

A second cyclone of only slight intensity crossed Otago on the 7th, and was followed by a more vigorous one, the centre of which moved rapidly across Westland and Canterbury on the 11th. Thereafter until the 18th fine weather, associated with a well developed high-pressure system, was experienced over most of the country.

During the 19th and 20th a cyclone which had developed suddenly in the south-west Tasman passed through Cook Strait, where the pressure fell almost to 29.0 in. This storm was accompanied by very heavy rains and severe gales, especially over the North Island.

The westerly weather already referred to then began to control the situation. From the 24th onwards the pressure difference between northern and southern places became large. In other words, pressure gradients became steep. Thenceforward until the end of the month strong winds blew almost continuously from between west and south. In western districts, especially in the North Island, gale force was experienced for much of the time. The period was remarkable for the number of tornadoes occurring. The most severe was one which struck the outskirts of Palmerston North at 3.25 p.m. on the 24th. A number of houses were damaged, trees were uprooted, and telegraph poles levelled. Onaero, north of Waitara, experienced a less violent tornado on the 26th, and the Rotorua district another on the 27th. These whirls were accompanied by severe thunder and hail. Many other places also recorded thunder and hail storms. A number of stock were killed, and several human beings received shocks, two persons being rendered unconscious.

EDWARD KIDSON, Director.

CLIMATOLOGICAL TABLE.

MEANS AND TOTALS FROM CHIEF STATIONS.

June, 1929.

Altitude above sea-level.	Name of Station and Observer.	Mean Temp. Air in Shade.	Extremes.		Total Rainfall (100 Points to the Inch).	Days with Rain ( $\frac{1}{4}$ Point or more).	Altitude above Sea-level.	Name of Station and Observer.	Mean Temp. Air in Shade.	Extremes.		Total Rainfall (100 Points to the Inch).	Days with Rain ( $\frac{1}{4}$ Point or more).
			Mean Max. Temp.	Mean Min. Temp.						Mean Max. Temp.	Mean Min. Temp.		
Ft. 225	NORTH ISLAND. WAIPOUA, DONNELLY'S CROSSING D. Grant	Deg. *	Deg. *	Deg. 47.3	Points. 880	22	Ft. 186	NORTH ISLAND.— <i>ctd.</i> GREYTOWN W. Allan	Deg. 48.5	Deg. 56.9	Deg. 40.1	Points. 677	17
65	RIVERHEAD .. W. J. McKibbin	* ..	* ..	46.7	743	23	415	WELLINGTON ..	50.1	54.6	45.7	556	15
152	AUCKLAND .. H. M. Vincent	54.9	60.1	49.8	565	25	SOUTH ISLAND.						
131	R U A K U R A F A R M, HAMILTON EAST A. Stuart	50.8	59.6	42.1	642	20	..	GOLDEN DOWNS, NELSON. J. P. McEnany	43.9	52.6	35.2	1223	16
..	CAMBRIDGE .. H. Sturgeon	51.2	59.7	42.8	566	21	34	NELSON .. O. B. Pemberton	48.9	56.5	41.4	510	13
211	MATAMATA .. W. Halligan	49.9	59.0	40.8	642	20	743	BALMORAL, CULVERDEN D. D. Dunn	44.3	53.7	35.0	227	9
46	TE AROHA .. C. E. Christensen	53.6	61.6	45.6	643	17	1220	HANMER SPRINGS .. H. Roche	42.5	52.1	32.9	438	12
340	WAIHI .. F. Haszard	51.7	58.2	45.2	1073	20	25	CHRISTCHURCH .. H. F. Skey	44.9	52.9	37.0	308	14
100	TAURANGA .. Miss K. Butcher	50.6	60.0	41.2	529	17	42	LINCOLN .. D. J. Sidey	45.8	54.1	37.6	433	11
925	ROTORUA .. G. R. Ewing	48.9	56.1	41.8	854	18	1220	LAKE COLERIDGE .. H. E. M. Hart	43.4	53.1	33.8	360	14
1000	ROTORUA NURSERY, WHAKAREWAREWA W. T. Morrison	48.5	56.9	40.1	645	17	1200	"RUDSTONE," METHVEN James Carr	44.3	50.7	38.0	475	12
60	NEW PLYMOUTH .. G. H. Dolby	52.6	57.9	47.3	1042	23	323	ASHBURTON .. H. P. Clayton	43.7	52.3	35.1	547	15
2125	KARIOI .. H. E. Fache	43.6	51.3	36.0	862	20	1000	FAIRLIE .. J. Fraser	40.7	50.0	31.4	408	11
2080	TAIHAPE .. A. R. Fennin	44.8	50.1	39.6	739	22	2510	THE HERMITAGE, MOUNT COOK J. A. Steadman	*	*	31.6	2771	22
100	PALMERSTON NORTH J. A. Colquhoun	50.1	57.2	43.0	622	22	2350	LAKE TEKAPO .. R. R. Beauchamp	38.6	46.3	31.0	423	12
..	MASSEY AGRIC. COL., PALMERSTON N. I. P. E. Sulser	49.8	56.8	42.8	773	24	56	TIMARU .. Caretaker of Domain	44.2	51.0	37.4	533	14
8	TANGIMOANA .. E. Belworthy	52.2	57.6	46.8	633	16	200	WAIMATE .. F. Akhurst	44.5	52.5	36.6	550	16
119	CENTRAL DEVELOPMENT FARM, WEBAROA J. E. Sharp	49.6	56.6	42.7	691	18	1550	SANATORIUM, WAIPIATA Dr. A. Kidd	40.4	48.8	32.1	212	15
44	KAPITI ISLAND .. A. S. Wilkinson	48.8	55.8	41.8	615	16	1000	OPHIR .. Rev. A. Don	38.8	47.8	29.9	143	14
5	NAPIER .. R. Thomas	52.0	60.2	43.9	88	13	..	MANORBURN DAM .. J. C. Buchanan	35.8	42.4	29.2	217	16
45	HASTINGS .. H. N. Fowler	49.0	59.1	38.9	124	12	520	ALEXANDRA .. Geo. Smith	39.6	48.1	31.1	152	11
384	M A N G A M U T U, PAHIATUA A. W. Hamilton	48.1	56.3	39.8	1069	21	300	DUNEDIN .. D. Tannock	46.1	52.1	40.1	694	18
377	MASTERTON .. R. Brown	47.8	56.7	38.9	508	17	245	GORE .. A. T. Newman	..	..	..	..	..
							12	HOKITIKA .. J. A. Chesney	48.0	55.3	40.8	1383	20
							12	INVERCARGILL .. L. Lennie	46.3	53.3	39.3	440	22

\* Incomplete.