CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for December 1956—continued

	Height of Station Above M.S.L.	Air Temperatures in Degrees (Fahrenheit)								Rainfall in Inches						
Station		Means of		Mean of A	Differ- ence	Absolute Maximum and Minimum			Total	No.	Differ- ence	Maximum Fall		Bright Sun- shine		
		A Max.	B Min.	and B	From Normal	Maxi- mum	Date	Mini- mum	Date	Fall	Rain Days	From Normal	Amount	Date		
Franz Josef Eyrewell Ashley Forest Darfield Harewood Christchurch Wigram Akaroa		Ft. 450 520 460 640 94 22 74 150	°F. 64·6 68·7 67·2 69·1 68·2 69·0 68·8 69·2	°F. 48·7 50·6 51·1 49·8 52·0 52·3 51·9 53·0	°F. 56·6 59·6 59·2 59·4 60·1 60·6 60·4 61·1	+0·1* +0·5 +0·8 +0·4* -0·2	°F. 73·2 81·5 82·0 82·1 83·8 84·2 82·8 85·0	18 20, 26 26 26 26 26 10 26	°F. 43·3 40·0 43·6 39·1 42·2 42·2 40·7 43·0	24 3, 4 4 24 24 24 24 24 3	In. 16·55 4·07 6·48 3·71 2·78 2·81 2·78 3·76	23 10 12 10 12 11 10 14	+0·47* +3·20* +0·86 -0·27 +0·39* +1·06*	In. 3·38 1·31 1·90 1·22 0·67 0·70 0·61 1·00	29 12 12 12 27 1 27 23	Hrs 201 176
Lincoln Highbank The Hermitage		36 1,102 2,510 525	69·2 69·3 66·1	50·3 	59·2 58·2 57·8	+0·5 +0·1*	82·9 77·9	26 26 9 26	36·0 42·8	24 24 24	2·60 5·26	14 11 14 11	+1·06* +0·38 -0·17*	1·00 0·65 1·76	12 23 	215 217
Haast	•••	15 323 1,004	64·8 71·0	49·6 49·7	57·2 60·4	+0·5* +1·3	72·0 85·2 85·8	14 10 	39·2 39·7	29 29	17·19 2·33	20 9	+4·61* -0·68	4·27 0·97	5 12	142 178
Timaru Adair Tara Hills, Omarama Milford Sound Waimate Naseby		56 200 1,600 20 200 2,300	69·1 66·4 68·4 61·6 67·8 64·9	50·2 49·9 45·3 50·2 51·0 41·5	59·6 58·2 56·8 55·9 59·4 53·2	+0·9 +1·0* -1·1* +0·5 +1·6	81·9 83·7 68·4 83·1 81·0	25 25 9 13 25	39.7 43.3 34.0 41.1 40.5 30.5	29 24 2 2 24 24 2	2·04 3·02 2·25 27·51 2·30 3·04	10 14 13 22 11 13	$ \begin{array}{r} -0.62 \\ +0.19* \\ +0.25* \\ +4.15 \\ -0.63 \end{array} $	0·49 0·70 0·70 5·70 0·73 1·18	12 12 25 29 12 27	167 191 151
Queenstown Cromwell Ophir Earnscleugh		1,100 720 1,000 500 1,550	67·4 71·3 69·1 71·0 64·5	47·8 49·3 45·4 46·7 44·0	57·6 60·3 57·2 58·8 54·2	$ \begin{array}{r} -0.3 \\ +0.1* \\ -1.1 \\ -0.8* \\ -1.8 \end{array} $	76·6 86·4 81·2 83·3 79·5	14 9 9 8	33·4 35·5 32·0 36·0 35·0	1 1 1 1 2	3·77 1·93 2·33 1·98 1·92	17 11 9 12 12	+1·27 +0·65* +0·51 +0·72* -0·27	1·14 0·87 0·65 0·97 0·50	29 25 25 25 25 27	196 187
Waipiata Alexandra Manorburn Dam† Garston Roxburgh Hydro		520 2,448 1,009 350	71·9 63·1 67·5 71·2	49·4 41·3 45·6 47·6	60·6 52·2 56·6 59·4	+0·4 +0·7	84·2 75·0 79·1 87·0	9 9 8 9	37·3 32·0 32·3 36·0	1, 24 1 1	2·22 2·35 4·04 2·48	12 11 16 14	$-0.27 \\ +0.92 \\ +0.39 \\ +0.67$	0·71 0·50 1·40 0·70	25 12 25 25	183
Mid Dome Moa Flat, West Otago Mossburn Taieri Musselburgh, Dunedin		1,252 1,345 961 80 5	66·9 64·2 68·2 66·6 65·4	46·1 44·5 45·2 48·5 51·2	56·5 54·4 56·7 57·6 58·3	+1·6* +1·5*	77·8 77·2 76·7 79·2 79·5	9 9 8 20 25	32·2 32·0 35·7 39·0 42·5	1 1 2 2 24	5·05 2·97 6·00 3·80 3·53	17 14 14 15 17	+0.01* +1.24* +0.65	1·48 0·54 2·04 0·69 0·46	25 12 25 27 27	151 162
Tapanui East Gore Gore Otautau		550 245 240 180 150	67·9 69·4 69·7 66·7 67·7	46·6 47·8 47·8 46·7 47·0	57·2 58·6 58·8 56·7 57·4	+2·3 +2·1* +2·3*	79·1 83·0 82·0 81·0 77·7	9 9 16 10 9	33·8 39·0 39·0 38·5 40·5	1 1 1 14 24	2·32 3·51 3·30 2·82 4·73	15 13 14 14 20	+0·43 -0·22* -0·20* +1·21*	0·53 0·75 0·81 1·12 1·09	1 16 16 25 25	165 150
Pebbly Hills Invercargill South Invercargill Airfield		8 0	67·7 67·7 65·7	49·7 47·9	58·7 56·8	+2·9 +1·8*	79·8 76·8	15 18	42·6 39·2	4 14	4·73 4·30 4·35	17 16	+0.62* +0.75*	0·98 1·01	25 25 25	i. 160

†Observations for 24 days.

-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 December 1956

General: December was a month of unsettled weather. Shearing and haymaking, which were held up in November, were even further delayed. Growth was generally good, but in some western districts of the North Island it has not been a favourable season for sheep, partly owing to blowfly attacks. In the Auckland Province the fruit crop has been adversely affected by excessive rain in previous seasons, especially the winter.

A small local tornado caused some damage in western suburbs of

Auckland in the early morning of the 12th.

Rainfall: In the North Island rainfall was above normal except in the southern part of the Wellington Province and about Whangarei. Totals were doubled in eastern districts from Castlepoint to Tokomaru Bay and also in the Wanganui-Rangitikei-Manawatu

In the South Island it was wetter than usual in most eastern districts north of Dunedin and also in Central Otago.

Thunderstorms with hail were widespread in eastern districts on the 1st and 2nd and again on the 23rd. On both occasions the hail was heavy enough to cause damage to crops in some areas, especially in North Canterbury on the 23rd, when a few of the hailstones were reported to have been 2 in. across.

Temperatures: Temperatures were more than a degree above normal in coastal districts of Southland, Otago, and Westland, also about Cook Strait and in the Napier-Whakatane-Gisborne area.

A fall of snow occurred on the high country of Southland and Central Otago on the 1st.

Sunshine: Except in western and northern districts of the North Island, sunshine was below normal. As in the previous month, the deficiency was greatest in Central Otago, amounting to over 40 hours.

Weather Sequence: A vigorous cold front crossed the country on the 1st, accompanied by a period of precipitation. Parts of Southland and Otago received some snow, while in Canterbury and in Nelson Province there were thunderstorms with hail. Showery conditions persisted on the following day, with thunder and hail in parts of the North Island, From the 3rd to the 9th was a period of settled weather, with an anticyclone at first over the North Island and later over the whole country. However, South Westland and Fiordland received considerable rain on the 5th owing to the passage of a depression far

The weather deteriorated in western and far southern districts on the 10th as a trough moved on to Southland, and on the following on the 10th as a trough moved on to Southland, and on the following day rain became general. A depression soon formed over the North Island and as it moved slowly eastward on the 12th and 13th heavy rain fell in Hawke's Bay, Wairarapa, and Wanganui. On the 14th there was a temporary improvement under the influence of a weak ridge of high pressure. However, during the next two days rain spread over the country, especially the North Island, from the west with the advance of a depression over the Central Tasman Sea. There were some heavy falls in Gisborne and Hawke's Bay during the passage of this depression across the North Island on the 17th and 18th, but the weather cleared in the west and south. A few and 18th, but the weather cleared in the west and south. A few showers still persisted in eastern areas of the North Island as the depression moved away on the 19th.

From the 20th to the 25th pressures were high to the north and low to the south and south-west. Rain affected western and at times far southern districts of the South Island. Elsewhere the weather was fair except on the 23rd, when a vigorous trough crossed the country accompanied by rain, with thunderstorms and hail in eastern districts from Otago to Wairarapa.

On the 26th and 27th there was general rain with the passage of a complex trough, and showers persisted in some districts on the following day. For the last three days of the year pressures were again high to the north and very low to the south, and another trough crossed the country. North-westerly winds exceeded gale force at times, especially about Cook Strait on the 30th, and the weather was generally unsettled, with thunderstorms from Manawatu to Auckland early on the 31st.

M. A. F. BARNETT, Director.

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