CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for June 1979—continued LATE RETURNS AND CORRECTIONS—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees Celsius								Rainfall in Millimetres					
		Means of		Mean of A	Differ-	Absolute Maximum and Minimum				Total	No.	Differ- ence	Maximum Fall		Bright Sun- shine
		A Max.	B Min,	and B	From Normal	Maxi- mum	Date	Mini- mum	Date	Fall	Rain Days	From	Amount	Date	
Wharite Peak, May 1979 Kahui, Taihape, May 1979 Highbank Power Station, May 1979 Adair, May 1979 Tara Hills, Omarama, May	Metres 914 518 336 85 488	°C 7.6 11.9 11.5 11.8 9.9	°C 3.2 4.2 3.7 4.6 0.3	°C 5.4 8.1 7.6 8.2 5.1	°C -0.3 -0.8 -0.7 -0.3 -0.3	°C 15.7 20.3 18.5 18.1 19.0	10 10 3 1 4	°C -1.6 -0.5 -1.5 -1.6	18 31 23 23 23	mm 174 115 201 124 85	18 12 11	mm -22 +120 +76 +44	mm 43 84 62 25	7 5 4	Hrs 109
1979 Taieri, Invermay, March 1979 Taieri, Invermay, April 1979 Taieri, Invermay, May 1979 Earnscleugh, May 1979 Stewart Island, March 1979 Stewart Island, May 1979 Raoul Island, February 1979 Raoul Island, March 1979	30 30 30 152 3 3 38 38	16.9 16.3 11.3 11.1 15.7 25.0 25.7	9.0 5.1 2.7 0.0 8.5 4.8 19.8 21.4	13.0 10.7 7.0 5.5 12.1 22.4 23.6	-0.2 -0.0 +0.0 +1.7	27.8 24.0 18.6 18.0 23.5 26.3 27.5	5 3 1 6 26 23	4.0 -3.0 -6.0 -7.5 2.9 -0.1 17.1 18.6	27 23 23 27 30 14 3	57 67 93 53 34 226 114 325	15 13 22 13 23 31 10 19	 +25 -41 +193	19 18 30 17 5 76 76 84	10 27 15 4 9 14 22 8	70 163 123

The "normal" refers to the present site of the instruments. Standard period for normals is 1941–1970. No normals are available for stations with only short records.

A rain day is a day with rainfall equal to or greater than 0.1 mm.

Where the extremes of temperature and rainfall have occurred more than once during the month, the date of the first occurrence is given.

WEATHER NOTES FOR JUNE 1979

General—Pressures were exceptionally high over most of New Zealand during June. In southern parts of the North Island, and the north of the South Island they were more than 10 millibars above normal. Winds were predominantly north-east in the north, and north-west in the south of the country. Conditions were mainly dry and warm throughout most of New Zealand during the month.

Mild temperatures produced good grass growth in most districts, but heavy rain at the end of the month and the lack of sun and wind, caused some pastures in the North Island to be too wet for stock leading to extensive pugging. Elsewhere winter feed was reported to be good, and stock in good condition.

On the 2nd of June a tornado passed through Kaitaia during the morning. Some houses had roofs blown off, and there was extensive damage to sheds, barns, and trees in the area.

Rainfall—The only areas with monthly rainfall totals above normal were in Northland, Auckland, and parts of Bay of Plenty, Poverty Bay, Nelson, and Marlborough. In Northland more than double the normal June rainfall was recorded, and in Auckland more than 70 percent above. On the 12th heavy rain in Northland closed many roads in the area through landslips and flooding. At Kaitaia the heaviest rain fell between 3 p.m. and midnight, 73 mm being recorded in this period, and 90 mm in the 24 hours up to 9 a.m. on the 13th. Many stations throughout the Northland region had 24 hour falls of between 50 and 100 mm.

Heavy rain commenced again on the 30th in Northland and Auckland and reached its peak on the 1st of July leading subsequently to some serious local flooding.

The driest areas were in the central districts and parts of Canterbury and Otago. Some stations in the south had only 10 to 25 percent of their normal months rainfall. At Methven only 2 means recorded during the month, and Christchurch Airport had their lowest June total (5 mm) since the station began in 1944.

Temperatures—During June temperatures were above normal throughout the whole of New Zealand. Most districts were warmer by at least 1°C, and in Northland, Auckland, Bay of Plenty, Taranaki, and Otago by more than 1½°C. The only cold spell during the month was from the 4th to 10th when maximum temperatures were slightly below average. On the 18th and 19th temperatures were very warm along the east coast of the South Island, maximum temperatures being above normal by 5°C to 8°C.

Sunshine—The only districts with above normal sunshine hours for the month were in Taranaki, Nelson, Canterbury, and parts of Southland. The greatest departures below normal were in Northland and Auckland. In Auckland City only 72 hours sunshine were recorded, and this is the lowest total for June since records began in 1930. Christchurch had in excess of 20 hours more than usual for June.

WEATHER SEQUENCE

The depression that was moving towards the North Island at the end of May crossed the Northland region on the 1st and 2nd. The cold front ahead of the depression brought heavy rain to most districts in the northern half of the North Island as it moved southeast. Parts of Northland, Auckland, and Bay of Plenty had 24 hour falls in excess of 50 mm up to 9 a.m. on the 2nd. Moderate falls were reported throughout other districts in the North Island. Temperatures were warmer than usual at the beginning of the month.

On the 3rd a ridge of high pressure extended on to New Zealand from an anticyclone in the Tasman Sea. By the morning of the 5th the anticyclone was centred over New Zealand and persisted until the afternoon of the 11th. A weak cold front moved across the South Island on the 8th, but only light rain was reported in some areas west of the main ranges. The majority of the country experienced fine weather and warmer temperatures until the 11th. A cold front associated with a depression moving to the south of the country moved on to the West Coast late on the 11th. As the front crossed the country heavy rain was reported in Fiordland, Westland, Buller, and parts of Wellington, Taranaki, Bay of Plenty, Auckland, and Northland. Some stations in Northland and Auckland reported falls of between 50 and 100 mm in 24 hours. Only light falls were recorded east of the main ranges in the South Island, and central North Island districts.

By the 13th another anticyclone had moved on to the country bringing further fine weather but cooler temperatures. On the 15th pressures were low to the north of New Zealand, and a weak cold front was moving towards the South Island. Light rain was reported in Fiordland as the cold front crossed the country, and light to moderate rain in the northern half of the North Island as a depression to the north of the country moved to the east. The anticyclone that had been lying over the country from the 13th had moved east, and this was replaced by another on the 17th. This anticyclone covered New Zealand until the morning of the 19th, when a trough of low pressure moved on to the South Island. Heavy rain was recorded in parts of Fiordland and Westland, with light to moderate rain in areas west of the main ranges in both the North and South Islands. On the east coast of the South Island temperatures were considerably above normal on the 18th and 19th.

An anticyclone had become established over the whole of New Zealand on the 20th and began to move eastwards on the 22nd. Pressures were low in the north Tasman Sea as a depression formed off the Australian coast. Late on the 22nd a cold front moved on to the South Island and this brought heavy rain to Fiordland and Westland. Some stations recorded falls of more than 100 mm in the 24 hours up to 9 a.m. on the 23rd. Light to moderate rain was reported in Southland, Buller, Wellington,

^{*}Indicates that the sunshine recorder is not located at the station but is in the near vicinity.