CLIMATOLOGICAL TABLE-continued Summary of the Records of Temperature, Rainfall, and Sunshine for October 1952-continued

Station.	Height of Station Above M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfall in Inches.					
		Means of		Mean		Absolute Maximum and Minimum.					No.		Maximum Fall,		Bright Sun
		A Max.	B Min.	of A and B.	Difference From Normal.	Maximum.	Date.	Minimum.	Date.	Total Fall.	of Rain Days.	Difference From Normal.	Amount.	Date.	shine.
Winchmore Haast Ashburton Fairlie Lake Tekapo Timaru Adair Tara Hills Milford Sound Waimate Queenstown Cromwell Ophir Earnscleugh Waipiata Alexandra Roxburgh Hydro Mid Dome Mos Flat, West Otago	Ft. 1,217 150 36 2,510 626 15 323 1,004 2,400 200 1,600 1,600 1,100 1,550 1,550 350 1,552 1,345 2,448 80 150 8 0	°F. 62·0 63·0 61·6 58·3 59·2 64·6 60·6 62·0 59·8 63·8 64·7 63·9 64·6 65·0 65·1 63·3 56·9 61·3 59·8 60·6 65·1 63·3 58·3 56·9 61·3 59·1 61·2	°F. 45.6 44.0 47.5 43.1 39.7 43.3 45.1 45.1 46.2 40.6 45.7 44.8 42.1 40.0 44.1 44.3 42.5 40.2 37.2 41.4 41.6 42.3 42.0 44.2 42.7	°F. 53.8 53.0 55.2 52.4 49.1 52.2 54.6 49.8 51.2 53.8 51.2 53.8 54.3 54.2 53.0 54.0 50.3 54.6 54.7 52.9 47.0 51.2 52.6 51.6 52.2 52.6 51.6 52.2 52.2	$(+1 \cdot 4) \\ +1 \cdot 8 \\ +0 \cdot 9 \\ +0 \cdot 5 \\ +1 \cdot 8 \\ (+1 \cdot 3) \\ +0 \cdot 6 \\ +2 \cdot 2 \\ -0 \cdot 3 \\ \vdots \\ +1 \cdot 1 \\ (+2 \cdot 3) \\ (+2 \cdot 3) \\ +3 \cdot 1 \\ +2 \cdot 1 \\ \vdots \\ (+2 \cdot 3) \\ +3 \cdot 1 \\ +2 \cdot 1 \\ \vdots \\ (+3 \cdot 1) \\ +2 \cdot 5 \\ (+2 \cdot 3) \\ +1 \cdot 4 \\ +2 \cdot 2 \\ \vdots \\ +2 \cdot 7 \\ +0 \cdot 6 \\ +1 \cdot 5 \\ \vdots \\ +1 \cdot 6 \\ (+1 \cdot 5) \\ \vdots \\ +1 \cdot 5 \\ +1 \cdot 9$	°F. 76.0 75.0 75.0 75.0 75.1 70.1 70.1 70.1 70.1 70.2 80.4 77.0 76.5 74.3 70.3 68.6 78.5 76.5 77.7 79.0 72.0 80.3 71.0 78.0 78.0 78.0 74.2 75.5 74.3	18 2 18 18 18 2 17 13 17 17 17 17 17 17 17 17 17 17	°F. 37·9 32·9 31·5 34·9 30·0 35·4 21·0 32·5 32·0 39·0 39·4 34·0 32·6 27·9 30·0 32·2 32·1 34·0 33·7 28·5 30·0 31·0 30·5 30·0 31·1	7 20 29 7 19, 20 5 5 5 5 20 7 5 7 24 5 5 6 6 6 6 6 6 6 6 6 7 9 22 5 24 24 24 24 24 24 24 24	In. 2 · 46 6 · 16 3 · 43 3 · 42 12 · 00 4 · 28 12 · 97 4 · 81 4 · 09 5 · 22 6 · 67 23 · 07 4 · 23 2 · 53 3 · 60 3 · 25 3 · 65 3 · 86 4 · 18 3 · 44 2 · 91 2 · 77 4 · 72 4 · 72 4 · 65 3 · 79 5 · 34 5 · 40	10 17 14 12 15 19 14 14 12 9 16 12 18 15 11 12 19 10 15 10 11 11 12 11 11 11 11 11 11 11 11 11 11	$(+0.66) \\ +2.53 \\ (+0.99) \\ +1.70 \\ -5.73 \\ (+2.06) \\ (-2.07) \\ +2.39 \\ -1.33 \\ +1.16 \\ +2.16 \\ +3.23 \\ (+0.89) \\ -2.77 \\ +2.12 \\ (+1.17) \\ +1.91 \\ (+2.04) \\ +1.92 \\ +2.43 \\ (+2.32) \\ (+1.15) \\ +1.23 \\ +0.72 \\ +1.40 \\ +1.87 \\ +1.24 \\ +0.86 \\ +1.79 \\ +1.92$	In. 0·73 1·43 1·23 0·93 2·70 1·04 3·16 1·40 1·21 1·12 6·15 1·26 1·39 1·41 1·29 1·37 1·56 1·26 1·30 0·99 1·40 1·37 1·12 1·13 1·19	20 19 19 20 18 20 18 20 18 21 21 21 20 18 18 18 18 18 18 18 18 18 18 18 18 18	Hrs. 162: 153: 162: 179: 148: 146: 149: 153: 153: 172: 156: 178: 145: 140: 156: 153: 153: 153: 153: 153: 153: 153: 153
Akaroa, Sept., 1952	150	58.7	44.5	51.6	$egin{array}{c} ext{LA'} \ +1\cdot 2 \end{array} $	ΓΕ RΕ □ 72÷0	TURN 1 22	S 34·5	24	2.44	11	(-0.84)	1.01	23	146:
Adair, Sept., 1952 Queenstown, Sept., 1952 Cromwell, Sept., 1952	$1,100 \\ 720$	$57 \cdot 6$ $58 \cdot 6$ $61 \cdot 3$	$41 \cdot 7 \\ 37 \cdot 4 \\ 36 \cdot 7$	$49.6 \\ 48.0 \\ 49.0$	$(+3 \cdot 3)$ $+1 \cdot 9$ $(+2 \cdot 9)$	$73 \cdot 0$ $66 \cdot 4$ $70 \cdot 1$	22 22 22	$32 \cdot 1 \\ 32 \cdot 2 \\ 25 \cdot 6$	24 2 2, 4	$ \begin{array}{r} 1 \cdot 56 \\ 2 \cdot 91 \\ 0 \cdot 89 \end{array} $	7 9 6	$egin{array}{c} (-0.56) \\ +0.25 \\ (-0.22) \end{array}$	1.28 1.54 0.63	23 22 22	
Waipiata, Sept., 1952 East Gore, Sept., 1952	$\frac{1,550}{245}$	57·0 59·9	$\begin{array}{c} 35 \cdot 6 \\ 37 \cdot 9 \end{array}$	$46.3 \\ 48.9$	$+2.0 \\ +1.6$	$\begin{array}{c} 65 \cdot 5 \\ 70 \cdot 0 \end{array}$	16 16	$25 \cdot 2 \\ 29 \cdot 0$	$\begin{array}{c} 24 \\ 2,3 \end{array}$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\frac{7}{13}$	$^{+0.43}_{-0.20}$	$0.50 \\ 0.95$	$\begin{array}{c c} 23 \\ 22 \end{array}$	177

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. Rainfall normals have been revised and now refer to the standard period 1921–1950. Where observations are not available for the whole period, or where the site of the raingauge has been changed, the normals are partly interpolated.

NOTES ON THE WEATHER FOR OCTOBER 1952

General.—With relatively warm temperatures and adequate but not excessive rainfall, October contributed very favourable conditions for the spring season. The general pattern consisted of spells of sunny weather alternating with beneficial rains. On a few occasions minor local damage was caused by strong winds, but, on the whole they were much less frequent than is usual in October.

Crops and pastures made excellent growth, and dairy production was at a high level. In the sheep country, too, conditions were generally very favourable and the shearing programme in the North Island was reported to be well advanced.

Rainfall.—Rainfall was above average in the provinces of Auckland (except parts of Northland), North Taranaki, Canterbury, Otago and Southland, with more than double the average amount on the Canterbury Plains and in Central Otago. There was also a small surplus in central Hawke's Bay and locally about Wellington City. Gisborne was the only area with less than half the usual October rainfall.

October rainfall.

Temperature.—Mean temperatures were generally at least 1° F. above the average. In the interior conditions were even milder, and over a wide area temperatures were 2–3 degrees above average.

Sunshine.—Over most of the North Island and in Nelson and Marlborough the duration of bright sunshine was slightly above average. There was a slight deficiency in Hawke's Bay and the far north and also over much of the South Island, but over the greater part of Canterbury, Otago, and Westland, the totals were equivalent to about an hour a day below the average.

Weather Sequence.—Apart from some rain in the south at the

equivalent to about an hour a day below the average.

Weather Sequence.—Apart from some rain in the south at the start, fair to cloudy weather prevailed for the first few days during the passage of an intense anticyclone across the North Island. On the 4th a vigorous trough accompanied by gales and heavy rain crossed the country. It was closely followed by a wedge of high pressure bringing a brief clearance.

After travelling rapidly across the North Tasman Sea on the 6th, an active depression continued on south-eastwards to pass centrally over New Zealand on the afternoon of the 8th. There was moderate rain from Canterbury and Nelson northwards and thunderstorms were reported from many parts of the North Island.

thunderstorms were reported from many parts of the North Island. On the 9th a cold front from the south progressed only as far as stage and Southland before weakening and retreating southwards.

A general improvement took place with the arrival of an anti-cyclone whose centre passed over Auckland on the 10th. Fresh north-westerly winds prevailed over the South Island, but on the

night of the 11th a cold front moved in from the south-east over Otago and Southland accompanied by rain and a sharp drop in temperature. Although an anticyclone to the south-east rapidly intensified, the northern part of the front became stationary just out to sea without causing any appreciable deterioration in the east coast weather, except south of Cook Strait where rain fell intermittently for a time on the 12th.

Westerlies replaced north-easterlies after the passage of an active trough on the 14th. On that occasion the rain failed to penetrate as far as eastern districts between Canterbury and Hawke's Bay. Following a temporary improvement on the 16th a gold Bay. Following a temporary improvement on the 16th a cold front from the south-west brought rain to western and southern districts of the South Island. With the development of a depression off the West Coast there was a general deterioration. Substantial rainfalls were recorded in the South Island between the 18th and the 20th, chiefly along the east coast, but in the North Island the rain was lighter and intermittent. Cold southerlies made a temporary advance as far as Cook Strait on the 19th, but it was not until the 21st, when the depression had moved to the east, that temperatures became appreciably cooler over the remainder of

The weather showed signs of improvement on the 22nd, but another cold front which began to advance north-eastwards across the South Island on the morning of the 23rd brought a further period of showers. It passed off to the north-east a day later and was followed by a large anticyclone which gradually enveloped the whole country. Thereafter until the 27th the weather was mainly settled apart from occasional showers in the far north and south. On the 26th a few showers also occurred along the east coast following a cool southerly change associated with the advance of another high pressure cell from the South Tasman Sea on to the South Island.

Rising temperatures and a change to northerly winds on the 28th were accompanied by an outbreak of widespread shower activity over the northern half of the North Island, but fair weather again predominated on the 29th. During that night conditions deteriorated rapidly and next day there was general rain as a warm front moved south-eastwards over the country. The depression with which the warm front was associated continued to advance slowly across the South Tasman Sea, and widespread rain again developed when it reached the Dominion at the end of the month.

M. A. F. BARNETT, Director.

[N.Z. Met S. Misc. Pub. 107]