

Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of October, 1919. Observations taken 9 a.m.

Altitude of Observatory, 8 ft.

| Date. | Barometer reduced and corrected in inches to Lat. 45°. | From Self-registering Instruments, for Twenty-four Hours previously. | | | | | | | Direction of Wind. | Rainfall, in Points (100 to 1 Inch). |
|-------|--|--|----------------------|----------------------|------------------|------------------------|------------------------|---------------------------|--------------------|--------------------------------------|
| | | Max. Temp. in Shade. | Min. Temp. in Shade. | Mean Temp. in Shade. | Solar Radiation. | Terrestrial Radiation. | Veloc. Wind, in Miles. | Amount of Cloud, 0 to 10. | | |
| 1 | 29.753 | 55.3 | 43.7 | 49.5 | 119.0 | 32.4 | 235 | 10 | WNW | 1 |
| 2 | 29.602 | 59.1 | 54.0 | 56.5 | 112.0 | 48.9 | 500 | 9 | W. | .. |
| 3 | 29.686 | 59.7 | 49.9 | 54.8 | 123.0 | 33.9 | 343 | 3 | N.W. | 1 |
| 4 | 30.293 | 56.5 | 41.3 | 48.4 | 123.0 | 36.6 | 553 | 7 | SSE | .. |
| 5 | 30.208 | 53.8 | 44.8 | 49.3 | 122.0 | 37.0 | 306 | 8 | N.E. | 88 |
| 6 | 29.557 | 55.5 | 48.0 | 51.7 | 99.0 | 47.5 | 181 | 10 | SSE | 61 |
| 7 | 29.941 | 54.4 | 46.2 | 50.3 | 92.0 | 39.4 | 206 | 10 | N.E. | .. |
| 8 | 30.187 | 58.7 | 43.9 | 51.3 | 126.0 | 33.5 | 130 | 6 | N.E. | .. |
| 9 | 30.056 | 64.6 | 52.4 | 58.5 | 132.0 | 49.0 | 304 | 9 | N.W. | 12 |
| 10 | 29.837 | 59.2 | 53.0 | 56.1 | 131.0 | 50.6 | 449 | 10 | N.W. | 7 |
| 11 | 29.812 | 58.0 | 53.4 | 55.7 | 97.0 | 52.5 | 363 | 10 | N.W. | .. |
| 12 | 29.940 | 64.4 | 47.8 | 56.1 | 135.0 | 39.2 | 111 | 1 | N.W. | .. |
| 13 | 29.883 | 64.4 | 53.3 | 58.8 | 127.0 | 49.0 | 390 | 6 | N.W. | Trace |
| 14 | 29.800 | 58.7 | 53.8 | 56.2 | 133.0 | 50.6 | 663 | 7 | N.W. | .. |
| 15 | 29.771 | 61.3 | 48.7 | 55.0 | 134.0 | 43.0 | 271 | 10 | WNW | .. |
| 16 | 29.902 | 61.3 | 40.7 | 51.0 | 123.0 | 29.1 | 108 | 3 | N.E. | 25 |
| 17 | 30.042 | 60.0 | 45.8 | 52.9 | 129.0 | 37.0 | 317 | 5 | S. | .. |
| 18 | 30.075 | 57.3 | 43.7 | 50.5 | 125.0 | 32.5 | 221 | 8 | NNW | .. |
| 19 | 29.799 | 58.0 | 52.7 | 55.3 | 127.0 | 47.1 | 474 | 9 | N.W. | 2 |
| 20 | 29.864 | 61.3 | 48.1 | 54.7 | 139.0 | 33.5 | 335 | 10 | SSE | .. |
| 21 | 29.965 | 58.1 | 41.7 | 49.9 | 129.0 | 29.2 | 177 | 1 | N.W. | .. |
| 22 | 29.908 | 58.9 | 53.5 | 56.2 | 126.0 | 49.3 | 551 | 10 | N.W. | .. |
| 23 | 30.023 | 61.1 | 51.6 | 56.3 | 108.0 | 45.5 | 533 | 0 | S.E. | .. |
| 24 | 30.233 | 64.9 | 49.0 | 56.9 | 122.0 | 35.4 | 166 | 0 | NNW | .. |
| 25 | 30.119 | 65.4 | 52.8 | 59.1 | 121.0 | 45.1 | 251 | 0 | N.E. | .. |
| 26 | 30.183 | 64.0 | 45.5 | 54.7 | 121.0 | 30.0 | 148 | 1 | Calm | .. |
| 27 | 30.186 | 68.8 | 52.9 | 60.8 | 135.0 | 44.6 | 102 | 10 | Calm | .. |
| 28 | 30.100 | 63.7 | 42.3 | 53.0 | 126.0 | 29.6 | 119 | 0 | Calm | Trace |
| 29 | 30.000 | 66.8 | 53.0 | 59.9 | 120.0 | 45.3 | 219 | 10 | SSE | 1 |
| 30 | 30.130 | 59.1 | 40.8 | 49.9 | 121.0 | 23.8 | 255 | 0 | Calm | .. |
| 31 | 29.915 | 60.9 | 52.1 | 56.5 | 124.0 | 44.5 | 320 | 0 | N.W. | .. |
| * | 29.953 | 60.4 | 48.4 | 54.4 | 122.6 | 40.3 | 300 | 5.9 | .. | 198 |
| † | 29.884 | 60.3 | 48.0 | 54.1 | 113.7 | 41.2 | 283 | .. | .. | 424 |

* Means, &c. † Means previous years.

DIRECTION OF WIND.

| N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | Calm. |
|----|------|----|------|----|------|----|------|-------|
| 2 | 5 | .. | 1 | 5 | .. | 3 | 11 | 4 |

NOTE.—A fair but changeable month, with high N.W. winds prevailing and rainfall 53 per cent. below the mean of previous years. Total bright sunshine, 212 hours 40 minutes, and two sunless days, giving an average of 6 hours 52 minutes per diem. Frost was recorded on the grass on five mornings. Mean earth-temperature at 1 ft. was 56.2°, and 55.1° at 3 ft. Mean dew-point, 46.9°; mean elastic force of vapour, 0.322 in.; and mean relative humidity, 76 per cent. of saturation.

CLIMATOLOGICAL TABLE.

MEANS AND TOTALS FROM THE CHIEF STATIONS. October, 1919.

| Altitude above Sea-level. | Name of Station and Observer. | Absolute Mean Temp. Air in Shade. | Extremes. | | Total Rainfall (100 Points or the Inch). | Days with Rain (4 Point or more). |
|---------------------------|---|-----------------------------------|-----------------|-----------------|--|-----------------------------------|
| | | | Mean Max. Temp. | Mean Min. Temp. | | |
| Ft. | NORTH ISLAND. | Deg. | Deg. | Deg. | Points. | Dys. |
| 125 | AUCKLAND .. F. A. F. Burnett | .. | .. | .. | .. | .. |
| 46 | TE AROHA .. G. F. McGirr | 54.3 | 63.5 | 45.1 | 447 | 11 |
| 925 | ROTORUA .. L. Bayfield | 56.1 | 68.2 | 44.0 | 540 | 10 |
| 340 | WAIHI .. P. A. Clifford | 55.2 | 64.7 | 45.7 | 811 | 13 |
| .. | TAURANGA .. C. J. Butcher | 55.4 | 64.8 | 46.0 | 390 | 8 |
| 160 | NEW PLYMOUTH .. W. W. Smith | 56.4 | 62.1 | 50.8 | 433 | 17 |
| 250 | MOUMAHAKI .. T. W. Lonsdale | 54.2 | 64.1 | 44.4 | 257 | .. |
| 2080 | TAIHAPE .. A. R. Fannin | 49.6 | 58.4 | 40.8 | 167 | 15 |
| 100 | PALMERSTON NORTH .. J. A. Colquhoun | 53.6 | 62.1 | 45.2 | 173 | 8 |
| 119 | CENTRAL DEVELOPMENT FARM, WERAROA J. Beverley | 52.8 | 60.1 | 45.5 | 194 | 11 |
| 186 | GREYTOWN .. W. C. Davies | .. | .. | .. | .. | .. |
| 377 | MASTERTON .. Wm. Hood | 54.4 | 66.4 | 42.5 | 190 | 9 |
| 70 | GREENMEADOWS, NA-PIER T. B. McBreen | 56.5 | 65.8 | 47.1 | 103 | 3 |
| .. | TRENTHAM MILITARY CAMP Lieut. Col. Leahy | 53.0 | 61.3 | 44.8 | 300 | 5 |
| 10 | WELLINGTON .. | 54.4 | 60.4 | 48.4 | 198 | 9 |
| .. | SOUTH ISLAND. | .. | .. | .. | .. | .. |
| .. | BRIGHTWATER .. Ven. Aroheracon Kempthorne | 55.0 | 64.0 | 46.1 | 134 | 10 |
| 34 | NELSON .. J. Williams | 55.8 | 64.8 | 46.8 | 170 | 6 |
| 1220 | HANMER SPA .. G. J. O'Brien | 52.1 | 62.4 | 41.8 | 178 | 15 |
| 25 | CHRISTCHURCH .. H. F. Skey | 53.6 | 63.0 | 44.2 | 142 | 7 |
| 42 | LINCOLN .. L. J. Wild | 53.0 | 64.1 | 41.9 | 168 | 8 |
| 1220 | KISSELTON .. A. R. Blackwood | 52.4 | 63.2 | 41.6 | 341 | 10 |
| .. | RAKAIA .. Miss A. Hardy | 53.3 | 64.7 | 41.9 | 160 | 6 |
| 130 | TIMARU .. Caretaker of Domain | 53.4 | 64.5 | 42.3 | 80 | 7 |
| 200 | WAIMATE .. F. Akhurst | 51.2 | 60.4 | 42.0 | 102 | 10 |
| 300 | DUNEDIN .. D. Tannock | 51.6 | 69.9 | 42.4 | 234 | 19 |
| 245 | GORE .. H. Dolamore | 48.4 | 57.7 | 39.1 | 591 | 18 |
| 12 | HOKITIKA .. W. H. Fleming | 51.0 | 57.4 | 44.7 | 915 | 18 |
| 12 | INVERCARGILL .. L. Lennie | 49.4 | 57.3 | 41.6 | 694 | 20 |
| | * September, 1919 .. | 48.8 | 58.7 | 39.0 | 324 | 13 |

SUMMARY FOR THE MONTH OF OCTOBER, 1919.

Nearly all parts of the Dominion experienced less than the average rainfall for October, the only districts having an excess being the Auckland peninsula and the southernmost portion of the South Island. The month was marked by very changeable weather, which was brought about by frequent westerly disturbances. The most intense of these occurred during the first three days, and was closely followed by a cyclone which ruled between the 4th and 6th. The latter was responsible for rain generally and very heavy rain in the northernmost districts. Other storms of the westerly type passed on the 10th, 14th, 21st, 22nd, and 31st. A well-developed anticyclone dominated between the 23rd and 28th, and during this period fair weather prevailed over the Dominion as a whole.

Vegetation showed only medium growth in most parts, while in Otago it proved very backward.

B. V. PEMBERTON, Acting-Director.