

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for January 1978—continued  
LATE RETURNS AND CORRECTIONS—continued

| Station  | Height of Station Above M.S.L. | Air Temperatures in Degrees Celsius |         |                 |                        |                              |      |         |      | Rainfall in Millimetres |                  |                        |              |      | Bright Sunshine |
|--|--------------------------------|-------------------------------------|---------|-----------------|------------------------|------------------------------|------|---------|------|-------------------------|------------------|------------------------|--------------|------|-----------------|
|  |                                | Means of                            |         | Mean of A and B | Difference From Normal | Absolute Maximum and Minimum |      |         |      | Total Fall              | No. of Rain Days | Difference From Normal | Maximum Fall |      |                 |
|  |                                | A Max.                              | B Min.  |                 |                        | Maximum                      | Date | Minimum | Date |                         |                  |                        | Amount       | Date |                 |
| Kaweka Forest, ..<br>December 1977             | Metres 414                     | °C 20.2                             | °C 10.5 | °C 15.4         | °C -0.1                | °C 27.5                      | 6    | °C 6.5  | 11   | mm 110                  | 12               | mm ..                  | mm 42        | 14   | Hrs ..          |
| Kairanga, D.S.I.R., ..<br>December 1977        | 15                             | 19.3                                | 9.3     | 14.3            | -1.5                   | 23.1                         | 5    | 3.2     | 24   | 91                      | 13               | ..                     | 25           | 30   | 227             |
| Palmerston North D.S.I.R., ..<br>December 1977 | 34                             | 19.5                                | 10.9    | 15.2            | -0.9                   | 23.6                         | 28   | 6.4     | 24   | 94                      | 14               | -10                    | 19           | 9    | 197             |
| Foxton, December 1977 ..                       | 3                              | ..                                  | ..      | ..              | ..                     | ..                           | ..   | ..      | ..   | 60                      | 16               | -21                    | 15           | 31   | 223             |
| Pauatahanui, December ..<br>1977               | 30                             | 17.8                                | 11.3    | 14.6            | -0.8                   | 21.2                         | 28   | 6.5     | 11   | 136                     | ..               | +66                    | 29           | 11   | ..              |
| Manaia Dem. Farm, ..<br>December 1977          | 98                             | 18.0                                | 9.3     | 13.7            | -1.2                   | 23.4                         | 19   | 4.4     | 27   | 67                      | 14               | -32                    | 17           | 30   | 248             |
| Normanby, December 1977                        | 122                            | 18.4                                | 9.1     | 13.8            | ..                     | 22.3                         | 5    | 4.5     | 26   | 46                      | 14               | ..                     | 11           | 30   | ..              |
| Kahui, Taihape, December ..<br>1977            | 518                            | 18.3                                | 7.9     | 13.1            | -1.2                   | 25.2                         | 5    | 4.6     | 25   | 104                     | ..               | ..                     | 37           | 31   | ..              |
| Franz Josef, November 1977                     | 122                            | 14.4                                | 6.5     | 10.5            | -1.2                   | 17.6                         | 3    | 2.0     | 2    | 314                     | 20               | -199                   | 54           | 23   | ..              |
| Franz Josef, December 1977                     | 122                            | 16.7                                | 8.0     | 12.4            | -1.3                   | 24.4                         | 14   | 2.7     | 13   | 320                     | 26               | -135                   | 44           | 8    | ..              |
| Ski Basin, December 1977                       | 1554                           | ..                                  | 1.9     | ..              | ..                     | ..                           | ..   | -3.1    | 25   | ..                      | ..               | ..                     | ..           | ..   | ..              |
| Craigieburn Forest, ..<br>December 1977        | 914                            | 17.1                                | 5.0     | 11.1            | -0.5                   | 26.2                         | 3    | -0.8    | 11   | 121                     | 18               | +2                     | 28           | 11   | ..              |
| Highbank Power Station, ..<br>December 1977    | 336                            | 18.9                                | 8.4     | 13.7            | -0.2                   | 28.2                         | 3    | 4.0     | 15   | 112                     | 12               | +18                    | 23           | 12   | 208             |
| Winchmore, December 1977                       | 160                            | 20.5                                | 8.6     | 14.6            | +0.4                   | 29.2                         | 4    | 4.3     | 15   | 73                      | 12               | -3                     | 12           | 30   | ..              |
| Ashley Forest, December ..<br>1977             | 107                            | 20.2                                | 9.2     | 14.7            | -0.1                   | 29.8                         | 4    | 3.8     | 11   | 54                      | 9                | -32                    | 18           | 21   | 220             |
| Darfield, December 1977 ..                     | 195                            | 22.0                                | 8.3     | 15.2            | +0.1                   | 30.7                         | 4    | 3.0     | 11   | 127                     | 10               | +51                    | 58           | 12   | ..              |
| Christchurch, ..<br>December 1977              | 7                              | 20.8                                | 9.8     | 15.3            | -0.2                   | 30.6                         | 4    | 5.4     | 24   | 68                      | 8                | +12                    | 30           | 30   | ..              |
| Taieri, Invermay, ..<br>December 1977          | 30                             | 18.2                                | 7.8     | 13.0            | ..                     | 26.8                         | 28   | 4.0     | 1    | 120                     | ..               | ..                     | 22           | 19   | ..              |
| Moa Creek, December 1977                       | 427                            | ..                                  | ..      | ..              | ..                     | ..                           | ..   | ..      | ..   | 37                      | ..               | -4                     | 8            | 19   | ..              |
| Moa Flat, December 1977                        | 410                            | 17.5                                | 6.4     | 12.0            | -0.1                   | 24.4                         | 18   | 1.7     | 11   | 106                     | 16               | +32                    | 21           | 19   | ..              |
| Winton, December 1977 ..                       | 44                             | 18.0                                | 6.6     | 12.3            | -1.1                   | 26.1                         | 28   | 1.0     | 1    | 94                      | 14               | +28                    | 22           | 30   | 197             |
| Woodlands, December 1977                       | 47                             | 18.0                                | 7.4     | 12.7            | -0.4                   | 25.4                         | 28   | 2.5     | 11   | 77                      | 24               | ..                     | 17           | 19   | ..              |
| Tautuku, December 1977 ..                      | 61                             | 17.4                                | 8.0     | 12.7            | ..                     | 26.7                         | 27   | 3.7     | 11   | 99                      | 12               | ..                     | 31           | 30   | ..              |
| Waitangi, Chatham Islands, ..<br>December 1977 | 44                             | 16.5                                | 10.9    | 13.7            | +0.3                   | 19.6                         | 8    | 6.6     | 1    | 91                      | 15               | +25                    | 22           | 31   | 114             |
| Campbell Island, ..<br>September 1977          | 15                             | 8.0                                 | 3.1     | 5.6             | +0.1                   | 10.1                         | 13   | -2.5    | 5    | 76                      | 26               | -26                    | 13           | 22   | 61              |
| Campbell Island, October ..<br>1977            | 15                             | 8.3                                 | 3.3     | 5.8             | -0.4                   | 11.4                         | 21   | -1.2    | 17   | 84                      | 29               | -33                    | 11           | 3    | 67              |
| Campbell Island, ..<br>November 1977           | 15                             | 10.3                                | 4.9     | 7.6             | +0.4                   | 13.9                         | 11   | 0.2     | 1    | 138                     | 24               | +31                    | 23           | 23   | 101             |
| Nandi Airport, Fiji, ..<br>December 1977       | 15                             | 32.7                                | 22.7    | 27.7            | +1.1                   | 35.4                         | 25   | 20.4    | 11   | 46                      | 13               | ..                     | 14           | 8    | 275             |
| Totokoitu, Rarotonga, ..<br>December 1977      | 9                              | 27.4                                | 22.5    | 25.0            | ..                     | 30.6                         | 30   | 19.5    | 20   | 55                      | 19               | ..                     | 13           | 29   | ..              |
| Scott Base, Antarctica, ..<br>November 1977    | 16                             | -10.2                               | -18.7   | -14.5           | -2.5                   | -5.3                         | 30   | -26.0   | 3    | ..                      | ..               | ..                     | ..           | ..   | ..              |
| Scott Base, Antarctica, ..<br>December 1977    | 16                             | -4.0                                | -11.0   | -7.5            | -2.2                   | -0.2                         | 15   | -15.6   | 1    | ..                      | ..               | ..                     | ..           | ..   | ..              |

The "normal" refers to the present site of the instruments. Standard period for normals is 1941-70. 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.

#### NOTES ON THE WEATHER FOR JANUARY 1978

**General**—Pressures were unusually high over the whole of New Zealand during January, with a predominance of westerly winds over most of the country. Rainfall was below normal over most of the country with the exception of Northland and the West Coast. In most areas this was a sunny, warm month. The only appreciably cold spell was the 1st/2nd of the month, when some areas had daily maximum temperatures well below normal. The longest fine dry spell was from the 21st to the 29th. Farmers throughout the country reported that pastures had become very dry with negligible grass growth. Stock in some areas had started to lose condition, and on some farms milk production was down by 20 percent.

**Rainfall**—The only areas with rainfall above normal for the month were the extreme north of Northland and the West Coast. Parts of Bay of Plenty, Hawke's Bay, Wairarapa, Manawatu, Taranaki, Nelson and Marlborough, had less than 10 percent of their normal months total. Blenheim Aerodrome recorded no rainfall at all during the month, and this has never happened before in any January since the station began in 1941. At Motueka only

0.1 mm was recorded during the month. Although 86 mm was recorded at Kaitia Aerodrome for the month, 84 mm of this was recorded in 36 hours on the 8th/10th during the passage of cyclone "Bob" across Northland. Many areas in the North and South Islands had less than 20 percent of their normal January totals. Parts of Westland were above normal by more than 50 percent.

**Temperatures**—Temperatures were above normal over the whole of New Zealand. In Auckland, Waikato, Bay of Plenty, Taranaki, Wairarapa and the majority of the South Island, apart from the West Coast, temperatures were at least 1.0°C above normal. Some areas in the central North Island and Otago were above normal by almost 2.0°C.

**Sunshine**—The only area that had below or near normal sunshine for the month was Westland, the rest of the country having at least 10 percent more than usual. Many places had at least 20 hours more sunshine, and in some areas of both islands more than 40 hours greater than normal. A total of 305 hours of sunshine was recorded at Manaia, Taranaki, during the month and this is the highest recorded in any month since the station began in 1968.