

remained off the east coast until the 15th, when it gradually moved away. Southerly winds set in on the 10th, and continued in most districts for the remainder of the spell. Very wet weather prevailed throughout the whole period, especially from the 9th to the 14th. On the 9th heavy rain was very general. A very severe hailstorm occurred on the 11th in the Napier district, and did serious damage to fruit crops and trees on a narrow line extending from Eskdale through Greenmeadows to Parkowhai. At some places stones up to an inch and a half in diameter were observed. On the 13th, when the cyclone became very intense, southerly gales were experienced at some places, temperatures dropped and snow fell on the mountain tops in both Islands. The period was reminiscent of that between the 12th and the 19th of last December when, however, the cyclones were centred further eastward. Last year, also, the southerly winds were more severe and temperatures lower.

A rather intense depression moving from the westward caused northerly gales in Cook Strait and rain from Taranaki and Wellington southwards on the 19th. The second cyclone, which, however, was of only slight intensity, developed in the northern portion of this depression on the 20th.

The third cyclone followed the passage of a southern depression on the 24th. Its centre was in the far northern portion of the Tasman Sea, and did not pass away to the eastward until the 29th. This storm was responsible for very wet weather during the holiday season. Heavy and general rains were experienced in almost all districts, especially on the 25th or 26th and the 28th. Low-pressure waves of the westerly type kept the weather unsettled, especially in the South Island, until the end of the month.

EDWARD KIDSON, Director.

CLIMATOLOGICAL TABLE.

MEANS AND TOTALS FROM CHIEF STATIONS.

December, 1928.

Altitude above Sea-level.	Name of Station and Observer.	Extremes.			Total Rainfall (100 Points to the Inch).	Days with Rain (4 Point or more).	Altitude above Sea-level.	Name of Station and Observer.	Extremes.			Total Rainfall (100 Points to the Inch).	Days with Rain (4 Point or more).
		Mean Temp. Air in Shade.	Mean Max. Temp.	Mean Min. Temp.					Mean Temp. Air in Shade.	Mean Max. Temp.	Mean Min. Temp.		
Ft.	NORTH ISLAND.	Deg.	Deg.	Deg.	Points.	Ft.	SOUTH ISLAND.	Deg.	Deg.	Deg.	Points.		
225	WAIPOUA, DONNELLY'S CROSSING E. Newton	61·8	70·4	53·2	682	17	34	NELSON .. O. B. Pemberton	60·9	67·9	53·9	869	15
65	RIVERHEAD .. W. J. McKibbon	60·5	70·3	50·7	493	15	743	BALMORAL, CULVERDEN D. D. Dunn	57·6	68·0	47·3	581	15
152	AUCKLAND .. H. M. Vincent	64·0	70·4	57·6	600	15	1220	HANMER SPRINGS .. W. Montgomery	56·2	66·5	46·0	941	16
131	RUAKURA FARM, HAMILTON EAST A. Stuart	61·3	71·9	50·7	496	15	25	CHRISTCHURCH .. H. F. Skey	58·0	64·6	51·4	600	14
..	CAMBRIDGE .. H. Sturgeon	61·7	72·4	51·0	437	14	42	LINCOLN .. D. J. Sidey	57·9	66·0	49·9	754	15
211	MATAMATA .. W. Halligan	61·3	72·3	50·4	636	13	1220	LAKE COLERIDGE .. H. E. M. Hart	58·6	68·1	49·1	474	14
46	TE AROHA .. C. E. Christensen	64·4	75·2	53·7	500	12	1200	"RUDSTONE," METHVEN James Carr	55·9	64·7	47·2	817	16
340	WAIHI .. F. Haszard	61·6	70·9	52·3	1403	13	323	ASHBURTON .. H. P. Clayton	..	*	49·7	679	14
100	TAURANGA .. Miss K. Butcher	60·9	71·6	50·2	892	16	1000	FAIRLIE .. J. Fraser	57·4	67·7	47·2	644	17
925	ROTORUA .. G. R. Ewing	61·0	69·9	52·1	515	13	2510	THE HERMITAGE, MOUNT COOK C. C. Woolley	..	..	..	..	..
1000	ROTORUA NURSERY, WHAKAREWAREWA W. T. Morrison	58·8	72·0	45·6	607	14	2350	LAKE TEKAPO .. R. R. Beauchamp	54·7	65·4	44·1	304	8
60	NEW PLYMOUTH .. G. H. Dolby	60·4	67·6	53·3	810	15	56	TIMARU .. Caretaker of Domain	57·9	65·2	50·7	423	17
2125	KAROI .. H. E. Fache	53·7	65·4	42·0	549	13	200	WAIMATE .. F. Akhurst	56·4	63·9	49·0	368	13
2080	TAIHAPE .. A. R. Fannin	57·3	65·7	48·9	610	18	1550	SANATORIUM, WAIPIATA Dr. A. Kidd	55·9	67·2	44·7	452	12
100	PALMERSTON NORTH J. A. Colquhoun	61·2	69·6	52·9	421	11	1000	OPHIR .. Rev. A. Don	58·7	70·8	46·7	200	14
..	MASSEY AGRI. COL., PALMERSTON N. I. P. E. Sulser	60·9	69·1	52·8	491	18	..	MANORBURN DAM .. J. C. Buchanan	52·4	62·7	42·1	213	11
8	TANGIMOANA .. E. Belworthy	61·3	70·2	52·4	406	14	520	ALEXANDRA .. Geo. Smith	..	70·8	*	190	10
119	CENTRAL DEVELOPMENT FARM, WERAROA J. E. Sharp	61·1	69·1	53·2	629	17	300	DUNEDIN .. D. Tannock	56·8	64·9	48·8	388	16
5	NAPIER .. R. Thomas	63·4	69·5	57·3	482	15	245	GORE .. A. T. Newman	..	..	..	..	..
45	HASTINGS .. H. N. Fowler	61·7	70·1	53·4	414	13	12	HOKITIKA .. J. A. Chesney	58·9	65·8	52·0	887	19
384	MANGAMUTU, PAHIATUA A. W. Hamilton	30·8	70·5	51·2	487	18	12	INVERCARGILL L. Lennie	55·5	63·7	47·3	343	17
377	MASTERTON .. R. Brown	60·4	70·3	50·6	644	16	ERRATA.						
186	GREYTOWN .. W. Allan	60·3	70·2	50·5	729	15	340	WAIHI September, 1928 ..	53·5	..	46·2	..	..
415	WELLINGTON ..	58·1	63·9	52·3	819	15	5	NAPIER March, 1928 ..	64·2	70·6	57·8	..	..

\* Thermometer out of order.