## THE NEW ZEALAND GAZETTE

## CLIMATOLOGICAL TABLE-continued

Summary of the Records of Temperature, Rainfall, and Sunshine for June, 1950-continued

Station.	Height of Stationabove M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfäll in Inches.					
		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 Normai.	Amount.	Date.	sun- shine,
	Ft.	°F.	°F.	°F.		°F.		°F.		In.			In.		Hrs.
Cromwell	720	45.6	29.6	$37 \cdot 6$		56.7	14	20.9	11	0.76	9		0.20	3	
Ophir	1,000	45.6	24.0	$34 \cdot 8$	-0.6	$52 \cdot 6$	4	$14 \cdot 2$	11	0.44	4	-1.42	0.24	29	
Earnscleugh	500	47.0	28.0	37.5		$55 \cdot 0$	3	$18 \cdot 2$	11	0.79	9		0.19	29	
Waipiata	1,550	$43 \cdot 4$	$29 \cdot 5$	$36 \cdot 4$	-0.8	50.0	6,7	$17 \cdot 2$	10	0.36	6	-0.77	0.10	23	115.7
Alexandra	520	$46 \cdot 8$	$28 \cdot 8$	$37 \cdot 8$	+0.0	$54 \cdot 2$	11, 23	19.9	11	0.48	9	-0.28	0.16	29	118.3
Mid Dome	1,252	$45 \cdot 6$	$29 \cdot 9$	$37 \cdot 6$		56.5	5	18.5	9	$2 \cdot 27$	16		0.46	8	
Manorburn Dam	2,448	40.9	24.7	$32 \cdot 8$	-0.2	$44 \cdot 8$	12, 25	10.0	10	0.37	5	-0.96	0.18	<b>5</b>	
Taieri	80	49.4	$34 \cdot 7$	$42 \cdot 0$	(+0.2)	54.6	6	$21 \cdot 8$	26	$1 \cdot 10$	15	(-1.14)	0.19	8	101.7
Mussleburgh, Dunedin	5	49.3	$37 \cdot 6$	$43 \cdot 4$	(+0.2)	$55 \cdot 0$	6	$27 \cdot 0$	10	$2 \cdot 33$	17	0.13	0.97	27	102.5
East Gore	245	47.3	$35 \cdot 0$	$41 \cdot 2$	+1.0	$54 \cdot 0$	13	$24 \cdot 0$	10	$3 \cdot 44$	23	+0.53	0.37	7	
Gore	240	47.5	$34 \cdot 8$	$41 \cdot 2$	+0.2	$55 \cdot 5$	13	$26 \cdot 0$	9	3.58	23		0.44	7	83.1
Otautau	180	$47 \cdot 1$	$34 \cdot 8$	$41 \cdot 0$		$52 \cdot 3$	23	$25 \cdot 0$	10	7.18	21		1.24	7	
Invercargill	32	48.0	$36 \cdot 9$	$42 \cdot 4$	+0.2	54.0	6	$27 \cdot 0$	10	$8 \cdot 20$	24	+4.45	1.40	7	57·0
Invercargill South	8	47.3	$37 \cdot 4$	$42 \cdot 4$	-0.3	$52 \cdot 3$	1	$28 \cdot 0$	2	8.80	23	+4.95	1.36	3	
					$\mathbf{LA}$	TE RF	TURN	s							
Milford Sound, May, 1950	20	55.7	43.0	49.4	(+3.5)	66.8	25	$32 \cdot 2$	22, 23	$25 \cdot 81$	15	(+3.59)	8.05	25	1.
Cromwell, May, 1950	720	$56 \cdot 2$	35.6	45.9		$69 \cdot 1$	4	19.3	20	1.89	7		1.70	$\frac{20}{25}$	••

Nore.-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, and the normals are partly interpolated.

## Notes on the Weather for June, 1950

Notes on the Weather FOR JUNE, 1950 General.—After the exceptionally mild conditions of the preceding month, June's weather, by contrast, appeared to be rather unpleasant. Although there was little settled weather, the conditions were, however, fairly typical of the winter season. Temperatures were, in fact, slightly above average. An unusual feature of the weather situation was the passage over the New Zealand area of the series of six wave depressions each of which had its origin near the coast of Queensland. A long spell of showery south-westerly weather made conditions very unpleasant in Southland until the final week.

On the whole it was a favourable month for farmers and stock is reported to be in good condition.

Rainfall.—Rainfall was above average in Marlborough, South-land and the Canterbury Plains. On the Kaikoura coast and in Southland where it was one of the wettest Junes in the last 40 years, totals were 2 or 3 times the average. Some local flooding occurred in Marlborough towards the average. Some heat notified in the North Island also, rainfall exceeded the average, except in the region about and west of the Tararua Range and about the central portion of the Auckland Peninsula.

Lowest rainfalls occurred in Central Otago where several stations had monthly totals of under half an inch, the equivalent of about a third to the average amount.

Temperatures.—Except in parts of Canterbury, mean tempera-tures were above normal. The anomalies were generally small but in central and northern districts of the North Island they exceeded 2° F.

There was a moderate fall of snow over Southland on the 7th.

Sunshine .- There was a deficiency of over 20 hours in the month's sunshine over the Auckland Province and along the Kaikoura coast. Most of Canterbury had an excess of 20-30 hours, but over the remainder of the country the sunshine was near average.

Weather Sequence.—With a trough of low pressure lying across the North Island, the weather there remained very unsettled. For a start, conditions were better in the South Island due to the influence of a weak anticyclone.

A depression which passed rapidly across the Cook Strait region on the evening of the 2nd brought brief but heavy rain to the central provinces. An anticyclone then moved from the Tasman Sea across to the north of New Zealand.

From the 4th to the 7th unsettled westerly weather prevailed, pressures running high to the north but very low to the south. Except in sheltered eastern districts heavy showers were frequent throughout this period and thunder occurred in many places. Snow became widespread in the South Island on the 6th and winds rose to gale force as the main depression, which was very deep and extensive, crossed Campbell Island. When a secondary depression passed close to Southland a day later, its associated cold front swept rapidly northwards over the South Island accompanied by hail and thunder. It began to rain over Northland with the approach of a wave depression which had formed off the coast of Queensland.

This wave passed across Northland on the night of the 8th. Mean-

This wave passed across Northland on the night of the 8th. Mean-while a weak ridge had developed over the South Island where the weather had cleared except for showers on the Southland coast. A second wave deepened steadily and, moving rapidly south-east-wards, crossed the Wellington province on the night of the 10th. On the 11th a ridge of high pressure extended across the Tasman Sea onto the Dominion. Since pressures remained low to the south-east, south-westerly conditions then prevailed. Cold showery weather continued in exposed districts, but it became fine and frosty over the greater part of the country. Before the end of the month, yet another four depressions from the Queensland region were to pass over or close to New Zealand. The third of the series was weak. It passed North of North Cape on the 14th, rainfall being confined mainly to the North-land and Coromandel districts. There was a period of rain in the South Island on the 16th during the passage of a vigorous cold front associated with a depression far to the south. With barometers rising in the south, winds then turned more south-easterly.

rising in the south, winds then turned more south-easterly. During the passage of the fourth depression over North Cape on the 18th, rain extended, for a time, over the Auckland Province on the 18th, rain extended, for a time, over the Auckland Province (except the southern part) and down the east coast to Banks Peninsula. Although cold, showery weather continued in Southland and South Otago, the 19th marked the beginning of a spell of settled weather over the greater part of the country. Temperatures remained cold and severe frosts occurred inland. In parts of the North Island the night of the 19th was the coldest for some years. A few scattered showers on the 21st were associated with the passage of a weak cold front. On the same day the fifth of the Queensland depressions passed well to the north of the Dominion just as the sixth was beginning to form. An intense anticyclone, which has been over south-eastern Australia for more than a week.

Just as the sixth was beginning to form. An intense anticyclone, which has been over south-eastern Australia for more than a week, then crossed the Tasman Sea to New Zealand. Thus, on the 24th, came to an end the long spell of showery weather in Southland. The sixth depression of the series followed a more southerly track than any of its predecessors. Deepening steadily it soon developed into a major storm which produced serious flooding in New South Wales as it moved down the Australian coast. Winds turned north castroly in New Zooland on the 25th with the anarous of the associated warm front. This front was preceded by a very extensive rain-band which reached Northland late on the 25th. Barometers fell steadily and rain gradually spread southwards over the whole country. When the original centre was still about 500 miles west of Auckland, a new centre formed east of Hawke's Bay

miles west of Auckland, a new centre formed east of Hawke's Bay early on the 28th. With a change to north-westerly winds in the north, rain became intermittent there, but the formation of a new centre intensified the rainfall in Wairarapa and Marlborough resulting in some local flooding in the latter district. As the new centre moved away to the east on the 29th, the original centre travelled towards Westland where it slowly died away. The weather, however, remained generally unsettled due to the rapid advance of a new and vigorous depression in an east-north-eastward direction across from Tasmania. At the end of the month it was rapidly approaching Auckland.

[N.Z.M.O. 107.]

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