

CLIMATOLOGICAL TABLE—continued

Summary of the Records of Temperature, Rainfall, and Sunshine for July 1953—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.	°F.	°F.	In.		In.		Hrs		
Wigram ..	74	50.8	33.0	41.9	(-0.5)	64.7	9	24.0	14	2.03	10	-0.39	0.65	5	138.0
Rudstone, Methven ..	1,217	50.0	34.7	42.4	+1.2	58.9	23	25.2	17	1.49	9	-1.50	0.41	19	136.4
Akaroa ..	150	50.3	38.0	44.2	-0.4	61.3	9	32.0	17	3.06	12	(-1.72)	0.71	5	104.1
Lincoln ..	36	50.4	32.1	41.2	+0.1	60.9	9	23.0	14	2.29	12	-0.28	0.63	5	130.5
The Hermitage ..	2,510	42.3	27.2	34.8	+0.3	50.1	8	20.0	6	12.00	9	+2.53	2.00	23	84.8
Winchmore ..	525	49.4	31.1	40.3	(+0.6)	58.7	9	21.1	17	1.40	5	(-0.99)	0.56	19	..
Haast ..	15	52.5	36.4	44.4	(-0.4)	59.3	3	29.2	16	8.43	14	(+0.56)	1.72	22	131.2
Ashburton ..	323	50.3	31.3	40.8	-0.3	60.8	9	24.0	31	1.52	7	-1.10	0.48	10	143.4
Fairlie ..	1,004	49.8	24.6	37.2	+0.2	60.0	23	15.0	16, 17	1.65	10	-0.33	0.50	12	..
Timaru ..	56	49.5	33.1	41.3	-0.1	63.9	23	27.2	17	1.18	7	-0.55	0.47	19	154.9
Adair ..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tara Hills ..	1,600	43.5	26.1	34.8	(-0.7)	59.0	23	16.3	17	0.90	8	(-0.33)	0.20	19, 20	132.5
Milford Sound ..	20	49.9	33.0	41.4	+0.2	56.8	23	27.2	14	14.69	12	+0.79	3.71	22	..
Waimate ..	200	53.8	33.0	43.4	+1.4	64.5	23	27.0	1	1.27	9	-0.54	0.35	19	143.2
Frankton Airfield ..	1,144	45.0	29.0	37.0	..	54.5	23	20.0	16	1.95	11	..	0.31	23	..
Queenstown ..	1,100	45.8	30.4	38.1	-0.2	54.2	8	23.2	16	2.37	10	+0.19	0.45	23	95.7
Cromwell ..	720	45.1	28.4	36.8	(-0.2)	61.0	23	19.4	14	0.49	8	(-0.27)	0.13	10	..
Ophir ..	1,000	44.6	24.0	34.3	-0.5	59.8	23	15.0	14	0.25	4	-0.53	0.09	9	..
Earnsclough ..	500	46.0	26.0	36.0	(+0.3)	63.3	23	13.4	13	0.38	4	(-0.29)	0.16	10	..
Waipiata ..	1,550	41.1	27.6	34.4	(-1.9)	60.0	23	16.8	17	0.06	1	-0.87	0.06	9	121.4
Alexandra ..	520	44.8	28.0	36.4	+0.0	62.8	23	20.6	15	0.32	6	-0.34	0.14	10	115.4
Roxburgh Hydro ..	350	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mid Dome ..	1,252	46.6	28.7	37.6	..	60.5	23	12.0	16	2.48	13	..	0.81	26	..
Moa Flat, West Otago ..	1,345	44.0	30.4	37.2	..	57.6	23	24.6	15	0.85	7	(-1.15)	0.40	10	..
Manorburn Dam ..	2,448	..	..	..	..	..	..	Incomplete	..	..	..	..	..	..	..
Taieri ..	80	50.8	31.7	41.2	(+0.2)	59.8	23	23.9	17	0.79	13	(-1.15)	0.22	26	109.6
Musselburgh, Dunedin ..	5	50.1	36.9	43.5	(+0.7)	60.1	9	31.7	19	1.20	11	-1.06	0.26	11	115.1
East Gore ..	245	47.5	32.3	39.9	+0.5	59.0	23	25.0	17	1.16	11	-0.85	0.42	10	..
Gore ..	240	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Otautau ..	180	48.3	31.6	40.0	(+0.8)	57.8	23	22.5	17	2.84	11	(-0.38)	1.00	10	..
Pebble Hills ..	150	48.3	32.8	40.6	..	60.5	23	26.0	17, 18	2.16	12	-0.37	0.79	10	..
Invercargill South ..	8	49.9	34.1	42.0	+0.3	57.8	23	28.6	17	2.35	13	(-0.62)	0.69	9	..
Invercargill Airfield ..	0	49.0	31.9	40.4	-0.1	57.6	23	23.8	17	2.25	15	-0.56	0.61	9	95.6

LATE RETURNS

Lake Waikaremoana, June 1953 ..	2,100	49.8	40.8	45.3	+1.3	57.0	10	32.2	27, 28	14.35	22	+7.21	4.94	9	..
Adair, June 1953 ..	200	48.3	35.9	42.1	(-1.3)	55.3	5	28.8	20	0.17	8	(-1.87)	0.04	16, 17	..
Roxburgh Hydro, June 1953 ..	350	45.6	31.8	38.7	..	58.7	2	21.0	11	0.89	8	(-0.32)	0.61	26	..

NOTE.—At stations where departures from normal are in parentheses, the temperature record has been maintained for less than ten years, the rainfall record for less than twenty 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 1953

General.—In most districts July was a comparatively dry and sunny month and stock were reported to be wintering reasonably well. In the Waikato and Hauraki Plains, however, there was considerable flood damage; in these districts and in parts of Taranaki and Northland the waterlogged ground was affecting sheep and cows adversely.

On the morning of the 22nd a series of small tornadoes occurred in the Waikato, Hauraki, Rotorua, and Bay of Plenty districts, causing local damage to trees and farm buildings.

Rainfall.—Except over a small part of Southland, rainfall was considerably below normal in all districts east of the main ranges; in fact, over the greater part of this area the deficit exceeded 50 per cent. The only part of the country which was appreciably wetter than usual was the Waikato-Taupo-Bay of Plenty area; the greatest surplus was recorded in the counties of Rotorua and Whakatane, where rainfall was more than double the normal value.

Exceptionally high rainfalls were recorded on the 4th from Russell to Taupo and the Bay of Plenty. In the Rotorua-Taupo area heavy rain was also experienced on the 3rd and the 5th, and at many stations the rainfall for the three days exceeded five inches. A major flood occurred in the Waikato River and over the Hauraki Plains. Violent thunderstorms occurred at Feilding on the 9th, in Westland on the 23rd, and at Thames on the 24th.

Temperatures.—Temperatures were close to normal over the whole country. Snow fell to low levels in eastern districts of the South Island on the 10th and 11th; there were also exceptionally heavy falls on the Southern Alps on the 18th and 20th. The 14th to the 17th was an exceptionally frosty period for the greater part of the country.

Sunshine.—Sunshine was above normal in eastern and northern districts of the South Island, in Taranaki, and about the Bay of Islands. The surplus exceeded twenty hours from Timaru to Ashburton and in parts of Marlborough province. Elsewhere sunshine totals were close to normal.

Weather sequence.—On the 1st transport services over Auckland and Waikato were disrupted by thick fog, but elsewhere the weather was fair. A depression soon became stationary over the North Tasman Sea, and a general

deterioration occurred over New Zealand. With the formation of a very small secondary disturbance over Northland on the 4th rain became very heavy from Russell to Taupo and the Bay of Plenty. Many parts of this area were affected by flood-waters and there was a major flood in the Waikato River. Southern and western districts of the South Island escaped rather lightly; in some parts of this area there was no rain at all. The weather cleared temporarily on the 7th under the influence of a ridge of high pressure extending on to the country from the north.

On the 8th there was a deterioration in western districts with the approach of a cold front from the South Tasman Sea. A wide band of rain accompanied the front as it moved over the country during the next three days. In the South Island the weather later became showery; snow was reported to low levels in Southland on the 10th, and in Otago and Canterbury on the 11th.

During the next five days an anticyclone moved slowly eastwards across New Zealand, and the weather was fair or fine, except for some scattered light rain at times on the east coast, mainly between Russell and Coronandel. Many districts reported several sharp frosts. On the 17th and 18th a trough of low pressure was accompanied by a wide band of rain and also caused heavy snow in the high country of the South Island.

The weather cleared on the 20th in most eastern districts. Elsewhere it remained unsettled for several more days during the passage of two depressions across the country and several others further to the south. From Waikato and Bay of Plenty came reports of exceptionally strong north-westerly winds on the 21st and 22nd, damaging buildings and uprooting trees.

By the 24th two depressions lay to the east, and southerly winds prevailed generally, rising to gale force about Canterbury, Wellington, and Wanganui. There was a slow improvement in western districts and a corresponding deterioration in eastern districts. With the advance of an anticyclone the weather began to clear from the south on the 27th. Some occasional rain still persisted, however, on the last days of the month in Gisborne, northern Hawke's Bay, and Westland.

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