CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for December 1978—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		Brigh Sun- shine	
		A Max.	B Min.	and B	From Normal	Maxi- mum	Date	Mini- mum	Date	Fall	Rain Days	From Normal	Amount	Date	эдис
Portland Island, November	Metres 78	°C 17.5	°C 12.5	°C 15.0	°C -0.1	°C 22.3	23	°C 8.6	17	mm 14	9	mm -29	mm 8	11	Hrs
1978 Kapiti Island, October 1978 Whatte Peak, November	16 814	15.4 11.9	8.9 4.8	12.2 8.4	$\begin{vmatrix} -0.3 \\ +0.2 \end{vmatrix}$	18.1 18.7	29 30	6.0	2 5	113 183	13 15	$^{+14}_{+20}$	39 96	19 11	
1978 Kairanga, Palmerston North November 1978	15	18.7	8.5	13.6	-0.2	25.5	30	0.0	5	70	11		33	11	227
Taita, Lower Hutt, November 1978	65	17.4	10.1	13.8	+0.2	24.6	30	1.3	6	103	9	-1	44	10	235
Somes Island, November 1978	43	16.6	10.5	13.6	•••	24.5	30	4.0	6	68	9	• •	21	10	••
Cape Egmont, November 1978	8	17.9	11.1	14.5	+0.2	20.9	29	2.3	6	65	12	-37	22	11	
Kahui, Taihape, November 1978	518	18.2	8.0	13.1	+0.3	25.7	29	0.9	6	78	12	••	27	11	
Karamea, November 1978 Totara Flat, November 1978	5 77	16.4 18.3	10.0 8.0	13.2 13.2	+0.3	19.3 26.0	21 30	6.6	26 6	132 161	i7	$-\dot{2}\dot{7}$	30	14 23	
Hari Hari, November 1978 Puysegur Point, November	45 43	16.6 13.9	7.8	12.2	+0.0	22.0 20.9	30 9	0.5	16 	279 181	18 25	$-140 \\ -22$	33 67	14 22	
1978 The Hermitage, Mount Cook November 1978	765	16.1	5.6	10.9	+0.5	26.1	27	-1.2	16	381	13	-18	70	14	171
Craigieburn Forest, November 1978	914	16.2	3.7	10.0	+0.5	25.8	30	-4.3	27	112	17	-28	29	14	
Waipara, November 1978 Rangiora, November 1978 Lincoln, November 1978 Adair, November 1978 Tara Hills, Omarama,	64 46 11 85 488	20.1 19.7 19.1 18.8 18.9	8.8 7.2 7.7 8.0 5.9	14.5 13.5 13.4 13.4 12.4	+0.1 +0.3 +0.7 +0.5	29.5 30.2 29.4 27.4 28.9	28 20 28 28 27	2.5 0.5 1.6 3.0 0.8	15 6 6 16 25	25 31 37 28 49	7 6 8 6 8	-17 -16 -28 $+1$	10 9 13 13 12	15 15 15 12 14	227 258
November 1978 Herbert Forest, November	61	19.0	5.8	12.4	+0.9	26.5	19	2.5	16	25	6	62	11	12	
1978 Ophir, November 1978 Moa Creek, September 1978 Moa Creek, October 1978 Moa Creek, November	305 427 427 427	19.3 12.4 15.8 18.8	5.4 -0.8 2.3 4.1	12.4 5.8 9.1 11.5	$ \begin{array}{c c} +0.0 \\ -0.2 \\ +0.1 \\ +0.7 \end{array} $	28.3 16.0 22.0 29.0	30 22 28 30		5 4 24 15	25 50 90 24	5	$ \begin{array}{r} -13 \\ +27 \\ +54 \\ -14 \end{array} $	8 64 7	14 13 1	••
1978 Alexandra, November 1978 Mahinerangi Dam,	141 396	20.9 16.0	8.1 5.1	14.5 10.6	$+0.7 \\ +0.5$	30.9 25.8	30 27	$^{1.8}_{-1.6}$	15 15	25 38	11 12	$-8 \\ -51$	8 9	22 15	257
November 1978 Nugget Point, November 1978	129	15.3	6.8	11.1	+0.4	25.3	19	2.1	16	59	15	-20	10	15	••
Tautuku, November 1978 Waitangi, Chatham Island, November 1978	61 44	16.9 14.2	7.0 8.7	12.0 11.5	− i .1	25.3 18.3	20 21	2.8 3.5	2 4	96 21	i4	$-\dot{40}$	15 6	3 12	134
Campbell Island, November 1978	15	9.9	4.8	7.4	+0.2	13.9	20	-0.3	15	120	24	+13	21	29	60
Nandi Airport, Fiji, November 1978	15	30.5	20.5	25.5	-0.5	33.8	16	17.7	11	76	13	• •	47	24	246
Totokoitu, Rarotonga, November 1978	9	25.9	22.0	24.0		29.0	1	20.0	16	637	21	• •	151	5	

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.

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

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 DECEMBER 1978

General—December was the first month since July with pressures below normal over the whole of New Zealand. Winds were predominantly westerly during the month, with a period of strong northwest winds on the 21st and 22nd. Most of the country experienced warm, dry, sunny conditions, but some areas in the South Island were slightly wetter than usual. Some rain early in the month produced good grass growth in most areas, but towards the end of the month formers reported that conditions were the end of the month farmers reported that conditions were becoming dry. Haymaking was delayed by wet weather but progressed well towards the end of the month, with good crops in most areas. Stock was reported to be in good condition, with dairy production above average.

Rainfall—The only areas with rainfall appreciably above normal were Canterbury, Otago and parts of Southland. Parts of Poverty Bay and Hawke's Bay had less than 50 percent of their normal month's rainfall. In Canterbury and Otago some districts had

more than double the usual December total. The highest totals were in Christchurch and Banks Peninsula area. Christchurch Airport recorded their highest December total since the station began in 1943.

On the 10th heavy rain caused flooding in parts of South Canterbury and North Otago. Snow was reported in Central Otago down to 1300 m. At Naseby snow was lying to a depth of 7.5 cm. Roads south of Timaru were flooded when 28 mm of rain fell in the period from 1 p.m. on the 10th to 5 a.m. on the 11th. Areas of Canterbury had a severe thunderstorm on the afternoon of the 10th during which 13 mm was recorded in 10 minutes at Christchurch Airport.

Between noon and 1 p.m. on the 10th a severe thunderstorm passed over the Wellington area, and 16 mm was recorded at Kelburn in this period. A 10-minute fall of more than 12 mm was measured, which has only been exceeded once before since the station began in 1928, and this occurred in 1935.