

## REMARKS ON THE METEOROLOGICAL RESULTS AT TORONTO FOR THE YEAR 1893

### TEMPERATURE.

The mean temperature of 1893 was  $43^{\circ}53$ , being  $0^{\circ}63$  colder than the average of the previous fifty-three years, and  $1^{\circ}08$  colder than 1892. The mean temperature of the several months was in four instances above and in eight below the averages for their respective months, the average excess to the average defect being in the ratio of  $2^{\circ}02$  to  $2^{\circ}27$ . On each of 163 days the mean temperature was above the normal of that particular day, and below on 202 days. The mean temperature of each month, with the difference from the normal, was: January,  $14^{\circ}66 - 7^{\circ}81$ ; February,  $19^{\circ}23 - 3^{\circ}46$ ; March,  $29^{\circ}25 + 0^{\circ}56$ ; April,  $39^{\circ}21 - 1^{\circ}60$ ; May,  $51^{\circ}94 - 0^{\circ}13$ ; June,  $46^{\circ}45 + 4^{\circ}32$ ; July,  $68^{\circ}16 + 0^{\circ}55$ ; August,  $65^{\circ}74 - 0^{\circ}55$ ; September,  $57^{\circ}07 - 1^{\circ}49$ ; October,  $48^{\circ}93 + 2^{\circ}63$ ; November,  $37^{\circ}34 - 1^{\circ}25$ ; December,  $24^{\circ}42 - 1^{\circ}80$ . Dividing the year into the ordinary seasons, we have for winter,  $21^{\circ}05$ ; spring,  $52^{\circ}53$ ; summer,  $63^{\circ}66$ ; autumn,  $36^{\circ}90$ . The thermic anomalies differ from the normal temperature proper to the latitude: winter,  $-14^{\circ}80$ ; spring,  $-5^{\circ}10$ ; summer,  $-2^{\circ}58$ ; autumn,  $-7^{\circ}44$ . The only month during the year in which the observed temperature exceeded the normal value for the latitude was June, which was  $1^{\circ}85$  warmer. The mean daily range for the year was  $17^{\circ}15$ , the greatest monthly average occurring in July ( $21^{\circ}60$ ) and the least in November ( $11^{\circ}99$ ). The greatest daily range ( $36^{\circ}3$ ) occurred on the 25th December, and the least ( $3^{\circ}3$ ) on the 13th of March. The warmest month relatively was June, estimated by its excess ( $4^{\circ}32$ ) above the normal temperature. The coldest absolutely was January ( $14^{\circ}66$ ); it was also the coldest relatively, its mean being  $7^{\circ}81$  below its proper normal. The climatic difference was  $53^{\circ}50$ . The warmest day was the 25th of July, mean temperature  $78^{\circ}35$ , and the coldest the 10th January,  $7^{\circ}88$  below zero, but the warmest day relatively was the 24th December, it being  $21^{\circ}00$  above its proper normal, and the coldest the 10th January, which was  $29^{\circ}15$  below the normal. The average temperature of the warmest and coldest days from former years was  $77^{\circ}90$  and  $2^{\circ}06$  below zero. The highest temperature of the year ( $93^{\circ}3$ ) occurred on the 25th July, the lowest ( $17^{\circ}8$  below zero) on the 12th of January. The annual range from the extremes was  $111^{\circ}1$ , being  $7^{\circ}4$  more than 1892, and  $8^{\circ}3$  above the average annual range. There were eleven instances on which the temperature at the hour of observation was  $20^{\circ}$  above the normal, and thirty-five when a defect of an equal amount occurred. The most striking deviations from the daily normal curve of temperature have been as follows:—

#### IN EXCESS.

March 24, mean deviation ...	$13^{\circ}83$	Dec.	23, mean deviation ...	$17^{\circ}68$
June 20           "           "	.... $13^{\circ}25$		24           "           "	.... $21^{\circ}00$
Sept. 19       "           "	.... $12^{\circ}02$		25           "           "	.... $15^{\circ}30$
Dec. 22       "           "	.... $12^{\circ}92$		28           "           "	.... $15^{\circ}63$