

ABSTRACT FOR THE MONTH OF JANUARY, 1878.

OF TRI-HOURLY METEOROLOGICAL OBSERVATIONS TAKEN AT MCGILL COLLEGE OBSERVATORY, HEIGHT ABOVE SEA LEVEL, 187 FEET.

| Day. | THERMOMETER. | | | | BAROMETER. | | | | Mean pressure of vapor | Mean relative humidity. | WIND. | | SKY CLOUDED IN TENTHS. | | | Rain and snow melted. | Day. |
|------------|--------------|-------|-------|-------|------------|--------|--------|-------|------------------------|-------------------------|--------------------|------------------------------|------------------------|-----|------|-----------------------|-----------|
| | Mean. | Max. | Min. | Range | Mean | Max. | Min. | Range | | | General direction. | Mean velocity in m. p. hour. | Mean | Max | Min. | | |
| 1 | 15.69 | 2.5 | 6.7 | 15.8 | 29.7781 | 29.834 | 29.729 | .105 | .0676 | 75.1 | W. | 11.7 | 5.9 | 19 | 0 | Inapp. | 1 |
| 2 | 12.90 | 22. | -1.0 | 23.0 | 29.9132 | 30.13 | 29.768 | .366 | .0640 | 77.4 | N. | 11.6 | 8.7 | 10 | 0 | 0.30 | 2 |
| 3 | 1.30 | 8.5 | -5.5 | 14.0 | 30.38 | 30.440 | 30.236 | .201 | .0315 | 69.5 | S. W. | 7.6 | 1.5 | 7 | 0 | | 3 |
| 4 | 14.7 | 20.2 | 4.8 | 15.4 | 30.0 | 30.334 | 28.617 | .717 | .0774 | 86.1 | E. | 12.5 | 9.4 | 10 | 7 | 1.50 | 4 |
| 5 | 8.12 | 20.2 | -8.5 | 28.7 | 29.7722 | 30.009 | 29.512 | .587 | .0579 | 80.9 | W. | 20.1 | 4.6 | 10 | 0 | 0.09 | 5 |
| Sunday 6 | | -3.0 | -15.6 | 12.6 | | | | | | | N. W. | 4.4 | | | | | 6 Sunday |
| 7 | -1.17 | -0 | -6.5 | 15.5 | 30.4304 | 30.592 | 30.261 | .33 | .096 | 81.5 | W. | 7.3 | 3.2 | 9 | 0 | Inapp. | 7 |
| 8 | -9.25 | 0.5 | -7.8 | 18.3 | 30.4674 | 30.681 | 30.402 | .279 | .0266 | 94.1 | | 6.2 | 8. | 10 | 4 | Inapp. | 8 |
| 9 | 14.14 | 25.3 | -2.8 | 28.1 | 30.3281 | 30.38 | 30.217 | .168 | 0.19 | 81.5 | S. E. | 8.8 | 10.0 | 10 | 10 | 0.14 | 9 |
| 10 | 26.41 | 32. | 18.3 | 14.3 | 30.0102 | 30.177 | 29.729 | .448 | .1341 | 92.5 | E. | 4.8 | 9.9 | 10 | 9 | 0.08 | 10 |
| 11 | 34.00 | 37.2 | 32.0 | 5.2 | 29.4616 | 29.667 | 29.239 | .428 | .1706 | 87.0 | N. E. | 25.8 | 0.0 | 10 | 10 | 0.21 | 11 |
| 12 | 35.22 | 40.0 | 32.5 | 7.5 | 29.9939 | 30.169 | 29.747 | .422 | .1575 | 76.7 | N. W. | 17.6 | 4.5 | 10 | 1 | Inapp. | 12 |
| Sunday 13 | | 34.2 | 29.8 | 4.4 | | | | | | | S. W. | 7.3 | | | | | 13 Sunday |
| 14 | 30.20 | 34.0 | 27.8 | 6.2 | 29.6322 | 30.002 | 29.425 | .577 | .1531 | 90.7 | S. E. | 10.8 | 10.0 | 10 | 10 | 0.43 | 14 |
| 15 | 23.37 | 32.0 | 8.0 | 24.0 | 29.6377 | 29.924 | 29.442 | .482 | .1042 | 80.1 | N. W. | 16.1 | 7.9 | 10 | 2 | 0.09 | 15 |
| 16 | -0.91 | 8. | -6.0 | 14.1 | 30.1669 | 30.273 | 29.9 | .6 | .029 | 70.6 | W. | 16.2 | 3.1 | 10 | 0 | | 16 |
| 17 | 1.35 | 11.8 | -6.5 | 18.3 | 30.2714 | 30.15 | 30.244 | .071 | .0375 | 80.9 | | 6.0 | 7.5 | 10 | 2 | | 17 |
| 18 | 12.44 | 24.0 | 0.7 | 23.3 | 30.2951 | 30.361 | 30.230 | .111 | .0569 | 72.2 | | 6.5 | 4.4 | 10 | 0 | | 18 |
| 19 | 27.76 | 33.8 | 17.0 | 16.8 | 30.0651 | 30.172 | 30.001 | .171 | .1232 | 79.9 | S. W. | 10.2 | 9.7 | 10 | 8 | | 19 |
| Sunday 20 | | 41.9 | 31.5 | 10.4 | | | | | | | S. W. | 9.4 | | | | | 20 Sunday |
| 21 | 33.52 | 35.3 | 33.0 | 2.3 | 29.7634 | 29.909 | 29.619 | .290 | .1825 | 95.0 | | 2.5 | 10.0 | 10 | 10 | 0.18 | 21 |
| 22 | 33.57 | 34.8 | 32.8 | 2.0 | 29.5592 | 29.584 | 29.36 | .048 | .1701 | 88.4 | W. | 10.3 | 10.0 | 10 | 10 | 0.06 | 22 |
| 23 | 5.9 | 33.0 | 7.5 | 40.5 | 29.9014 | 30.13 | 29.485 | .828 | .0580 | 79.7 | | 7.1 | 10 | 0 | 0 | 0.18 | 23 |
| 24 | -0.31 | 8.1 | -9.3 | 17.4 | 30.2861 | 30.144 | 30.067 | .377 | .0337 | 79.6 | | 7.5 | 10 | 4 | | Inapp. | 24 |
| 25 | 14.46 | 17.6 | 2.3 | 14.7 | 30.1827 | 30.251 | 30.065 | .186 | .0619 | 83.7 | N. | 10.0 | 10 | 10 | 10 | 0.92 | 25 |
| 26 | 17.70 | 20.0 | 12.9 | 7.1 | 29.9249 | 30.131 | 29.816 | .315 | .0890 | 91.6 | N. | 10.0 | 10 | 10 | 10 | 0.25 | 26 |
| Sunday 27 | | 31.4 | 19.0 | 12.4 | | | | | | | S. W. | 12.4 | | | | 0.02 | 27 Sunday |
| 28 | 12.60 | 31.2 | 0.1 | 31.1 | 29.8059 | 29.994 | 29.612 | .382 | .0319 | 72.2 | N. | 12.8 | 4.0 | 10 | 0 | 0.09 | 28 |
| 29 | 1.64 | 11.0 | -6.5 | 17.5 | 30.1819 | 30.106 | 30.014 | .392 | .0365 | 72.5 | N. W. | 15.1 | 2.1 | 7 | 0 | | 29 |
| 30 | 1.6 | 12.2 | -3.1 | 15.3 | 30.5762 | 30.639 | 30.471 | .168 | .0327 | 71.0 | W. | 7.9 | 0.6 | 2 | 0 | | 30 |
| 31 | 2.26 | 11.0 | -8.9 | 19.9 | 30.4211 | 30.593 | 30.171 | .422 | .0375 | 75.9 | N. E. | 16.3 | 7.5 | 10 | 2 | | 31 |
| Means..... | 13.145 | 22.25 | 6.25 | 16.00 | 30.0489 | | | .3404 | .07961 | 81.01 | | 11.04 | 6.99 | | | | Means. |

Barometer readings reduced to sea level, and to temperature of 32° Fahrenheit. † Pressure of vapor in inches of mercury. ‡ Humidity relative, saturation 100. § Observed.

Mean temperature of month. 13.14. Mean of max. and min. temperatures, 14.25. Greatest heat was 41.9 on the 20th; greatest cold was 17.8 on the 18th,—giving a range of temperature for the month of 59.7 degrees. Greatest range of the thermometer in one day was 30.5 on the 23rd; least range was 2.0 degrees on the 22nd. Mean range for the month was 16.0 degrees. Mean height of the barometer was 30.0489. Highest reading was 30.681 on the 8th; lowest reading was 29.239 on the 11th; giving a range of 1.442 in. Mean elastic force of vapor in the atmosphere was equal to .0796 in. of mercury. Mean relative humidity was 81.0. Maximum relative humidity was 100 on the 4th, 6th, 7th, 8th, 17th, 21st, 25th and 26th. Minimum relative humidity was 28 on the 30th. Mean velocity of the wind was 11 miles per hour; greatest mileage in one hour was 50 on the 23rd. Greatest velocity in gusts was at the rate of 60 miles per hour on the 23rd. Mean direction of the wind, west, north-west. Mean of sky clouded 70 per cent.

Rain fell on 5 days. Snow fell on 18 days. Rain or snow fell on 20 days.

Total rainfall, 0.49 inches. Total snowfall 30.5 in., equal to 2.95 in. water. Total precipitation in inches of water was 3.35.