CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for March 1975—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Celsius)								Rainfall in Millimetres					
		Means of		Mean of A	Differ- ence	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 Normal	Amount	Date	
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Makahu Saddle, January 1975	974	••	9.3	• • •	••			4.5	31	323	20	+144	49	10	
Makahu Saddle, February	974	20.1	9.7	14.9	+1.1	30.8	24	4.7	9	154	10	-5	52	25	•••
Hastings, February 1975 Makaretu, February 1975 Stratford, February 1975	12 335 311	25.7 23.6 21.5	15.1 11.9 12.6	20.4 17.8 17.1	+1.5 +1.8	30.0 28.8 25.9	28 13 24	8.7 5.0 7.3	9 9 9	13 38 42	12 12	−40 −i05	6 9 10 37	25 25 14	 193
Kahui, Taihape, January 1975	518		12.0	17.7	••	26.7	24	5.9		158	9	••	9	11 21	••
Kahui, Taihape, February 1975	518	22.6	12.8		••				2	29	9	••			
Haast, February 1975 Black Birch Range, January 1975	1,396	19.1 14.3	12.1 7.8	15.6 11.1	$^{+1.2}_{+1.2}$	24.4 22.4	25 5	4.8	8 31	605 151	16 16	+282	195 67	10 20	155
Craigieburn Forest, August 1974	914	7.3	-3.1	2.1	-0.7	13.1	16	-7.0	9	78	13	46	33	23	
Craigieburn Forest, September 1974	914	11.2	1.2	6.2	+0.8	17.6	14	-3.1	20	73	16	-64	15	2	
Bromley, Christchurch, February 1975	9	21.0	13.6	17.3	+1.1	30.0	11	6.5	6	41	13	-5	11	22	
Temuka, February 1975 Clyde, February 1975 Alexandra, February 1975 Raoul Island, February 1974 Raoul Island, January 1975 Mid Dome, February 1975	24 183 141 38 38 38	21.5 23.4 22.8 23.8 25.1 20.8	11.2 10.1 11.6 18.9 19.4 8.9	16.4 16.8 17.2 21.4 22.3 14.9	+1.4 +0.5 +0.9 +0.8 +0.7	32.1 30.5 30.0 26.7 26.6 28.0	20 9 2 30 16 13	4.5 5.7 6.1 14.9 16.7 4.5	8 8 8 13 28 4	62 51 40 377 165 112	6 9 14 18 14 17	-2 +2 +288 +74 +26	27 14 10 156 102 36	16 27 27 17 10 27	178 196 217

The "normal" refers to the present site of the instruments. Standard periods for normals are: Temperature 1931-60, Rainfall 1941-70, Sunshine 1941-70. No normals are available for stations with only short records.

This is the first time that the sunshine normals 1941-70 have been used.

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.

NOTES ON THE WEATHER FOR MARCH 1975

General—In March the weather was warm and cloudy, as in February. Rainfall was above normal over about half of the country but there were a few dry areas.

Grass growth was generally very good, and the winter feed situation for farm stock is excellent in many areas. In the North Island high facial eczema spore counts caused some concern. In the South Island a lack of sunshine caused ground conditions to be rather wet, especially in parts of Canterbury. The only place in the country with conditions too dry for good grass growth was the Wanganui district.

Rainfall—The rainfall over most of the country was between 75 and 150 percent of normal. However, it was considerably above average in some areas exposed to the north and east, which recorded large rainfalls from the depression which was formerly Cyclone Alison. The area mainly affected was the northern half of the South Island on the 11th, 12th, and 13th. The Kaikoura Coast experienced exceptional falls of about 200 mm in 12 hours on the 12th.

During the 28th, 29th, and 30th heavy rain in South Westland and Fiordland caused Lake Te Anau to reach a very high level.

Temperature—Temperatures were above normal over the whole country, mainly by $1\frac{1}{2}^{\circ}$ to 2°C .

Sunshine—Sunshine was below normal everywhere, except for small areas in the east of Northland and on the Kaikoura Coast, where it was about normal. This was the cloudiest March for 10 years at many places on the West Coast.

Weather Sequence March 1974—The month began with a strong southerly flow over the country with some scattered rain in the north and east of the North Island and in coastal Southland. The southerly eased in the afternoon as a large anticyclone from the Tasman Sea moved quickly towards central New Zealand. During the 2nd and the morning of the 3rd the anticyclone moved across the country with generally fine weather except for a few showers in Northland. By the 4th the anticyclone was centred near Chatham Islands and a moist north to north-west flow was established over the South Island. This brought rain over the South Island and the south of the North Island. This rain moved gradually northward on

the 5th as a cold front moved slowly north-eastward to lie through Cook Strait by midnight on the 5th. The weather sequence of the 4th and 5th produced rainfalls of over 100 mm on the West Coast.

An anticyclone moved very quickly on to the South Island on the 6th and the rain cleared from most areas except the north-east of the North Island. Though this anticyclone covered much of the country on the 7th and morning of the 8th there were scattered showers in the west of the South Island and in several areas of the North Island. A cold front moved over much of the South Island on the 8th.

Cyclone Alison, which was to dominate the weather over New Zealand from the 10th to the 15th, had formed near New Hebrides about the 4th, crossed New Caledonia on the 8th, and was about 400 km north-west of North Cape by the morning of the 10th. Widespread rain developed in Northland with north-easterly gales, and rain extended over much of the North Island on the 11th, as the cyclone moved south - south-east to be centred west of Egmont by the 13th. Meanwhile, a strong ridge of high pressure from an anticyclone in the South Tasman Sea had extended east of New Zealand, and a very strong north-easterly flow covered the country on the 12th. Severe weather conditions were experienced in many areas exposed to the north-east and gales and extremely heavy rain were recorded in eastern Marlborough and North Canterbury. Rainfalls on the 12th and 13th were very heavy over the South Island north of a line from Haast to Oamaru, with widespread flooding on the West Coast, the Kaikoura Coast, and south of Nelson. The rainfall at Kaikoura for the 24 hours to 9 a.m. on the 13th was 205 mm—a fall that can be expected there on the average about once in a hundred years. Proceeding southward off the West Coast the cyclone filled quite quickly and by late on the 15th it had passed away about 500 km south of Invercargill.

Rain persisted in many western areas during the 14th but there was a temporary clearance in the east. On the 15th a shallow depression formed to the north of North Cape and it moved south-eastwards to lie just east of Cook Strait by the morning of the 17th. There was widespread rain over the North Island and northern and western parts of the South Island on the 16th and 17th.

Fine weather prevailed over New Zealand on the 18th and 19th. This spell broke in the south-west of the South Island on the 20th but persisted elsewhere on the 20th and 21st. A slow moving cold

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