Climatological Table-Summary of the Records of Temperature, Rainfall, and Sunshine for January 1957-continued

| Station |  |  | Air Temperatures in Degrees (Fahrenheit) |  |  |  |  |  |  |  | Rainfall in Inches |  |  |  |  | $\begin{gathered} \text { Bright } \\ \text { Sun- } \\ \text { shine } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Means of |  | $\begin{aligned} & \text { Mean } \\ & \text { of A } \\ & \text { and } \end{aligned}$ | $\begin{aligned} & \text { Differ- } \\ & \text { ence } \\ & \text { From } \\ & \text { Normal } \end{aligned}$ | Absolute Maximum andMinimum |  |  |  | $\begin{gathered} \text { Total } \\ \text { Fall } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { No. } \\ \text { of } \\ \text { Rain } \\ \text { Days } \end{gathered}\right.$ |  | $\underset{\text { Fall }}{\text { Maximum }}$ |  |  |
|  |  |  | $\underset{\text { Max. }}{\text { A }}$ | B <br> Min. |  |  | $\underset{\text { Maxi- }}{\text { maxi- }}$ | Date | Mini- | Date |  |  |  | Amount | Date |  |
|  |  | Ft. | ${ }^{\circ} \mathrm{F}$. | ${ }^{\circ} \mathrm{F}$. | ${ }^{\circ} \mathrm{F}$. |  | ${ }^{\circ} \mathrm{F}$. |  | ${ }^{\circ} \mathrm{F}$. |  | In. |  |  | In. |  | Hrs. |
| Eyrewell |  | 520 | $74 \cdot 5$ | $51 \cdot 0$ | $62 \cdot 8$ |  | $91 \cdot 0$ | 31 | $43 \cdot 0$ | 20 | $2 \cdot 17$ | 8 | $-1.23 *$ | 0•85 | 6 |  |
| Ashley Forest |  | 460 | $72 \cdot 0$ | $53 \cdot 1$ | $62 \cdot 0$ | +1.5* | $87 \cdot 4$ | 31 | $44 \cdot 4$ |  | $2 \cdot 02$ | 6 | -0.78* | 0.81 | 6 |  |
| Darfield |  | 640 | $74 \cdot 9$ | $50 \cdot 8$ | $62 \cdot 8$ | $+2 \cdot 0$ | $90 \cdot 7$ | 31 | $42 \cdot 8$ | 3 | $1 \cdot 17$ | 9 | $-1.61$ | $0 \cdot 59$ | 6 |  |
| Harewood |  | 94 | $73 \cdot 6$ | 52.8 | $63 \cdot 2$ |  | 90.5 | 31 | $42 \cdot 0$ | 3 | $1 \cdot 84$ | 8 |  | $1 \cdot 00$ | 6 | 288 |
| Christchurch |  | 22 | $74 \cdot 1$ | $53 \cdot 6$ | $63 \cdot 8$ | $+2 \cdot 4$ | 87-8 | 31 | $45 \cdot 0$ | 3 | $1 \cdot 84$ | 6 | -0.39 | 1.08 | 6 |  |
| Wigram |  | 74 | $73 \cdot 7$ | $53 \cdot 6$ | $63 \cdot 6$ | +2.4* | $90 \cdot 0$ | 31 | $44 \cdot 9$ | 4 | $2 \cdot 62$ | 7 | +0.53* | $1 \cdot 59$ | 6 |  |
| Akaroa |  | 150 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lincoln |  | 36 | $75 \cdot 2$ | $50 \cdot 4$ | $62 \cdot 8$ | $+2 \cdot 4$ | 92-1 | 31 | $39 \cdot 7$ |  | 1.94 | 5 | -0.16 | $0 \cdot 64$ | 6 | 294 |
| Highbank |  | 1,102 | $71 \cdot 8$ | $50 \cdot 9$ | $61 \cdot 4$ |  | $83 \cdot 4$ | 31 | $35 \cdot 5$ | 13 | $3 \cdot 04$ | 8 |  | 1.35 | 6 | 279 |
| The Hermitage |  | 2,510 | $66 \cdot 9$ | $46 \cdot 7$ | $56 \cdot 8$ | $+1.0$ | $78 \cdot 0$ | 31 | $37 \cdot 0$ | 3,18 | $9 \cdot 60$ | 15 | $-9.19$ | $2 \cdot 00$ | 28 | 170 |
| Winchmore |  | 525 | $74 \cdot 0$ | $48 \cdot 9$ | $61 \cdot 4$ | +1.8* | $90 \cdot 5$ | 31 | $39 \cdot 1$ | 3 | $2 \cdot 19$ | 8 | -0.25* | 0.96 | 6 |  |
| Haast |  | 15 | $65 \cdot 0$ | $49 \cdot 2$ | $57 \cdot 1$ | -1.0* | $70 \cdot 0$ | 27 | $41 \cdot 2$ | 18 | 9•68 | 20 | -5.37* | $2 \cdot 80$ | 27 | 173 |
| Ashburton |  | 323 | $77 \cdot 6$ | $50 \cdot 0$ | $63 \cdot 8$ | $+2 \cdot 8$ | $96 \cdot 0$ | 31 | $40 \cdot 6$ | 4 | $1 \cdot 39$ | 5 | $-1.24$ | 0.77 | 6 | 263 |
| Fairlie |  | 1,004 | $74 \cdot 5$ | $45 \cdot 9$ | $60 \cdot 2$ | $+1.0$ | 85.0 | 21, 26 | $34 \cdot 0$ | 22 | $0 \cdot 59$ | 4 | $-2.43$ | $0 \cdot 43$ | 27 |  |
| Timaru |  | 56 | 74.0 | 52.4 | $63 \cdot 2$ | +2.6 | $86 \cdot 8$ | 20, 26 | $44 \cdot 8$ | 2 | $0 \cdot 64$ | 6 | $-1.73$ | $0 \cdot 26$ | 27 | 232 |
| Adair |  | 200 | 71.9 | $51 \cdot 5$ | $61 \cdot 7$ | +2.7* | $87 \cdot 9$ | 26 | $44 \cdot 9$ | 3 | $0 \cdot 43$ | 5 | -2.11* | $0 \cdot 24$ | 27 |  |
| Tara Hills, Omarama |  | 1,600 | $73 \cdot 9$ | $46 \cdot 7$ | $60 \cdot 3$ | +0.3* | 84-9 | 30 | $36 \cdot 1$ | 18 | $1 \cdot 15$ |  | $-1.07 *$ | 0.76 | 27 | 227 |
| Milford Sound |  | 20 | 63-8 | $51 \cdot 3$ | 57.6 | $+0.4$ | $73 \cdot 2$ | 25 | $45 \cdot 0$ | 11 | 26:80 | 21 | $+0.42$ | 10-15 | 26 |  |
| Waimate |  | 200 | $73 \cdot 6$ | $52 \cdot 1$ | $62 \cdot 8$ | $+2 \cdot 6$ | $88 \cdot 6$ | 26 | $46 \cdot 9$ | 21 | 0.73 | 8 | $-1.88$ | 0.33 | 17 | 217 |
| Naseby |  | 2,300 | $69 \cdot 0$ | $43 \cdot 0$ | $56 \cdot 0$ |  | 83-1 | 30 | $31 \cdot 9$ | 18 | $2 \cdot 09$ | 8 |  | $0 \cdot 84$ | 27 |  |
| Queenstown |  | 1,100 | 71.0 | $49 \cdot 2$ | $60 \cdot 1$ | $+0.7$ | $83 \cdot 3$ | 26 | $42 \cdot 6$ | 18 | $2 \cdot 58$ | 13 | -0.45 | 0.93 | 27 | 240 |
| Cromwell |  | 720 | $75 \cdot 6$ | $50 \cdot 7$ | $63 \cdot 2$ | +1.1* | $85 \cdot 9$ | 31 | $43 \cdot 5$ | 21 | 1.52 | 10 | $-0 \cdot 26^{*}$ | 0.98 | 27 |  |
| Ophir |  | 1,000 | 74-1 | 47-1 | $60 \cdot 6$ | $+0.4$ | 84-3 | 30 | $33 \cdot 4$ | 18 | $1 \cdot 70$ | 7 | $-0 \cdot 14$ | $0 \cdot 83$ | 27 |  |
| Earnscleugh |  | 500 | $75 \cdot 6$ | $48 \cdot 4$ | $62 \cdot 0$ | +1.0* | 88.4 | 26 | $36 \cdot 9$ | 18 | $2 \cdot 07$ | 9 | +0.45* | 1.08 | 9 |  |
| Waipiata |  | 1,550 | $70 \cdot 4$ | $45 \cdot 8$ | $58 \cdot 1$ | $+0 \cdot 1$ | $81 \cdot 8$ | 31 | $34 \cdot 8$ | 18 | 1.56 | 8 | $-0.45$ | $0 \cdot 51$ | 27 | 222 |
| Alexandra |  | 520 | $76 \cdot 3$ | 51.4 | $63 \cdot 8$ | $+2.1$ | 88.9 | 31 | $41 \cdot 2$ | 18 | 1.08 | 9 | $-0.76$ | $0 \cdot 61$ | 27 | 232 |
| Manorburn Dam $\dagger$ |  | 2,448 | $65 \cdot 3$ | $42 \cdot 4$ | $53 \cdot 8$ | $+0.7$ | $75 \cdot 0$ | 30 | $33 \cdot 0$ | 18 | $2 \cdot 46$ | 8 | $+0.28$ | $0 \cdot 67$ | 27 |  |
| Garston |  | 1,009 | $70 \cdot 5$ | $46 \cdot 6$ | $58 \cdot 6$ |  | $82 \cdot 0$ | 30 | $35 \cdot 1$ | 18 | $3 \cdot 26$ | 14 |  | $0 \cdot 80$ | 27 |  |
| Roxburgh Hydro |  | 350 | $75 \cdot 0$ | $50 \cdot 3$ | $62 \cdot 6$ |  | 90.2 | 31 | $40 \cdot 0$ | 18 | $1 \cdot 66$ | 12 | -0.12* | $0 \cdot 40$ | 27 |  |
| Mid Dome |  | 1,252 | $68 \cdot 7$ | $46 \cdot 8$ | $57 \cdot 8$ |  | $82 \cdot 3$ | 26 | $39 \cdot 0$ | 18 | $4 \cdot 72$ | 15 |  | 1.03 | 6 |  |
| Moa Flat, West Otago |  | 1,345 | $66 \cdot 6$ | $46 \cdot 5$ | $56 \cdot 7$ |  | $80 \cdot 3$ | 26 | $38 \cdot 8$ | 18 | $2 \cdot 76$ | 14 | +0.04* | $0 \cdot 62$ | 27 |  |
| Mossburn .. |  | 961. | $68 \cdot 3$ | $46 \cdot 6$ | $57 \cdot 4$ |  | $78 \cdot 1$ | 26 | 37.9 | 23 | $4 \cdot 42$ | 14 |  | 1.98 | 26 |  |
| Taieri |  | 80 | $69 \cdot 2$ | $48 \cdot 7$ | $59 \cdot 0$ | +1.2* | 84-6 | 26 | $42 \cdot 5$ | 29 | $2 \cdot 66$ | 13 | +0.28* | $0 \cdot 90$ | 6 | 186 |
| Musselburgh, Dunedin |  | 5 | $67 \cdot 8$ | $52 \cdot 6$ | $60 \cdot 2$ | $+2 \cdot 0^{*}$ | $80 \cdot 3$ | 20 | $42 \cdot 6$ | 18 | $3 \cdot 25$ | 15 | $+0.52$ | 1.07 | 6 | 204 |
| Tapanui |  | 550 | $69 \cdot 2$ | $47 \cdot 7$ | $58 \cdot 4$ |  | $79 \cdot 5$ | 26 | $42 \cdot 3$ | 10,28 | $2 \cdot 89$ | 12 |  | $0 \cdot 56$ | 6 |  |
| East Gore |  | 245 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gore |  | 240 | $70 \cdot 4$ | $48 \cdot 6$ | $59 \cdot 5$ | $+1 \cdot 1^{*}$ | $82 \cdot 0$ | 26 | 41.0 | 14 | $5 \cdot 28$ | 17 | +2.20* | 0.95 | 2 | 187 |
| Otautau |  | 180 | $67 \cdot 4$ | $47 \cdot 4$ | $57 \cdot 4$ | +0.3* | $76 \cdot 6$ | 26 | $39 \cdot 8$ | 15 | $4 \cdot 90$ | 17 | +1.73* | $2 \cdot 20$ | 26 | 187 |
| Pebbly Hills |  | 150 | $68 \cdot 5$ | $46 \cdot 9$ | $57 \cdot 7$ |  | $83 \cdot 0$ | 26 | $39 \cdot 0$ | 25 | $4 \cdot 70$ | 17 | $+1.22$ | $0 \cdot 95$ | 26 |  |
| Invercargill South |  | 8 | $66 \cdot 9$ | $49 \cdot 9$ | $58 \cdot 4$ | $+1.2$ | $77 \cdot 3$ | 24 | $43 \cdot 0$ | 18 | $5 \cdot 29$ | 17 | +1.48* | 1.34 | 26 |  |
| Invercargill Airfield |  | 0 | $65 \cdot 2$ | $47 \cdot 3$ | $56 \cdot 2$ | +0.0* | $75 \cdot 6$ | 24 | $40 \cdot 3$ | 15 | $5 \cdot 65$ | 17 | $+1.92 *$ | $1 \cdot 37$ | 26 | 197 |

†Observations for 26 days.

LATE RETURNS

| Paerata, December, 1956 | 166 | $72 \cdot 5$ | 51.8 | $62 \cdot 2$ | $+0 \cdot 2^{*}$ | 77.4 | 27 | $45 \cdot 7$ | 4 | $5 \cdot 14$ | 15 | +2.50 | 1.45 | 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wallaceville, Dec., 1956 | 195 | $67 \cdot 8$ | $52 \cdot 0$ | $59 \cdot 9$ | +1.9* | $74 \cdot 4$ | 21 | $38 \cdot 6$ | 3 | $2 \cdot 18$ | 11 | -2.31 | $0 \cdot 51$ | 12 | 190 |
| Molesworth, Dec., 1956 | 2,930 | $64 \cdot 8$ | $43 \cdot 3$ | $54 \cdot 0$ | $-0.8 *$ | $80 \cdot 0$ | 9 | $33 \cdot 0$ | 3 | $2 \cdot 16$ | 5 | +0.02* | $0 \cdot 90$ | 12 |  |
| Balmoral, December, 1956. | 650 | $70 \cdot 4$ | $49 \cdot 9$ | $60 \cdot 2$ | +2.9 | $84 \cdot 5$ | 9 | $39 \cdot 0$ | 4,24 | 3.14 | 11 | +0.84 | 0.79 | 26 |  |
| The Hermitage, Dec., 1956 | 2,510 | $62 \cdot 5$ | $44 \cdot 2$ | $53 \cdot 4$ | $-1.2$ | $78 \cdot 0$ | 8,9 | $31 \cdot 0$ | 24 | $10 \cdot 50$ | 18 | -2.42 | $2 \cdot 70$ | 29 | $\cdots$ |
| Fairlie, December, 1956 . | 1,004 | $67 \cdot 3$ | $46 \cdot 1$ | $56 \cdot 7$ | -0.4 | $80 \cdot 0$ | 25 | $36 \cdot 0$ | 24 | $2 \cdot 34$ | 11 | $-0.55$ | $1 \cdot 00$ | 12 | . |

Note-At stations where departures from normal have an asterisk, 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 1921-50. 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 January 1957

General: January was unusually dry and sunny. The long spell of settled weather was welcomed by holiday-makers and farmers alike. Shearing and haymaking were in fuil swing after numerous set-backs in previous months. Fruit ripened quickly and was harvested under excellent conditions. By the end of the month, however, pastures were drying up and this was adversely affecting dairy production.

Rainfall: Rainfall was less than a quarter of the normal value over most of the Auckland Province, also over the greater part of Taranaki and Marlborough. The greatest deficiency was in Northland, where few stations received even half an inch.

Only in Otago and Southland did totals reach the average value.
Thunderstorms affected parts of Southland and Canterbury on the 6th. In the Methven district of inland Canterbury the thunderstorm was associated with heavy hail, which caused serious damage to crops.

Temperature: Temperatures were mainly above normal by about a degree. On the Canterbury coast and about Cook Strait it was warmer than usual by 2 to 3 degrees.
Sunshine: Except in Otago and Southland, sunshine was well above normal, mainly by about 50 hours. For Auckland, Palmerston North, Nelson, and Blenheim it was the sunniest January in some 35 to 50 years of records. The highest total was 335 hours, at Blenheim.

Weather Sequence: A deep depression centred to the south moved eastward on the first two days of the month, giving generally unsettled weather, with rather cool temperatures. Fair weather accompanied the passage of a ridge of high pressure on the 3rd, but more rain came to many districts from the 4th to the 6th as a trough of low pressure moved slowly north-eastward over the country. Thunderstorms affected parts of Southland and Canterbury on the 6th.
From the 7th to the 26th pressures remained high in the New Zealand area, especially over the North Island. However, from the 11th to 13th a tropical cyclone which had formed about a week earlier near New Caledonia moved southward past East Cape, bringing rain to Gisborne and Hawke's Bay and also unusually heavy seas from Tauranga to Napier. In addition a number of depressions passed far to the south of the country, bringing rather unsettled conditions to western and far southern districts of the South Island. Most other parts of the country had very warm, sunny weather over this twenty-day period.
A trough of low pressure moved on to the country on the 27th and soon became stationary. The whole of the southern half of the South Island received some rain, with substantial falls in West land. A few northern and western districts of the North Island also benefited on the 28th and 29th, but the falls were very light. On the last two days of the month pressures were again high in the New Zealand area, but a depression was approaching from the northwest. Rain came once again to the West Coast, and some light falls also affected parts of the Auckland Province.
M. A. F. BARNETT, Director.
(N.Z. Met. S. Misc. Pub. 107)

