

Government Meteorological Observatory.

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

Altitude of Observatory, 8 ft.

| Date. | Barometer reduced and corrected in Inches to Lat. 49°. | From Self-registering Instruments, for Twenty-four Hours previously. | | | | | | | Amount of Cloud, 0 to 10. | 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. | Direction of Wind. | | | |
| 1 | 29-501 | Fah. 65.3 | Fah. 54.3 | Fah. 59.8 | Fah. 138.0 | 50.4 | 558 | 9 | N.W. | .. | |
| 2 | 29-690 | 65.8 | 42.5 | 54.1 | 122.0 | 30.7 | 284 | 10 | N.W. | 44 | |
| 3 | 29-475 | 58.4 | 43.8 | 51.1 | 106.0 | 44.3 | 530 | 10 | S. | 13 | |
| 4 | 29-261 | 54.9 | 48.7 | 51.8 | 119.0 | 37.6 | 253 | 10 | N. | 39 | |
| 5 | 29-213 | 56.9 | 48.4 | 52.6 | 119.0 | 40.8 | 599 | 1 | N.W. | 58 | |
| 6 | 29-770 | 59.1 | 38.6 | 48.8 | 131.0 | 30.0 | 268 | 6 | SSE | 2 | |
| 7 | 30-053 | 54.7 | 45.2 | 49.9 | 127.0 | 37.0 | 178 | 9 | S.E. | .. | |
| 8 | 30-118 | 60.8 | 49.6 | 55.2 | 129.0 | 42.0 | 166 | 8 | N. | .. | |
| 9 | 30-037 | 58.5 | 51.9 | 55.2 | 135.0 | 46.7 | 287 | 8 | N.W. | .. | |
| 10 | 29-806 | 60.0 | 54.0 | 57.0 | 135.0 | 49.9 | 479 | 10 | N.W. | .. | |
| 11 | 29-900 | 61.8 | 50.1 | 55.9 | 124.0 | 40.4 | 322 | 1 | N.W. | .. | |
| 12 | 29-830 | 62.7 | 52.8 | 57.7 | 137.0 | 47.2 | 456 | 7 | N.W. | .. | |
| 13 | 29-909 | 60.2 | 53.0 | 56.6 | 130.0 | 44.7 | 368 | 3 | N. | .. | |
| 14 | 29-981 | 65.0 | 49.5 | 57.2 | 131.0 | 33.0 | 139 | 1 | N. | 1 | |
| 15 | 29-728 | 64.0 | 51.3 | 57.6 | 133.0 | 47.5 | 500 | 10 | N. | 36 | |
| 16 | 29-866 | 57.6 | 50.0 | 53.8 | 100.0 | 49.8 | 334 | 10 | S.E. | .. | |
| 17 | 30-057 | 57.6 | 41.8 | 49.7 | 118.0 | 30.0 | 201 | 0 | Calm | .. | |
| 18 | 29-763 | 62.9 | 53.3 | 58.1 | 133.0 | 48.3 | 347 | 6 | N.W. | .. | |
| 19 | 29-665 | 64.4 | 56.0 | 60.2 | 130.0 | 53.2 | 443 | 10 | N.W. | 13 | |
| 20 | 29-532 | 62.0 | 55.1 | 58.5 | 123.0 | 51.8 | 282 | 6 | N.W. | .. | |
| 21 | 29-572 | 64.0 | 45.0 | 54.5 | 128.0 | 32.5 | 247 | 3 | N.W. | 11 | |
| 22 | 30-072 | 62.8 | 45.6 | 54.2 | 133.0 | 43.0 | 384 | 10 | S. | .. | |
| 23 | 30-169 | 57.9 | 35.8 | 46.8 | 124.0 | 22.5 | 202 | 0 | NNE | .. | |
| 24 | 29-900 | 59.8 | 52.9 | 56.3 | 124.0 | 46.5 | 317 | 9 | NNE | .. | |
| 25 | 29-839 | 61.0 | 45.8 | 53.4 | 133.0 | 32.3 | 195 | 9 | N.W. | .. | |
| 26 | 29-571 | 61.2 | 54.4 | 57.8 | 143.0 | 51.2 | 484 | 10 | N.W. | 30 | |
| 27 | 29-960 | 62.3 | 47.7 | 55.0 | 133.0 | 43.4 | 245 | 4 | S.E. | .. | |
| 28 | 29-893 | 62.8 | 47.8 | 55.3 | 137.0 | 48.9 | 324 | 2 | N. | .. | |
| 29 | 29-866 | 63.2 | 50.0 | 56.6 | 134.0 | 48.8 | 380 | 8 | S. | 7 | |
| 30 | 30-045 | 57.8 | 42.9 | 50.3 | 127.0 | 38.0 | 407 | 8 | S. | .. | |
| * | 29-801 | 60.8 | 48.6 | 54.7 | 127.9 | 42.1 | 339 | 6 | 6 | .. 254 | |
| † | 29-893 | 63.5 | 50.3 | 56.9 | 120.2 | 43.6 | 271 | .. | .. | .. 356 | |

* Means, &c. † Means previous years.

DIRECTION OF WIND.

| | | | | | | | | |
|----|------|----|------|----|------|----|------|-------|
| N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | Calm. |
| 8 | .. | .. | 3 | 5 | .. | .. | 13 | 1 |

NOTE.—The weather during the month has been unsettled, with strong N.W. winds prevailing. Precipitation, which was of a showery nature, was 28 per cent. below the mean of previous years. Total bright sunshine, 190 hours 40 minutes, and three sunless days. Frost was recorded on the grass on four mornings. Thunder and lightning occurred on the 2nd, and hail fell on the 29th. Mean earth-temperature at 1 ft. was 59°, and 58° at 3 ft. Mean dew-point, 46°; mean elastic force of vapour, 0.311 in.; and mean relative humidity, 72 per cent. of saturation.

CLIMATOLOGICAL TABLE.

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

| Altitude above Sea-level. | Name of Station and Observer. | Extremes. | | | Total Rainfall (100 Points to the Inch). | Days with Rain (4 Point or more). |
|---------------------------|---|-----------------------------------|-----------------|-----------------|--|-----------------------------------|
| | | Absolute Mean Temp. Air in Shade. | Mean Max. Temp. | Mean Min. Temp. | | |
| Ft. 125 | NORTH ISLAND. AUCKLAND* F. A. F. Burnett | Deg. 54.6 | Deg. 64.7 | Deg. 44.5 | Points. 216 | Dys. 16 |
| 46 | TE AROHA .. G. F. McGirr | .. 55.0 | .. 65.0 | .. 45.1 | 109 | 6 |
| 925 | ROTORUA .. L. Bayfield | .. 57.6 | .. 69.9 | .. 45.3 | 155 | 7 |
| 340 | WAIHI .. P. A. Clifford | .. 57.4 | .. 65.8 | .. 49.1 | 240 | 15 |
| .. | TAURANGA .. C. J. Butcher | .. 56.9 | .. 67.2 | .. 46.7 | 90 | 11 |
| 160 | NEW PLYMOUTH .. W. W. Smith | .. 57.0 | .. 62.9 | .. 51.2 | 252 | 17 |
| 250 | MOUMAHAKI .. T. W. Lonsdale | .. 54.3 | .. 63.4 | .. 45.2 | 345 | 21 |
| 2080 | TAIHAPE .. A. R. Fanning | .. 49.4 | .. 57.9 | .. 40.9 | 249 | 19 |
| 100 | PALMERSTON NORTH .. J. A. Colquhoun | .. 53.1 | .. 60.8 | .. 45.5 | 239 | 15 |
| 119 | CENTRAL DEVELOPMENT FARM, WERAROA J. Beverley | .. 52.8 | .. 59.3 | .. 46.3 | 338 | 16 |
| 186 | GREYTOWN† W. C. Davies | .. 55.9 | .. 66.5 | .. 45.3 | 299 | 11 |
| 377 | MASTERTON Wm. Hood | .. 55.4 | .. 67.6 | .. 43.2 | 261 | 14 |
| 70 | GREENMEADOWS, NAPIER T. B. McBreen | .. 58.3 | .. 68.1 | .. 48.5 | 45 | 3 |
| .. | TRENTHAM MILITARY CAMP Lieut.-Col. Leahy | .. 53.7 | .. 62.0 | .. 45.4 | 307 | 11 |
| 10 | WELLINGTON .. Ven. Archdeacon Kempthorne | .. 54.7 | .. 60.8 | .. 48.6 | 254 | 11 |
| .. | SOUTH ISLAND. BRIGHTWATER .. Ven. Archdeacon Kempthorne | .. 55.2 | .. 65.5 | .. 44.9 | 387 | 12 |
| 34 | NELSON .. J. Williams | .. 56.9 | .. 66.3 | .. 47.6 | 182 | 9 |
| 1220 | HANMER SPA G. J. O'Brien | .. 52.7 | .. 62.7 | .. 42.7 | 385 | 12 |
| 25 | CHRISTCHURCH H. F. Skey | .. 53.8 | .. 62.1 | .. 45.6 | 209 | 11 |
| 42 | LINCOLN .. L. J. Wild | .. 53.8 | .. 64.4 | .. 43.2 | 244 | 12 |
| 1220 | KISSELTON .. A. R. Blackwood | .. 53.2 | .. 63.6 | .. 42.8 | 300 | 7 |
| .. | RAKAIA .. Miss A. Hardy | .. 53.3 | .. 64.8 | .. 41.8 | 274 | 12 |
| 130 | TIMARU .. Caretaker of Domain | .. 53.5 | .. 63.3 | .. 43.7 | 362 | 9 |
| 200 | WAIMATE .. F. Akhurst | .. 52.2 | .. 61.4 | .. 43.0 | 410 | 11 |
| 300 | DUNEDIN .. D. Tannock | .. 51.5 | .. 60.1 | .. 43.0 | 387 | 19 |
| 245 | GORE .. H. Dolamore | .. 49.1 | .. 58.9 | .. 39.3 | 365 | 20 |
| 12 | HOKITIKA .. W. H. Fleming | .. 51.5 | .. 57.5 | .. 45.6 | 1318 | 23 |
| 12 | INVERCARGILL L. Lennie | .. 49.8 | .. 57.5 | .. 42.2 | 414 | 21 |
| * | * October, 1919 .. | .. 52.5 | .. 62.0 | .. 43.1 | 406 | 10 |
| † | † " 1919 .. | .. 54.6 | .. 65.4 | .. 43.9 | 224 | 8 |

* Auckland. † Greytown.

SUMMARY FOR THE MONTH OF NOVEMBER, 1919.

November proved another dry month for the greater portion of the Dominion. The whole of the North Island, parts of the East Coast, and the northern and southernmost districts of the South Island reported less than the average rainfall. In the Napier, Gisborne, and Bay of Plenty districts the deficiency ranged from 50 to as much as 80 per cent.

Weather conditions during the month were very unsettled, but precipitation was usually of a showery nature, and was invariably followed by strong, drying winds.

The most notable disturbance was an intense westerly low-pressure area which ruled during the first six days of the month, and which was responsible for very unsettled and, at times, stormy conditions in many parts. Some snow fell in the East Coast districts of the South Island on the night of the 2nd. There were numerous other disturbances of a similar type, but of only moderate intensity. Frosts were rather more frequent than is usual during this month, and several did extensive damage in various parts of the Dominion.

B. V. PEMBERTON, Acting-Director.