

METEOROLOGY FOR AUGUST, 1877.

PRIVATE OBSERVATORY, HOBART TOWN.

Latitude 42° 52' 13" S.; Longitude 9h. 49m. 29.2s. E.

(Registered for the Royal Society of Tasmania.)

| Day of Month. | Bar. corrected for temperature instrumental error, and to mean sea level. | | Thermometers | | Thermometers | | Relative Humidity. | | Clouds. | | Wind. | | Rain. in Inches. | Spon. Evap. | Ozone. Chron. Scale. | | | | | | | |
|---------------------|---|------------|--------------|-----------------|--------------------------------|-----------------------|--------------------------------|-----------|--------------------------|---------------------------|-----------------------------|----------------------------|------------------|-------------|----------------------|------------------------|-----------|--------------------|-----------|-----------------------------|-----------|-----------|
| | | | (Reading.) | | (Self-Registering.) | | | | | | | | | | | | | | | | | |
| | | | 7-30 a.m. | 4-30 p.m. | Centigrade, 7-30 a.m. | Fahrenheit, 7-30 a.m. | | | Fahrenheit, 4-30 p.m. | Highest in Sun, 4-30 p.m. | Highest in Shade, 4-30 p.m. | Lowest on Grass, 7-30 a.m. | | | | Per cent | 7-30 a.m. | 4-30 p.m. | 7-30 a.m. | 4-30 p.m. | 7-30 a.m. | 7-30 a.m. |
| Character. | Amount. | Character. | Amount. | Direction from. | Force in lbs. per square foot. | Direction from. | Force in lbs. per square foot. | 7-30 a.m. | 7-30 a.m. | 7-30 a.m. | | | | | | | | | | | | |
| 1 29.715 29.725 | 9.0 | 49.0 | 56.0 | 78.0 | 61.0 | 37.0 | 93 | 75 | N | 10 | K | 7 | NW | 26 | S | 0 | 2.60 | .03 | 2.5 | | | |
| 2 29.810 29.755 | 8.0 | 47.0 | 60.0 | 85.5 | 63.0 | 34.5 | 86 | 62 | N | 10 | K | 7.5 | NW | 0 | N | 2.60 | .05 | 2.5 | | | | |
| 3 29.735 29.810 | 10.5 | 51.0 | 52.0 | 72.0 | 60.0 | 36.5 | 86 | 86 | K | 7.0 | KN | 6.0 | NW | .52 | N | .26 | .05 | 3.5 | | | | |
| 4 29.920 29.610 | 5.5 | 41.5 | 46.0 | 76.0 | 59.5 | 32.0 | 77 | 93 | KN | 8.5 | N | 10.0 | NW | 0 | NW | 0 | .26 | .03 | 3.0 | | | |
| 5 29.920 29.920 | 5.5 | 42.0 | 43.0 | — | 56.0 | 30.0 | 85 | 86 | N | 10.0 | N | 10.0 | NW | 2.60 | S | 0 | .95 | .05 | 7.5 | | | |
| 6 29.810 29.625 | 10.0 | 50.0 | 55.0 | 78.5 | 59.0 | 34.5 | 74 | 56 | K | 4.0 | KS | 7.0 | NW | 2.60 | NW | 15.62 | .20 | 5.0 | | | | |
| 7 29.330 29.310 | 3.0 | 39.0 | 50.0 | 80.0 | 64.0 | 34.0 | 72 | 53 | K | 10.0 | K | 2.0 | N | .26 | N | .52 | .1 | 3.5 | | | | |
| 8 29.320 29.320 | 6.5 | 44.0 | 60.0 | 94.0 | 64.0 | 34.0 | 93 | 61 | K | 7.0 | K | 4.5 | NW | 2.60 | NW | .52 | .45 | 4.0 | | | | |
| 9 29.725 29.810 | 8.0 | 47.0 | 53.0 | 84.0 | 60.0 | 34.0 | 70 | 74 | KN | 10.0 | K | 4.0 | NW | 5.20 | NW | .52 | .02 | 1.54 | | | | |
| 10 29.340 29.345 | 12.0 | 55.0 | 49.5 | 68.0 | 57.0 | 35.5 | 73 | 74 | KN | 7.0 | K | 7.0 | N | .26 | NW | .52 | .27 | 3.5 | | | | |
| 11 29.725 29.715 | 6.5 | 43.5 | 52.0 | 68.0 | 56.5 | 33.5 | 78 | 74 | KN | 10.0 | K | 4.0 | NW | 10.42 | S | .26 | .1 | 4.0 | | | | |
| 12 29.610 29.705 | 15.0 | 60.0 | 52.0 | — | 64.0 | 38.0 | 53 | 100 | K | 2.0 | N | 10.0 | NW | .26 | N | .26 | .38 | 4.0 | | | | |
| 13 29.040 29.010 | 8.5 | 48.0 | 56.0 | 88.0 | 61.0 | 34.5 | 79 | 70 | K | 5.0 | K | 6.0 | NW | .26 | N | .26 | .38 | 4.0 | | | | |
| 14 29.210 29.440 | 11.0 | 52.0 | 47.0 | 85.0 | 57.0 | 37.0 | 100 | 93 | KN | 7.5 | N | 10.0 | NW | .26 | NW | .26 | .27 | 7.0 | | | | |
| 15 29.425 29.415 | 8.0 | 47.0 | 51.5 | 80.0 | 57.0 | 34.0 | 79 | 80 | KN | 8.0 | KN | 9.0 | NW | .26 | NW | 0 | .02 | 5.5 | | | | |
| 16 29.010 29.110 | 6.0 | 43.0 | 52.0 | 85.0 | 60.0 | 33.0 | 67 | 80 | K | 5.0 | K | 7.5 | N | 0 | SE | 0 | .1 | 3.0 | | | | |
| 17 29.300 29.140 | 2.0 | 36.0 | 51.5 | 86.0 | 58.0 | 30.0 | 77 | 75 | 0 | 0 | KS | 3.5 | N | 0 | NW | .26 | .1 | 5.0 | | | | |
| 18 29.040 29.930 | 5.5 | 42.0 | 52.0 | 90.0 | 61.0 | 33.5 | 79 | 62 | 0 | 0 | K | 7.0 | NW | 0 | N | .52 | .05 | 4.0 | | | | |
| 19 29.810 29.715 | 8.0 | 47.0 | 54.0 | 84.0 | 61.5 | 34.0 | 93 | 86 | KN | 7.5 | KN | 7.5 | N | 0 | N | 0 | .02 | .81 | 3.5 | | | |
| 20 29.935 29.910 | 7.5 | 46.0 | 48.0 | — | 58.0 | 33.5 | 93 | 93 | KN | 9.0 | K | 5.0 | S | 0 | S | 0 | .1 | 5.5 | | | | |
| 21 29.120 29.130 | 4.5 | 40.0 | 50.0 | 75.0 | 57.0 | 31.5 | 73 | 100 | K | 9.0 | KN | 9.0 | NW | 0 | S | 0 | .01 | 5.0 | | | | |
| 22 29.130 29.930 | 3.0 | 38.0 | 56.0 | 82.0 | 56.0 | 31.0 | 76 | 71 | K | 4.0 | KS | 3.5 | N | .26 | N | .52 | .08 | 7.0 | | | | |
| 23 29.525 29.415 | 6.0 | 43.0 | 60.0 | 82.5 | 62.5 | 34.5 | 92 | 66 | KN | 10.0 | KN | 8.0 | NW | .26 | NW | .52 | .10 | 4.5 | | | | |
| 24 29.510 29.515 | 9.0 | 49.0 | 55.0 | 85.0 | 59.0 | 36.0 | 68 | 75 | K | 6.5 | K | 7.0 | N | .52 | N | .26 | .05 | 6.5 | | | | |
| 25 29.315 29.420 | 7.0 | 45.0 | 55.0 | 78.0 | 58.0 | 34.0 | 93 | 65 | KN | 10.0 | K | 6.0 | NW | 0 | NW | .52 | .01 | 6.0 | | | | |
| 26 29.520 29.435 | 9.5 | 49.5 | 52.0 | 75.5 | 61.0 | 25.5 | 74 | 57 | K | 10.0 | KN | 9.0 | N | .26 | NW | 5.21 | .06 | 5.0 | | | | |
| 27 29.940 29.020 | 5.5 | 42.0 | 50.0 | 75.0 | 55.0 | 33.0 | 78 | 86 | N | 10.0 | KN | 7.5 | S | .26 | NW | .52 | .01 | 5.0 | | | | |
| 28 29.310 29.310 | 7.5 | 46.0 | 52.0 | 68.0 | 58.0 | 35.0 | 72 | 69 | K | 7.0 | K | 7.5 | S | .26 | S | .26 | .01 | 5.0 | | | | |
| 29 29.415 29.340 | 6.0 | 43.0 | 52.0 | 85.0 | 59.0 | 33.0 | 84 | 69 | K | 9.0 | K | 4.0 | NW | 0 | SE | .26 | .02 | 7.5 | | | | |
| 30 29.410 29.340 | 5.0 | 41.0 | 52.0 | 86.0 | 58.0 | 32.0 | 78 | 85 | K | 7.5 | 0 | 0 | NW | 0 | SE | .26 | .02 | 7.5 | | | | |
| 31 29.120 29.920 | 3.0 | 38.0 | 57.0 | 90.0 | 58.0 | 30.5 | 69 | 61 | 0 | 0 | K | 7.0 | N | .26 | N | .26 | .1 | 2.4 | | | | |
| Mean Press. 29.841 | | 7.16 | Mean 48.95 | | Mean 81.0 | Mean 59.0 | Mean 33.71 | Mean 78.1 | Mean for Month. 6.83 | | Mean Force ... 1.00 lb. | | Tl. 3.14 | Tl. 3.59 | Tl. 153.5 | Greatest Force 15.62 " | | Least Force... 0 " | | Prevailing Direction. N.W., | | Mean 4.95 |
| Greatest do. 30.415 | | Max. 15.0 | Max. 94.0 | | Max. 94.0 | Max. 64.0 | Max. 35.0 | Max. 78.1 | Prev. Character, K & KN. | | Mean Force ... 1.00 lb. | | Tl. 3.14 | Tl. 3.59 | Tl. 153.5 | Greatest Force 15.62 " | | Least Force... 0 " | | Prevailing Direction. N.W., | | Mean 4.95 |
| Least do. 29.210 | | Min. 2.0 | Min. 38.0 | | Min. 68.0 | Min. 55.0 | Min. 30.0 | Min. 78.1 | Mean for Month. 6.83 | | Mean Force ... 1.00 lb. | | Tl. 3.14 | Tl. 3.59 | Tl. 153.5 | Greatest Force 15.62 " | | Least Force... 0 " | | Prevailing Direction. N.W., | | Mean 4.95 |

NOTE.—Force and speed of wind on August 6th :—Force : From 16 to 20 lbs. per square foot. Speed : From 56.568 to 63.245 miles per hour.

The Meteorological form brought into use at the beginning of 1876 differs in some respects from the former one. It has been adopted with the view of assimilating the Hobart Town records more closely with those of stations in Europe, America, etc., in order to co-operate in a system of International Meteorology. Readings are added from the centigrade thermometer, that being the instrument generally used on the continent of Europe.

The mean is in all cases taken from the sums of the two daily registers, not from the maximum and minimum.

The direction of the wind is registered from currents at a height of 92 feet above sea level, and its force in lbs. per square foot.

The relative quantity of rain that fell under the different winds is registered each morning at 7.30 a.m.

The 35 years' standard tables are used for obtaining the difference from average.

FRANCIS ABBOTT, F.R.A.S., etc.

Time of leafing, flowering and fruiting of a few standard plants in the Royal Society's Gardens during the month of August, 1877.

8th. Horsechestnut commencing to break into leaf.

14th. Common elder (*Sambucus niger*) ditto.

14th. Gooseberries, ditto.

20th. Common elm (*Ulmus campestris*) in flower.

27th. Common poplar (*Lombardy*) commencing to break into leaf.

28th. Royal apricot in flower.

F. ABBOTT, JUN., Superintendent.

Results of observations taken at New Norfolk for August, 1877, in accordance with new forms, and registered at 7.30 a.m., and 4.30 p.m. :—

Barometer, mean of two daily readings, corrected and reduced, 29.836 in.

Thermometer, mean of 2 ditto, 44.46deg.

Ditto, mean of maximum and minimum in shade, 46.46deg.

Dew point, mean position of 2 daily readings, 39.70deg.

Elastic force of vapour, mean of 2 ditto, .246.

Humidity of air, mean of 2 ditto, .85.

Solar intensity, mean of maximum temperature, 110.90deg.

Terrestrial radiation, mean of minimum temperature, 31.72deg.

Rainfall, 4.36in., in excess of evaporation 2.50in.

Clouds, mean of 2 daily registers, 6.31.

Ozone, mean of 2 daily ditto, 8.59.

W. E. SHOOBRIDGE, Bushy Park.

Rainfall at Hill Station, 1.55ft. above sea level, 4.70in.

AUGUST WEATHER.

The anticipations of rough, stormy weather at the commencement of this month were fully realised, the prevailing weather being wet and stormy, with severe gales from N.W. and S.W. The first four days were wet and stormy from N.W., 1.35 inches of rain falling in 24 hours, from 2 p.m. on 4th. On the next day snow storms set in from the S.W., and the maximum in shade that had been up to 64° on the 2nd, was only 48° on the 5th. The 6th and 7th were fine, and on the 8th there was a hard frost, the terrestrial radiation being down to 23° with a falling barometer and a great deal of thunder and lightning in the evening. Stormy showers with lightning in W. were the rule till the 14th, when the barometer fell to 29.32 inches, and, after a heavy fall of .46 inch of rain in the afternoon, it cleared up somewhat, and there were fine, clear days and frosty nights, with the exception of a shower on the night of the 18th, till 22nd, when the barometer again went down, and S.W. storms set in, with plenty of snow on the hills, till the 26th, when it veered round for awhile to N.W., but was back again next day to S.W., and on 28th westerly weather and a rising glass brought in fine weather till the end of the month.

Rain fell on 20 days to the large amount of 4.36 inches, being the highest register for August in four years, and was only exceeded in three months during that period, viz. : in November, 1874, when there were 5.35 inches; December, 1875, 5.91 inches; and November, 1876, 4.52 inches; making up a total since the beginning of the year of 14.97 inches to 12.04 inches in 1876, 13.46 in 1875, and 12.48 in 1874, the rainfall for August in those years being 2.17 in., 1.93 in. and 1.79 inches.

The evaporation was only 1.86 inches, whereas last year it was 2.45 inches.

The mean temperature, 46.46°, is about the average for August, and so is the Terrestrial radiation, 31.72°, while the Solar intensity, 110.90°, is 5° higher.

The wet character of the month will no doubt retard the spring growth, and be very injurious to crops in stiff, low-lying, and ill-drained lands, yet it will be of great assistance to the grasses and late crops, by enabling them to withstand the dryness of our summer weather, and judging from the dry windy weather that has already set in, they will need all the moisture they have, and a great deal more before many months.

W. E. SHOEBRIDGE,
Bushy Park.

5th September, 1877.