## THE NEW ZEALAND GAZETTE

CLIMATOLOGICAL TABLE-Summary of the Records of Temperature, Rainfall, and Sunshine for February 1971-continued

| Station  | Height<br>of<br>Station<br>Above<br>M.S.L.  | Air Temperatures in Degrees (Fahrenheit)  |  |   |  |   |   |   |  | Rainfall in Inches  |                                       |   |  |   |                                 |
|--|---|---|--|---|--|---|---|---|--|---|---------------------------------------|---|--|---|---------------------------------|
|  |   | Means of  |  | Mean  | Differ-  | Absolute Maximum and<br>Minimum   |   |   | Total  | No.   | Differ-                               | Maximum<br>Fall   |  | Bright<br>Sun-<br>shine   |                                 |
|  |   | A<br>Max.   | B<br>Min.  | of A<br>and<br>B  | ence<br>From<br>Normal   | Maxi-<br>mum  | Date  | Mini-<br>mum  | Date   | Fall  | Rain<br>Days                          | From<br>Normal  | Amount   | Date  |                                 |
|  | Ft.   | °F.   | °F.  | °F.   |  | °F.   |   | °F.   |  | In.   |                                       |   | In.  |   | Hrs.                            |
| Berwick Forest<br>Dunedin Airport<br>Musselburgh, Dunedin<br>Oamaru<br>West Arm, Lake Manapouri                              | 60<br>4<br>5<br>99<br>590   | 72.4<br>72.5<br>69.6<br>70.8<br>73.6  | 50.0<br>49.1<br>54.3<br>52.8<br>54.4   | 61.2<br>60.8<br>62.0<br>61.8<br>64.0  | $\begin{vmatrix} +3.1 \\ +2.7 \\ +3.2 \\ +2.2 \\ +7.5 \end{vmatrix}$   | 93.2<br>94.1<br>89.0<br>95.2<br>84.0  | 10<br>10<br>10<br>10<br>19  | 37.1<br>34.0<br>46.0<br>45.0<br>45.0  | 7<br>7<br>6<br>8   | $ \begin{array}{c} 1.62\\ 1.31\\ 1.08\\ 1.13\\ 2.70 \end{array} $   | 6<br>7<br>5<br>4<br>8                 | $-1.1 \\ -0.9 \\ -1.4 \\ -1.0 \\ -10.3$   | 0.68<br>0.50<br>0.46<br>0.46<br>1.17   | 22<br>22<br>22<br>24<br>13  | 196<br>180<br>204<br>           |
| Borland Saddle   | 3,250<br>1,080<br>1,154<br>1,268<br>698<br>1,000<br>1,400<br>500<br>461<br>360<br>1,345<br>1,300<br>740<br>835<br>50<br>180<br>145<br>235<br>150<br>1<br>150<br>20<br>430<br>157<br>126<br>157<br>49<br>58<br>510 | 77.7<br>76.1<br>75.0<br>80.4<br>78.4<br>78.4<br>76.3<br>78.3<br>79.6<br>72.1<br>69.3<br>73.3<br>70.9<br>67.7<br>70.9<br>67.7<br>70.9<br>71.7<br>70.9<br>71.7<br>72.6<br>8.7<br>68.8<br>72.2<br>68.7<br>68.8<br>71.4<br>67.8<br><br>75.4<br>64.6<br>54.0 | 54.1<br>52.3<br>50.1<br>54.5<br>49.8<br>47.1<br>50.6<br>54.1<br>52.4<br>49.2<br>48.5<br>50.5<br>51.0<br>48.8<br>51.3<br>49.9<br>49.7<br>49.3<br>54.6<br>50.1<br>51.6<br>53.6<br><br>67.5<br>52.7<br>45.0 | $\begin{array}{c} \\ 65.9 \\ 64.2 \\ 62.6 \\ 67.5 \\ 64.1 \\ 61.8 \\ 64.4 \\ 66.2 \\ 66.0 \\ 60.6 \\ 58.9 \\ 61.9 \\ 60.2 \\ 59.4 \\ 59.8 \\ 61.5 \\ 61.2 \\ 61.7 \\ 61.4 \\ 61.5 \\ 60.7 \\ \\ 71.4 \\ 61.5 \\ 60.7 \\ \\ 71.4 \\ 64.5 \\ 81.5 \\ 60.7 \\ \\ 71.4 \\ 64.5 \\ 81.5 \\ 60.7 \\ \\ 71.4 \\ 64.5 \\ 81.5 \\ 60.7 \\ \\ 71.4 \\ 81.6 \\ 49.5 \\ 12.9 \end{array}$ | $\begin{array}{c} \cdot \cdot \cdot \\ + 5.9 \\ \cdot \cdot \\ + 4.5 \\ + 4.7 \\ + 4.0 \\ + 4.3 \\ + 4.2 \\ + 5.5 \\ + 5.9 \\ \cdot \\ + 2.5 \\ + 2.9 \\ + 3.0 \\ \cdot \\ + 3.0 \\ \cdot \\ + 3.9 \\ \cdot \\ - 0.9 \\ - 0.1 \\ + 1.0 \\ + 0.2 \end{array}$ | 88.6<br>85.3<br>88.0<br>93.0<br>91.0<br>89.3<br>92.2<br>90.1<br>93.0<br>90.1<br>88.4<br>91.0<br>88.0<br>88.0<br>88.0<br>88.0<br>88.0<br>88.0<br>88.0<br>8 | 8<br>19<br>19<br>19<br>19<br>13<br>13<br>13<br>13<br>13<br>10<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13<br>13 | $\begin{array}{c} & 45.4 \\ 42.1 \\ 38.4 \\ 42.2 \\ 36.8 \\ & \\ 37.9 \\ 43.7 \\ 41.0 \\ 39.0 \\ 35.5 \\ 39.8 \\ 35.5 \\ 39.8 \\ 37.0 \\ 39.4 \\ 40.3 \\ 35.5 \\ 39.8 \\ 37.0 \\ 38.0 \\ 36.0 \\ 45.2 \\ 35.0 \\ 36.0 \\ 45.2 \\ 35.0 \\ 36.0 \\ 41.3 \\ 46.8 \\ & \\ 64.4 \\ 42.6 \\ 36.7 \\ -3.3 \end{array}$ | ···<br>28<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7<br>7 | $\begin{array}{c} 1.56\\ 1.20\\ 1.41\\ 1.33\\ 0.66\\ 0.94\\ 1.43\\ 1.32\\ 1.80\\ 1.34\\ 1.52\\ 1.40\\ 1.23\\ 1.12\\ 0.48\\ 0.65\\ 0.89\\ 0.92\\ 1.17\\ 0.87\\ 0.96\\ 1.45\\ 1.75\\\\ 1.75\\\\ 1.78\\ 0.72\\ 4.79\\\\ \end{array}$ | 327533445678665564789956812<br>.13824 | $\begin{array}{c} -0.9\\ -2.1\\ -0.3\\ -1.0\\ -0.8\\ -0.1\\ -0.2\\ -1.6\\ -2.0\\ -1.8\\ -1.5\\ -3.0\\ -2.2\\ -2.7\\ -2.6\\ .\\ -2.7\\ -2.6\\ .\\ -3.0\\ -2.2\\ -2.7\\ -2.6\\ .\\ .\\ -3.0\\ -2.2\\ -2.7\\ -2.6\\ .\\ .\\ .\\ .\\ .\\ .\\ .\\ .\\ .\\ .\\ .\\ .\\ .\\$ | 0.89<br>0.82<br>0.72<br>0.80<br>0.32<br>0.43<br>0.43<br>0.43<br>0.43<br>0.43<br>0.43<br>0.43<br>0.43 | 23<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>22<br>2 | 224<br><br><br><br><br><br><br> |
| Lake Vanda, Antarctica   | 510   | l   | 1  | ι   | ι  | 1   | •••   | 1 ••  | ••   | 1   |                                       | ••  | 1 •• 1   | ••  | •••                             |
|  |   |   |  |   |  | RETU  |   |   |  |   |                                       |   |  | _   |                                 |
| Makaretu, Dec. 1970<br>Makaretu, Jan. 1971<br>Waipukurau, Jan. 1971<br>Flock House, Bulls, Jan. 1971<br>Murchison, Jan. 1971 | 91<br>14<br>4,850<br>1,100<br>1,100<br>450<br>30<br>520   | 77.7<br>77.1<br>57.2<br>69.8<br>71.6<br>73.3<br>77.1  | 58.2<br>63.1<br>45.8<br>49.5<br>54.2<br>55.2<br>54.6<br>55.7   | 68.0<br>70.1<br>51.5<br>59.6<br>69.2<br>64.2<br><br>66.4  | +5.2<br>+4.6<br><br>+1.4<br>   | 83.0<br>81.3<br>69.9<br>81.5<br>84.0<br>84.0<br>85.2  | 4<br>26<br>24<br>29<br>26<br><br>27   | 51.0<br>55.2<br>37.0<br>35.3<br>46.5<br>45.0<br>49.0<br>43.5  | 21<br>19<br>15<br>10<br>27<br>26<br>29<br>15                               | $ \begin{array}{c} 1.17\\ 1.25\\\\ 2.04\\ 8.19\\ 4.82\\ 6.48\\ 3.68 \end{array} $   | 3<br>5<br>10<br>16<br>13<br>9<br>13   | -2.6<br>-1.9<br><br>+1.9<br>+4.0<br>  | 0.88<br>0.96<br><br>0.72<br>2.11<br>1.31<br>1.43<br>0.79   | 3<br>3<br>20<br>4<br>4<br>7<br>21   | 215<br><br>111<br>              |
| Christchurch Gardens, Jan.<br>1971   | 22<br>235   | 70.4<br>72.0  | 55.8   | 63.1<br>  | +1.4   | 91.8<br>84.2  | 29<br>17  | 48.9<br>41.9  | 5<br>5   | 0.82 2.03   | 10<br>9                               | -1.4 -1.2   | 0.27<br>0.83   | 6<br>29   | i79                             |

The "normal" refers to the present site of the instruments. The standard periods for normals are: for temperature 1931-60, for rainfall 1921-50, and for sunshine 1935-60. No normals are available for stations with only short records.

\*The sunshine recorder is not located at the station but is in the near vicinity.

## NOTES ON THE WEATHER FOR FEBRUARY 1971

General-February was exceptionally warm, especially in the west and south. As in January, there was an unusually high fre-quency of north-easterly winds. It also resembled the previous month in that many districts had nearly all their rain in a few days, from the 23rd to the 25th. Between the rains from cyclone Rosie early in January and this period in February there were 6 weeks of dry hot weather, affecting especially the South Island and southern districts of the North Island. Parts of the Southland Plain and western Southland were still very dry by the end of the month, with some sheep being sold off and young trees also affected. Forest fires were exceptionally frequent in Westland, Otago, and Southland and they also affected some North Island areas, especially around Wellington

around Wellington. *Rainfall*—Rainfall showed unusually wide variations from record low values for February of less than 10 percent of the normal on parts of the Southland Plain to record high values of more than four times normal around New Plymouth and Kaitaia. It was below normal, mainly by 50 percent, over most of the South Island besides Wellington, Wairarapa, Southern Hawke's Bay, and Technology Taihape

Northern Northland, western Taranaki, and Taupo received more than double the normal rainfall. A slow-moving trough в

brought most of the month's rain to Kaitaia from the 20th to the 25th and to New Plymouth in a little over 24 hours on the 24th and 25th, with flooding in both areas. The 24-hour fall at New Plymouth Airport of 14 in. was quite exceptional, and the flooding in the city was reported to be the worst in living memory. The total rainfall for the 23rd and 24th at Stratford Mountain House was 31.3 in., one of the highest 2-day totals ever recorded in New Zealand.

Temperatures-This was equal with February 1935 as the third warmest month on record, the two warmest being February 1938, warmest month on record, the two warmest being February 1938, and January 1956, also about equal. Departures above normal ranged from 1°F ( $0.5^{\circ}$ C.) in east coast districts from Kaikoura to Gisborne to 7°F. (4°C.) over parts of the Alps and Fiordland. The average departure over the North Island was 2.5°F. (1.4°C.) and over the South Island 4.5°F. (2.5°C.). The maximum temperature of 101°F. (38°C.) at Darfield in North Canterbury on the 10th was equal to the provides the fiberst up to for New Zoelland recorded at equal to the previous highest value for New Zealand recorded at Ashburton, on 19 January 1956.

Sunshine-Sunshine was mainly 20-70 hours below normal over the North Island, with especially low values in Bay of Plenty. The South Island was favoured with 20-60 hours above normal, except for Nelson.