

REMARKS ON THE METEOROLOGICAL RESULTS
AT TORONTO FOR THE YEAR 1898.

TEMPERATURE.

The mean temperature of the year 1898 was $47^{\circ}15$, being $2^{\circ}89$ warmer than the average of 58 years and $1^{\circ}22$ warmer than 1897. It is the warmest year during the period covered by the present record 1840-98.

The mean temperature of the several months was in ten instances above and in two below the average for the respective months, the average excess to the average defect being in the ratio of $3^{\circ}50$ to $0^{\circ}15$. On each of 247 days the mean temperature was above the normal of that particular day and below on 118 days. The mean temperature of each month, with the difference from the normal, was: January, $25^{\circ}39+2^{\circ}06$; February, $24^{\circ}65+2^{\circ}12$; March, $36^{\circ}29+7^{\circ}58$; April, $43^{\circ}44+2^{\circ}36$; May, $54^{\circ}97+2^{\circ}69$; June, $65^{\circ}42+3^{\circ}01$; July, $70^{\circ}50+2^{\circ}79$; August, $69^{\circ}72+3^{\circ}48$; September, $62^{\circ}80+4^{\circ}15$; October, $50^{\circ}29+3^{\circ}87$; November, $36^{\circ}06-0^{\circ}13$; December, $26^{\circ}23-0^{\circ}17$. Dividing the year into the ordinary seasons we have for Winter, $28^{\circ}78$; Spring, $54^{\circ}61$; Summer, $67^{\circ}67$; Autumn, $37^{\circ}53$. The thermic anomalies differ from the normal temperature proper to the latitude: Winter, $-7^{\circ}00$; Spring, $-3^{\circ}02$; Summer, $+1^{\circ}44$; Autumn, $-6^{\circ}81$. In four months during the year the observed temperature exceeded the normal value for the latitude, viz.: June, $0^{\circ}82$; July, $1^{\circ}80$; August, $1^{\circ}22$; and September, $1^{\circ}30$. The mean daily range for the year was $17^{\circ}48$, the greatest monthly average occurring in July ($22^{\circ}84$) and the least in December ($13^{\circ}10$). The greatest daily range ($34^{\circ}4$) occurred on the 30th January, and the least ($2^{\circ}2$) on the 10th November. The warmest month relatively was March, estimated by its excess ($7^{\circ}58$) above the normal, July, the warmest absolutely. The coldest absolutely was February ($24^{\circ}65$). December was the coldest relatively, its mean being $0^{\circ}17$ below the normal.

The climatic difference was $45^{\circ}85$, the warmest day was the 1st of September, mean temperature, $80^{\circ}72$, and the coldest the 1st February, $-0^{\circ}12$; but the warmest day relatively was the 3rd October, it being $20^{\circ}4$ above its proper normal, and the coldest the 13th December, which was $23^{\circ}4$ below the normal. The average temperature of the warmest and coldest days from former years was $78^{\circ}02$ and $2^{\circ}27$ below zero. The highest temperature of the year ($97^{\circ}1$) occurred on the 2nd September, and the lowest ($15^{\circ}0$ below zero) on the 30th of January. The annual range from these extremes was $112^{\circ}1$, being $11^{\circ}6$ more than 1897 and $9^{\circ}0$ more than the average annual range. There were 21 instances in which the temperature at the hour of observation was 20° above the normal and 23 when a defect of equal amount occurred. The most striking deviations from the daily normal curve of temperature have been as follows: