread over New Zealand from the Tasman Sea and only a few light showers were reported; but temperatures became somewhat cooler again. On the 8th and 9th pressures were high in the Chatham Islands

area and a small depression with associated trough of low pressure moved slowly southward from the North Tasman Sea. Very heavy rain was reported in the Kaitaia area with considerable falls in most parts of Northland and some flooding. Rain affected all other districts except Canterbury. During the next 2 days the trough of low pressure remained stationary from the North Tasman Sea through Auckland and to the east, and a second depression over the North Tasman Sea started to move towards the North Island. The weather remained unsettled, especially in the North Island, with considerable falls in some inland areas from Hamilton southward. Temperatures were still cool. With the slow southward motion of this depression west of the North Island, the period from the 12th to the 14th was exceptionally wet in Northland and Auckland, with some flooding. Other areas which recorded considerable amounts of rain were Bay of Plenty, Coromandel, and parts of Canterbury.

By the 15th the trough was still almost stationary, while the main centre of the depression was near the Chatham Islands. Lighter rain still affected northern districts of the North Island. During the next 2 days a depression passed close to Southland and moved towards Campbell Island. Considerable rain was reported on the West Coast and some also in western districts of the North Island, while temperatures became warmer. From the 18th to the 21st an anticyclone was passing across the country and the weather was mainly settled but cool again.

By the 22nd the anticyclone was centred west of the North Island while pressures were low in the area of the Chatham Islands, and cool south-westerly winds covered the country. Rain affected mainly the West Coast but there were light falls in most other parts of the South Island and the south-west of the North Island. On the following day a trough of low pressure crossed the country asso-ciated with a small depression. Rain affected specially the northern half of the South Island and the Wellington-Manawatu area. On the 24th an anticyclone passed over the country and the weather was mainly fair, although still cool.

During the 25th and 26th the anticyclone remained centred to the east, while a tropical storm over the North Tasman Sea moved rapidly southward, and pressures were also low over and to the west of the South Island. In the warm north-westerlies rain affected west of the South Island. In the warm north-westerlies rain affected the whole country, with some very heavy falls in the north and west of the South Island, causing serious flooding in the Rai Valley of Marlborough. As all the low pressure centres moved to the south of Campbell Island, strong cold south-westerlies covered the country for the remaining 5 days of the month. Heavy rain con-tinued at first in the Alps but the rain became generally lighter from the 20th At the ord of the month the entry of the order from the 29th. At the end of the month the centre of the anticyclone moved somewhat further southward and temperatures were particularly cold in Fiordland and from Southland to Canterburv.

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J. F. DE LISLE, Director.

Amount of

New Zealand Post Office: Schedule of Building Contracts of \$20,000 or More in Value

Name of Works	Successful Tenderer Tender Accepted
Alexandra Post Office building	\$ Breen Construction Co. Ltd 426,327
	W. J. SEWELL, Director-General.

New Zealand Government Railways—Schedule of Civil Engineering and Building Contracts of \$20,000 or More in Value

Amount of Name of Work Successful Tenderer Tender Accepted \$ Bridge No. 267 NIMT, contract for shop work for the north truss reinstatement Hawkins Steel, P.O. Box 252, Hamilton ... 39,735.00 T. M. SMALL. General Manager,