

## METEOROLOGY.

---

### MEAN METEOROLOGICAL RESULTS AT TORONTO, FOR THE YEAR 1859.

---

BY PROFESSOR KINGSTON, M.A., DIRECTOR OF THE PROVINCIAL MAGNETIC OBSERVATORY.

---

*(Read before the Canadian Institute, February 11th, 1860.)*

---

The mean temperature of the year 1859 was  $44^{\circ}.19$ , which differs only  $0^{\circ}.08$  in excess from the average of 20 years.

The mean temperatures of the several months were in six instances above and six below their respective averages. As shown by the table, the warmest month absolutely though relatively a cold one, was July, and the month that was absolutely coldest, though it was relatively warm, was February. The warmest month relatively, was March, being  $6^{\circ}.27$  above the average, and the relatively coldest month December, which was lower than the average by  $8^{\circ}.08$ . December was the coldest December on record, being  $3^{\circ}.2$  colder than the coldest December previously recorded.

The warmest day was July 12th, with a mean temperature  $79^{\circ}.88$ , and the coldest January 10th, with a mean temperature  $-8^{\circ}.65$ .

The highest temperature of the year was  $88^{\circ}0$  being  $2^{\circ}.5$  below the average. It occurred on July 12th, already mentioned as the warmest day. The lowest temperature of the year, occurring on January 10th, (also the coldest day in the year,) was  $-26^{\circ}.5$  being  $14^{\circ}.7$  below the average, and the lowest ever recorded at the observatory. The absolute annual range thus amounted to  $114^{\circ}.5$ .

*Humidity.*—The mean humidity of the year was .74, being nearly identical with that of 1858. The annual march, as exhibited in the monthly means, corresponded in its alternate increase and diminution, very accurately with that of the preceding year, and in most cases showed nearly exactly the same numbers.

*Clouds.*—The extent of sky clouded, on the average of the year, was nearly  $\frac{3}{4}$  of the hemisphere, and for nine months the sky was on the average at least half overcast. This accords with the experience of previous years, but in the distribution of cloudiness among the different months, a want of parallelism is apparent.

*Wind.*—The resultant direction of the wind, was  $N\ 61^{\circ}\ W$ . The mean velocity of the year was 8.17 miles per hour, which was 1.60 miles above the average, and shows an increase on the two preceding years. The most windy month was April, with a mean velocity 10.79 miles, and the least windy month May, with a mean velocity, 5.70 miles. The most windy day, was March 19th, when the mean velocity was 31.16 miles, the greatest recorded; and the calmest day September 23rd.

The most windy hour on the average of the year, was from 1 P.M. to 2 P.M. with a mean velocity 11.00 miles; and the calmest hour, from midnight to 1 A.M.