| Station | $\begin{aligned} & \text { Height } \\ & \text { of } \\ & \text { Station } \\ & \text { Above. } \\ & \text { M.S.L. } \end{aligned}$ | Air Temperatures in Degrees (Celsius) |  |  |  |  |  |  |  | Rainfall in Millimetres |  |  |  |  | Bright Sun-shine |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Means of |  | $\begin{gathered} \text { Mean } \\ \text { of A } \\ \text { and } \\ \text { and } \end{gathered}$ | DifferFrom Normal | Absolute Maximum andMinimum |  |  |  | Total | $\left\lvert\, \begin{gathered} \mathrm{No.} \\ \text { of } \\ \text { Rain } \\ \text { Days } \end{gathered}\right.$ | Difference Norma | $\begin{gathered} \text { Maximuum } \\ \text { Fall } \end{gathered}$ |  |  |
|  |  | $\underset{\text { Max. }}{\text { A }}$ | $\underset{\text { Min. }}{\text { M }}$ |  |  | $\underset{\substack{\text { Maxi- } \\ \text { mum }}}{\substack{\text { Max } \\ \text { muxi- }}}$ | Date | $\begin{aligned} & \text { Mini- } \\ & \text { mum } \end{aligned}$ | Date |  |  |  | Amount | Date |  |
|  | Metres | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ}{ }^{\text {C }}$ | ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{C}$ |  | ${ }^{\circ} \mathrm{C}$ |  | mm |  | mm | mm |  | Hrs |
| Mount February 1979 Reserve, | 305 | 20.2 | 10.2 | 15.2 | -0.5 | 30.1 | 3 | 2.7 | 21 | 168 | 15 |  | 37 | 27 |  |
| Wharerata Forest, February | 439 | 19.8 | 11.9 | 15.9 | . | 25.0 | 13 | 6.5 | 21 | 189 | .. | . | 61 | 23 |  |
| ${ }_{\text {Kaweka }}^{1979}$ Forest, Februa | 414 | 21.7 | 11.7 | 16.7 | $-0.5$ | 27.4 | 3 | 7.8 | 21 | 102 | 13 |  | 33 | 22 |  |
| 1979 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Portland Island, February | 78 | 21.1 | 15.5 | 18.3 | -0.1 | 27.6 | 17 | 10.4 | 8 | 117 | 9 | +66 | 39 | 18 |  |
| Wharite Peak, January 1979 | 914 | 15.7 | 9.2 | 12.5 | +1.1 | 20.0 | 25 |  |  | 76 | 17 | -81 | 16 | 22 |  |
| Wharite 1979 Peak, February | 914 | 14.4 | 8.1 | 11.3 | -0.4 | 23.5 | 4 | 3.0 | 21 | 147 |  | $+12$ | 33 | 18 |  |
| Foxton, January 1979 . | 3 |  |  | $\cdots$ |  |  |  | $\cdots$ | $\cdots$ | 15 | , | -49 | 9 | 5 |  |
| Foxton, February 1979 .. | 3 |  |  |  | $\cdots$ |  |  |  |  | 57 | 10 | -4 | 18 | 22 |  |
| Turoa, Mount February 1979 | 1628 | 12.1 | 4.9 | 8.5 |  | 18.9 | 3 | 0.3 | 19 | 264 |  | . |  | .. |  |
| Waiouru Military Camp, December 1978 | 823 | 17.1 | 6.0 | 11.6 | +0.0 | 27.5 | 26 | 0.3 | 28 | 119 | .. | -3 |  | .. |  |
| Waiouru Military Camp, | 823 |  | .. | $\cdots$ | .. | .. | . | . | . | 46 | . | -33 | 24 | 31 | . |
| Kahui, Taihape, February | 518 | 21.2 | 10.7 | 16.0 | -0.6 | 27.6 | 3 | 4.8 | 21 | 84 | 12 |  | 27 | 17 |  |
| 1979 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Karamea, February 1979 | 2 | 18.7 | 11.3 | 15.0 |  | 26.7 | 4 | 9.3 | 19 | 179 |  |  | 87 | 16 |  |
| Franz Josef, February 1979 | 9 | 18.3 | 10.0 | 14.2 | -0.7 | 25.2 | 21 | 5.5 | 10 | 369 46 | 14 | -126 | 102 | 27 |  |
| Craigieburn Forest, January 1979 | 914 | 21.6 | 7.4 | 14.5 | +1.4 | 28.4 | 21 | 0.4 | 14 | 46 | 10 | -56 | 22 | 27 |  |
| Craigieburn ruary 1979 Forest, Feb- | 914 | 20.2 | 6.9 | 13.6 | +0.1 | 32.9 | 3 | 2.4 | 10 | 117 | 17 | +13 | 24 | 16 |  |
| Christchurch, February 1979 | 7 | 23.1 | 11.9 | 17.5 | +0.7 | 30.6 | 16 | 6.7 | 24 | 45 | 7 | -1 | 14 | 19 |  |
| Taieri, 1979 Invermay, February | 30 | 19.5 | 9.0 | 14.3 |  | 30.0 | 3 | 3.9 | 18 | 32 | 15 |  | 9 | 11 | 153 |
| Cromwell, February $1979 .$. | 213 | 23.5 | 10.0 | 16.8 | -0.4 | 32.3 | 4 | 2.7 | 10 | 20 | 7 | -16 | 6 | 16 |  |
| Tautuku, February 1979 . | 61 | 17.4 | 9.5 | 13.5 |  | 27.6 | 3 | 5.9 | 20 | 101 | 18 | .. | 24 | 19 |  |
| Scott November 1978 Antarctica, | 16 | -8.4 | -16.6 | -12.5 | -0.5 | -0.8 | 15 | -21.8 | 3 |  | .. |  |  | .. |  |
| Scott Base, Antarctica, December 1978 | 16 | -2.6 | -10.1 | -6.4 | -1.1 | 5.8 | 28 | -15.4 | 14 |  | .. | .. | .. |  |  |
| Scott January 1979 Antarctica, | 16 | -2.0 | -8.7 | -5.4 | -0.3 | 4.2 | 2 | -15.6 | 23 |  |  |  |  |  |  |

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 MARCH 1979

General-March 1979 was an unusually wet month with a high frequency of cyclonic disturbances in the Tasman Sea. Easterly airstreams occurring on nearly half of the days of the month affected all parts of the country. Pressures were lower than normal in the North Island and higher to the south-east of the country. In many parts of New Zealand March rainfall records were broken and sunshine totals were very low.

Most farmers found the conditions very good for grass growth. Local flooding in the Bay of Plenty and Canterbury affected some farmers and conditions for crops were bad delaying harvesting. The wet, dull weather adversely affected stock.

Rainfall-Most of the North Island had monthly totals above normal. At some stations in the Bay of Plenty, central Hawke's Bay, and the western Wairarapa, the month's totals were five times the average. Northland, Taupo, Wellington, and many parts of the east coast had up to three times their usual rainfall.

In the South Island, the Kaikoura coast had between five and seven times the normal March rainfall. In Canterbury totals were up to four times the average and on the West Coast between Haast and Hokitika up to three times. Only in Southland, Fiordland, and in the north-west of the South Island was there less rain than usual.

A notable fall of rain on the West Coast occurred on the 6th. Franz Josef had 505 mm on this day and there was some severe flooding. The total for the month there was 1260 mm . Like the one-day fall this was a record for March. There were high rainfalls
in the Bay of Plenty on the 9 th and 10 th and in Northland on the 11th. On the 19th, the Bay of Plenty again had heavy rain with flooding and landslips. Te Puke had 293 mm on this day and Tauranga Airport, 178 mm . Over the whole month these stations had 786 mm and 502 mm respectively. These figures and also the one-day falls are new local records for March. During the 20th, 21st, and 22nd the heavy rain spread to the east coasts of the North and South Islands. Flooding occurred in Christchurch on the 21 st, and further flooding in the Bay of Plenty on the 22nd. On the 29 th and 30 th a severe southerly storm brought heavy rain to central parts of New Zealand.

Temperatures-Daily minima were above average over the whole country and there were departures from usual of more than $3^{\circ} \mathrm{C}$ in Hamilton, Whakatane, and Rotorua. Mean maximum temperatures were also above average by $2^{\circ} \mathrm{C}$ in some North Island places, but were lower than usual on the east coast of the South Island. These departures resulted generally in mean temperatures about $2^{\circ} \mathrm{C}$ above normal.

Sunshine-No stations in New Zealand had more sunshine than usual. In the North Island most stations had 60-70 percent of the normal sunshine, many of these totals being record March lows. In the South Island, sunshine durations were even smaller with 50-60 percent of the normal being most frequent. At Highbank, in Canterbury, only 43 percent of the usual March total was recorded. This is 35 hours less than the previous lowest March total and almost 100 hours less than normal. At Queenstown and Invercargill more than 80 percent of the normal was recorded

