THE NEW ZEALAND GAZETTE

No. 19

Rainfall in Millimetres Air Temperatures in Degrees (Celsius) Height of Station Above M.S.L. Bright Sun-shine Absolute Maximum and Minimum Maximum Fall Means of Differ-No. of Rain Station Differ-Total Fall of A and From From Mari Data Mini Data nt Date Hrs Bor 15 . . 13 Bor . . 5 49 Car 28 101 Car 1 13 119 Car

CLIMATOLOGICAL TABLE-Summary of the Records of Temperature, Rainfall, and Sunshine for January 1975-continued

The "normal" refers to the present site of the instruments. Standard periods for normals are: Temperature 1931-60, Rainfall 1941-70, Sunshine 1935-60. No normals are available for stations with only short records.

*Indicates that the sunshine recorder is not located at the station but is in the near vicinity.

A rain day is a day with rainfall equal to or greater than 0.1 mm.

Where the extremes of temperature and rainfall have occurred more than once during the month, the date of the first occurrence is given.

NOTES ON THE WEATHER FOR JANUARY 1975

General--Like many previous months, January was marked by an unusually high frequency of north-easterly winds, bringing excessive cloud to some eastern districts. In the west it was one of the warmest months on record. In northern districts of the North Island farmers reported good growth. In most other areas conditions were rather dry in the first half of the month, but good rains in the second half freshened up the pastures. In some parts of the country difficulties were reported in harvesting and haymaking; but in Southland conditions remained too dry.

Rainfall-Rainfall was above normal in the North Island except for eastern and northern Northland and Manawatu. It was also above normal in most of Nelson, Marlborough, and Canterbury. It was more than double the normal value in many areas east of the main ranges north of Timaru and about parts of the Coromandel and Kaimai Ranges. It was less than half the normal value in parts of Southland and South Otago and on the West Coast.

On the night of 28-29 January an exceptional fall of rain, amounting in places to nearly 200 mm, of which more than 100 mm fell in 6 hours, was reported in parts of the upper plains of South Canterbury, causing serious flooding, especially at Peel Forest, where four lives were lost.

At Rangiora on the 16th, 35 mm of rain were recorded in half an hour, an exceptionally intense fall for this part of New Zealand.

As in December, thunderstorms were unusually frequent, especially over the North Island from the 6th to the 17th.

Temperatures—Temperatures were above normal, mainly by 2°c. Departures were highest in the west, and New Plymouth had its warmest January in over 30 years of observation. The first half of the month was considerably warmer than the second half, with persistently high maxima in some western districts. New Plymouth's maximum temperature of 30.4°c on the 4th was the highest even recorded there; and Wellington's maximum of 30.1°c on the 5th was the highest ever recorded in that city in January.

Sunshine--East of the main ranges sunshine was below normal, mainly by 30-70 hours, with some particularly low values in Canter bury and Central Otago. In western districts sunshine was mainly above normal by 30-40 hours, but in Northland it was above normal by up to 90 hours.

Weather Sequence—For the first 5 days of January a belt of high pressure extended from west of the North Island across the country to east of the South Island, while pressures were relatively low to the north-east and also far to the south. The weather was fine and sunny with temperatures soon becoming very warm. However, rain was reported at times in Fiordland and coastal Southland; and easterlies brought some rain at times to Gisborne and Hawke's Bay, mainly on the 5th.

The belt of high pressure across the country collapsed on the 6th but an anticyclone was centred near Campbell Island, From this day until the 12th a series of shallow depressions occupied most of the area around New Zealand, the main one being to the east of the North Island. Rain soon spread from the east over the Taupo-Taumarunui area, and later extended over the greater part of the North Island, with some considerable falls, especially in Bay of Plenty. Parts of the South Island were also affected at times. Temperatures remained warm. During the next 3 days a further deterioration occurred as a trough of low pressure moved on to the country from the west, associated with a shallow depression. Rain was recorded in most districts; and a thunderstorm brought local flooding to Hamilton.

From the 16th to the 18th the depression over the country deepened and moved slowly eastward, while pressures rose in the Campbell Island area. Temperatures became cooler in the southerlies and rain spread to remaining districts of the North Island and the greater part of the South Island. However, there was a temporary improvement in most districts on the 18th. During the next 3 days another depression crossed New Zealand from west to east with general rain, except in parts of Otago and Southland. Some considerable falls were reported, especially in the King Country, about Cook Strait, and on the Kaikoura coast. On the 22nd and 23rd a belt of high pressure again extended from west of Northland across most of New Zealand to the south-east of the South Island, but a depression was still centred to the east of the North Island, and pressures were also low far to the south-west. The weather cleared in southern districts of the North Island and over most of the South Island.

On the 24th and 25th a trough of low pressure crossed the country but rain was confined mainly to the West Coast and the Southland coast. During the next 2 days strong north-westerlies predominated as two depressions in succession passed south-eastward close to Southland. Very heavy rain was reported in the Alps with daily falls of 100-200 mm on the 26th. Rain also con-tinued on the West Coast and the Southland coast and extended close to Nakon also to Nelson.

On the 28th a small depression crossed the South Island in association with a trough of low pressure. Rain affected most of the South Island besides southern districts of the North Island. Some Plains, causing flooding in Peel Forest, South Canterbury. For the last 3 days of the month the trough continued to move north-eastward, followed by cool southerlies. Further rain was reported in Canterbury, Marlborough, and Nelson; and showers affected some eastern districts of the North Island. However, the weather cleared in the south on the 31st.

(N.Z. Met. S. Pub. 107.)

J. F. DE LISLE, Director.

Normai Amount D	Days		Date	mum	Date	mum	Normai	в	В Min.	Max.			
mm mm		mm		°C		°C	°C	°C	°C	°C	Metres		
8 1	7	34	1	1.4	28	28.4		13.0	6.2	19.7	183	, November	and Burn, 974
14 1	11	55	11	1.5	29	27.5		14.7	8.3	21.0	183	, December	and Burn, 74
-19 32	21	98	10	-5.5	26	12.1	-0.2	6.0	3.4	8.5	15	nd, October	
-26 15 2	26	81	21	2.1	4	14.0	+0.7	7.9	5.5	10.2	15	d, November	pbell Island, 74
+15 23 1	22	117	17	0.8	4	17.5	+1.4	10.2	7.8	12.6	15	d, December	pbell Island, 74
												,	74 pbell Island,