CLIMATOLOGICAL TABLE—*continued*

Summary of the Records of Temperature, Rainfall, and Sunshine for May, 1950—continued

Station.	Height of Station above M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfall in Inches.					Bright Sunshine.
		Means of		Mean of A and B.	Difference from Normal.	Absolute Maximum and Minimum.				Total Fall.	No. of Rain Days.	Difference from Normal.	Maximum Fall.		
		A Max.	B Min.			Maximum.	Date.	Minimum.	Date.				Amount.	Date.	
	Ft.	°F.	°F.	°F.		°F.		°F.		In.			In.		Hrs.
Queenstown	1,100	55·1	38·6	46·8	+2·7	65·0	30	31·6	19	3·61	11	+0·95	1·56	25	89·8
Cromwell	720	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophir	1,000	56·2	30·7	43·4	+2·5	67·8	27	16·7	21	1·12	3	+0·03	0·86	25	..
Earnscleugh	500	56·6	31·5	44·0	..	68·3	30	18·5	20	1·09	5	..	0·90	25	..
Waipiata	1,550	55·3	36·8	46·0	+3·6	67·2	4	25·0	20	0·02	1	−1·32	0·02	25	116·3
Alexandra	520	56·2	33·4	44·8	+1·9	66·2	30	19·2	20	0·92	8	−0·01	0·80	25	104·7
Mid Dome	1,252	56·7	36·1	46·4	..	67·5	27	23·0	21	1·74	8	..	1·20	25	..
Manorburn Dam ..	2,448	51·3	28·4	39·8	+1·5	60·5	4, 28	19·0	20	0·46	3	−1·37	0·42	25	..
Taieri	80	57·8	37·5	47·6	(+1·7)	74·5	26	24·7	19	0·95	6	−1·35	0·47	17	94·8
Musselburgh, Dunedin	5	55·8	42·4	49·1	(+1·8)	72·8	26	31·5	22	1·05	9	−1·55	0·34	17	94·4
East Gore	245	56·5	36·7	46·6	+1·9	67·0	26	25·0	20	0·59	14	−2·29	0·14	4	..
Gore	240	57·0	37·1	47·0	+1·5	68·0	26, 27	26·5	19	0·55	13	..	0·13	4	103·6
Otautau	180	55·8	35·6	45·7	..	68·8	27	25·8	7, 19	1·58	11	..	0·67	16	..
Invercargill	32	56·1	38·0	47·0	+1·3	68·0	27	25·0	19	1·47	15	−2·73	0·40	16	100·8
Invercargill South ..	8	56·5	38·7	47·6	+1·4	70·0	27	28·0	19	1·36	12	−2·95	0·38	16	..
LATE RETURNS															
Te Aroha, April, 1950 ..	46	..	47·5	..	..	..	..	34·5	8	5·74	14	+1·08	1·87	14	..
Opotiki, April, 1950 ..	27	68·4	48·6	58·5	..	77·1	1	37·9	9	5·42	10	..	3·33	14	..
Cromwell, April, 1950	720	62·7	36·9	49·8	..	72·3	10	27·9	13	0·21	3	..	0·16	10	..
East Gore, April, 1950	245	59·0	40·4	49·7	−0·8	69·0	10	33·0	25	1·55	15	−1·56	0·66	5	..

NOTE.—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 MAY, 1950

General.—May was cloudy and very mild, in fact it was the mildest May on record. Pastures and winter fodder crops showed remarkable growth except in the interior of Otago and Southland, where rainfall has been low for several months. Many plants and shrubs flowered out of season.

In Westland, however, the last quarter was very stormy, high winds and flooded rivers causing considerable damage, and resulting in serious and prolonged dislocation of road and rail communications. Canterbury rivers were also unable to cope with the discharge arising from the phenomenal rainfall in the ranges, and some flooding occurred on the plains.

Rainfall.—In the North Island rainfall was well below normal with the notable exception of those districts with a north-easterly aspect, especially in the Coromandel–Bay of Plenty–Rotorua area. A new record was established at Tairua where the month's total was 25·26 inches of which 14·00 inches fell in the forty-eight hours commencing at 9 a.m. on the 18th. About the same time a phenomenal local downpour was reported near Port Charles at the head of the Coromandel Peninsula. It was a very dry month in the Wanganui–Rangitikei–Manawatu area.

Very heavy northerly rains during the fourth week brought the rainfall well above average in and west of the Southern Alps, and also to a lesser extent in the Marlborough Sounds and in parts of Nelson. Elsewhere in the South Island rainfall was below average, with smallest totals in Otago. At Otira all but 4 inches of the month's total of 38·04 inches fell after the 23rd. The daily fall of 16·25 inches on the 26th has not been exceeded since this station commenced recording in 1906.

Temperatures.—Mean temperatures were well above normal throughout the whole country making this easily the warmest May for over 80 years. In Westland and most of the North Island the departure from average was 5°–6° F. decreasing to about 2° F. in Southland. There were several very warm days in Canterbury and Hawke's Bay during the last week. At Wigram, Christchurch, a temperature of 81·2° F. was recorded on the 26th. This was only the third occasion on which a temperature over 80° F. has been officially recorded in New Zealand in May.

Sunshine.—There was a general lack of sunshine. Over the greater part of the country the deficiency was at least 30 hours. About the Bay of Plenty and the northern part of the South Island some totals were more than 50 hours short of the average. Rotorua and Hanmer both registered the lowest May sunshine since records began some 40 years ago.

Weather Sequence.—For a start settled anticyclonic weather prevailed. Following the passage of a weak cold front on the 2nd, a high pressure cell from the South Tasman merged with the anticyclone already over the Dominion. Barometers remained high with only a very brief drop during the passage of another cold front on the 5th. The latter produced light falls of rain in most districts, but the weather soon cleared again and sharp frosts occurred inland. On the morning of the 8th, some showers were associated with a temporary freshening of winds from the south-west.

North-easterly winds prevailed with the approach of a complex disturbance which had been located over the north-western part of the Tasman Sea since the beginning of the month. Rain set in over Northland on the 9th, and soon spread southwards as far as Wellington and Marlborough. On the 10th winds rose temporarily to gale force in exposed parts of Northland. Heavy rainfalls were recorded there as well as in the Bay of Plenty. As the main centre moved slowly down through the central Tasman, rain gradually extended to other eastern districts of the South Island where dull misty weather continued for several days. A small secondary centre passed across the North Island on the night of the 12th, augmenting the rainfall in Gisborne and Hawke's Bay. Apart from local morning fogs, the weather in the south-west remained fair until the arrival of the main centre which passed eastwards across Southland on the 16th. Cool south-easterlies then invaded the South Island and produced light rainfalls in Otago and Southland; elsewhere the weather cleared, although only temporarily in the North Island.

An intense anticyclone south of the Tasman Sea extended on to the Dominion and delayed the advance of a new depression in mid-Tasman. Although it was not until the 22nd that this depression—by then much weakened—passed close to North Cape, the associated frontal system lay stationary across the Auckland Province for several days, giving widespread rain over northern and central districts of the North Island from the 18th onwards. In the South Island this was a period of settled frosty weather.

The southern anticyclone passed across to the east of New Zealand on the 23rd, where it became stationary and intensified further. Rain fell for a time in Westland and Southland during the passage of a deep depression in the far south on the 24th. The following wedge gave a very brief clearance during the night. Rain had also developed in the Auckland Province under the influence of a shallow depression to the north-west.

A severe storm which was deepening rapidly off New South Wales on the 24th, then crossed the Tasman Sea, later passing close to Southland on the morning of the 26th. With its approach northerly winds prevailed and gradually increased to gale strength in the South Island. Rain became general except in coastal districts east of the main ranges where only a few scattered showers managed to penetrate. As a result of exceptionally heavy rains in and west of the Southern Alps, rivers in Westland and Canterbury were in high flood by the 27th.

Even though the storm centre moved away steadily to the south, northerly winds and unsettled weather continued. Further substantial rainfalls occurred in Westland, and also in Nelson, chiefly due to a front which had become stationary across the northern part of the South Island. Since the 24th it had been unusually warm on the east coast but, with the arrival of a wedge from the South Tasman on the 28th, temperatures became much cooler in the South Island and widespread fog and drizzle developed in Canterbury, Otago and Southland. Although there was a distinct improvement in Westland, showery weather persisted there.

Another large, but not very active, depression moved slowly across the Tasman Sea to pass over the Auckland province on the 30th. In the South Island, too, there was rain on the 30th during the passage of a cold front, but the weak anticyclone which followed brought some improvement. It remained dull and unsettled in the North Island.

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