## CLIMATOLOGICAL TABLE—continued Summary of the Records of Temperature, Rainfall, and Sunshine for April 1953-continued

| Station.   | Height of Station<br>Above M.S.L. | Air Temperatures in Degrees (Fahrenheit).   |  |                                      |  |   |                      |   |                          | Rainfall in Inches.  |                      |  |   |                      | 1                 |
|--|-----------------------------------|---|--|--------------------------------------|--|---|----------------------|---|--------------------------|--|----------------------|--|---|----------------------|-------------------|
|  |                                   | Means of  |  | Mean                                 |  | Absolute Maximum and<br>Minimum.                    |                      |   |                          |  | No.                  |  | Maximum<br>Fall.  |                      | Bright<br>Sun-    |
|  |                                   | A<br>Max.   | B<br>Min.  | of<br>A<br>and<br>B.                 | Difference<br>From<br>Normal.                                    | Maximum.  | Date.                | Minimum.  | Date.                    | Total<br>Fall.   | of<br>Rain<br>Days.  | Difference<br>From<br>Normal.  | Amount.   | Date.                | shine.            |
| Rudstone, Methven                                      | Ft.<br>1,217                      | °F.<br>60·4   | °F.<br>42·9  | °F.<br>51·6                          | -0.6   | °F.<br>72·0   | 16                   | °F.<br>32·4   | 24                       | In.<br>4·39  | 14                   | +1.15  | In.<br>1·28   | 7                    | Hrs.<br>116·6     |
| Winchmore  | $150 \\ 36 \\ 2,510 \\ 525$       | $61 \cdot 3 \\ 54 \cdot 4 \\ 60 \cdot 2$  | $41 \cdot 1 \\ 39 \cdot 7 \\ 40 \cdot 4$   | 51·2<br>47·0<br>50·3                 | $ \begin{array}{c}                                     $         | $78.6 \\ 66.0 \\ 74.0$                              | 18<br>16, 26<br>18   | $29.7 \\ 30.0 \\ 30.0$  | 22<br>21<br>11           | $3.73 \ 27.26 \ 4.46$  | 15<br>20<br>12       | $\begin{vmatrix} \cdot \cdot \\ +1 \cdot 91 \\ +9 \cdot 84 \\ (+2 \cdot 16) \end{vmatrix}$ | 1.20 $5.55$ $1.10$  | 6<br>28<br>7         | 123 · 8<br>82 · 9 |
| Haast Ashburton Fairlie Timaru                         | $15 \\ 323 \\ 1,004 \\ 56$        | $62 \cdot 7$ $61 \cdot 6$ $61 \cdot 4$  | $\begin{array}{c} \cdot \cdot \cdot \\ 42 \cdot 3 \\ 37 \cdot 8 \\ 43 \cdot 1 \end{array}$ | $52.5 \\ 49.7 \\ 52.2$               | $ \begin{array}{c}\\ -0.1\\ -0.5\\ -0.8 \end{array} $            | 77.0 $74.0$ $76.0$                                  | 17<br>17<br>17       | $31.8 \\ 27.0 \\ 34.2$  | 11<br>15<br>12           | $5.00 \\ 2.96 \\ 3.67$   | 11<br>13<br>15       | $\begin{array}{c c} +2.59 \\ +0.59 \\ +2.01 \end{array}$                                   | $1.37 \\ 0.99 \\ 0.89$  | 29<br>29<br>6        | 99.0              |
| Adair Tara Hills Milford Sound Waimate                 | 200<br>1,600<br>20<br>200         | 59·3<br>59·1<br>59·5<br>61·8  | $44 \cdot 3 \\ 39 \cdot 7 \\ 43 \cdot 8 \\ 43 \cdot 1$                                     | 51 · 8<br>49 · 4<br>51 · 6<br>52 · 4 | $\begin{pmatrix} (-0.3) \\ (-0.3) \\ +0.7 \\ -0.2 \end{pmatrix}$ | $74 \cdot 8$ $70 \cdot 2$ $65 \cdot 2$ $75 \cdot 0$ | 18<br>18<br>24<br>18 | $   \begin{array}{r}     36 \cdot 9 \\     25 \cdot 3 \\     37 \cdot 2 \\     33 \cdot 5   \end{array} $             | 22<br>15<br>15<br>15     | $2 \cdot 46 \ 2 \cdot 57 \ 33 \cdot 24 \ 3 \cdot 56$   | 14<br>12<br>19<br>15 | (+0.72)<br>+0.76<br>+11.46<br>+1.72  | $0.98 \\ 0.88 \\ 4.75 \\ 1.42$  | 6<br>28<br>28<br>6   | 125 · 8           |
| Frankton Airfield Queenstown                           | 1,144<br>1,100<br>720             | 60·3<br>59·5<br>61·8  | $41 \cdot 4 \\ 42 \cdot 5 \\ 42 \cdot 9$   | 50·8<br>51·0<br>52·4                 | $\begin{array}{c} \\ +0.3 \\ (+1.9) \end{array}$                 | $72 \cdot 0$ $71 \cdot 9$ $75 \cdot 0$ $72 \cdot 7$ | 19<br>24<br>18<br>18 | $30.5 \\ 34.7 \\ 29.4$  | 15<br>21<br>15           | $5.09 \\ 6.01 \\ 2.30$   | 13<br>14<br>12       | +2.97 $(+0.85)$  | $1.47 \\ 1.84 \\ 0.74$  | 28<br>28<br>28       | 107.6             |
| Alexandra  | 1,000<br>500<br>1,550<br>520      | $     \begin{array}{r}       60 \cdot 6 \\       62 \cdot 2 \\       55 \cdot 8 \\       62 \cdot 0     \end{array} $ | $38.5 \\ 39.3 \\ 39.3 \\ 41.2$   | 49·5<br>50·8<br>47·6<br>51·6         | $ \begin{vmatrix} +0.2 \\ (+0.4) \\ -1.9 \\ +0.5 \end{vmatrix} $ | $74 \cdot 2 \\ 68 \cdot 6 \\ 74 \cdot 2$            | 28<br>18<br>28       | $23 \cdot 3$ $25 \cdot 5$ $28 \cdot 2$ $29 \cdot 9$   | 15<br>15<br>15<br>15     | $   \begin{vmatrix}     2 \cdot 56 \\     2 \cdot 05 \\     2 \cdot 68 \\     2 \cdot 01   \end{vmatrix} $ | 10<br>7<br>10<br>10  | $ \begin{array}{r} +1.09 \\ (+0.77) \\ +1.20 \\ +0.66 \end{array} $                        | $1.15 \\ 0.74 \\ 1.20 \\ 0.73$  | 28<br>28<br>28<br>28 | 122·<br>126·      |
| Roxburgh Hydro Mid Dome                                | 350 $1,252$ $1,345$ $2,448$       | $61.6 \\ 61.8 \\ 55.6 \\ 51.7$  | 42.8 $42.6$ $39.3$ $34.9$  | 52·2<br>52·2<br>47·4<br>43·3         | <br>-2·0   | $73 \cdot 0$ $75 \cdot 0$ $66 \cdot 0$ $62 \cdot 5$ | 24<br>7<br>24<br>18  | $     \begin{array}{r}       31 \cdot 2 \\       32 \cdot 0 \\       32 \cdot 2 \\       27 \cdot 0     \end{array} $ | 15<br>19<br>10<br>15, 21 | $   \begin{array}{r}     3 \cdot 24 \\     3 \cdot 76 \\     4 \cdot 27 \\     2 \cdot 31   \end{array} $  | 12<br>12<br>15<br>11 | (+1.82)<br>(+2.00)<br>+0.49  | $     \begin{array}{r}       0 \cdot 72 \\       1 \cdot 25 \\       1 \cdot 01 \\       0 \cdot 94     \end{array} $ | 28<br>18<br>28<br>28 |                   |
| Faieri<br>Musselburgh, Dunedin<br>East Gore            | 80<br>5<br>245                    | 59·8<br>57·3<br>58·7  | $42.0 \\ 45.2 \\ 42.3$   | 50·9<br>51·2<br>50·5                 | (-0.4)<br>(-1.6)<br>+0.1   | $72 \cdot 2$ $70 \cdot 2$ $72 \cdot 0$              | 18<br>17<br>24       | 26·4<br>35·0<br>32·0  | 15<br>15<br>5, 15        | $   \begin{array}{r}     3 \cdot 01 \\     3 \cdot 87 \\     4 \cdot 77   \end{array} $                    | 19<br>18<br>19       | (+0.91) $+1.38$ $+1.92$  | 1.33 $1.14$ $1.08$  | 28<br>28<br>12       | 77 · 82 · · ·     |
| Gore Otautau Pebbly Hills Invercargill South           | 180<br>150<br>8                   | 58·7<br>58·8<br>58·7  | 41.9 $42.9$ $44.0$   | 50·3<br>50·8<br>51·4                 | (+0·6)<br>+0·6   | $69 \cdot 1 \\ 70 \cdot 0 \\ 72 \cdot 0$            | 24<br>24<br>24       | $28.5 \\ 31.0 \\ 33.1$  | 15<br>15<br>15           | $6.32 \\ 5.29 \\ 5.94$   | 15<br>19<br>19       | (+2.72)<br>(+1.62)<br>(+2.16)  | 1.27 $1.02$ $1.57$  | 12<br>12<br>12       |                   |
| nvercargill Airfield                                   | 0                                 | 58.0  | 42.1   | 50.0                                 |  | 70·3  |                      | 28.1  | 15                       | 5.50   | 20                   | (+1.78)  | 1.41  | 12                   | 114.              |
| Waerenga-o-kuri, March<br>1953<br>Cromwell, March 1953 |                                   | 68.1  | 49·5<br>46·7   | 58·8<br>57·9                         | $\left  \frac{(-0\cdot7)}{(+0\cdot3)} \right $                   | 74·3<br>82·4  | 10                   | 42·0<br>35·4  | 15<br>18                 | $\begin{bmatrix} 0.82 \\ 2.06 \end{bmatrix}$   | 9                    | (-4.68)<br>(+0.63)   | $\begin{vmatrix} 0.27 \\ 1.01 \end{vmatrix}$  | 28<br>11             | ,                 |

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 raingauge has been changed, the normals are partly interpolated.

## NOTES ON THE WEATHER FOR APRIL 1953

General.—Over the greater part of the country the weather in April was dull and rather stormy. Winds from a westerly quarter were unusually strong for this time of the year, especially from Cook Strait southward. On the 11th southwesterly gales of unusual violence swept over Southland, Otago, and Canterbury; tornadoes also caused some local damage at Auckland City on the 1st and at Greymouth on the 20th.

Pasture-growth was reported to be good but the present.

the 20th.

Pasture-growth was reported to be good, but the prevailing wet conditions were generally unfavourable for lambs, which were slow in fattening except in the Gisborne area, where weather conditions were appreciably better. From Canterbury there were reports of blight damage to the potato crop.

Rainfall.—Over the greater part of the country rainfalls were above normal. More than double the average value was accorded from earthern Huykle's Boy to Cane Palliser and

recorded from southern Hawke's Bay to Cape Palliser and from Banks Peninsula to Timaru. There was a slight defi-ciency in the far north and in Taranaki, Gisborne, Manawatu,

ciency in the far north and in Taranaki, Gisborne, Manawatu, and eastern Nelson.

Considerable thunderstorm activity was reported on the 10, the 20th, the 24th, and the 30th. On the 20th thunderstorms covered a particularly wide area extending from the Bay of Plenty to South Westland.

Temperatures.—Over the greater part of the country temperatures were below normal, and in many districts from North Canterbury to Taranaki the deficit exceeded 1° F. Temperatures were warmer than usual from Hamilton northward, and over the greater part of Northland they were more than 1° F. above average. In Central Otago, Southland, and Fiordland temperatures were also a little above normal.

Sunshine.—In Gisborne sunshine was somewhat above average but all other districts received less than usual. In Taranaki, Wellington, Westland, and Otago some areas experienced a deficiency equivalent to more than one and a half hours a day. New Plymouth and Dunedin both experienced the least sunny April on record.

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Weather Sequence.—At the beginning of the month a frontal depression was centred west of Northland, and an anticyclone was situated to the south-west of Southland. As the two pressure systems moved slowly eastward, an easterly to south-easterly current covered the whole country for four days. General rain soon developed over the North Island and there were some considerable falls about Auckland City, Coromandel, Gisborne, and Hawke's Bay. Some light rain also spread to eastern and northern districts of the South Island. South Island.

The weather remained unsettled during the passage of another depression whose centre crossed Nelson and Marlborough on the 7th. Heavy rains were recorded over Nelson and the Bay of Plenty on the 6th and on the following day

near Wellington City. After the passage of a cold front on the 9th, stormy south-westerly conditions prevailed until the 14th. Gales caused minor property damage over a considerable part of the country, chiefly during the passage of two depressions along the east coast during the 10th and 11th. South-westerly gales were particularly severe on the 11th, especially in Canterbury, Otago, and Southland, where there was widespread damage to trees, farm buildings, small craft and power transmission lines; a small railway-station near Winton in Southland was blown over. Showers occurred in all parts of the country on the 9th and 10th but were mainly confined to the South Island from the 11th to the 13th. The only heavy rain reported over this period of south-westerly conditions was in eastern Southland on the 12th; this caused the Waipahi River to flood on the 13th. near Wellington City. After the passage of a cold front on

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By the 15th an anticyclone had moved on to the country; frosts were reported in all parts of the South Island and in many North Island districts. The weather was settled generally for a day but the anticyclone moved away rather rapidly. A series of deep depressions now passed to the south bringing westerly conditions to the greater part of the country for several days. Rain commenced in Fiordland on the 16th, and had spread to all western districts by the 18th; it continued in these areas on the 19th and some scattered falls were at the same time reported in eastern districts. The rain was heavy in Fiordland and Westland; on the 18th the river at Hokitika was reported in flood. This was also a period of continuous strong winds in the Cook Strait area.

A cold front which passed over the country on the 20th A cold front which passed over the country on the 20th and 21st brought a temporary change to south-westerlies. Snow was reported to low levels in Central Otago and gales caused minor damage in Auckland, Taranaki, and Wellington Provinces. Rain fell in all parts of the country on the 20th; on the 21st and 22nd it was again mainly restricted to western districts south of Auckland City. During the next three days a slow-moving cold front brought light rain to the remainder of the South Island and to central districts of the North Island North Island.

North Island.

Another cold front which moved on to Southland on the 27th made very slow progress and several depressions formed on it during its passage over the country. The last of these depressions was centred to the west of Northland at the end of the month. Rain was particularly heavy over the west coast of the South Island on the 28th and 29th and over the Auckland Province on the 30th; in other districts the passage of the front was accompanied by moderate rain. By the end of the month a ridge of high pressure was bringing more settled conditions to Southland, Otago, and South Westland.

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(N.Z. Met. S. Pub. 107)