CLIMATOLOGICAL TABLE—*Summary of the Records of Temperature, Rainfall, and Sunshine for July 1957*—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.
Eyrewell	520	48·8	31·6	40·2	..	63·0	1	21·5	14	4·70	11	+1·58*	0·74	4	..
Ashley Forest	460	49·1	35·9	42·5	+0·7*	63·8	1	27·2	14	3·09	13	+0·14*	0·53	17	..
Darfield	640	49·6	32·3	41·0	+0·2	63·9	1	23·8	31	4·10	11	+1·93	0·71	19	..
Harewood	94	50·2	33·3	41·8	..	65·2	1	21·9	31	3·39	14	..	0·85	17	129
Christchurch	22	51·2	34·8	43·0	+0·7	68·2	1	23·8	31	3·86	17	+1·26	0·92	17	..
Wigram	74	50·1	33·9	42·0	−0·4*	67·0	1	22·0	31	3·55	16	+1·13*	0·96	17	..
Akaroa	150	49·7	39·0	44·4	−0·2	65·2	1	32·5	26, 28	5·66	20	+0·88*	1·00	17	72
Lincoln	36	50·2	32·7	41·4	+0·3	68·7	1	20·1	31	3·75	18	+1·18	0·86	17	136
Highbank	1,102	48·2	34·9	41·6	..	61·4	16	26·9	30	3·79	10	..	0·90	4	155
The Hermitage	2,510	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winchmore	525	48·2	31·4	39·8	+0·1*	62·7	1	20·8	31	3·69	10	+1·30*	0·94	4	..
Haast	15	53·2	36·3	44·8	+0·0*	66·0	20	25·3	28	4·66	10	−3·21*	1·57	15	178
Ashburton	323	50·5	32·8	41·6	+0·5	67·8	1	22·5	14	3·41	10	+0·79	0·80	4	139
Fairlie	1,004	47·8	26·6	37·2	+0·2	64·0	1	15·0	31	1·27	7	−0·71	0·77	18	..
Timaru	56	48·5	33·6	41·0	−0·4	65·3	1	24·9	14	1·21	10	−0·52	0·50	17	151
Adair	200	49·0	34·8	41·9	+0·0*	64·6	1	28·5	30	0·89	7	−0·88*	0·50	17	..
Tara Hills, Omarama	1,600	43·7	26·3	35·0	−0·3*	56·1	15	16·9	30	0·51	9	−0·72*	0·22	1	159
Milford Sound	20	48·8	33·8	41·3	+0·1	56·5	15	28·1	30	6·52	8	−7·38	2·58	15	..
Waimate	200	52·3	33·5	42·9	+0·9	68·6	1	25·2	14	1·39	14	−0·52	0·36	18	132
Naseby	2,300	41·5	25·1	33·3	..	54·8	1	11·1	31	1·00	6	..	0·43	24	..
Queenstown	1,100	45·0	31·3	38·2	−0·1	55·6	1	23·2	31	1·90	9	−0·28	0·74	1	94
Cromwell	720	45·1	29·0	37·0	+0·0	59·8	1	17·4	31	0·66	10	−0·10*	0·18	24	..
Ophir	1,000	43·9	25·1	34·5	−0·3	59·0	1	14·0	31	0·75	9	−0·03	0·16	15	..
Earnscleugh	500	45·6	27·2	36·4	+0·7*	61·2	1	15·3	31	0·38	7	−0·29*	0·13	15	..
Waipiata	1,550	41·1	27·1	34·1	−2·2	55·0	1	17·0	30, 31	0·40	7	−0·53	0·14	5, 17	123
Alexandra	520	44·7	28·6	36·6	+0·3	61·2	1	18·5	31	0·45	11	−0·21	0·11	15	105
Manorburn Dam†	2,448	37·7	24·3	31·0	+1·0	51·5	1	7·0	31	0·64	10	−0·30	0·17	17	..
Garston	1,009	44·4	26·2	35·3	..	57·9	1	6·9	31	2·59	14	..	0·46	24	..
Roxburgh Hydro	350	44·9	32·2	38·6	..	61·0	1	20·0	30	1·33	12	+0·29*	0·35	15	..
Mid Dome	1,252	44·2	27·4	35·8	..	57·0	15	12·2	29	2·87	15	..	0·48	15	..
Moa Flat, West Otago	1,345	41·4	30·2	35·8	..	54·4	1	19·8	30, 31	2·76	14	+0·76*	0·62	26	..
Taieri	80	47·5	32·4	40·0	−1·0*	61·9	1	22·5	31	2·59	16	+0·65*	0·42	4, 26	105
Musselburgh, Dunedin	5	49·4	37·1	43·2	+0·4*	60·6	1	28·8	31	2·89	19	+0·63	0·77	26	106
Tapanui	550	45·0	32·7	38·8	..	56·1	15	22·3	31	3·74	14	..	0·70	27	..
East Gore	245	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gore	240	47·2	29·9	38·6	−1·1*	57·0	1, 15	18·0	31	3·53	15	+1·53*	0·99	26	123
Otautau	180	47·6	32·1	39·8	+0·6*	57·3	15	20·2	30	4·17	16	+0·95*	1·25	26	116
Pebbly Hills	150	47·4	31·4	39·4	..	53·4	1	21·0	30	3·68	16	+1·15	1·25	26	..
Invercargill	8	48·9	34·1	41·5	−0·2	57·3	15	25·0	30	3·80	17	+0·83	0·64	26	..
Invercargill Airfield	0	47·9	33·2	40·6	+0·1	57·7	15	23·6	30	3·56	16	+0·75	0·63	26	118

†Observations for 27 days.

LATE RETURNS

Paerata, June 1957	166	61·3	40·4	50·8	−0·5*	66·1	4	35·7	4	4·34	21	−0·75	1·28	23	..
Appleby, Nelson, June 1957	57	57·0	38·6	47·8	+2·0	63·6	7	29·2	2	0·22	5	−3·42*	0·09	30	..

NOTE—At stations where departures from normal have an asterisk, 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 1957

General: July was frosty and also sunnier than usual. In some districts, more especially in the North Island, the unusually severe frosts affected both pastures and stock adversely. However, in most western areas of the North Island the comparative dryness of the season was proving beneficial.

On the 27th a westerly gale caused serious damage in central Hawke's Bay.

Rainfall: Rainfall was about three-quarters of the normal value over the greater part of the country. However, it was somewhat wetter than usual in the far south, in eastern districts from Ashburton to Gisborne, and also in Nelson and Manawatu.

Heavy rain on the 3rd and 4th caused some flooding in the South Taranaki-Wanganui-Rangitikei area.

Temperatures: Mean temperatures were about a degree below normal over most of the country.

Unusually heavy snow was reported at low levels in Otago and Southland from the 24th to the 28th, causing serious dislocation of transport. The remainder of the South Island and the high country of the North Island were also affected; the latter area had previously received a good coating from the 3rd to the 5th.

Frosts were frequent in many districts, the most frosty periods being from the 5th to the 15th, and the last three days of the month. In the latter period some unusually severe frosts were reported in Southland, in many parts of which snow was still lying at the beginning of August. The lowest screen temperature officially observed was 7°F. at Garston, south of Lake Wakatipu, on the 31st. The upper reaches of the Mataura River were frozen over.

Sunshine: The greater part of the country was favoured with somewhat sunnier weather than usual, and the excess amounted to an hour a day over most of the provinces of Auckland, Taranaki, and Westland.

Weather Sequence: On the first two days of the month pressure was low to the south of the country. A trough of low pressure was almost stationary over the Auckland Province, with a depression developing over the north Tasman Sea. Rain was confined mainly to western districts. On the 3rd and 4th the depression crossed the North Island and at the same time pressure rose to the south. Rain fell over the North Island and northern and eastern districts of the South Island, with snow on the high country. Conditions improved in most districts on the 5th as the depression moved slowly away to the east.

The next ten or eleven days was a period of rather settled and frosty weather in many districts, especially in the Auckland Province. From the 6th to the 11th an anticyclone was moving slowly across the eastern Tasman Sea, while pressure was comparatively low to the east of the country and at times to the north. East coast districts received some occasional light rain and parts of Northland and Southland were also affected. On the 12th and 13th the anticyclone enveloped New Zealand and the weather was generally fine. During the next two days conditions deteriorated in northern districts of both islands and on the West Coast with the approach of a depression over the Tasman Sea.

Two centres developed in the depression, and the first moved over the North Island from the 16th to the 18th with general rain. During the next two days the second and weaker centre, which had been lying further west, also crossed the North Island; rain was restricted to east coast districts as far south as Christchurch. At the same time an anticyclone which had been centred to the south moved to the east of the South Island. On the 21st and 22nd the weather was mainly fair, apart from extensive areas of fog.

Another depression brought rain to the North Island on the 23rd. On the next day, while pressure was still low to the east, a cold front moved on to the South Island. A very deep depression then developed near Campbell Island, and as it moved slowly eastward from the 25th to the 28th, a strong, cold southerly to south-westerly airstream covered the country. Snow was reported to low levels over the greater part of the South Island and was unusually heavy in parts of Otago and Southland; the North Island high country also received a good coating. Gales were reported in many districts, the westerly gale on the 27th in Hawke's Bay being particularly destructive. There was an improvement from the south and west during the last three days of the month as an intense anticyclone moved on to the South Island, and severe frosts were reported in Otago and Southland. Some light rain still at times affected areas from Cook Strait to East Cape.

M. A. F. BARNETT, Director

(N.Z. Met. S. Misc. Pub. 107)