

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for October 1979—continued  
LATE RETURNS AND CORRECTIONS—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Celsius)								Rainfall in Millimetres					Bright Sunshine
		Means of		Mean of A and B	Difference From Normal	Absolute Maximum and Minimum				Total Fall	No. of Rain Days	Difference From Normal	Maximum Fall		
		A Max.	B Min.			Maximum	Date	Minimum	Date				Amount	Date	
Kahui, Taihape, September 1979	518	12.6	5.4	9.0	+0.1	17.8	14	0.6	26	60	..	..	..	..	..
Wanganui Airport, September 1979	9	15.0	8.9	12.0	..	19.0	13	2.3	27	47	21	..	10	14	..
Lake Rotoiti, September 1979	634	11.3	2.7	7.0	+0.6	15.6	27	-5.4	26	140	23	+8	37	20	..
Craigieburn Forest, September 1979	914	10.8	0.9	5.9	+0.5	17.8	12	-3.4	26	152	23	+15	49	30	..
Ashley Forest, September 1979	107	15.5	4.2	9.9	+0.7	22.5	28	-4.0	15	25	7	-28	5	15	135
Christchurch, August 1979	7	10.7	2.4	6.6	-0.7	17.3	12	-4.5	16	83	11	+30	32	1	..
Christchurch, September 1979	7	15.6	5.3	10.5	+0.7	22.2	30	1.4	27	26	9	-20	11	15	..
Bromley, Christchurch, September 1979	9	15.1	6.3	10.7	+1.0	21.7	13	2.5	27	18	..	-25	..	..	..
Adair, September 1979	85	14.1	4.8	9.5	+0.8	20.4	13	1.5	24	13	7	-28	9	30	..
Moa Creek, August 1979	427	..	-4.1	..	..	..	..	-9.0	8	22	..	+7	6	6	..
Moa Creek, September 1979	427	..	..	..	..	..	..	..	..	24	..	+1	..	..	..
Raoul Island, September 1979	38	19.5	14.2	16.9	+0.6	22.3	8	11.3	11	258	17	+141	105	23	121

The "normal" refers to the present site of the instruments. Standard period for normals is 1941-1970. 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.

#### WEATHER NOTES FOR OCTOBER 1979

**General**—During October pressures were slightly below normal in the north of New Zealand, but appreciably above to the south of the country. There was a lower frequency of north-west winds over the southern half of the country, but in the north the wind-flow was near normal. Throughout New Zealand, conditions were generally wetter, but slightly warmer than usual.

Grass growth was reported to be very slow in most districts especially in the North Island, where rain and cold winds kept feed in short supply. Stock was in good condition apart from some lambs and young cattle, but milk production was down because of lack of feed.

A combination of exceptionally high tides and winds gusting to more than 93 km/h (50 knots) caused the closure of roads around the Auckland waterfront on the 8th. Yachts were damaged when they broke their moorings and were driven ashore by strong winds.

**Rainfall**—The only areas with rainfall totals below normal were parts of coastal Bay of Plenty, Poverty Bay, northern Hawke's Bay, Manawatu, the Kaikoura coast, and Southland. Some of these areas had only 50 percent of the normal rainfall. At Invercargill the total was the lowest measured in October since 1966. In Waikato, Central Districts, Wairarapa, Wellington, Nelson, Marlborough, and Canterbury the monthly rainfalls were more than 100 percent above normal. Taupo and Waingawa (Masterton) recorded their highest October rainfalls since the stations began in 1950 and 1926 respectively, and at Christchurch Airport the rainfall was the highest since October 1947.

Homes were evacuated in the town of Ohura on the 14th when the Waitewhena river which runs through the town breached its banks. Flood waters were reported to be 76 cm deep after heavy rain totalling 109 mm fell in the period from the 13th to 15th inclusive.

**Temperatures**—Temperatures were above normal throughout most of New Zealand by about  $\frac{1}{2}$ °C, but below by the same amount along the east coast of the South Island. Daytime maximum temperatures were lower than usual in most areas but night time temperatures were slightly above average. During one especially cold spell from the 22nd to 26th maximum temperatures were below normal by 3-6°C on the 23rd. From the 27th to 29th some east coast districts had maximum temperatures above average by as much as 5-8°C.

**Sunshine**—The only areas with sunshine hours above normal for the month were parts of Northland, Auckland, the West Coast, and Canterbury. At Dunedin less than 70 percent of the normal was recorded, and many areas throughout the country had 30-40 hours less sunshine than usual.

#### WEATHER SEQUENCE OCTOBER 1979

The cold front that had been moving northwards across the South Island at the end of September, brought moderate rain to most of the North Island at the beginning of the month. Early on the 2nd a wave depression formed on the front to the north-west of New Zealand, and moved slowly across the North Island on the 3rd and 4th. Heavy rain was reported in parts of Northland, Auckland, Bay of Plenty, Hawke's Bay, and Wairarapa. Many of these areas had reported falls of 30 to 50 mm in 24 hours. Throughout the South Island only isolated showers were recorded in this period. Temperatures were very cold along the east coast of the country at the beginning of the month.

Late on the 4th a ridge of high pressure extended onto New Zealand, from an anticyclone in the Tasman Sea moving eastwards. Most of the country had fine weather until late on the 7th. On the 7th a complex depression developed in the north Tasman Sea and began to move south-east towards the North Island. By the evening of the same day the depression and associated cold front had passed onto Northland bringing moderate to heavy rain to most areas in the North Island, and parts of the South Island as it continued to move south-east. On the morning of the 10th the depression was lying to the east of the North Island, and a ridge of high pressure extended onto the country from the Tasman Sea.

A trough of low pressure moved onto the South Island late on the 11th and this brought heavy rain to Fiordland, and moderate falls to most of the country as it moved northwards. At Wellington more than 40 mm was recorded in the 24-hour period up to 9 a.m. on the 13th. This trough was followed by another on the 13th which also brought heavy rain to the West Coast, and parts of the central North Island. A small depression developed within the trough of low pressure on the 14th, but moved rapidly eastwards across New Zealand and was lying to the south-east of the country by the 15th. Temperatures were above normal throughout most of the country during the second week of the month.

On the 16th an anticyclone covered the North Island, and a cold front associated with a depression moving to the south of the country moved onto the South Island. Heavy rain was reported