

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for June 1977—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
	Metres	°C	°C	°C	°C	°C	Date	°C	Date	mm		mm	mm	Date	Hrs
Otira Substation, May 1977	383	10.2	1.3	5.8	..	14.0	12	-4.0	31	254	18	-183	45	22	..
Franz Josef, May 1977 ..	122	13.2	3.1	8.2	-1.2	16.4	4	-1.8	20	255	12	-156	61	23	..
Molesworth, May 1977 ..	893	8.6	-1.9	3.4	-1.7	16.0	14	-6.2	13	67	10	-2	22	3	..
Ski Basin, May 1977 ..	1,554	3.0	-2.7	0.2	-1.5	6.4	21	-10.2	19	..	..	..	..	..	..
Craigieburn Forest, May 1977	914	8.8	-0.9	4.0	-0.9	15.7	14	-6.7	19	73	..	-64	15	2	..
Winchmore, April 1977 ..	160	17.2	6.0	11.6	+0.8	27.9	9	-0.2	27	50	11	-16	10	24	..
Winchmore, May 1977 ..	160	11.8	2.1	7.0	-0.6	18.9	14	-2.2	19	53	9	-21	17	3	..
Rangiora, May 1977 ..	46	12.6	2.8	7.7	-0.9	20.2	23	-3.0	28	50	11	-16	13	3	..
Eyrewell Forest, May 1977	158	12.2	1.3	6.8	-1.1	18.1	15	-4.6	21	82	11	+1	30	2	..
Lincoln, No. 2, January 1977	12	..	..	..	..	..	..	..	..	63	15	..	27	18	..
Lincoln, No. 2, February 1977	12	..	..	..	..	..	..	..	..	49	6	..	33	21	..
Lincoln, No. 2, March 1977	12	..	..	..	..	..	..	..	..	5	4	..	3	23	..
Lincoln, No. 2, April 1977	12	..	..	..	..	..	..	..	..	41	9	..	22	20	..
Lincoln, No. 2, May 1977	12	..	..	..	..	..	..	..	..	80	13	..	13	2	..
Lake Pukaki, May 1977 ..	556	8.1	-0.2	4.0	-1.8	15.5	15	-5.0	20	28	9	..	7	23	..
Livingstone Substation, May 1977	305	10.4	1.5	6.0	-1.3	17.1	23	-4.5	31	29	8	..	15	2	..
Invermay, Taieri, May 1977	30	10.8	2.2	6.5	..	17.9	29	-3.5	20	152	17	..	32	2	..
West Arm, Manapouri, May 1977	232	7.3	2.0	4.7	-1.7	12.3	28	-1.6	20	290	19	..	53	23	..
Moa Creek, May 1977 ..	427	..	..	..	..	..	..	..	..	32	..	+4	9	17	..
Moa Flat, May 1977 ..	410	8.7	0.6	4.7	-1.4	14.0	29	-2.9	10	107	15	+49	23	2	..
Mahinerangi Dam, May 1977	396	8.4	1.3	4.9	-0.9	16.0	13	-2.0	27	190	15	+109	56	2	..
Milton, May 1977 ..	18	10.3	2.0	6.2	-1.0	16.6	28	-3.4	20	139	15	+73	34	2	..
Raoul Island, March 1977	38	23.9	19.6	21.8	-0.1	25.8	10	16.7	28	69	18	-63	22	10	167
Raoul Island, April 1977 ..	38	23.4	17.4	20.4	-0.3	25.4	17	12.7	30	52	18	-72	12	14	195
Totokoitu, Rarotonga, May 1977	9	25.9	21.1	23.5	..	29.8	8	18.2	30	387	22	..	114	8	..

The "normal" refers to the present site of the instruments. Standard period for normals is 1941-70. 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 JUNE 1977

General—During June pressures were near normal over New Zealand but higher to the north and south of the country. There was a greater frequency of easterly winds during the month, and two spells of cold southerlies from the 3rd to the 9th and 20th to the 22nd. Conditions were cloudy and wet over the major part of the country with the exception of some areas in Central Otago and Southland. Most farmers throughout the country reported good grass growth and stock in good condition. The ground in many areas was still very wet towards the end of the month. On the 28th, winds gusting to probably more than 100 knots caused major damage to ski huts on Mount Ruapehu. The roof was blown off one hut, and most huts in the valley below the Top of the Bruce had some damage. One car was lifted and tipped onto its roof by the wind.

Rainfall—Rainfall was above normal over most of the country, the only areas below normal being parts of Westland, most of Otago, and Southland. Many areas in both islands were above normal by more than 50 percent, and in Poverty Bay, Hawke's Bay, and parts of central Canterbury more than 150 percent above. Some areas of Central Otago and Southland recorded less than 50 percent of their normal June total. A severe thunderstorm early on the 4th brought heavy rain to the Wellington area. Almost 47 mm was recorded at Kelburn in less than 4½ hours. On the 20th and 21st, heavy rain in the Gisborne area caused widespread

flooding and slips and many homes were evacuated. It was reported that rivers in the area rose to about 2 metres above their normal level. A fall of 156 mm was recorded at Gisborne in 24 hours and this is the highest for June since 1894 and the highest in any month since 1910. The major falls occurred between midnight on the 20th and 6 p.m. on the 21st. The total fall from 9 a.m. on the 20th to 9 a.m. on the 22nd was 218 mm. During this period heavy falls were also recorded in Auckland, Waikato, and Bay of Plenty, and many places in these regions were affected by flooding and land slips. On the 26th, 27th, and 28th, gales and heavy rain in both the North and South Islands caused flooding and damage in many areas. During this period heavy falls of snow were reported in the South Canterbury back country, and rivers were reported to be running high and causing widespread flooding. On the 29th, large hailstones were reported at Pahiatua (Manawatu), and a deep layer of hail covered most of the district causing damage to crops and property.

Temperatures—Temperatures were above normal over most of the North Island, Nelson, Marlborough, North Canterbury, and the West Coast. They were slightly below in Northland, Poverty Bay, Hawke's Bay, Canterbury, Otago, and Southland. Maximum temperatures were near normal in the North Island but below by ½°C in the South Island. Minimum temperatures were above average over most of the country, in some areas by about 1°C. There were two cold spells during the month, the 5th to the 9th and the 18th to the 21st, when temperatures were below normal over most of the country.