

REMARKS ON TORONTO METEOROLOGICAL REGISTER FOR OCTOBER, 1863.

Highest Barometer 30.218 at 10 a.m. on 25th. } Monthly range =
 Lowest Barometer 29.272 at midnight on 30th. } 0.946 inches.
 Maximum temperature 66.8° on p.m. of 1st. } Monthly range =
 Minimum temperature 39.9° on a.m. of 26th } 35.9°
 Mean maximum temperature 62.7° } Mean daily range = 12.25°
 Mean minimum temperature 49.54 }
 Greatest daily range 23.8° from a. m. to p. m. of 20th.
 Warmest day 1st. Mean temperature 59.53 } Difference = 23.76.
 Coldest day 24th. Mean temperature 33.78 }
 Maximum Solar Radiation } Mean range = 60.0
 Maximum Terrestrial Radiation }
 Aurora observed on 3 nights, viz. 8th, 10th, and 12th. Possible to see Aurora
 on 13 nights; impossible on 18 nights.
 Raining on 16 days; depth, 2.622 inches; duration of fall, 65.9 hours.
 Mean of cloudiness = 0.67; above average, 0.03. Most cloudy hour observed, 6 a.m.;
 mean = 0.74; least cloudy hour observed, 4 p.m.; mean = 0.59.

Sums of the components of the Atmospheric Current, expressed in Miles.

North.	South.	East.	West.
1407.04	1523.32	1525.50	598.35

Resultant direction, S. 71° W. Resultant Velocity, 0.49 miles per hour.
 Mean velocity 6.16 miles per hour.
 Maximum velocity 29.4 miles, from 11 a.m. to noon on 31st.
 Most windy day 31st—Mean velocity 14.07 miles per hour.
 Least windy day 14th—Mean velocity 1.05 miles per hour.
 Most windy hour, noon to 1 p.m.—Mean velocity 8.87 miles per hour. } Difference 13.02.
 Least windy hour, 10 to 11 p.m.—Mean velocity, 4.51 miles per hour. } 4.36 miles.
 12th. Hoar frost and thin ice 6 a.m.; auroral light, arches and streamers, 9
 3rd. Hoar frost and thin ice at 6 a.m.; sheet lightning 8.30 to 10 p.m. and midnight.
 —6th. Particles of hail falling at 2 p.m.—7th. Fog at 10 p.m. and midnight.
 8th. Auroral light and streamers in N. N. E. and N. W. at 10 p.m. and mid-
 night.—10th. Bright auroral light and some fine streamers in N. at 9 p.m.—
 11th. Hoar frost and thin ice 6 a.m.; auroral light, arches and streamers, 9
 p.m. to midnight.—13th. Sharp hoar frost 6 a.m.—14th. Fog and heavy dew
 8 p.m. to midnight.—15th. Fog and heavy dew 6 a.m.; sheet lightning 7.30 p.m.
 —16th. Distinct solar halo 3 to 4 p.m.—17th. Fog at 6 a.m.—22nd. Hoar frost
 6 a.m.—24th, 25th, and 26th. Thin ice at 6 a.m.—26th. Faint lunar halo during
 the evening; particles of hail at 4.30 p.m.—29th. Solar halo 2 i. m.; lunar halo
 at midnight.

Heavy dew recorded on 4 mornings during this month.
 October, 1863, was comparatively mild, windy and cloudy. The depth of rain re-

corded was above the average; but as there was no appreciable depth of snow, the
 total amount of moisture fell below the average.

COMPARATIVE TABLE FOR OCTOBER.

YEAR.	TEMPERATURE.				RAIN.			SNOW.			WIND.	
	Mean.	Maximum Observed. (45° 9).	Minimum Observed.	Range.	No. of days.	Inches.	No. of days.	Inches.	No. of days.	Inches.	Direction.	Force or Velocity city.
1840	44.4	68.5	23.9	44.6	13	1.860	3	...	...	...	...	0.41 lbs
1841	41.6	58.3	20.8	38.0	6	1.360	2	...	...	...	...	0.35 "
1842	45.1	65.5	30.0	35.5	8	5.175	0	...	...	...	...	0.54 "
1843	41.8	65.7	24.6	41.2	4	3.760	0	...	...	...	...	0.35 "
1844	43.3	69.5	17.8	51.8	7	Imp.	4	12.0	...	...	...	0.43 "
1845	46.4	62.7	20.0	42.7	1	1.760	1	Imp.	...	...	...	0.26 "
1846	44.6	60.7	20.7	49.0	14	4.180	2	Imp.	...	...	...	0.44 "
1848	46.3	62.2	26.4	35.8	11	1.550	0	...	...	...	...	0.19 "
1849	45.3	59.2	25.5	33.7	13	5.065	0	...	...	...	...	4.60 ms
1850	44.4	66.0	24.8	41.8	10	2.085	0	...	...	...	...	1.27 7.76 "
1851	47.4	66.1	25.0	41.1	10	1.680	0	...	...	...	...	1.10 5.30 "
1852	48.0	70.7	29.8	40.9	12	6.280	0	...	...	...	...	1.06 4.30 "
1853	44.4	64.7	25.5	39.2	10	0.875	0	...	...	...	...	1.19 4.47 "
1854	49.5	74.2	29.8	44.4	15	1.495	3	Imp.	...	...	...	1.74 4.77 "
1855	45.4	64.3	23.0	36.3	14	2.435	0	...	...	...	...	1.52 4.57 "
1856	45.3	70.1	23.3	46.8	10	0.875	2	...	...	...	...	1.15 6.07 "
1857	45.4	65.5	27.7	35.8	10	1.040	0	...	...	...	...	2.93 6.24 "
1858	48.8	78.3	34.2	42.1	17	1.797	1	Imp.	...	...	...	3.36 5.96 "
1859	43.0	68.4	22.5	46.1	11	0.946	4	Imp.	...	...	...	5.04 8.12 "
1860	47.3	63.7	28.4	35.3	15	1.618	1	Imp.	...	...	...	2.06 6.93 "
1861	48.7	64.5	30.2	34.3	15	1.563	1	Imp.	...	...	...	1.06 5.96 "
1862	48.7	76.0	27.0	49.0	19	2.684	2	...	...	...	...	2.89 6.53 "
1863	45.0	63.4	30.9	32.5	16	2.522	0	...	...	...	...	0.48 6.16 "
Results to 1861.	45.62	66.48	25.38	41.10	111.7	2.435	1.9	0.81	...	...	...	1.67 5.80
Exc. for 1863.	+0.43	3.08	5.62	8.00	+4.3	0.037	1.9	0.84	...	...	...	+ 0.30