THE NEW ZEALAND GAZETTE

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CLIMATOLOGICAL TABLE—continued										
Summary of the	Records of	Temperature,	Rainfall,	and Sunshine fo	· September	1952—continued				

Station.	uo .	Air Temperatures in Degrees (Fahrenheit).]							
	Height of Station Above M.S.L.	Means of		Mean		Absolute Maximum and Minimum.				No.		Maximum Fall.		Bright Sun-	
		A Max.	B Min.	of A and B.	Difference From Normal.	Maximum.	Date.	Minimum.	Date.	Total Fall.	of Rain Days.	Difference From Normal.	Amount.	Date.	shine.
Wigram Rudstone, Methven Akaroa	Ft. 74 1,217 150	°F. 58 · 6 59 · 9	$^{\circ}$ F. 41 · 2 39 · 7	°F. 49·9 49·8	$\left \begin{array}{c} (+1 \cdot 1) \\ +2 \cdot 8 \end{array}\right $	°F. 72·2 67·7	22 22	°F. 27·0 30·3	24 24	In. 1.75 2.49	8 11	(-0.15) -1.21	In. $1 \cdot 23$ $1 \cdot 57$	23 23	Hrs. 163 · 5 207 · 1
Akaroa Lincoln The Hermitage Winchmore Haast	$ \begin{array}{r} 130 \\ 36 \\ 2,510 \\ 626 \\ 15 \\ \end{array} $	$59 \cdot 3$ $55 \cdot 1$ $58 \cdot 4$ $57 \cdot 4$	$ \begin{array}{c c}\\ 40 \cdot 2 \\ 35 \cdot 4 \\ 37 \cdot 7 \\ 40 \cdot 7 \end{array} $	$ \begin{array}{c} 49 \cdot 8 \\ 45 \cdot 2 \\ 48 \cdot 0 \\ 49 \cdot 0 \end{array} $	$\begin{vmatrix}\\ +2 \cdot 3\\ +2 \cdot 7\\ (+1 \cdot 5)\\ (+0 \cdot 8) \end{vmatrix}$	$72 \cdot 7$ $64 \cdot 0$ $71 \cdot 6$ $62 \cdot 2$	$ \begin{array}{c} 22 \\ 17 \\ 22 \\ 11 \end{array} $	$29 \cdot 0$ $36 \cdot 0$ $20 \cdot 8$ $29 \cdot 8$	$ \begin{array}{c} 24 \\ 24 \\ 24 \\ 24 \\ 25 \\ \end{array} $	$2 \cdot 25$ 11 \cdot 82 1 \cdot 88 8 \cdot 52		+0.35 -1.64 (-0.48) (-2.23)	$1 \cdot 33 \\ 3 \cdot 80 \\ 1 \cdot 51 \\ 2 \cdot 22$	23 23 23 20	$ \begin{array}{c}\\ 182 \cdot 3\\ 155 \cdot 2\\\\ 161 \cdot 8 \end{array} $
Ashburton Fairlie Lake Tekapo Timaru	$323 \\ 1,004 \\ 2,400 \\ 56 $	$61 \cdot 0$ $60 \cdot 1$ $57 \cdot 4$ $59 \cdot 4$	$ \begin{array}{r} 39 \cdot 4 \\ 28 \cdot 5 \\ 36 \cdot 4 \\ 37 \cdot 4 \end{array} $	$50 \cdot 2 \\ 44 \cdot 3 \\ 46 \cdot 9 \\ 48 \cdot 4$	$\begin{vmatrix} +2 \cdot 3 \\ -0 \cdot 8 \\ +0 \cdot 5 \end{vmatrix}$	$74 \cdot 8$ $72 \cdot 0$ $68 \cdot 5$ $77 \cdot 9$	22 22 7 23	$ \begin{array}{r} 28 \cdot 6 \\ 12 \cdot 0 \\ 25 \cdot 0 \\ 31 \cdot 0 \end{array} $	$ \begin{array}{r} 3 \\ 3 \\ 24 \\ 20 \end{array} $	$ \begin{array}{c c} 1 \cdot 65 \\ 1 \cdot 42 \\ 2 \cdot 01 \\ 1 \cdot 59 \end{array} $	6 7 5 4	$ \begin{array}{c c} -0.57 \\ -1.24 \\ -0.04 \\ -0.36 \end{array} $	$1 \cdot 39 \\ 1 \cdot 07 \\ 1 \cdot 37 \\ 1 \cdot 26$	22 23 23 23 23	180·7 161·8
Adair Tara Hills Milford Sound Waimate Queenstown	$ \begin{array}{r} 200 \\ 1,600 \\ 20 \\ 200 \\ 1,100 \end{array} $	$57 \cdot 8$ $57 \cdot 8$ $59 \cdot 9$	$ \begin{array}{c} 34 \cdot 1 \\ 40 \cdot 0 \\ 40 \cdot 1 \\ $	$ \begin{array}{c} 46 \cdot 0 \\ 48 \cdot 9 \\ 50 \cdot 0 \\ $	$ \begin{vmatrix}\\ (+1 \cdot 9) \\ +2 \cdot 4 \\ +1 \cdot 5 \\ \end{vmatrix} $	$68 \cdot 9 \\ 63 \cdot 3 \\ 77 \cdot 0 \\$	$ \begin{array}{c} 16 \\ 23 \\ 22 \\ \dots \end{array} $	$24 \cdot 0$ $34 \cdot 0$ $30 \cdot 5$	$\begin{array}{c c} & \ddots \\ & 24 \\ & 4 \\ & 24 \\ & \ddots \end{array}$	$1 \cdot 82 \\ 26 \cdot 45 \\ 1 \cdot 58 \\$		$(+0.31) \\ +6.65 \\ -0.67$	$0.85 \\ 7.30 \\ 0.95 \\$	23 30 23	185·7 130·4
Cromwell Ophir Earnscleugh Waipiata	720 1,000 500 1,550	$ \begin{array}{c} 60 \cdot 9 \\ 62 \cdot 4 \\ $	$32 \cdot 5$ $32 \cdot 5$ $32 \cdot 5$	$46.7 \\ 47.4 \\$	$\begin{array}{c} & & \\ & +1 \cdot 4 \\ (+1 \cdot 0) \cdot \end{array}$	$70 \cdot 4$ $76 \cdot 5$	16 22	$22 \cdot 0$ $22 \cdot 8$ 	3,6 4,6	$1 \cdot 27 \\ 0 \cdot 22 \\$	 6 3	$+0.13 \\ (-0.61)$	$0.53 \\ 0.10 \\$	$\overset{.}{\overset{22}{20,22}}$	•••
	520 350 1,252 1,345 2,448	$\begin{array}{c} 62 \cdot 0 \\ 62 \cdot 4 \\ 58 \cdot 2 \\ 56 \cdot 0 \\ 52 \cdot 3 \end{array}$	$\begin{array}{c} 36 \cdot 0 \\ 38 \cdot 1 \\ 35 \cdot 9 \\ 37 \cdot 3 \\ 31 \cdot 0 \end{array}$	$\begin{array}{c} 49 \cdot 0 \\ 50 \cdot 2 \\ 47 \cdot 0 \\ 46 \cdot 6 \\ 41 \cdot 6 \end{array}$	$\begin{vmatrix} +1 \cdot 9 \\ \vdots \\ +2 \cdot 0 \\ \end{vmatrix}$	$66 \cdot 6 \\ 61 \cdot 5$	$ \begin{array}{r} 16 \\ 16 \\ 22, 30 \\ 22 \\ 16 \\ 16 \end{array} $	$\begin{array}{c} 26 \cdot 8 \\ 27 \cdot 3 \\ 28 \cdot 0 \\ 30 \cdot 5 \\ 21 \cdot 0 \end{array}$	$ \begin{array}{c} 6 \\ 3 \\ 30 \\ 24 \\ 24 \\ 24 \end{array} $	$ \begin{array}{c} 0.84 \\ 1.18 \\ 2.18 \\ 1.94 \\ 1.20 \end{array} $		$\begin{array}{c} +0.02 \\ (-0.09) \\ \vdots \\ (+0.02) \\ +0.03 \\ (0.01) \end{array}$	$0.70 \\ 0.48 \\ 1.17 \\ 0.68 \\ 0.72$	22 22 22 22 22 22 22	180.3
Taieri Musselburgh, Dunedin East Gore Gore Otautau	80 5 245 240 180	$59 \cdot 2 \\ 56 \cdot 1 \\ . \\ 60 \cdot 3 \\ 58 \cdot 6$	$ \begin{array}{r} 37 \cdot 5 \\ 42 \cdot 5 \\ \\ 38 \cdot 1 \\ 37 \cdot 1 \end{array} $	$ \begin{array}{c c} 48 \cdot 4 \\ 49 \cdot 3 \\ \\ 49 \cdot 2 \\ 47 \cdot 8 \end{array} $	$ \begin{array}{c} (+0\cdot7) \\ (+0\cdot0) \\ \\ (+1\cdot6) \\ (+1\cdot5) \end{array} $	$71 \cdot 3$ $65 \cdot 3$ $72 \cdot 0$ $68 \cdot 9$	$ \begin{array}{c c} 30 \\ 17 \\ \\ 16 \\ 16 \end{array} $	$29 \cdot 1$ $35 \cdot 5$ $28 \cdot 5$ $26 \cdot 4$	$ \begin{array}{c c} 30 \\ 30 \\ \\ 2 \\ 6 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	11 10 13 12	$(-0.51) + 0.27 \\ (-0.25) \\ (-0.03)$	$0.54 \\ 0.94 \\ \\ 0.97 \\ 0.82$	$\begin{array}{c c} 22\\ 22\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	$ \begin{array}{c} 161 \cdot 5 \\ 170 \cdot 9 \\ \\ 155 \cdot 1 \\ \\ \end{array} $
Pebbly Hills Invercargill South Invercargill Airfield	150 150 8 0	$59 \cdot 3$ $58 \cdot 1$ $57 \cdot 3$	$37 \cdot 5$ $39 \cdot 8$ $37 \cdot 3$	$48 \cdot 4 \\ 49 \cdot 8$	$ \begin{array}{c} (+1 \cdot 3) \\ +2 \cdot 7 \\ (+1 \cdot 6) \end{array} $	$69 \cdot 0$ $68 \cdot 4$ $65 \cdot 7$	16 16 16	$20^{+} \pm 27 \cdot 0$ $29 \cdot 1$ $24 \cdot 8$	6 6 6	$\begin{vmatrix} 2 & 55 \\ 3 \cdot 27 \\ 4 \cdot 55 \\ 4 \cdot 64 \end{vmatrix}$	12 14 13 15	(-0.03) (+0.43) (+1.25) (+1.42)	$1 \cdot 14 \\ 1 \cdot 31$	22 22 22 22	 157.0
LATE RETURNS															
Molesworth, Aug., 1952 Adair, Aug., 1952 East Gore, Aug., 1952 Invercargill, Aug., 1952	$ \begin{array}{r} 2,930 \\ 200 \\ 245 \\ 8 \end{array} $	$47 \cdot 8 \\ 51 \cdot 0 \\ 55 \cdot 1 \\ 54 \cdot 5$	$29 \cdot 0$ $36 \cdot 6$ $34 \cdot 3$ $36 \cdot 1$	$ \begin{array}{c c} 38 \cdot 4 \\ 43 \cdot 8 \\ 44 \cdot 7 \\ 45 \cdot 3 \end{array} $	$ig egin{array}{c} (+1 \cdot 4) \ (-0 \cdot 1) \ +2 \cdot 0 \ +1 \cdot 3 \end{array}$	$55 \cdot 5$ $63 \cdot 8$ $68 \cdot 0$ $65 \cdot 2$	20 22 26 26	$19 \cdot 8$ $23 \cdot 5$ $22 \cdot 0$ $23 \cdot 6$	24 18 8 8	$ \begin{array}{c c} 3 \cdot 43 \\ 2 \cdot 16 \\ 0 \cdot 21 \\ 0 \cdot 29 \end{array} $	12 13 5 7	$(+1\cdot42)$ $(+0\cdot54)$ $-1\cdot86$ $-2\cdot71$	$0.92 \\ 0.72 \\ 0.08 \\ 0.07$	9 9 20 22	· · · · · · ·

-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 1921-1950. Where observations are not available for the whole period, or where the site of the raingauge has been changed, the normals are partly interpolated.

NOTES ON THE WEATHER FOR SEPTEMBER 1952

General.-The prevalence of winds from an easterly quarter which had been a feature of the previous month was also in evidence for the first half of September. An abrupt change to a boisterous westerly pattern took place in the middle of the month. Temperatures were generally mild except for a sharp cold snap at the beginning of the fourth quarter. Some severe frosts occurred at that time and damaged early vegetable crops in parts of the North Island.

More rain was needed in Taranaki, but the remaining dairying districts of the North Island experienced very favourable conditions Drying westerly winds in the latter half of the month were welcomed by North Island sheep farmers after a long spell of wet weather. In the South Island some lambs were lost after a late snowstorm on the 23rd.

Rainfall.—The total rainfall was less than half the average over a large part of the Dominion, including the provinces of Nelson, Marlborough, and Taranaki, and the Buller and Manawatu districts. In Westland and Southland an exceptionally dry spell of eight weeks' duration came to an end in the middle of the month.

Over Hawke's Bay and Gisborne, rainfall was more than double the average, while there was a small surplus near the South-land coast, in parts of inland Otago and on the east coast of the Wellington Province.

Temperatures.--Mean temperatures were close to or slightly Temperatures.—Mean temperatures were close to or slightly above normal over the whole country. The largest departures from normal were 2-3 degrees in parts of Canterbury and near the centre of the North Island. The snow which fell on the 23rd covered the high country of both islands and lay for a short time on the Canterbury Plains to a depth of a few inches. It was the only appreciable snowfall since mid-June. When skies cleared shortly afterwards, severe frosts were recorded in most inland districts districts.

Sunshine.—Most of the country received more than the average sunshine, Taranaki, Nelson, and Westland being specially favoured. The only appreciable deficiency occurred in Hawke's Bay where Napier's sunshine was equivalent to one hour a day below average.

Weather sequence.-For the first four days of September a large depression moving slowly away eastwards from the North Island, continued to give cool unsettled weather in eastern districts from Cook Strait to East Cape. Elsewhere conditions were mainly fair due to the influence of a ridge of high pressure which extended from an anticyclone south of the Chatham Islands across the South Island and away north-westwards towards Queensland.

A slow-moving trough from the west, which reached New Zealand on the 5th, became very weak over the South Island, but, with the formation of a low pressure centre in the north, rain developed in Northland on the 5th and gradually extended south-wards over the North Island. This depression continued to deepen wards over the North Island. This depression continued to deepen as the centre moved slowly eastwards across Northland on the 6th. Heavy rainfalls were recorded for the next two days in the Gisborne and Hawke's Bay districts. On the 9th a little scattered rain extended southwards along the east coast as far as Canterbury, but the weather remained fine over the remainder of the South Island.

As the northern depression moved away, rain continued to fall intermittently in eastern districts of the North Island until the fail intermittently in eastern districts of one forth in taking and the 11th. By that time it had already began to rain again in North-land with the approach of an occlusion associated with a deep depression in the central Tasman Sea. A broad band of rain moved south-eastwards over the North Island on the 12th and also affected northern and western districts of the South Island. The weather remained changeable and showery in the North Island until after the centre of the Tasman depression had moved across to the east showers and some thunder were reported from Otago and South-land from the 13th to the 15th due to weak disturbances passing far to the south.

On the 15th the anticyclone south-east of the Chatham Islands, which had been a semi-permanent feature of the weather map for the previous six weeks, began to move away and the weather pattern over New Zealand then changed to a predominantly westerly type for the rest of the month. An anticyclone passed rapidly eastwards over the North Island on the 16th closely followed by a very active trough which moved more slowly and took two days to cross the country. Northerly winds increased to gale force in exposed places and heavy rainfalls were recorded in districts about and west of the main ranges.

Pressures remained high to the north while a series of de-pressions moved rapidly south-eastwards across the South Tasman Sea and southern New Zealand. Winds reached gale force at times