

Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of July, 1924. Observations taken 9 a.m.

Altitude of Observatory, 10 ft.

| Date. | Barometer reduced and corrected in Inches to Lat. 45°. | From Self-registering Instruments, for Twenty-four Hours previously. | | | | | Solar Radiation. | Terrestrial Radiation. | Wind, in Miles, 0 to 10. | 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. | Fah. | Fah. | | | | | | |
| 1 | 30.074 | 56.1 | 47.0 | 51.5 | 105.0 | 41.1 | 185 | 2 | Calm | .. | .. | |
| 2 | 29.871 | 54.9 | 39.0 | 46.9 | 97.0 | 29.1 | 85 | 7 | N.N.W | .. | .. | |
| 3 | 29.917 | 55.4 | 35.2 | 45.3 | 100.0 | 26.7 | 46 | 0 | Calm | .. | .. | |
| 4 | 29.877 | 60.3 | 44.1 | 52.2 | 102.0 | 34.1 | 217 | 9 | N.W. | 51 | .. | |
| 5 | 30.265 | 57.9 | 41.1 | 49.5 | 97.0 | 39.0 | 373 | 4 | S.E. | .. | .. | |
| 6 | 30.110 | 50.1 | 33.7 | 41.9 | 95.0 | 23.0 | 169 | 8 | N. | 1 | .. | |
| 7 | 30.408 | 54.8 | 44.7 | 49.7 | 96.0 | 38.8 | 200 | 2 | S.E. | .. | .. | |
| 8 | 30.603 | 51.8 | 33.9 | 42.7 | 96.0 | 25.0 | 156 | 6 | Calm | .. | .. | |
| 9 | 30.651 | 52.1 | 34.2 | 43.1 | 96.0 | 24.9 | 44 | 0 | Calm | .. | .. | |
| 10 | 30.656 | 53.7 | 33.0 | 43.3 | 96.0 | 23.1 | 24 | 3 | N.N.W | .. | .. | |
| 11 | 30.421 | 53.1 | 43.2 | 48.1 | 101.0 | 40.2 | 333 | 6 | N.W. | .. | .. | |
| 12 | 30.153 | 55.4 | 51.9 | 53.6 | 101.0 | 50.3 | 579 | 10 | N.N.W | 15 | .. | |
| 13 | 30.185 | 57.0 | 52.4 | 54.7 | 104.0 | 49.0 | 15 | 10 | N.N.W | .. | .. | |
| 14 | 30.460 | 56.9 | 38.0 | 47.4 | 96.0 | 28.6 | 80 | 8 | Calm | .. | .. | |
| 15 | 30.450 | 55.0 | 31.8 | 43.4 | 96.0 | 21.1 | 48 | 0 | N.E. | Trace | .. | |
| 16 | 30.206 | 55.7 | 40.9 | 48.3 | 99.0 | 31.2 | 217 | 9 | N.W. | 29 | .. | |
| 17 | 29.815 | 56.4 | 48.4 | 52.4 | 101.0 | 47.1 | 373 | 10 | N.W. | 30 | .. | |
| 18 | 29.731 | 55.1 | 48.7 | 51.9 | 98.0 | 47.0 | 428 | 8 | N.N.W | 38 | .. | |
| 19 | 29.624 | 53.0 | 45.4 | 49.2 | 78.0 | 38.0 | 141 | 7 | S.W. | 12 | .. | |
| 20 | 29.655 | 55.1 | 35.0 | 45.0 | 103.0 | 24.0 | 179 | 0 | N.E. | .. | .. | |
| 21 | 29.684 | 55.2 | 39.5 | 47.3 | 98.0 | 29.2 | 152 | 6 | S.E. | 4 | .. | |
| 22 | 29.967 | 48.8 | 35.4 | 42.1 | 93.0 | 23.9 | 239 | 10 | S.E. | 1 | .. | |
| 23 | 30.146 | 47.9 | 43.1 | 45.5 | 84.0 | 36.0 | 276 | 1 | S.E. | 3 | .. | |
| 24 | 30.287 | 52.0 | 42.9 | 47.4 | 93.0 | 40.2 | 296 | 7 | S.E. | 14 | .. | |
| 25 | 30.434 | 46.1 | 36.3 | 41.2 | 90.0 | 28.0 | 248 | 2 | N.E. | .. | .. | |
| 26 | 30.308 | 52.2 | 33.3 | 42.7 | 96.0 | 23.2 | 81 | 7 | N.N.E. | .. | .. | |
| 27 | 30.108 | 53.0 | 44.9 | 48.9 | 101.0 | 44.0 | 326 | 3 | N. | .. | .. | |
| 28 | 30.154 | 55.3 | 50.1 | 52.7 | 103.0 | 47.4 | 377 | 7 | N.W. | 34 | .. | |
| 29 | 29.885 | 57.2 | 49.6 | 53.4 | 103.0 | 48.0 | 148 | 10 | N.W. | 13 | .. | |
| 30 | 29.786 | 54.4 | 50.0 | 52.2 | 93.0 | 46.0 | 266 | 6 | N.W. | .. | .. | |
| 31 | 29.942 | 61.3 | 51.0 | 56.1 | 105.0 | 43.1 | 216 | 5 | N.W. | 52 | .. | |
| * | 30.124 | 54.3 | 41.9 | 48.1 | 96.2 | 35.2 | 210.2 | 5.6 | .. | .. | 297 | |
| † | 29.918 | 53.1 | 42.3 | 47.7 | 87.5 | 35.7 | 203.0 | 5.6 | .. | .. | 573 | |

* Means, &c. † Means previous years.

DIRECTION OF WIND.

| | | | | | | | | |
|----|------|----|------|----|------|----|------|-------|
| N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | Calm. |
| 8 | 3 | .. | 6 | .. | 1 | .. | 8 | 5 |

NOTE.—A mild winter month with precipitation 48 per cent. below the mean of previous years. Total bright sunshine 144 hours 34 minutes, 49 per cent. of the possible, and two sunless days. Hail fell on the 19th, and frost was recorded on the grass on fourteen mornings. Mean earth temperature at 1 ft. was 46.1°, and 50.4° at 3 ft. Mean dew-point, 40.3°; mean elastic force of vapour, 0.250 in.; and mean relative humidity, 75 per cent. of saturation.

CLIMATOLOGICAL TABLE.

MEANS AND TOTALS FROM THE CHIEF STATIONS.

July, 1924.

| Altitude above sea-level. | Name of Station and Observer. | Absolute Mean Temp. Air in Shade. | Extremes. | | Total Rainfall (100 Points to the Inch). | Days with rain (Point or more). |
|---------------------------|---|-----------------------------------|-----------------|-----------------|--|---------------------------------|
| | | | Mean Max. Temp. | Mean Min. Temp. | | |
| Fl. 152 | NORTH ISLAND. AUCKLAND .. | Deg. 51.2 | Deg. 56.6 | Deg. 45.7 | Points. 296 | 17 |
| 131 | RUAKURA FARM, HAMILTON EAST W. B. Monro | .. | .. | .. | .. | .. |
| 46 | TE AROHA .. C. E. Christensen | 48.9 | 58.6 | 39.3 | 258 | 10 |
| 340 | WAIHI .. C. F. Sims. | 47.1 | 57.6 | 36.7 | 397 | 11 |
| 100 | TAURANGA .. C. J. Butcher | 48.8 | 57.4 | 40.2 | 291 | 11 |
| 925 | ROTORUA .. W. E. Penno | 45.5 | 54.7 | 36.3 | 338 | 12 |
| 60 | NEW PLYMOUTH .. G. H. Dolby | 48.3 | 54.8 | 41.9 | 698 | 18 |
| 250 | MOUMAHAKI .. J. G. McFarlane | 45.6 | 54.9 | 36.3 | 351 | 10 |
| 2080 | TAIHAPE .. A. R. Fannin | 41.2 | 47.4 | 35.1 | 208 | 16 |
| 100 | PALMERSTON NORTH .. J. A. Colquhoun | 45.1 | 53.6 | 36.6 | 242 | 10 |
| 5 | OROUA DOWNS .. R. A. Reid | 43.1 | 54.6 | 31.6 | 302 | 9 |
| 119 | CENTRAL DEVELOPMENT FARM, WEBAROA J. E. Sharp | 45.2 | 53.3 | 37.1 | 337 | 13 |
| 5 | NAPIER .. Chas. L. Thomas | 47.9 | 56.0 | 39.9 | 127 | 6 |
| 377 | MASTERTON .. R. Brown | 44.8 | 54.8 | 34.8 | 170 | 16 |
| 186 | GREYTOWN .. W. Allan | 45.1 | 54.3 | 36.0 | 220 | 12 |
| 10 | WELLINGTON .. | 48.1 | 54.3 | 41.9 | 297 | 14 |
| | SOUTH ISLAND. | | | | | |
| 87 | BRIGHTWATER .. Ven. Archdeacon Kempthorne | 44.2 | 54.7 | 33.7 | 248 | 9 |
| 34 | NELSON .. H. Harrison | 44.7 | 55.2 | 34.2 | 349 | 10 |
| 1220 | HANMER SPRINGS .. W. G. Morrison | 41.2 | 51.5 | 31.0 | 147 | 8 |
| 25 | CHRISTCHURCH .. H. F. Skey | 41.8 | 51.6 | 32.0 | 149 | 10 |
| 42 | LINCOLN .. M. J. Scott | 43.3 | 53.3 | 33.2 | 136 | 4 |
| 1220 | KISSELTON .. F. Freeman | 48.8 | 60.5 | 37.1 | 324 | 9 |
| 130 | TIMARU .. Caretaker of Domain | 42.0 | 51.9 | 32.1 | 29 | 6 |
| 200 | WAIMATE .. F. Akhurst | 42.8 | 52.3 | 33.3 | 31 | 7 |
| 300 | DUNEDIN .. D. Tannock | 44.9 | 51.4 | 38.5 | 213 | 11 |
| 245 | GORE .. A. T. Newman | .. | .. | .. | .. | .. |
| 12 | HOKITIKA .. J. A. Chesney | 43.6 | 52.2 | 35.1 | 1046 | 19 |
| 12 | INVERCARGILL .. L. Lennie | 43.4 | 50.9 | 35.9 | 295 | 22 |
| | LATE RETURN. | | | | | |
| 131 | RUAKURA FARM, HAMILTON EAST— June, 1924 | 48.9 | 58.0 | 39.9 | 617 | 13 |

SUMMARY FOR THE MONTH OF JULY, 1924.

With the exception of three anticyclones which ruled from the 5th to the 10th, 14th to the 15th, and 24th to the 27th, the month was dominated by atmospheric systems of the westerly type, with lowest pressure passing southward of New Zealand. As a consequence, winds from a westerly quarter generally prevailed and rainfall was chiefly confined to districts with a westerly aspect. The western half of the South Island recorded a total rainfall above the average, while the eastern half experienced dry conditions. The whole of the North Island, except a small portion in the neighbourhood of Cape Egmont, also had a deficient rainfall.

Generally, July was characterized by mild weather, though the nights were cold and frosty, especially while high atmospheric pressure was in evidence. There were, however, two very cold spells, one from the 3rd to 6th and the other between the 20th and 25th, the latter period being marked by heavy southerly winds, which were accounted for by the development of a storm eastward of New Zealand. Snow fell during these two periods on the high country of both islands.

D. C. BATES, Director.