

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for August 1965—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.	
Rankleburn Forest ..	835	47.0	31.7	39.4	-2.4	53.8	29	23.2	4	1.27	14	..	0.30	20	..
Otautau ..	180	50.2	30.7	40.4	-2.4	59.0	29	22.2	5	2.19	13	-0.8	0.70	20	143
Gore ..	230	50.2	30.6	40.4	-2.9	57.0	7, 10	23.0	4	1.28	15	-0.8	0.35	19	138
East Gore ..	245	49.4	31.8	40.6	-2.5	57.0	7	24.0	5, 6	1.22	13	-0.9	0.33	19	..
Pebble Hills ..	138	48.6	32.8	40.7	-2.3	55.0	7, 27	23.0	27	2.12	15	-0.6	0.90	19	..
Invercargill Airport ..	1	49.6	31.3	40.4	-2.6	55.5	7	24.0	4	1.88	14	-1.1	0.72	19	137
Milton ..	60	50.0	31.5	40.8	..	58.4	7	22.4	5, 6	0.92	14	-1.1	0.34	22	..
Balclutha ..	20	49.3	32.5	40.9	..	55.8	7	22.9	4, 6	0.90	13	..	0.35	22	119
Rarotonga ..	15	75.9	63.3	69.6	..	80.5	30	49.7	9	1.13	12	..	0.36	16	215
Raoul Island ..	126	64.2	54.7	59.4	..	68.9	23	45.4	5	6.68	19	..	2.42	12	152
Chatham Island ..	157	50.8	42.4	46.6	-0.2	54.9	20	34.2	26	3.27	21	-0.1	0.83	22	85
Campbell Island ..	49	44.1	36.8	40.4	..	47.1	27	36.2	8	4.67	31	..	0.63	30	30
Scott Base, Antarctica ..	45	..	..	-15.2	..	+15.8	..	-60.3	..	..	..	..	..	..	..

Supplementary data, sunshine: Foxton, .. hrs.

LATE RETURNS

Ranana, July 1965 ..	1,200	50.8	34.2	42.5	..	60.0	24	25.0	22	6.89	18	..	1.05	31	..
Riwaka, July 1965 ..	25	53.2	32.5	42.8	-1.7	60.2	20	26.1	11	7.43	10	+2.5	1.85	23	..
Golden Downs, July 1965 ..	900	48.4	29.6	39.0	-2.2	55.4	26	20.5	4	4.22	12	-0.2	0.83	24	..
Cherry Farm, Waikouaiti, July 1965 ..	21	50.6	31.8	41.2	+1.1	61.0	17	28.0	17	0.76	11	-0.9	0.18	31	..
East Gore, July 1965 ..	245	45.5	32.6	39.0	-0.7	54.5	17	26.0	12	3.23	21	+1.1	0.52	31	..
Foxton, July 1965 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Riwaka Hop Research Station, July 1965 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Riwaka Hop Research Station, August 1965 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erratum, Wellington Airport, July 1965 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

The "normal" refers to the present site of the instruments. The standard periods for normals are: for temperature 1931-60, for rainfall 1921-50, and for sunshine 1935-60. No normals are available for stations with only short records.

NOTES ON THE WEATHER FOR AUGUST 1965

**General:** August was marked by an unusually high frequency of winds from an easterly quarter, with excessive cloud and rain in Gisborne and Hawke's Bay. In these areas especially, but also in other parts of the North Island, the wet weather caused the loss of many lambs. However, in Southland, Otago, and South Canterbury the weather was comparatively dry but frosty, with better conditions for stock.

A local tornado, said to have been accompanied by a fireball, did some damage at Cobden (Greymouth) on the 10th.

**Rainfall:** Rainfall was two to five times the average value in Gisborne and Hawke's Bay, also in Coromandel and about Auckland city. Elsewhere in the North Island, except in western districts from Waitomo to Manawatu, rainfall was also somewhat above average. In the South Island, west of a line from Nelson to Christchurch, rainfall was below average, mainly by 25 per cent. Central and North Otago received less than half the average value.

Two totals of 35 in. were recorded, one at Makororo, inland from East Cape, and the other at Maraetotara, south-east of Hastings. Flooding was reported in parts of Gisborne and Hawke's Bay following heavy rain from the 10th to the 15th. At Maraetotara nearly 20 in. was recorded during the 13th and 14th.

Auckland city had a total of 12.76 in., the highest August rainfall in well over a century of records. More than 9 in. of this fell in three days, the 25th to the 27th, with some flooding, slips, and landslides.

**Temperatures:** Temperatures were 1-2 degrees above average in central and most eastern districts of the North Island. On the other hand, they were 2-3 degrees below average in Southland and Central Otago.

The spell of cold snowy weather at the end of July persisted for the first six days of August, with snow in some eastern and central districts of the North Island and light falls even in Waikato and Auckland, an unusual occurrence. Snow also affected roads in the Taupo-Taihape area from the 21st to the 23rd.

**Sunshine:** Sunshine was more than 50 hours below average in Gisborne and Hawke's Bay; and Napier's total of 93 hours was the lowest for August in 58 years of record. Over the remainder of the North Island and in coastal Canterbury sunshine was mainly 10-40 hours below average. The West Coast, Central Otago, and Southland were favoured with 15-45 hours above average.

**Weather Sequence:** The weather for the first six days of August was in the main a continuation of that experienced in the last three days of July. It was dominated by cold southerlies or south-easterlies with further rain in Wellington and eastern districts of the North Island and more snow on the high country, especially about the

main ranges and in the Taupo-Taihape area. The depression near the Chatham Islands moved away north-eastward very slowly, while the anticyclone initially over the Tasman Sea moved south-eastward over the South Island and to the east.

On the 7th and 8th the weather was generally settled as the anticyclone extended over the whole country.

Conditions soon deteriorated again, except near the east coast from Oamaru to Gisborne, as a depression crossed the South Island and a second depression developed to the north on the slow-moving trough associated with the first depression. Considerable falls of rain were reported on the 10th and 11th in Northland, Bay of Plenty, Nelson, and parts of Westland. During the next four days the depression to the north deepened and remained almost stationary, while pressures were relatively high over the South Island. The weather cleared in the north and west and over Otago and Southland; but rain moved to eastern districts as far south as Timaru, with some exceptional falls on the East Coast and in Hawke's Bay, resulting in serious flooding. By the 16th the depression had lost intensity and the rain was lighter; but with the approach of another depression over the Tasman Sea rain had commenced in Westland and Buller.

As the depression over the Tasman Sea moved slowly across the South Island with an associated trough of low pressure during the next four days, rain was again fairly general except in eastern districts, which received little or none. Pressures soon rose in the south, but a series of depressions crossed the North Island from the 21st to the 24th; and winds turned to cold south-easterlies. Rain was general as far south as Westport and Kaikoura and also on the east coast to Invercargill. Some considerable falls were reported in the Wellington Province. Snow was reported once again well down on the high country, especially in the Taupo-Taihape district.

By the 25th an anticyclone was centred over the Chatham Islands, and during this and the next three days a trough and a small depression were stationary near Auckland with excessive rain, causing slips, landslides, and flooding in this district. Rain was also reported at first over the remainder of the North Island and in Nelson, Marlborough, and North Canterbury. However, by the 27th the weather had cleared except over the Auckland and Hawke's Bay Provinces. On the 29th the depression was still centred to the north-east and rain was still falling east of a line from about Coromandel to Waipukurau; while at the same time the weather was deteriorating in Fiordland and Southland with the approach of a trough of low pressure from the south-west.

During the last two days of the month an anticyclone covered the Tasman Sea and a weak trough of low pressure crossed the South Island. Rain affected the West Coast, and there were also light falls on the Southland and Otago coast and a few showers in Auckland.

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