Climatological Table-Summary of the Records of Temperature, Rainfall, and Sunshine for February 1960-continued

| Station |  |  | Air Temperatures in Degrees (Fahrenheit) |  |  |  |  |  |  |  | Rainfall in Inches |  |  |  |  | $\begin{aligned} & \text { Bright } \\ & \text { Sun- } \\ & \text { shine } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Means of |  | $\begin{aligned} & \text { Mean } \\ & \text { of A } \\ & \text { and } \\ & \text { B } \end{aligned}$ | Difference Normal | Absolute Maximum and Minimum |  |  |  | $\begin{gathered} \text { Total } \\ \text { Fall } \end{gathered}$ | $\begin{gathered} \text { No. } \\ \text { of } \\ \text { Rain } \\ \text { Days } \end{gathered}$ | Difference Normal | $\underset{\text { Fall }}{\text { Maximum }}$ |  |  |
|  |  |  |  | \% ${ }_{\text {M }}$ |  |  | Maximum | Date | Minimum | Date |  |  |  | Amount | Date |  |
|  |  | Ft. | ${ }^{\text {F }}$. | ${ }^{\circ} \mathrm{F}$. | ${ }^{\circ} \mathrm{F}$. |  | ${ }^{\circ} \mathrm{F}$. |  | F. |  | In. |  |  | In. |  | Hrs. |
| Westport |  |  | $68 \cdot 6$ | $53 \cdot 0$ | $60 \cdot 8$ | $+1.0$ | $77 \cdot 8$ | 23 | $45 \cdot 0$ | 28 | $6 \cdot 89$ | 11 | +0.06* | 1-84 | 2 | 206 |
| Molesworth | . | 2,930 | $67 \cdot 1$ | $44 \cdot 6$ | $55 \cdot 8$ | $-0 \cdot 4^{*}$ | $79 \cdot 0$ | 25 | $33 \cdot 0$ | 22 | $2 \cdot 30$ | 7 | $+0 \cdot 21^{*}$ | $0 \cdot 79$ | 2 |  |
| Greymouth |  | 13 | $68 \cdot 5$ | $55 \cdot 0$ | $61 \cdot 8$ | +1.8* | $79 \cdot 1$ | 23 | $47 \cdot 3$ | 28 | 6.52 | 17 | $-0 \cdot 18^{*}$ | $1 \cdot 26$ | 26 | 188 |
| Hanmer |  | 1,270 | 71.5 | $47 \cdot 5$ | $59 \cdot 5$ | +0.1 | 83-0 | 9, 25 | $34 \cdot 0$ | 20 | 2.70 9.39 | 9 | -0.95 | 0.64 | 2 | 185 |
| Hokitika South |  | 15 | 67.4 | $50 \cdot 9$ | $59 \cdot 2$ | $+1 \cdot 1^{*}$ | 77-1 | 23 | $40 \cdot 0$ $36 \cdot 5$ | 20 | 9.39 1.87 | 18 | ${ }^{+1} 1.66^{*}$ | 2.21 0.45 | 2 | 196 |
| Balmoral |  | 650 | $72 \cdot 5$ | $49 \cdot 3$ | $60 \cdot 8$ | $-0.7 *$ | $86 \cdot 5$ | 9 | $36 \cdot 5$ | 1 | $1 \cdot 87$ | 7 | -0.28 | $0 \cdot 45$ | 2 | . |
| Lake Coleridge |  | 1,195 | $70 \cdot 3$ | $48 \cdot 8$ | $59 \cdot 6$ | $+0 \cdot 2$ | $83 \cdot 5$ | 25 | 38.0 | 20 | $1 \cdot 40$ | 8 | $-0.83$ | 0.76 | 12 | . |
| Eyrewell |  | 520 | $71 \cdot 7$ | $48 \cdot 5$ | $60 \cdot 1$ |  | $87 \cdot 0$ | 25 | $38 \cdot 5$ | 22 | $1 \cdot 58$ | 9 | -1.54* | 0.68 | 12 | $\cdots$ |
| Franz Josef |  | 392 | $68 \cdot 8$ | $50 \cdot 1$ | $59 \cdot 4$ |  | $76 \cdot 9$ | 14 | $42 \cdot 7$ | 28 | 17.24 | 14 |  | 3.47 | 2 |  |
| Ashley Forest | $\ldots$ | 350 | $69 \cdot 8$ | $51 \cdot 6$ | $60 \cdot 7$ | +0.7* | $81 \cdot 0$ | 26 | 44-2 | 20 | $1 \cdot 70$ | 11 | -0.93* | $0 \cdot 54$ | 12 |  |
| Darfield |  | 640 | $73 \cdot 1$ | $49 \cdot 6$ | $61 \cdot 4$ | $+1 \cdot 4$ | $87 \cdot 9$ | 25 | $39 \cdot 1$ | 20 | $2 \cdot 00$ | 8 | $-0 \cdot 53$ | $0 \cdot 70$ | 12 |  |
| Christchurch Airport | .. | 94 | $69 \cdot 3$ | $51 \cdot 7$ | $60 \cdot 5$ |  | $84 \cdot 4$ | 26 | $44 \cdot 2$ | 20 | $1 \cdot 13$ | 8 |  | $0 \cdot 29$ | 12 | 182 |
| Christchurch .. |  | 22 | $70 \cdot 1$ | $51 \cdot 0$ | $60 \cdot 6$ | -0.2 | $86 \cdot 2$ | 26 | $43 \cdot 4$ | 20 | 1.03 | 9 | $-0.77$ | $0 \cdot 24$ | 18 | . |
| Wigram |  | 74 | $70 \cdot 6$ | $51 \cdot 3$ | $61 \cdot 0$ | $+0 \cdot 3^{*}$ | $85 \cdot 1$ | 26 | $42 \cdot 5$ | 20 | $1 \cdot 14$ | 7 | $-0.53 *$ | $0 \cdot 27$ | 12 |  |
| Akaroa |  | 150 | $69 \cdot 4$ | $52 \cdot 7$ | $61 \cdot 0$ | -0.9 | $85 \cdot 8$ | 26 | $44 \cdot 2$ | 20 | 1.64 | 14 | $-0.83$ | $0 \cdot 36$ | 2 | 182 |
| Lincoln |  | 36 | $70 \cdot 4$ | $50 \cdot 4$ | $60 \cdot 4$ | $+0.7$ | $85 \cdot 5$ | 25 | $40 \cdot 8$ | 20 | $1 \cdot 50$ | 7 | -0.25 | $0 \cdot 38$ | 12 | 192 |
| Highbank | $\cdots$ | 1,102 | $70 \cdot 1$ | $50 \cdot 2$ | $60 \cdot 2$ |  | $85 \cdot 0$ | 25 | $34 \cdot 2$ | 20 | 1.48 | 9 |  | $0 \cdot 49$ | 27 | 200 |
| The Hermitage | . | 2,510 | $65 \cdot 8$ | $46 \cdot 0$ | $55 \cdot 9$ | -0.2 | $80 \cdot 0$ | 25 | $36 \cdot 0$ | 20 | $12 \cdot 87$ | 9 | $-2.31$ | $2 \cdot 82$ | 12 | 158 |
| Winchmore |  | 526 | 70.3 | $48 \cdot 4$ | $59 \cdot 4$ | $-0 \cdot 2 *$ | $82 \cdot 0$ | 25 | $38 \cdot 0$ | 20 | $1 \cdot 27$ | 8 | -1.01* | $0 \cdot 59$ | 12 |  |
| Haast | . | 15 | $66 \cdot 0$ | $51 \cdot 4$ | $58 \cdot 7$ | +0.3* | $72 \cdot 9$ | 3 | $41 \cdot 8$ | 20 | 11.21 | 15 | $-2 \cdot 39 *$ | 1.75 | 26 | 209 |
| Ashburton |  | 323 | $74 \cdot 2$ | $49 \cdot 7$ | $62 \cdot 0$ | $+1.0$ | $88 \cdot 6$ | 9 | $39 \cdot 8$ | 22 | $1 \cdot 24$ | 9 | -1.45 | $0 \cdot 53$ | 12 | 185 |
| Fairlie |  | 1,004 | $68 \cdot 8$ | $46 \cdot 0$ | $57 \cdot 4$ | $-1.2$ | $81 \cdot 5$ | 9 | $35 \cdot 0$ | 28 | $1 \cdot 20$ | 6 | $-1.72$ | $0 \cdot 48$ | 12 |  |
| Timaru |  | 56 | $70 \cdot 5$ | $50 \cdot 6$ | $60 \cdot 6$ | $+0.4$ | $77 \cdot 6$ | 23 | $42 \cdot 1$ | 20 | 1.65 | 9 | -0.57 | $0 \cdot 67$ | 12 | 178 |
| Adair .. .. | $\cdots$ | 200 | $66 \cdot 9$ | $50 \cdot 4$ | $56 \cdot 6$ | $+0 \cdot 6 *$ | $81 \cdot 9$ | 9 | $43 \cdot 9$ | 28 | $1 \cdot 35$ | 10 | -0.97* | $0 \cdot 59$ | 12 |  |
| Tara Hills, Omarama | $\cdots$ | 1,600 | $71 \cdot 2$ | $47 \cdot 1$ | $59 \cdot 2$ | -0.5* | $82 \cdot 9$ | 25 | $38 \cdot 5$ | 28 | $1 \cdot 15$ | 8 | -0.54* | $0 \cdot 49$ | 18 | 194 |
| Benmore, Otematata | $\cdots$ | 1920 | $72 \cdot 5$ | $50 \cdot 6$ | $61 \cdot 6$ 59 |  | $84 \cdot 0$ 79 | 25 | 43•3 | 29 | $1 \cdot 02$ | 6 |  | 0.47 | 18 | . |
| Lake Hawera | . | 1,147 | $70 \cdot 1$ | $49 \cdot 6$ | $59 \cdot 8$ |  | $79 \cdot 8$ | 22 | $38 \cdot 1$ | 20 | 1.27 | 9 |  | 0.47 | 12 |  |
| Milford Sound |  | 20 | $65 \cdot 4$ | $49 \cdot 1$ | $57 \cdot 2$ | $+0.2$ | $71 \cdot 1$ | 14 | $43 \cdot 1$ | 20 | $18 \cdot 85$ | 17 | -4.73 | $4 \cdot 91$ | 14 |  |
| Waimate |  | 200 | $69 \cdot 0$ | 50•3 | $59 \cdot 6$ | -0.5 | $79 \cdot 0$ | 25 | $43 \cdot 5$ | 4 | $1 \cdot 32$ | 8 | $-1 \cdot 00$ | $0 \cdot 38$ | 12 | 158 |
| Naseby Forest | . | 2,300 | $68 \cdot 9$ | $41 \cdot 4$ | $55 \cdot 2$ |  | $81 \cdot 2$ | 23 | $30 \cdot 2$ | 13 | $2 \cdot 88$ | 11 |  | $0 \cdot 79$ | 12 |  |
| Queenstown | . | 1,100 | $69 \cdot 6$ | $46 \cdot 6$ | $58 \cdot 1$ | $-1.5$ | $79 \cdot 0$ | 23 | $37 \cdot 7$ | 20 | $2 \cdot 20$ | 10 | $-0.21$ | $0 \cdot 61$ | 17 | 208 |
| Cromwell | . | 720 | $74 \cdot 2$ | $48 \cdot 6$ | $61 \cdot 4$ | -0.2* | $85 \cdot 8$ | 23 | $36 \cdot 7$ | 20 | $1 \cdot 00$ | 7 | -0.68 | 0. 20 | 12 | . |
| Ophir . | $\ldots$ | 1,000 | $72 \cdot 5$ | $44 \cdot 0$ | $58 \cdot 2$ | $-1.6$ | $85 \cdot 0$ | 23 | $32 \cdot 4$ | 11 | 1.78 | 9 | $-0.15$ | $0 \cdot 58$ | 12 | $\cdots$ |
| Moa Creek | . | 1,400 | $69 \cdot 9$ | $41 \cdot 9$ | $55 \cdot 9$ |  | $80 \cdot 2$ | 25 | $29 \cdot 5$ | 20 | $1 \cdot 83$ | 20 |  | $0 \cdot 55$ | 5 | . |
| Earnscleugh | . | 500 | $74 \cdot 2$ | $45 \cdot 3$ | $59 \cdot 8$ | -0.9* | $86 \cdot 0$ | 23 | $35 \cdot 0$ | 20 | $1 \cdot 87$ |  | $+0.62$ | $0 \cdot 88$ | 5 |  |
| Waipiata | . | 1,550 | $68 \cdot 8$ | $45 \cdot 2$ | $57 \cdot 0$ | $-0.8$ | $81 \cdot 5$ | 23 | 34.0 | 20 | $2 \cdot 31$ | 10 | +0.31 | $0 \cdot 59$ | 26 | 218 |
| Alexandra | . | 520 | $73 \cdot 8$ | $49 \cdot 2$ | $61 \cdot 5$ | $+0 \cdot 1$ | $85 \cdot 5$ | 23 | $39 \cdot 2$ | 13 | $2 \cdot 60$ | 9 | $+1 \cdot 13$ | 1.77 | 5 | 213 |
| Garston | . | 1,009 | $70 \cdot 4$ | $43 \cdot 5$ | $57 \cdot 0$ | .. | $79 \cdot 0$ 86.5 | 23 | $30 \cdot 7$ $35 \cdot 0$ | 11 | 4.27 1.68 | 14 |  | 1.92 0.41 | 12 | . |
| Roxburgh Hydro | . | 350 | 73.4 | $47 \cdot 0$ | 60.2 | . | $86 \cdot 5$ | 25 | 35.0 | 13 | 1.68 5.38 | 11 | -0.05* | 0.41 0.90 | 26 | $\cdots$ |
| Mid Dome Cherry Farm, Waikouaiti |  | 1,252 | $69 \cdot 4$ $65 \cdot 3$ | $44 \cdot 2$ $46 \cdot 1$ | $56 \cdot 8$ 55.7 |  | $79 \cdot 5$ $74 \cdot 8$ | 25 | $33 \cdot 1$ $38 \cdot 5$ | 13 | 5.38 1.70 | 13 |  | 0.41 0.40 | 12 |  |
| Cherry Farm, Waikouaiti Moa Flat, West Otago | . | 1,345 | $65 \cdot 3$ $66 \cdot 1$ | $46 \cdot 1$ $44 \cdot 1$ | $55 \cdot 7$ $55 \cdot 1$ |  | $74 \cdot 8$ $78 \cdot 1$ | 25 | $38 \cdot 3$ | 11 | 1.70 3.76 | 16 | +0.81* | 0.70 | 26 |  |
| Taieri .. .. |  | 80 | $67 \cdot 8$ | 47-0 | $57 \cdot 4$ | -0.3* | $83 \cdot 4$ | 14 | $34 \cdot 7$ | 20 | $2 \cdot 90$ | 13 | +0.59* | $0 \cdot 48$ | 9 | 181 |
| Musselburgh, Dunedin |  | 5 | $65 \cdot 2$ | $51 \cdot 1$ | $58 \cdot 2$ | -0.3 | $77 \cdot 3$ | 25 | $39 \cdot 1$ | 20 | 3.02 | 16 | $+0.07$ | $0 \cdot 53$ | 15 | 185 |
| Tapanui | $\cdots$ | 550 | $68 \cdot 2$ | $45 \cdot 4$ | $56 \cdot 8$ |  | $80 \cdot 2$ | 14 | $38 \cdot 2$ | 20 | $3 \cdot 89$ | 14 |  | 0.94 | 9 | .. |
| East Gore | .. | 245 | $68 \cdot 4$ | $46 \cdot 1$ | 57.2 | -0.7 | $84 \cdot 6$ | 25 | $35 \cdot 3$ | 20 | $4 \cdot 31$ | 17 | $+1.50$ | $1 \cdot 01$ | 14 |  |
| Gore . |  | 240 | $69 \cdot 3$ | $45 \cdot 5$ | $57 \cdot 4$ | -0.9* | $84 \cdot 0$ | 25 | $36 \cdot 5$ | 19 | $4 \cdot 03$ | 17 | +1.22* | 1.00 | 14 | 201 |
| Otautau |  | 180 | $66 \cdot 2$ |  |  |  | $78 \cdot 8$ | 25 |  |  | $4 \cdot 19$ | 16 | $+1 \cdot 18^{*}$ | 0.70 | 9 | 186 |
| Pebbly Hills |  | 150 | $68 \cdot 4$ | $45 \cdot 4$ | $56 \cdot 9$ |  | $81 \cdot 0$ | 25 | 31.5 | 1 | $5 \cdot 16$ | 16 | +1.68* | 0.80 | 9 | .. |
| Invercargill |  | 8 | $65 \cdot 3$ | 47-8 | $56 \cdot 6$ | $-0.6$ | $78 \cdot 8$ | 14 | $37 \cdot 2$ | 20 | $5 \cdot 41$ | 18 | +1.98* | 1.01 | 9 |  |
| Invercargill Airfield |  | 0 | $65 \cdot 1$ | $44 \cdot 7$ | $54 \cdot 9$ | $-1 \cdot 3^{*}$ |  | 25 | $33 \cdot 8$ | 1 | $5 \cdot 31$ | 18 | +1.96* | $0 \cdot 97$ | 9 | 190 |
|  |  | LATE RETURNS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Te Paki, Te Hapua, Jan 19 |  | 200 | $74 \cdot 8$ | $58 \cdot 6$ | $66 \cdot 7$ | +2•0* | $80 \cdot 4$ | 29, 31 | $45 \cdot 0$ | 1 | 0.92 | 5 | -2.47* | $0 \cdot 49$ | 6 | 248 |
| Dannevirke, Jan 1960 | . | 685 | $72 \cdot 3$ | $54 \cdot 2$ | $63 \cdot 2$ | .. | $81 \cdot 0$ | 28 | $36 \cdot 9$ | 1 | $1 \cdot 45$ | 9 | $-1 \cdot 74 *$ | $0 \cdot 39$ | 24 | .. |

Note-At stations where departures from normal have an asterisk, the temperature record has been maintained for less than 10 years, the rainfall record for less than 20 years. Rainfall normals have been revised and now refer to the standard period 1921-50. Where observations are not available for the whole period, or where the site of the rain gauge has been changed, the normals are partly interpolated.

## Notes on the Weather for February 1960

General: February was particularly wet, cloudy, and warm over the northern half of the North Island. In all districts good rains were welcome after January's dry weather. In the Auckland Province dairy production was reported to have recovered after the set-back in January. On the other hand, in Gisborne and Hawke's Bay conditions were too wet and also too cloudy and humid for the fruit crops, some of which were attacked by fungus diseases. In Canterbury it was a good season for wheat, but in South Canterbury the dry weather was still retarding pasture growth.

Rainfall: Rainfall was double the average value over most of the Auckland Province. It was also somewhat above average about Cook Strait and in parts of Southland.

For Te Aroha, with 17.42 in. of rain, it was the wettest February in 54 years of observation.

Many thunderstorms were reported over the North Island on the 2nd. In the Bay of Plenty and Rotorua total rainfalls for the three days 2-4 February were as high as 6-12 in. at many stations. Serious flooding occurred in Opotiki on the 4th.

In Canterbury and Wairarapa it was appreciably drier than usual, the deficiency being mainly 40 to 60 per cent.

Temperatures: Temperatures were about two degrees above average from Wanganui northward. They were a degree above average in Nelson and on the West Coast.

Sunshine: Sunshine was below average by 45-75 hours in coastal districts from Napier to Tauranga and also in eastern Northland. In other parts of the North Island it was also somewhat below average.
Most western and southern districts of the South Island were favoured with about 30 hours more sunshine than usual.

Weather Sequence: At the beginning of the month an anticyclone was centred east of the North Island, but conditions were already commencing to deteriorate in the west and north with the advance of a trough of low pressure across the Tasman Sea. A shallow depression developed in the trough and remained near the North Island during the 2nd, 3rd, and 4th, while the trough itself moved only very slowly across the country. This was a period of northerly winds and considerable rain over the North Island, with some rain also over most of the South Island. Many thunderstorms were reported on the night of the 2nd, and by the 4th flood waters covered the town of Opotiki. Conditions improved in most districts on the 5th as the depression and trough moved away to the east; and on the following day an anticyclone centred over the North Island brought a brief spell of generally settled weather to the whole country.
Pressure remained high over the North Island, but a trough of low pressure affected the South Island on the 7th and 8th bringing rain, except to Canterbury and Otago. As the trough became slow moving for the next three days some other areas received a period of rain in turn, namely Otago, eastern districts from Napier

