

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for June 1960—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Fahrenheit)								Rainfall in Inches					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	
	Ft.	°F.	°F.	°F.		°F.	°F.			In.		In.		Hrs.	
Waihopai .. .. .	860	51.9	35.4	43.6	+0.2	61.2	11	25.6	16	3.44	9	+0.69	1.10	5	
Westport .. .. .	7	55.5	42.1	48.8	+2.4	60.0	22	35.2	23	10.72	14	+3.67*	3.36	4	
Molesworth .. ..	2,930	43.9	27.9	35.9	+0.6*	58.0	16	16.0	24	3.49	8	+1.27*	1.67	21	
Greymouth .. .. .	13	54.6	43.3	49.0	+2.2*	60.2	22	36.0	29	9.36	13	+1.00*	2.08	17	
Hanmer Forest .. .	1,270	48.4	32.0	40.2	+0.5	63.0	4	21.0	25	8.36	13	+4.87	2.78	20	
Hokitika South ..	15	54.7	38.0	46.4	+2.1*	59.5	26	27.9	25	9.95	14	+1.12*	1.88	3	
Balmoral .. .. .	650	50.3	31.9	41.1	-0.2*	65.3	4	21.5	16, 17	6.27	13	+3.97	2.58	20	
Lake Coleridge ..	1,195	48.5	33.8	41.2	+0.8	58.0	11	23.0	26	2.97	12	+0.51	0.68	21	
Eyrewell .. .. .	520	50.3	34.5	42.4	..	62.1	4	25.0	16	7.51	14	+4.28	2.40	20	
Franz Josef .. ..	392	54.2	38.3	46.2	..	60.8	22	31.9	25	15.49	12	..	4.26	3	
Ashley Forest .. .	350	51.2	39.4	45.3	+2.6*	62.8	4	31.0	16	6.92	12	+4.12*	2.38	21, 22	
Darfield .. .. .	640	50.9	36.4	43.6	+1.8	61.5	11	26.0	25	8.01	16	+5.52	2.42	21	
Christchurch Airport	94	51.4	37.0	44.2	..	63.9	10	27.6	28	6.62	12	..	1.60	20	
Christchurch .. .	22	52.2	36.9	44.6	+1.4	65.2	10, 11	27.8	28	4.92	14	+2.33	1.17	20	
Hororata .. .. .	631	50.2	34.8	42.5	..	64.0	11	22.8	25	5.99	13	..	1.63	21	
Akaroa .. .. .	150	52.0	42.2	47.1	+1.5	62.3	11	33.8	28	7.00	17	+2.37*	1.46	21	
Lincoln .. .. .	36	51.2	37.2	44.2	+2.1	62.1	10	25.6	28	5.72	15	+3.27	1.86	21	
Highbank .. .. .	1,102	49.1	39.1	44.1	..	61.0	16	28.8	26	5.89	14	..	1.32	21	
The Hermitage .. .	2,510	44.1	30.6	37.4	+1.1	58.0	1, 17	15.0	25	10.42	12	-1.66	2.17	3	
Winchmore .. .. .	526	50.0	35.9	43.0	+2.6*	61.1	11	23.9	25	5.38	13	+3.18*	1.94	21	
Haast .. .. .	15	53.8	41.8	47.8	+2.2*	57.7	22	33.2	26, 30	10.17	15	+2.74*	3.84	3	
Ashburton .. .. .	323	52.1	36.2	44.2	+2.4	65.0	11	24.2	25	5.87	12	+3.27	2.40	21	
Fairlie .. .. .	1,004	48.4	30.9	39.6	+1.2	62.5	11	20.0	26, 29	2.51	13	+0.71	0.71	21	
Timaru .. .. .	56	50.8	36.6	43.7	+1.3	59.1	11	27.3	28	2.22	14	+0.35	0.48	7, 22	
Adair .. .. .	200	49.7	38.2	44.0	+0.6*	62.3	11	29.1	25	1.60	12	-0.44*	0.42	1, 7	
Tara Hills, Omarama	1,600	45.0	28.1	36.6	+1.3*	57.3	17	16.1	26, 29	0.71	10	-0.74*	0.27	3	
Benmore, Otematata	920	46.2	32.3	39.2	..	59.0	11	24.1	26	0.47	11	..	0.14	7	
Lake Hawea .. ..	1,147	45.1	34.7	39.9	..	54.6	11	27.8	27	3.14	9	..	1.64	3	
Milford Sound .. .	20	49.9	38.8	44.4	+2.5	58.6	16	28.2	28, 29	10.63	16	-3.32	3.45	3	
Waimate .. .. .	200	52.7	36.0	44.4	+1.1	65.6	11	24.6	26	2.55	12	+0.53	0.55	7	
Naseby Forest .. .	2,300	43.0	28.5	35.8	..	53.8	11	12.0	27	2.38	11	..	0.63	19	
Queenstown .. ..	1,100	45.6	33.9	39.8	+0.3	58.6	17	23.6	26	1.95	11	-0.39	0.45	3	
Cromwell .. .. .	720	45.9	32.9	39.4	+1.8*	59.0	11	20.6	30	1.34	15	+0.37*	0.36	19	
Ophir .. .. .	1,000	43.7	29.7	36.7	+1.2	57.8	11	15.6	27	1.47	9	+0.51	0.56	19	
Moa Creek .. .. .	1,400	42.4	28.0	35.2	..	55.0	11	16.0	28	1.08	8	..	0.61	19	
Earnsclough .. .	500	45.6	29.9	37.8	+0.8	57.2	11	18.0	30	0.79	8	+0.00	0.35	18	
Waipiata .. .. .	1,550	43.9	29.6	36.8	-0.3	54.2	11	13.5	26	0.94	12	-0.17	0.17	4, 21	
Alexandra .. .. .	520	45.0	32.9	39.0	+1.3	57.5	11	22.1	30	0.79	9	+0.00	0.27	18	
Garston .. .. .	1,009	46.1	30.1	38.1	..	58.0	11	18.3	26	4.23	16	..	1.88	19	
Roxburgh Hydro ..	350	47.1	..	..	..	58.5	17	..	..	1.60	10	+0.39*	0.50	4	
West Arm, Lake Manapouri	593	44.3	36.5	40.4	..	52.9	17	24.3	28	11.30	22	..	2.27	3	
Mid Dome .. .. .	1,252	46.5	32.6	39.6	..	58.8	11	18.9	25	6.99	14	..	3.14	19	
Cherry Farm, Waikouaiti	21	50.4	36.3	43.4	..	60.0	11	27.0	25	3.98	14	..	0.86	21	
Moa Flat, West Otago	1,345	43.9	32.7	38.3	..	59.0	11	20.6	25	3.14	17	+0.88*	0.87	19	
Taieri .. .. .	80	49.9	35.7	42.8	+1.0*	60.6	11	23.2	28	6.65	15	+4.33*	1.85	4	
Musselburgh, Dunedin	5	50.7	39.1	44.9	+1.3*	60.0	11	28.0	26	4.90	18	+2.34	1.61	4	
Tapanui .. .. .	550	46.6	34.9	40.8	..	57.5	11	20.0	25	7.84	20	..	2.54	19	
East Gore .. .. .	245	47.2	35.7	41.4	+1.1	58.0	7	21.0	26	2.80	18	+0.05	0.50	19	
Gore .. .. .	240	47.9	34.2	41.0	+0.4*	60.0	11	20.2	27	2.85	16	+0.10*	0.52	19	
Otautau .. .. .	180	47.7	36.5	42.1	+0.5*	59.0	16	22.0	26	6.18	17	+2.89*	1.88	19	
Pebble Hills .. .	150	49.0	36.0	42.5	..	64.0	2	24.0	25, 28	5.12	14	+1.68*	1.63	21	
Invercargill Airfield	0	48.6	36.1	42.4	+0.8*	58.3	16	25.3	27	6.63	19	+2.98*	1.57	19	

LATE RETURNS

Waeronga-o-Kuri, May 1960	1,130	58.8	45.7	52.2	+1.9*	68.8	22	37.5	13	3.39	16	-3.23	0.75	2
East Gore, May 1960	245	53.1	37.2	45.2	+0.4	63.0	13	27.0	29	2.65	13	+0.06	0.61	21

NOTE—At stations where departures from normal have an asterisk, the temperature record has been maintained for less than 10 years, the rainfall record for less than 20 years. Rainfall normals have been revised and now refer to the standard period 1921–50. Where observations are not available for the whole period, or where the site of the rain gauge has been changed, the normals are partly interpolated.

NOTES ON THE WEATHER FOR JUNE 1960

**General:** June was mild and rather cloudy, with an unusually high frequency of easterly winds. In most districts stock were reported to be in good condition, with reasonable supplies of winter feed. However, some farmers, mainly in Northland, Gisborne and Hawke's Bay, and Southland, were finding the ground too wet after considerable rain.

**Rainfall:** Rainfall was appreciably above average in eastern districts. North and central Canterbury and coastal Otago received double the normal value. On the Kaikoura and north Canterbury coast it was one of the wettest Junes on record, with totals of 11–12 inches, of which more than three-quarters fell from the 19th to the 22nd.

It was drier than average in Manawatu and on the Wairarapa Plain, in the Buller district, and in parts of inland north Otago. Some stations in these areas received only half the normal rainfall.

Heavy rain caused flooding in Northland and Gisborne on the 8th; in parts of Canterbury, Otago, and Southland from the 19th to the 22nd; and in Northland and the Hauraki Plains on the 28th.

A violent thunderstorm brought some brief but exceptionally heavy rain to the Christchurch area on the morning of the 13th. Many thunderstorms were also reported in the Auckland Province on the 18th.

**Temperatures:** Temperatures were warmer than average, mainly by 1–2 degrees.

Snow fell on the high country of the South Island on the 19th. Falls also occurred on the mountains of both islands about the 6th, 10th, 15th, and 29th.

Some unusually frosty weather was reported in parts of central Otago during the last six days of the month. At Alexandra the temperature rose above freezing point on only two days of the six, and then only by a degree.

**Sunshine:** Sunshine was below average over the greater part of the country. The deficiency exceeded 20 hours in Central Otago, and also in parts of Canterbury, Nelson, and Taranaki. For Alexandra, with a total of 54 hours, it was the cloudiest June in 32 years of record.

Northern Northland was favoured with 20–30 hours more sunshine than usual.

**Weather Sequence:** On the 1st most districts received some rain during the passage of a trough of low pressure and a small depression. During the next two days an anticyclone crossed the North Island and generally the weather improved. However, pressures were low to the south, and western and far southern districts of the South Island received considerable rain. During the 4th and 5th a depression from the south Tasman Sea crossed the South Island, and the rain spread to other districts except Gisborne, Hawke's Bay, and most of Canterbury. The associated cold front also crossed the country, but the development of a depression to the northwest of Northland on the 6th retarded the motion of this front and caused it to move southward as a warm front for four days. The depression moved