

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for October 1976—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.			Maxi-mum	Date	Mini-mum	Date				Amount		Date	
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs	
Black Birch Range, August 1976	1,396	3.1	-1.6	0.8	+0.2	10.9	22	-6.6	8	
Molesworth, September 1976	893	9.4	-0.3	4.6	-1.2	16.0	29	-5.5	3	41	9	-12	7	5	..	
Eyrewell Forest, September 1976	158	11.5	2.6	7.1	-1.4	16.9	18	-4.8	3	98	21	+40	30	5	..	
Christchurch, September 1976	7	12.5	4.6	8.6	-1.2	17.8	18	-1.7	2	49	9	+3	18	13	..	
Timaru Aerodrome, September 1976	26	11.3	3.2	7.3	-1.0	17.5	21	-2.9	3	38	14	-3	10	25	..	
Herbert Forest, September 1976	61	12.2	2.2	7.2	-0.8	19.0	21	-1.7	4	33	11	-18	5	7	..	
Taieri, Invermay, August 1976	24	10.6	3.0	6.8	+0.4	17.4	21	-2.0	8	106	15	+65	52	26	..	
Taieri, Invermay, September 1976	24	12.0	2.5	7.3	-1.2	17.6	12	-2.8	4	34	13	-9	11	14	..	
Taieri, Invermay, No. 2, August 1976	30	10.4	2.9	6.7	..	16.9	21	-2.6	8	114	14	..	64	26	..	
Taieri, Invermay, No. 2, August 1976	30	11.7	2.8	7.3	..	17.0	12	-2.7	2	36	15	..	11	14	..	
Clyde, August 1976	..	183	10.2	0.0	5.1	..	16.4	21	-5.6	4	42	4	..	16	26	..
Ophir, September 1976	..	305	12.5	-0.1	6.2	-1.3	17.2	29	-4.8	2	13	8	-15	4	29	..
Raoul Island, August 1976	..	38	19.8	14.6	17.2	+1.2	23.0	14	11.0	3	100	18	-37	25	10	145
Raoul Island, September 1976	..	38	19.3	13.2	16.3	+0.0	21.7	13	9.7	24	193	20	+76	98	5	193
Nandi Airport, Fiji, September 1976	..	15	28.7	20.1	24.4	-0.2	30.9	27	16.1	11	279	12	..	117	4	165

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.

NOTES ON THE WEATHER FOR OCTOBER 1976

WEATHER SEQUENCE

General—October was the third successive month with a higher frequency of winds from an easterly quarter than normal. This has been reflected in the persistence of cloudy wet conditions in the east, with unusually cold temperatures in Canterbury. Farmers in eastern districts of both Islands have found these cloudy, wet conditions rather unfavourable for stock, but elsewhere good growth is reported. The month was also less windy than usual.

Rainfall—Eastern districts from Gisborne to Otago averaged about 50 percent above normal rainfall. However, rainfall was also above normal in a number of other areas, notably Buller and Nelson, Manawatu, Bay of Plenty with Coromandel, and eastern Northland. On the other hand, it was drier than normal in most western districts of the North Island and also in Marlborough (except for the Kaikoura coast), Westland with the Alps and the Canterbury high country, and most of Southland. As in the previous month, it was particularly dry in a considerable area of Fiordland and the Southern Lakes district, with mainly less than half the normal value. The total rainfall for Milford Sound for August to October 1976 was only 483 mm, by far the lowest for these three months in 47 years of record; the previous lowest was 672 mm, in 1974. The level of hydro-electric storage in the South Island has been unusually low for some months.

Temperatures—Temperatures were below normal, mainly by up to 1°C, in the North Island and in western districts of the South Island. However, east of the ranges in the South Island departures exceeded 1°C, and in the Christchurch-Ashburton area they exceeded 2°C. In the latter area and in some other parts of Canterbury it appears likely that this spring (the months September, October, and November) will be the coldest for over 40 years. The coldest periods were 3-5 October and the 26th and 27th.

Sunshine—Sunshine was below normal in eastern districts of both Islands and also in northern districts of the South Island, mainly by 10 to 25 percent, that is, 30 to 60 hours. The greatest percentage deficiency was recorded in South Canterbury and Otago. For Dunedin, the total of 90 hours was the second lowest ever recorded in New Zealand in October. The total at Ashburton for August, September, and October of 361 hours was the lowest in over 40 years of record.

The first five days of October were characterised mainly by cold southerlies. At the beginning of the month a depression was centred near Raoul Island while an anticyclone covered south-eastern Australia, Tasmania and the western Tasman Sea. A trough of low pressure moved on to the South Island. Rain was reported mainly on the West Coast and in parts of Southland and Otago. As the anticyclone moved south-eastward on the following day, the winds changed to cold southerlies and scattered rain was reported, mainly in eastern districts. As the main centre of the anticyclone moved towards the Chatham Islands on the 3rd and 4th, conditions remained rather similar, with southerlies bringing showers to eastern districts from Christchurch to Gisborne, besides some other districts. The 4th was the coldest day of the month over the country as a whole. As the anticyclone continued to move eastward on the following day showers became lighter and were confined to some North Island areas east of the ranges.

From the 6th to the 8th a depression east of Tasmania moved towards the South Island; and at the same time the associated trough of low pressure became slow-moving over the North Island with the formation of a depression over the North Tasman Sea. Rain was general over these three days, affecting the North Island and parts of the South Island. During the next two days the southernmost depression crossed the South Island, with rain in northern and western districts of the North Island and on the West Coast. By this time temperatures had become milder. During the 11th and 12th the northernmost depression crossed the North Island, causing rain there and also in the northern half of the South Island. A southerly change brought colder temperatures once again to the South Island.

On the 13th another depression from the North Tasman Sea crossed Northland with considerable rain there, while scattered showers were reported in most eastern districts in the southerlies. On the following day this depression lay east of the North Island while an anticyclone south of Tasmania was moving eastward. Cold southerlies brought showers to eastern districts, especially from the Kaikoura coast to southern Hawke's Bay. From the 15th to the 19th a complex depression initially over the North Tasman Sea moved across New Zealand, while an anticyclone was centred south of Tasmania. This was a period of generally un-