Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of February, 1936. Observations taken at Altitude of Observatory, 415 ft.

| | | | | n Inches, at and Standard | Temperature (° F.) from Observations at 9 a.m. | | | | | | Wind. | | | (100 | Hours | at |
|--|--------|---|---------------------------------------|------------------------------|--|---------------------------|-------|----------------------------|---------------------------|---------------------------|--------------------|-------------------------------------|---------------------|------------------|------------------------|-----------|
| | | | | | In Screen. | | | | | rass. | Beaufort Scale. | | Anemo- meter. | Points Inch.) | | (Symbols) |
| | Date. | | | e, in evel an ity. | At 9 a.m. | | | Maxi- mum. | Mini- mum. | m on (| ou. | | n 24 | ii = | t Sunshine: Tenths. | |
| | | | Pressure, ir Sea-level Gravity. | Dry. | Wet. | Humid- ity. | Dry. | Dry. | Minimum on Grass. | Direction. | Force. | Run in Hours. | Rainfall, Points | Bright and J | Weather 9 a.m. | |
| | ••• | | | 29.907 | 64.8 | 59.0 | 69 | 69.3 | 52 · 1 | 45.3 | SE | 1 | 133 | 267 | 2.4 | 0 |
| | | • •. | | $29 \cdot 348$ | $57 \cdot 4$ | $57 \cdot 3$ | 99 | 60.0 | 57.0 | 57.0 | SSE | 8 | 299 | 213 | 0.0 | orq |
| | •• . | • • | | 30.082 | 59.8 | 53.8 | 65 | $63 \cdot 2$ | 50.0 | 49.1 | SSE | 2 | 449 | | 8.5 | 0 |
| | • • | • • | • • | 30.158 | 63.0 | 56.9 | 67 | 70.8 | 52.0 | 47.1 | N | 2. | 71 | | 7.3 | bc |
| | • • | • • | • • | 30.097 | $67 \cdot 0$ $65 \cdot 3$ | $61 \cdot 4$ $61 \cdot 1$ | 71 77 | 70.4 | 56.0 | $53 \cdot 1$ $57 \cdot 8$ | NW | $\frac{2}{5}$ | $\frac{100}{302}$ | 1 | 9.9 | be |
| | • • | • • | • • | $29.848 \\ 29.779$ | 51.8 | 50.4 | 90 | $68 \cdot 7 \\ 55 \cdot 5$ | $59 \cdot 3$ $52 \cdot 0$ | 49.0 | NW SSE | 5 | 359 | 79 66 | $6 \cdot 9$ | bec |
| | • • | •• | • • | 29.779 29.817 | 50.3 | 49.0 | 91 | 54.8 | 49.2 | 48.9 | SSW | $\begin{array}{c c}2\\6\end{array}$ | $\frac{359}{267}$ | 89 | 0.0 | or |
| | • • | • • | • • | 29.817 | $50.5 \\ 50.1$ | 50.0 | 99 | 61.4 | 48.8 | 47.1 | Calm | | 310 | 10 | $0.0 \\ 0.2$ | or |
| | • • | • • | • • | 29.831 | 61.4 | 58.3 | 82 | $67 \cdot 3$ | 49.4 | 49.8 | NW | 2 | 32 | | $8 \cdot 2$ | or o |
| | • • | • • | • • | 29.845 | 64.4 | $57 \cdot 2$ | 66 | 68.8 | 56.1 | 52.9 | NW | 3 | 265 | | 12.7 | b |
| | • • | • • | • • | 29.773 | 68.8 | 57.6 | 46 | 74.0 | 58.3 | 55.1 | WNW | 5 | $\frac{263}{362}$ | | $12 \cdot 7$ | bq |
| | • • | •• | • • | 30.112 | $62 \cdot 1$ | 59.9 | 71 | 65.6 | 55.1 | 49.4 | NNE | 5 | 167 | • • • | 10.2 | c |
| | • • | • • | • • | 30.112 | $63 \cdot 2$ | 58.0 | 71 | 68.8 | 54.7 | 50.4 | NNE | 2 | 269 | • • • | $2 \cdot 1$ | 0 |
| | • • | •• | • • | 30.311 | 66.7 | 57.0 | 52 | $72 \cdot 3$ | 50.2 | 44.0 | E | $\frac{2}{2}$ | 103 | | 12.9 | b |
| | • • | • • | • • • | 30.070 | 64.0 | 60.9 | 83 | 66.7 | 57.8 | 53.4 | NW | 5 | 205 | | 4.0 | o |
| | • • • | •• | | 29.925 | 65.2 | 61.8 | 81 | 69.0 | 60.8 | 60.0 | NNW | 5 | 360 | | 0.5 | 0 |
| | | •• | | 29.876 | 68.0 | 62.8 | 73 | $74 \cdot 9$ | 60.1 | 55.1 | NNE | ĭ | 158 | 3 | 1.7 | o |
| | | • • | | 29.873 | 57.8 | 53.3 | 73 | 59.5 | 57.0 | 57.6 | S | 4 | 135 | 239 | 0.0 | ő |
| | • • | • • • | | 29.692 | 58.2 | 57.4 | 95 | 64.7 | 55.1 | 55.1 | sw | $\hat{2}$ | 328 | 3 | 1.9 | om |
| | | • | | 29.861 | 62.8 | 60.8 | 89 | 68.8 | 55.5 | 53.0 | SSE | $\bar{3}$ | 86 | 2 | 1.5 | 0 |
| | • • | • | | 29.974 | 69.0 | 63.0 | 70 | 76.3 | 57.4 | 50.9 | NNE | ĭ | 103 | 3 | 8.6 | be |
| | | •• | | 30.030 | 69.0 | 64.1 | 76 | 73.6 | 60.0 | 56.9 | NNW | 2 | 52 | | 8.3 | c |
| | | • • • | | $30 \cdot 041$ | 70.9 | 67.8 | 85 | $79 \cdot 1$ | $57 \cdot 2$ | 52.0 | N | 2 | 143 | Trace | 12.6 | c |
| | | | | $29 \cdot 863$ | $64 \cdot 7$ | $62 \cdot 2$ | 87 | 70.9 | 59.6 | 59.0 | Calm | | 73 | 14 | 1.1 | 0 |
| | •• | | | $29 \cdot 987$ | $56 \cdot 2$ | 50.0 | 62 | 59.2 | 51.7 | 51.1 | SSE | 8 | 241 | | 8.7 | 09 |
| | | | | $30 \cdot 237$ | 58.9 | 53.0 | 66 | 64.0 | 50.9 | 47.1 | SSE | 4 | 310 | | 11.6 | b |
| | | | | $29 \cdot 955$ | $60 \cdot 1$ | 53.0 | 59 | 66.6 | $52 \cdot 7$ | 51.9 | NW | 4 | 111 | | 7.0 | c |
| | •• | • • | | 29.934 | 65 · 2 | 60.3 | 74 | 72 · 1 | 57.8 | 56.0 | N | _2 | 263 | 1 | 6.4 | 0 |
| | Means, | &c. | | 29.938 | 62.3 | 57.8 | 75 | 67.5 | 55.0 | $52 \cdot 2$ | | 3.1 | 209 | 990 | 167.9 | |

Mean earth temperature at 1 ft., 64.5°; and at 3 ft., 63.6°. Number of rain days, 14. Total rainfall, 260 per cent. above normal, being the highest ever recorded in February. Sunshine, 42 per cent. of the possible. Mean dew-point at 9 a.m., 54.1°; mean vapour pressure, 0.418 in.

DIRECTION OF WIND.

Gale (force Forces N. 6 N.W. 7½ 8 or more). Calm. 2 -1 1 $\frac{1}{2}$ 2 9 1 4 $4\frac{1}{2}$ ı $1\frac{1}{2}$ 1

Note. -A dull, very wet, and, at times, stormy month. Thunderstorms occurred on the night of the 7th and the afternoon of the 19th.

NOTES ON THE WEATHER FOR FEBRUARY, 1936.

Notes on the Weather for February, 1936.

General.—February is usually a dry month, but this year not only did we have by far the wettest February hitherto recorded in New Zealand, but, except for the western and southern portions of the South Island, it is doubtful whether even in a winter month so much rain has fallen over the country as a whole. Flooding occurred at times over practically the whole of the North Island, and in parts of the Auckland Province the floods of the 1st to 2nd were of record proportions. In South Marlborough, Canterbury, and north-eastern Otago, also, there was heavy flooding. In Canterbury the floods of the 19th to 21st were the most severe since 1923, and the Ashley River rose to unprecedented heights. In addition, there was much cloudy and humid weather between the rains. In consequence of the wet weather there has everywhere been a rank growth of pasture. Stock are in good condition generally, and the milk-yield has been well maintained. For sheep the grass is too rank and soft, and lambs are not fattening well. Severe damage has been done to the wheat crop, which otherwise would have been excellent. In many cases grain, both standing and in stooks, has sprouted. Other crops are generally poor, and conditions have been extremely unfavourable for haymaking. The apple crop, however, appears to be satisfactory. White butterflies, though not so numerous as in 1934-35, were more plentiful than earlier in the summer.

Rainfall.—Over the whole of the North Island extremely wet weather prevailed, and the totals were generally about three to four times the average for February, though in places with a westerly aspect conditions prevailed. Most of Westland, the Mackenzie country, the interior of Otago, and Southland had less than the average rain. In South Westland there were some heavy falls.

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Temperatures.—Though there were cold spells on the 7th to 8th (when considerable snow fell on the ranges of the South Island), the 19th and the 26th, the month was comparatively mild. In most cases the mean temperatures were below normal, but there were frequent exceptions to this rule. On the west coast means were generally above the average.

Marlborough and most of Canterbury experienced a cold month, the departures from normal being approximately 2° F.

Few frosts were reported.

Sunshine.—Invercargill, with 187.2 hours, had considerably more sunshine than usual, while Gore and Dunedin, also, were above the average. Everywhere else there were large deficiencies, 40 to 50 hours being common. It was the absence of sunshine and consequent low maximum temperatures which was principally responsible for the low mean temperatures for the month. Auckland, with 217.7 hours, had the highest registration.

Storm Systems.—During the night of the 1st and the morning of the 2nd a deep cyclone, which had originated some days before as a tropical cyclone to the north-west of the New Hebrides, rapidly increasing its speed of movement, travelled down the western side of the Auckland Peninsula and thence across the centre of the North Island and away in a south-easterly direction. In most of the Auckland Province north-easterly gales were followed, after the centre passed, by south-westerly. Elsewhere over the North Island southerly or south-easterly gales were experienced. Though short-lived, owing to the rapid movement of the storm, these winds rose to whole gale force in some exposed positions. It was probably the most violent storm ever experienced at most places in the North Island, and certainly caused more destruction than any previous one. Extremely heavy rains occurred, falls of 4 in. to 11 in. being the rule. Though there were some heavy rainfalls, principally in Marlborough, the South Island was little affected.