CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for August 1957—continued

Station		Height of Station Above	Air Temperatures in Degrees (Fahrenheit)							Rainfall in Inches						
			Means of		Mean of A	Differ- ence	Absolute Maximum and Minimum			Total	No.	Differ- ence	Maximum Fall		Bright Sun- shine	
		M.S.L.		B Min.	and B	From Normal	Maxi- mum	Date	Mini- mum	Date	Fall	Rain Days	From Normal	Amount	Date	January 1
Eyrewell Ashley Forest Darfield Harewood Christchurch Wigram Akaroa Lincoln Highbank The Hermitage Winchmore Haast Ashburton Fairlie Timaru Adair Tara Hills, Omarama Milford Sound Waimate Naseby Queenstown Cromwell Ophir Earnscleugh Waipiata Alexandra Manorburn Dam† Garston		Ft. 520 460 640 94 150 323 1,004 56 200 2,300 1,100 500 1,550 520 2,448 1,009	°F. 53.7 53.8 55.1 53.9 54.6 53.8 54.1 54.6 53.8 54.3 53.5 55.8 56.0 53.8 51.8 50.6 155.2 48.7 51.4 52.3 52.9 49.0 52.9 51.7	°F. 34·3 38·9 34·5 36·6 37·4 34·1 39·9 34·5 30·1 36·4 37·4 28·7 28·9	44.0 46.4 44.8 45.4 46.6 46.0 48.2 45.8 47.8 47.8 45.2 42.0 44.4 44.6 39.6 45.4 37.8 43.0 40.2 39.6 40.2 39.6 40.2 39.6 40.2 40.2 40.4 40.6 40.0	+2·6* +1·9 +2·3 +1·8* +1·8 +2·1  +1·5 +1·5 +1·5 +1·8 +0·6 +0·7* +0·6* +2·3 +1·4 -0·3* -0·7 -0·7 +0·6* +2·3 +1·4 -0·3* -1·6* +1·6*	°F. 65·0 63·0 66·0 66·3 65·1 62·0 63·8 64·5 64·7 64·8 68·0 65·8 64·3 59·1 60·1 62·0 61·8 63·8 59·0 66·0 65·8	19 20 19 19 19 19 5 19 12  20 20 20 20 23 25 20 20 23 23 24 23 24 23 21 21	°F. 20·0 27·0 22·2 23·0 23·8 28·2 19·5 25·0 11·0 11·0 24·4 27·8 15·8 27·8 25·0 9·4 22·6 11·0 11·0 11·0 11·0 4·2 26·1	1 1 1 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 3 1 1 1 2 2 1 1 1 3 1 1 1 1	In. 0·87 0·54 0·71 0·53 1·39 0·77 1·23 0·65 7·89 0·65 1·60 0·85 0·45 0·56 13·99 0·44 1·67 0·21 0·21 0·77	7 6 5 10 8 9 11 12 7 7 8 15 7 7 7 12 7 8 15 10 6 6 4 7 7 4 4 3 3 4 4 6 6 8	-2·28* -2·16* -1·76 -1·54 -1·38* -2·59* -1·31 -1·65 -0·30 -0·61 -1·17* -0·77* -3·21 -1·32 -0·55 -0·61* -0·96 -0·42 -0·77	0·18 0·20 0·15 0·19 0·13 0·27 0·20 0·36 0·17 1·15 0·20 0·38 0·27 0·21 0·18 5·46 0·24 1·11 0·14 0·05 0·04 0·09 0·08 0·30	6 6 15 6 16 21 8 21 1. 16, 21 12 16, 21 15 15 21 20 20 19 13 20 16 20 20 21	Hrs 138 128 148 152 134 131 134 169 121 143 150 143
Roxburgh Hydro Mid Dome Moa Flat, West Otago Taieri Musselburgh, Dunedin Tapanui		350 1,252 1,345 80 5 550	52·6 51·5 48·0 52·7 51·7 52·1	34·9 31·8 33·6 33·5 38·3 35·0	43·8 41·6 40·8 43·1 45·0 43·6	-0·6* -0·5*	63·0 59·9 59·2 64·4 62·5 60·7	20 25 20 20 19 19	23·0 12·1 18·1 20·5 28·0 20·1	1 1 1 1 1 2	0·13 0·96 0·69 0·43 0·55 0·85	7 10 12 5 12 11	-0·84 -1·04* -1·31* -1·53		21 21 21 15 16 20	123 120
East Gore Gore Otautau Pebbly Hills Invercargill Invercargill Airfield		245 240 180 150 8 0	52·9 52·2 52·0 52·8 52·2	33·2 33·9 33·4 36·5 34·4	43·0 43·0 42·7 44·6 43·3	+0·0* +0·0* +0·6 +0·3* †Observe		20 31 31 31 31 31	16·0 18·0 16·0 22·2 20·8	2, 3 2, 3 2 2 2 3	0·47 1·70 1·15 1·57 1·49	9 13 10 15 15	-1·60* -1·11* -1·47* -1·43* -1·45*	0·13 0·45 0·48 0·53 0·54	20 15 21 20 20	114 136  133
Paerata, July, 1957 The Hermitage, June, The Hermitage, July, East Gore, July, 1957		166 2,510 2,510 2,510 245	56·4 48·6 42·0 46·0	39·9 30·8 26·4 31·5	48·2 39·7 34·2 38·8	$ \begin{array}{c c} -1.6* \\ +3.4 \\ -0.3 \\ -0.6 \end{array} $	RETU 66·1 63·0 57·0 57·0	3   7   16   1	33·8 22·0 18·0 18·0	15, 16 17 30 30	3·82 11·63 5·60 3·32	15 11 10 14	-1.44 $-0.45$ $-3.87$ $+1.31$	1·03 4·50 2·00 1·08	15 30 15 26	•••

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 August 1957

General: The persistence of north-easterly winds for much of the month caused August to be drier than usual, except in Hawke's Bay and most of the Auckland Province. Generally conditions were mild and pasture growth good, except in Otago and Southland, where severe frosts early in the month were followed by dry conditions.

Although losses of early lambs were reported from the Bay of Plenty and Gisborne, lambing progressed satisfactorily in other

Rainfall: Rainfall was less than half the normal value over most eastern districts of the South Island and also in Wairarapa and Manawatu. It was particularly dry in North and Central Otago, where many stations received less than half an inch.

By contrast, it was two to three times as wet as usual in the Thames Valley, northern Northland, and Gisborne. For Paeroa, with 15·9 in. of rain, it was the wettest of any month in over forty years of record; and for Te Aroha, with 18·7 in., it was the second wettest month in nearly seventy years of record. wettest month in nearly seventy years of record.

Temperatures: It was warmer than usual by about 2 degrees over most of the country. However, in Hawke's Bay and in eastern districts from Timaru southward temperatures were about normal.

Sunshine: Except in western and far southern districts of the South Island, sunshine was below normal. The deficiency amounted to an hour a day in Hawke's Bay and also over most of the Auckland

Weather Sequence: For the first eleven days of the month the weather Sequence: For the first eleven days of the month the weather over the whole country was influenced by an intense anticyclone which on the 1st was centred between Christchurch and the Chatham Islands and moved only slowly eastwards. A series of depressions forming in the central Tasman Sea moved north-eastwards around the anticyclone and during this period the whole country was covered by a north-easterly air stream. This gave rain in the Auckland Province, Bay of Plenty and the east

coast of the North Island. Accompanied by strong winds the rain became heavy and caused local flooding in Northland and the Bay of Plenty area between the 3rd and 5th. Over the South Island pressure remained high and during the first four days of the month exceptionally heavy frosts were reported from Southland, several rivers being frozen over in the upper reaches.

By the 12th the anticyclone was weakening and a depression in the Tasman Sea moving on to New Zealand brought some rain to the west coast of the South Island. This depression moved to the south of the country while another moved across central districts between the 15th and 16th giving some rain over most of the country, the falls being heavy in Taranaki.

An anticyclone from the Tasman Sea took an eastwards course to the north of the North Island during the next few days while pressures were low to the south of New Zealand. As this system moved away a vigorous cold front moved across the whole country during the 21st and 22nd giving some heavy rain on the west coast of the South Island and in central North Island districts. This was followed by southerly winds veering to south-westerly as an anti-

of the South Island and in Central North Island districts. This was followed by southerly winds veering to south-westerly as an anti-cyclone in the south Tasman Sea moved on to the country.

The Auckland province was again affected by a depression in the north Tasman Sea and by the 24th light rain was falling north of Auckland City. The rain spread southwards and heavy falls were recorded about Coromandel Peninsula and East Cape on the 25th.

A cold front brought a cool southerly change with showers to east coast districts of both islands on the 27th. On the 28th there was a general improvement and until the 30th most of New Zealand experienced fine sunny conditions due to an intense anticyclone

which moved rapidly across central districts.

A deterioration in the North Island set in on the 31st with the southward movement onto North Auckland of a low pressure centre that had formed in the New Caledonia area. In the South Island the weather continued fine.

R. G. SIMMERS, Acting Director.

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