Climatologioal Table－continued
Summary of the Records of Temperature，Rainfall，and Sunshine for February 1955－continued

| Station |  | Air Temperatures in Degrees（F＇ahrenheit） |  |  |  |  |  |  |  | Rainfall in Inches |  |  |  |  | Bright Sun－ shine |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Means of |  | $\begin{gathered} \text { Mean } \\ \text { of } \\ \text { A } \\ \text { and } \\ \mathbf{B} \end{gathered}$ | Difference From Normal | Absolute Maximum and Minimum |  |  |  | Total Fall | $\begin{aligned} & \text { No. } \\ & \text { of } \\ & \text { Rain } \\ & \text { Days } \end{aligned}$ | $\begin{gathered} \text { Difference } \\ \text { From } \\ \text { Normal } \end{gathered}$ | $\underset{\text { Fall }}{\text { Maximum }}$ |  |  |
|  |  | $\stackrel{A}{\text { Max. }}$ | $\begin{gathered} \mathrm{B} \\ \text { Min. } \end{gathered}$ |  |  | $\begin{aligned} & \text { G } \\ & \text { 券 } \\ & \text { 感 } \end{aligned}$ | Date | $\begin{aligned} & \text { 娄 } \\ & \text { 胃 } \end{aligned}$ | Date |  |  |  | 号 | $\stackrel{\oplus}{\text { ® }}$ |  |
|  | Ft． | ${ }^{\circ} \mathrm{F}$ ． | ${ }^{\circ} \mathrm{F}$ ． | ${ }^{\circ} \mathrm{F}$ ． |  | ${ }^{\circ} \mathrm{F}$ ． |  | ${ }^{\circ} \mathrm{F}$ ． |  | In． |  |  | In． |  | Hrs． |
| Christchurch | 22 | $73 \cdot 1$ | $55 \cdot 7$ | 64．4 | $+3 \cdot 6$ | $91 \cdot 2$ | 1 | $45 \cdot 8$ | 4 | $3 \cdot 60$ | 11 | ＋1．80 | $1 \cdot 10$ | 25 |  |
| Wigram | 74 | $73 \cdot 5$ | $55 \cdot 3$ | $64 \cdot 4$ | $(+3 \cdot 7)$ | $91 \cdot 3$ | 1 | $41 \cdot 8$ | 4 | $3 \cdot 27$ | 8 | $(+1 \cdot 60)$ | 0.96 | 8， 25 |  |
| Akaroa | 150 | $73 \cdot 2$ | $55 \cdot 4$ | $64 \cdot 3$ | ＋2．4 | $89 \cdot 8$ | 1 | $48 \cdot 5$ | 10 | $2 \cdot 91$ | 11 | $(+0.44)$ | $0 \cdot 84$ | 25 | $163 \cdot 2$ |
| Lincoln | 36 | $74 \cdot 0$ | $53 \cdot 8$ | $63 \cdot 9$ | $+4 \cdot 2$ | $90 \cdot 6$ | 1 | $38 \cdot 9$ | 4 | $3 \cdot 02$ | 10 | ＋1．27 | $1 \cdot 00$ | 8 | $158 \cdot 2$ |
| Highbank． | 1，102 | 69.2 | $52 \cdot 2$ | $60 \cdot 7$ |  | $83 \cdot 2$ | 23 | $42 \cdot 4$ | 22 | $4 \cdot 91$ | 14 |  | 1.28 | 8 | $131 \cdot 1$ |
| The Hermitage | 2，510 | $65 \cdot 6$ | $48 \cdot 2$ | $56 \cdot 9$ | $+0.8$ | $73 \cdot 0$ | 10， 24 | $40 \cdot 0$ | 3， 20 | $38 \cdot 85$ | 14 | $+23.67$ | $12 \cdot 50$ | 1 | $147 \cdot 2$ |
| Winchmore ． | 525 | 71.7 | $51 \cdot 6$ | $61 \cdot 6$ | $(+2 \cdot 0)$ | $86 \cdot 0$ | 2 | $38 \cdot 2$ | 4 | $2 \cdot 57$ | 11 | （ +0.29 ） | $0 \cdot 67$ | 8 |  |
| Haast | 15 | $65 \cdot 9$ | $53 \cdot 5$ | $59 \cdot 7$ | $(+1 \cdot 3)$ | $70 \cdot 0$ | 24 | $41 \cdot 7$ | 4 | $19 \cdot 63$ | 17 | （ +6.03 ） | $3 \cdot 21$ | 1 | $127 \cdot 5$ |
| Ashburton | 323 | $74 \cdot 2$ | $52 \cdot 9$ | $63 \cdot 6$ | $+2 \cdot 6$ | 91.0 | 1 | $39 \cdot 6$ | 4 | $2 \cdot 32$ | 9 | $-0.37$ | $0 \cdot 55$ | 16 | $126 \cdot 2$ |
| Fairlie | 1，004 | $69 \cdot 2$ | $48 \cdot 6$ | $58 \cdot 9$ | $+0.3$ | $84 \cdot 0$ | 1 | $35 \cdot 0$ | 12 | $3 \cdot 34$ | 13 | $+0.65$ | 0.95 | 8 |  |
| Timaru | 56 | $70 \cdot 8$ | $53 \cdot 3$ | $62 \cdot 0$ | ＋1．8 | $87 \cdot 9$ | 2 | $46 \cdot 3$ | 4， 10 | $3 \cdot 23$ | 12 | ＋1．01 | 0.85 | 16 | $115 \cdot 7$ |
| Adair | 200 | $69 \cdot 6$ | $53 \cdot 1$ | $61 \cdot 4$ | $(+3 \cdot 4)$ | $86 \cdot 9$ | 2 | $46 \cdot 3$ | 4 | $3 \cdot 55$ | 13 | $(+1.23)$ | 1.29 | 16 |  |
| Tara Hills，Omarama | 1，600 | $70 \cdot 5$ | $49 \cdot 5$ | $60 \cdot 0$ | （ $+0 \cdot 3$ ） | $84 \cdot 1$ | 1 | $40 \cdot 2$ | 4 | $3 \cdot 26$ | 13 | $(+1.57)$ | $0 \cdot 78$ | 2 | $159 \cdot 3$ |
| Milford Sound | 20 | $66 \cdot 1$ | $52 \cdot 0$ | $59 \cdot 0$ | ＋2．0 | 71.9 | 11 | $42 \cdot 9$ | 3 | $22 \cdot 53$ | 17 | $-1.05$ | $4 \cdot 82$ | 14 |  |
| Waimate | 200 | $70 \cdot 6$ | $52 \cdot 6$ | $61 \cdot 6$ | $+1.5$ | $85 \cdot 4$ | 2 | $43 \cdot 9$ | 4 | 4.93 | 14 | $+2 \cdot 61$ | $2 \cdot 39$ | 16 | $91 \cdot 8$ |
| Naseby | 2，300 | $67 \cdot 2$ | $45 \cdot 0$ | $56 \cdot 1$ |  | $81 \cdot 4$ | 1 | $30 \cdot 2$ | 2 | 1.62 | 10 |  | $0 \cdot 31$ | 27 | ．． |
| Frankton Airfield | 1，144 | $71 \cdot 3$ | $48 \cdot 5$ | $59 \cdot 9$ |  | $81 \cdot 1$ | 6 | $40 \cdot 2$ | 3 | $2 \cdot 44$ | 7 |  | 0.90 | 1 |  |
| Queenstown ． | 1，100 | $70 \cdot 3$ | $50 \cdot 8$ | $60 \cdot 6$ | $+1.0$ | $80 \cdot 1$ | 19 | $41 \cdot 6$ | 3 | $3 \cdot 30$ | 10 | $+0.89$ | 0.92 | 1 | $193 \cdot 8$ |
| Cromwell | － 720 | $73 \cdot 6$ | $52 \cdot 5$ | $63 \cdot 0$ | $(+1.4)$ | $85 \cdot 2$ | 1 | $41 \cdot 0$ | 27 | $2 \cdot 27$ | 10 | $(+0.59)$ | 0.95 | 1 | ．． |
| Ophir | 1，000 | $71 \cdot 6$ | $49 \cdot 6$ | $60 \cdot 6$ | ＋0．8 | 81.9 | 6 | $35 \cdot 3$ | 27 | $1 \cdot 73$ | 9 | $-0.20$ | $0 \cdot 32$ | 2 |  |
| Earnscleugh | 1， 500 | $72 \cdot 3$ | $50 \cdot 9$ | $61 \cdot 6$ | $(+0.9)$ | $81 \cdot 3$ | 2 | $37 \cdot 8$ | 28 | 1．64 | 9 | $(+0.39)$ | $0 \cdot 53$ | 1 |  |
| Waipiata | 1，550 | $67 \cdot 8$ | $47 \cdot 4$ | $57 \cdot 6$ | －0．2 | $82 \cdot 4$ | 1 | $37 \cdot 5$ | 3 | $0 \cdot 88$ | 8 | －1．12 | 0.21 | 16 | $153 \cdot 5$ |
| Alexandra | 520 | $72 \cdot 7$ | $52 \cdot 3$ | $62 \cdot 5$ | ＋1．1 | $83 \cdot 9$ | 1 | $41 \cdot 8$ | 27 | 1．35 | 10 | $-0 \cdot 12$ | $0 \cdot 45$ | 16 | $174 \cdot 8$ |
| Mid Dome ．．． | 1，252 | $68 \cdot 5$ | $48 \cdot 1$ | $58 \cdot 3$ |  | $82 \cdot 3$ | 1 | $37 \cdot 4$ | 4 | $3 \cdot 11$ | 11 |  | $0 \cdot 66$ | 16 | ．． |
| Moa Flat，West Otago | 1，345 | $64 \cdot 3$ | $46 \cdot 3$ | $55 \cdot 3$ |  | $80 \cdot 3$ | 1 | $36 \cdot 8$ | 9 | $2 \cdot 94$ | 15 | （ -0.01 ） | 0.95 | 14 |  |
| Manorburn Dam＊． | 2，448 | $64 \cdot 5$ | $44 \cdot 4$ | $54 \cdot 4$ | $+0 \cdot 8$ | $73 \cdot 2$ | 1， 6 | $36 \cdot 0$ | 28 | 1.59 | 10 | －0．17 | $0 \cdot 40$ | 20 |  |
| Roxburgh Hydro | 350 | $72 \cdot 0$ | $49 \cdot 7$ | $60 \cdot 8$ |  | $84 \cdot 3$ | 1 | $41 \cdot 5$ | 27 | $1 \cdot 60$ | 8 | $(-0.13)$ | $0 \cdot 42$ | 20 |  |
| Taieri $\quad$. | 80 | $68 \cdot 3$ | $48 \cdot 1$ | $58 \cdot 2$ | $(+0.5)$ | $79 \cdot 6$ | 18 | $39 \cdot 7$ | 10 | $2 \cdot 36$ | 13 | $(+0.05)$ | 1.08 | 16 | $127 \cdot 4$ |
| Musselburgh，Dunedin | 5 | $66 \cdot 1$ | $52 \cdot 5$ | $59 \cdot 3$ | $(+0 \cdot 8)$ | $74 \cdot 0$ | 23 | $44 \cdot 0$ | 10 | $4 \cdot 03$ | 12 | ＋1．08 | $1 \cdot 33$ | 16 | $130 \cdot 9$ |
| Tapanui ．．． | 550 | $67 \cdot 9$ | $47 \cdot 7$ | $57 \cdot 8$ |  | $83 \cdot 2$ | 1 | $35 \cdot 5$ | 4 | $2 \cdot 87$ | 13 |  | $0 \cdot 79$ | 23 | ．． |
| East Gore | 245 | $68 \cdot 7$ | $47 \cdot 6$ | $58 \cdot 2$ | $+0 \cdot 3$ | $86 \cdot 0$ | 1 | $33 \cdot 0$ | 9 | $3 \cdot 15$ | 11 | $+0.34$ | $1 \cdot 14$ | 23 |  |
| Gore | 240 | $68 \cdot 8$ | $47 \cdot 4$ | $58 \cdot 1$ | $(-0 \cdot 2)$ | $86 \cdot 0$ | 1 | $34 \cdot 5$ | 9， 12 | $2 \cdot 74$ | 11 | （ -0.07 ） | 0.90 | 23 | $165 \cdot 4$ |
| Otautau | 180 | $66 \cdot 9$ | $47 \cdot 6$ | $57 \cdot 2$ | $(+0.8)$ | $81 \cdot 2$ | 1 | $33 \cdot 2$ | 27 | $2 \cdot 40$ | 9 | （－0．61） | $0 \cdot 75$ | 23 | ．． |
| Pebbly Hills | 150 | $68 \cdot 3$ | $47 \cdot 2$ | $57 \cdot 8$ |  | $84 \cdot 0$ | ， | $32 \cdot 2$ | 12 | $3 \cdot 19$ | 12 | $(-0.29)$ | $0 \cdot 88$ | 23 | ． |
| Invercargill South | 8 | $65 \cdot 8$ | $49 \cdot 6$ | 57.7 | $+0 \cdot 5$ | $83 \cdot 5$ | 1 | $38 \cdot 3$ | 25 | $2 \cdot 81$ | 11 | $(-0.62)$ | $0 \cdot 77$ | 23 |  |
| ＊Observations for 24 days only． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| LATE RETURN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wallaceville，January， 1955 | 195 | $71 \cdot 8$ | $51 \cdot 2$ | $61 \cdot 5$ | $(+1 \cdot 4)$ | $81 \cdot 0$ | 12 | $39 \cdot 5$ | 23 | $0 \cdot 52$ | 5 | $(-2 \cdot 53)$ | $0 \cdot 40$ | 21 | $234 \cdot 7$ |

Note．－At stations where departures from normal are in parentheses，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 February 1955

General．－It was a cloudy month，and also very warm，especially in the North Island．For many districts which had been experiencing dry conditions since Christmas plentiful rain，chiefly in the second half of the month，proved most beneficial to pastures．However，over a considerable part of the Auckland Province rainfall was quite inadequate for plant growth．
There were two periods of particularly heavy rain over the north－western districts of the South Island and over the Tararua Ranges，from the 16 th to 20 th ，and from 24 th to 26 th ．On the first of these occasions there were serious floods in Marlborough．On both occasions there were serious floods in several rivers rising in the Tararuas，and the West Coast was completely inaccessible by road．

Rainfall．－Rainfall was more than double the normal value between Stratford and Taumarunui，over the western part of the Wellington Province as far north as Levin，and also over the northern half of the South Island where some exceptionally large totals were reported from the high country．
The Auckland and Hawke＇s Bay Provinces were drier than usual by at least 25 per cent except in a few localities，including Auckland City，which were affected by excessive local downpours．Over most of the remainder of the country there was a slight excess．
At Stockton opencast coal mine，north－east of Westport，the total rainfall of 68.7 in ．was only 3 in ．short of the highest monthly total ever recorded in New Zealand．
There was an unusually heavy local downpour at Auckland City on the 5 th，when amounts varying from 4 to 6 in．fell in the afternoon and early evening，while a few miles away，in the Waitakere Ranges， there was little or no rain．A number of severe thunderstorms were reported from the Auckland Province on the 9th and l0th．In one of these a house at Rotorua was struck by lightning and burnt to the ground．
Temperatures．－For the greater part of the North Island mean temperatures were about $5^{\circ} \mathrm{F}$ ．above normal，approximately the same as February 1935 and February 1938，the two warmest months on record．

Temperatures were also well above normal in the South Island，the departure ranging from $1^{\circ} \mathrm{F}$ ．in the south to $3^{\circ} \mathrm{F}$ ．in the north．
The period from the 14th to the 20th was particularly warm and humid in the North Island．
Sunshine．－Sunshine was more than 20 hours below normal，except over the Auckland Peninsula（including Auckland City），in Westiand， in Western Otago，and in parts of Southland．The deficiency exceeded

2 hours a day in Taranaki，over most of Wellington Province，and in South Canterbury．For Masterton，with a total of 133 hours，it was the dullest February in over 40 years of records．

Weather Sequence．－At the beginning of the month a deep depres－ sion was passing far to the south，and the associated trough of low pressure crossed New Zealand rather slowly to become stationary over the Auckland Province on the 3rd and 4th．There was considerable rain on the West Coast，while Marlborough，Hawke＇s Bay，and Gis－ borne also benefited from moderate falls．For the next two days baro－ meters were high over the whole country，with anticyclones centred to east and west，but there were a number of unusually heavy local downpours，mainly in the Auckland and Taranaki Provinces．

On the 7th the weather cleared over the North Island but com－ menced to deteriorate in the far south with the approach of another trough，which moved slowly north－eastward during the next five days accompanied by light to moderate rain，except in most western districts of the North Island．Some severe thunderstorms were reported from the Auckland Province，with further heavy local downpours．
On the 13th conditions were deteriorating in western districts of both Islands with the approach of another trough of low pressure． This trough became stationary over the South Island two days later with the formation of a depression which crossed Otago on the 17th． By then a warm，humid，north－westerly airstream covered most of the country，and this persisted until a cold front associated with a deep depression far to the south crossed the country on the 20th and 21st． Over most of this period there was heavy rain in the Alps and on the West Coast，in Marlborough Sounds，and on the Tararua Ranges． Flooding was reported in the Marlborough Sounds on the 16th，and in several Wellington rivers on the 20th．All districts benefited，but rain was only light to moderate over most of the North Island and in Canterbury．It was a period of uncomfortably warm and humid weather over the North Island．
With high barometers over the whole country the 22 nd brought pleasanter conditions，but the slow north－eastward passage of another trough from the 23 rd to the 26 th was accompanied by further heavy rain in Westland and the Alps and in the Tararua Ranges，with minor flooding in parts of Wairarapa．Most other districts south of Hamilton received further beneficial rain．On the 27th and 28th a deep depres－ sion passed far to the south，and the associated trough of low pressure crossed the country with heavy rain once again in Westland and lighter falls in most districts as far north as Wanganui．

M．A．F．BARNETT，Director．
（N．Z．Met．S．Misc．Pub．107）

