

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for July 1959—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.			Maxi-mum	Date	Mini-mum	Date				Amount		Date
	Ft.	°F.	°F.	°F.		°F.		°F.		In.		In.		Hrs.	
Hanmer	1,270	49.4	28.6	39.0	+0.5	58.5	20	20.0	11	5.20	10	+1.00	1.48	25	129
Hokitika South	15	52.2	35.7	44.0	+0.4*	57.9	26	27.3	24	5.31	15	-3.19*	1.21	8	116
Balmoral	650	53.0	29.3	41.2	+1.8*	62.9	16	18.0	7	3.68	9	+1.56	0.92	25	..
Lake Coleridge	1,195	49.6	28.8	39.2	+0.4	58.0	3	23.0	10	2.39	9	-0.61	0.73	26	..
Eyrewell	520	50.6	30.3	40.4	..	58.6	16	23.0	7	3.58	7	+0.46*	1.88	26	..
Franz Josef	450	52.6	35.2	43.9	..	60.6	27	28.9	25	9.07	14	..	2.23	19	..
Ashley Forest	350	51.5	35.3	43.4	+1.6*	61.8	5	29.2	7	4.66	9	+1.71*	1.58	26	..
Darfield	640	51.8	31.7	41.8	+1.0	60.4	20	25.9	10	2.88	7	+0.71	1.47	26	..
Christchurch Airport	94	50.9	31.8	41.4	..	58.8	17, 19	26.0	7	2.56	17	..	1.01	26	159
Christchurch	22	52.1	30.6	42.4	+0.1	62.1	19	27.0	2, 7	2.12	7	-0.48	0.83	26	..
Wigram	74	52.2	32.2	42.2	-0.1*	61.8	19	25.4	2	2.06	6	-0.54*	0.79	26	..
Akaroa	150	51.9	37.4	44.6	+0.0	66.0	19	32.0	2	2.87	9	+1.91*	1.05	26	142
Lincoln	36	50.9	31.2	41.0	-0.1	59.4	19	23.0	2	1.26	11	-1.31	0.35	5, 8	163
Highbank	1,102	51.1	33.7	42.4	..	59.0	3	27.8	24	4.18	9	..	1.94	26	167
The Hermitage	2,510	46.4	30.0	38.2	+3.7	55.0	18	22.0	7	2.47	7	-7.00	0.87	31	85
Winchmore	626	50.9	31.6	41.2	+1.5*	62.0	20	25.8	7	2.24	9	-0.15*	1.07	26	..
Haast	15	51.4	37.6	44.5	-0.3*	58.2	27	32.7	6	8.53	15	+0.66*	1.63	4	148
Ashburton	323	53.2	31.6	42.4	+1.3	64.2	19	26.0	7	1.75	9	-0.87	0.54	26	152
Fairlie	1,004	50.5	28.0	39.2	+2.2	62.0	20	18.0	7	2.89	10	+0.91	1.16	26	..
Timaru	56	50.2	33.5	41.8	+0.4	58.2	3	25.3	7	1.26	9	-0.47	0.37	27	130
Adair	200	51.1	36.1	43.6	+1.7*	60.8	15	31.8	10	1.96	9	+0.19*	0.58	22	..
Tara Hills, Omarama	1,600	47.2	25.8	36.5	+1.2*	55.9	13	16.9	7	0.27	6	-0.96*	0.06	5, 27	134
Benmore, Otematata	920	48.5	29.7	39.1	..	58.2	19	22.5	22	0.50	7	..	0.29	26	..
Milford Sound	20	48.5	34.8	41.6	+0.4	55.1	26	31.0	10, 24	19.28	19	+5.38	3.09	3	..
Waimate	200	53.1	32.8	43.0	+1.0	62.0	19	25.0	7	1.54	11	-0.37	0.55	27	122
Naseby Forest	2,300	45.3	27.0	36.7	..	52.9	16	20.3	7	0.49	8	..	0.11	8, 26	..
Queenstown	1,100	48.4	32.5	40.4	+2.1	56.0	17	26.0	7	1.45	11	-0.73	0.36	19	90
Cromwell	720	48.8	27.5	38.2	+1.2*	58.2	16	21.5	2	0.19	5	-0.57*	0.09	19	..
Ophir	1,000	49.0	23.2	36.1	+1.3	58.0	16	11.0	23	0.10	3	-0.68	0.07	3	..
Moa Creek	1,400	46.8	21.5	34.2	..	55.0	16	12.4	7	0.05	2	..	0.04	19	..
Earnsclough	500	49.0	24.8	36.9	+1.2*	60.3	16	19.8	2	0.12	4	-0.55*	0.05	27	..
Waipiata	1,550	46.3	29.0	37.6	+1.3	53.5	19	22.2	9	0.19	6	-0.74	0.07	26	119
Alexandra	520	48.2	26.5	37.4	+1.1	60.5	16	21.0	23	0.13	4	-0.53	0.06	19	122
Garston	1,009	48.7	28.3	38.5	..	56.0	16	22.8	22	1.49	10	..	0.37	7	..
Roxburgh Hydro	350	51.5	31.9	41.7	..	68.0	11	21.0	4	0.41	5	-0.63*	0.13	3	..
Moa Flat, West Otago	1,345	46.4	31.5	39.0	..	55.1	16, 19	27.8	25	0.76	12	-1.24*	0.23	3	..
Taieri	80	51.3	34.0	42.6	+1.6*	61.6	16	24.0	1	0.93	15	-1.01*	0.21	26	101
Musselburgh, Dunedin	5	51.2	37.6	44.4	+1.6*	62.2	3	30.2	1	1.04	16	-1.22	0.24	3	110
Tapanui	550	48.8	34.7	41.8	..	57.8	19	29.2	9	1.18	13	..	0.22	4	..
East Gore	245	50.4	34.5	42.4	+3.0	58.0	19	29.0	9	1.42	14	-0.59	0.30	3	..
Gore	240	50.3	34.1	42.2	+2.5*	59.0	19	29.6	8, 9	1.56	16	-0.45*	0.28	3	119
Otautau	180	49.8	33.9	41.8	+2.6*	57.0	16	29.0	29	2.64	14	-0.58*	0.55	10	121
Pebble Hills	150	50.3	33.1	41.7	..	57.5	3	29.0	1, 30	2.42	18	-0.11*	0.42	3	..
Invercargill	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Invercargill Airfield	0	49.9	35.9	42.9	+2.4*	57.4	16	26.0	1	2.48	22	-0.33*	0.52	3	105

LATE RETURNS

Waerangi-o-Kuri, Jun 1959	1,130	52.8	37.8	45.3	-0.9*	60.2	13	27.8	24	1.16	12	-4.15*	0.27	26	..
Flock House, Bulls, Jun 1959	30	53.8	38.2	46.0	-0.4*	59.0	17	27.0	5	0.62	5	-2.89	0.31	21	..
Invercargill, Jun 1959	8	50.6	37.1	43.8	+1.0	62.2	20	29.6	30	2.58	15	-1.14*	0.46	14	..

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 JULY 1959

General: Like the previous month, July was comparatively mild and sunny over most of the South Island. In the North Island it was a fairly typical July.

Most of the country enjoyed a spell of settled, sunny weather from the 10th to the 21st. By contrast a spell of south-easterly weather from the 23rd to the 26th was particularly cold and wet, with snow to low levels in the South Island and well down on the hills of the North Island. During this latter period some lambing losses were reported in Hawke's Bay and Wairarapa. In general, however, conditions have been very favourable for stock and pastures have shown a little growth even in the South Island.

Rainfall: Over the greater part of the country rainfall was close to or somewhat below normal. On the West Coast and in Otago it was mainly half the average value, and in western and southern districts of the North Island about two-thirds.

The only considerable area with rainfall well above normal consisted of North Canterbury and Marlborough (excluding the Sounds). In parts of this area rainfall was more than double the average value.

Temperatures: Temperatures were mainly close to average in the North Island, and 1–2 degrees above average in the South Island.

Sunshine: Most eastern districts, areas about Cook Strait, and South Westland were favoured with 10–40 hours more sunshine than usual. In the Christchurch–Ashburton area it was one of the sunniest Julys on record, with totals ranging from 150 to 170 hours.

In western districts north of Greymouth and from New Plymouth to Auckland sunshine was below normal by about 20 hours.

Weather Sequence: On the first two days of the month a depression crossed the North Island, with rain. On the 3rd and 4th a weak trough brought rain to southern and western districts of the South Island. On the next day the trough intensified as it moved over the North Island, and rain became general. With rising pressures on the 6th the weather cleared in most districts, but a depression

developing east of the North Island caused conditions to remain unsettled in Gisborne and parts of Hawke's Bay. From the 7th to the 9th a depression from the Tasman Sea crossed the central districts with general rain.

From the 10th to the 21st pressures remained high as an anticyclone originally centred over New South Wales moved slowly eastward, to become centred over New Zealand. It was a period of settled and predominantly mild weather over most of the country. However, except on the 18th and the 21st, conditions were unsettled in western and far southern districts of the South Island owing to the passage of depressions to the south. Some showers were also reported in Northland, mainly during the early part of the period; and weak troughs brought light rain to Taranaki and south-western districts of the Auckland Province on the 14th and 16th.

Conditions from the 22nd to the 29th were in marked contrast to those prevailing in the previous 12 days. Since winds were mainly from an easterly quarter, the weather remained fair or fine on the West Coast and on the Southland coast. Elsewhere there was frequent rain, heavy at times, with some very cold temperatures. An anticyclone was centred to the south, later south-east, of the South Island, while a very deep depression initially east of Tasmania drifted slowly towards the North Island. Coldest temperatures occurred in the south-easterlies from the 23rd to the 26th, with snow temporarily to low levels in parts of the South Island and well down on the hills in the North Island. The 26th was also a day of heavy rain for eastern and some northern districts of the North Island as winds became more north-easterly. By the 27th the depression was losing intensity, and another centre developed. As the two shallow centres moved over the country during the next two days temperatures became much milder and rain was confined to the North Island and some northern districts of the South Island.

On the last two days of the month pressures were high to the north and low to the south. Rain was reported on the western and southern coasts of the South Island.

M. A. F. BARNETT, Director.