

Monthly Meteorological Register, at the Provincial Magnetic Observatory, Toronto, Canada West.—August, 1854.

Latitude, 43 deg. 39.4 min. North. Longitude, 79 deg. 21. min. West. Elevation above Lake Ontario, 108 feet.

Day.	Barom. at temp. of 32 deg.				Temp. of the Air.				Mean Temp. + or - of the Average	Tension of Vapour.				Humidity of Air.				Wind.				Rain in Inch.
	6 A.M.	2 P.M.	10 P.M.	Mean.	6 A.M.	2 P.M.	10 P.M.	M'N.		6 A.M.	2 P.M.	10 P.M.	M'N.	6 A.M.	2 P.M.	10 P.M.	M'N.	6 A.M.	2 P.M.	10 P.M.	Mean Vel'y	
1	29.594	29.486	29.487	29.510	68.0	87.5	74.5	77.12	+10.15	0.577	0.899	0.762	0.733	.85	.71	.93	.81	Calm	S S W	W b S	4.0	0.025
2	29.580	29.585	29.647	29.606	66.6	79.0	62.8	70.10	+3.25	.467	.416	.441	.448	.74	.53	.79	.65	W N W	N W	N N W	6.75	...
3	29.661	29.577	29.463	29.559	56.1	175.2	63.2	65.45	-1.40	.366	.507	.476	.410	.83	.60	.84	.77	Calm	Calm	Calm	0.10	...
4	29.438	29.436	29.517	29.475	65.8	87.3	63.7	67.85	+1.05	.486	.742	.515	.531	.78	.94	.84	.83	Calm	S W b S	N N W	2.58	0.210
5	29.581	29.578	29.526	29.557	59.9	77.9	63.2	67.23	+0.43	.421	.563	.454	.604	.84	.61	.80	.78	N W b W	S b W	Calm	2.18	...
6	29.458	29.441	—	—	69.9	78.1	—	—	—	.440	.393	—	—	.87	.42	—	—	Calm	W b N	—	10.75	...
7	29.697	29.697	29.762	29.721	56.0	70.5	52.8	59.95	-6.73	.307	.193	.257	.255	.70	.27	.65	.54	Calm	N W b W	Calm	9.61	...
8	29.532	29.545	29.838	29.836	58.2	72.6	57.7	63.48	-3.18	.365	.555	.304	.412	.77	.72	.65	.70	N W b N	S S E	N b W	4.00	...
9	29.831	29.786	29.717	29.773	52.4	72.9	62.2	64.22	-2.33	.280	.440	.428	.392	.73	.56	.78	.67	N	E b N	E b N	N X E	4.54
10	29.702	29.646	29.607	29.615	62.5	76.2	61.6	67.92	+1.40	.423	.455	.522	.462	.76	.52	.88	.71	N E b N	E b N	E	Inap.	...
11	29.599	29.599	29.595	29.596	64.2	76.5	64.6	69.07	+2.63	.483	.637	.503	.550	.82	.72	.85	.80	N E b E	Calm	2.17
12	29.595	29.545	29.467	29.526	64.4	80.1	68.1	71.65	+5.32	.532	.639	.588	.582	.90	.65	.80	.78	Calm	S E	W N W	1.52	Inap.
13	29.470	29.508	—	—	67.6	80.8	—	—	—	.480	.494	—	—	.73	.48	—	—	S S W	W b N	—	9.54	...
14	29.788	29.751	29.702	29.739	56.7	71.1	59.2	62.45	-3.78	.353	.337	.311	.344	.78	.45	.63	.63	N W	S S E	Calm	3.23	...
15	29.409	29.516	29.576	29.496	59.2	75.6	58.1	62.98	-3.17	.435	.373	.319	.380	.88	.43	.81	.70	Calm	N W	Calm	8.08	...
16	29.624	29.610	29.652	29.630	57.8	77.2	59.1	64.46	-1.58	.321	.267	.429	.354	.69	.29	.89	.63	W N W	W b S	N W	9.05	...
17	29.665	29.677	29.719	29.689	55.3	71.6	51.3	58.60	-7.37	.347	.372	.275	.331	.81	.49	.74	.69	N W b W	S b E	Calm	4.71	...
18	29.777	29.738	29.826	29.779	52.6	78.0	58.2	64.83	-1.00	.315	.382	.363	.368	.81	.41	.77	.64	Calm	S E b S	Calm	2.80	...
19	29.715	29.623	29.579	29.633	55.9	81.7	59.6	66.28	+0.52	.362	.454	.399	.423	.83	.43	.81	.70	Calm	S	Calm	2.27	...
20	29.557	29.599	—	—	63.9	86.2	—	—	—	.462	.533	—	—	.80	.44	—	—	Calm	N	—	7.50	...
21	29.742	29.627	29.543	29.635	56.7	86.4	76.1	74.87	+9.43	.359	.596	.646	.550	.80	.49	.74	.68	Calm	S b E	SW b W	4.63	...
22	29.579	29.635	29.727	29.658	76.8	87.4	66.6	77.67	+12.28	.542	.615	.466	.561	.60	.49	.74	.62	W b N	N W b N	E	7.05	1.165
23	29.823	29.762	29.678	29.748	63.2	68.2	58.6	62.40	-2.73	.466	.520	.370	.444	.82	.77	.77	.81	E X E	E b N	Calm	2.56	...
24	29.571	29.536	29.609	29.572	63.0	98.1	75.4	80.43	+15.48	.501	.570	.655	.590	.89	.32	.77	.64	Calm	W	N W b W	8.62	...
25	29.678	29.673	29.596	29.646	66.7	75.9	66.4	69.22	+4.48	.435	.393	.522	.463	.68	.45	.83	.68	N N W	E b N	Calm	2.99	0.040
26	29.583	29.486	29.583	29.547	60.3	87.0	69.1	73.45	+8.92	.447	.673	.566	.583	.88	.54	.82	.73	Calm	S b W	W b N	4.85	...
27	29.662	29.717	—	—	64.9	70.9	—	—	—	.510	.496	—	—	.86	.68	—	—	W S W	E b N	—	2.12	...
28	29.781	29.792	29.787	29.786	56.4	78.5	59.5	65.65	+1.52	.403	.425	.391	.413	.91	.45	.79	.70	Calm	E b S	Calm	1.87	...
29	29.776	29.715	29.659	29.713	61.1	78.4	64.0	67.42	+3.60	.427	.628	.540	.530	.81	.67	.93	.81	Calm	E b S	Calm	3.03	...
30	29.638	29.516	29.653	29.620	68.3	86.9	72.9	74.87	+11.25	.609	.693	.655	.649	.91	.56	.83	.78	S	S b E	Calm	4.43	0.075
31	29.795	29.819	29.807	29.795	68.7	68.7	65.0	67.20	+3.88	.603	.557	.531	.553	.88	.82	.68	.87	E N E	E	Calm	4.88	Inap.
M	29.669	29.639	29.642	29.647	61.2	78.24	63.46	68.03	+2.27	.431	.516	.469	.478	.80	.65	.80	.79	2-S6	8-33	1-64	4.74	1.455

Highest Barometer..... 29.845, at 2 p.m. on 8th } Monthly range:

Lowest Barometer..... 29.384, at 8 a.m. on 15th } 0.461 inches.

Highest registered temperature 99°.2, at p.m. on 24th } Monthly range:

Lowest registered temperature 45°.6, at a.m. on 18th } 53°.6.

Mean Maximum Thermometer..... 80°.72 } Mean daily range:

Mean Minimum Thermometer..... 55°.26 } 25°.46.

Greatest daily range..... 38°.4, from p.m. of 24th to a.m. of 25th.

Warmest day..... 24th. Mean temperature..... 80°.43 } Difference,

Coldest day..... 17th. Mean temperature..... 58°.60 } 21°.83.

Greatest intensity of Solar Radiation, 107°.6 on 24th, p.m. } Range,

Lowest point of Terrestrial Radiation, 35°.8 on 18th, a.m. } 71°.8.

Aurora observed on 1 night: viz. on 20th.

Possible to see Aurora on 21 nights.

Impossible to see Aurora 10 nights.

Raining on 5 days. Raining 6.3 hours; depth, 0.455 inches, which

was the least quantity recorded for any August during the series.

Thunder Storms occurred on the 1st, 13th, 25th, and 30th.

Sheet Lightning, not accompanied by thunder or rain, observed on the

22nd, 26th, 29th, and 31st.

Sum of the Atmospheric Current, in miles, resolved into the four Cardinal directions.

North.	West.	South.	East.
1230.21	1864.29	612.00	724.09

Mean direction of the Wind, W 28° N.

Mean velocity of the Wind, 4.74 miles per hour.

Maximum velocity, 26.6 miles per hour, from 4 to 5 p.m. on 6th.

Most windy day, the 6th; mean velocity, 10.75 miles per hour.

Least windy day, the 3rd; mean velocity, 0.10 " "

During the thunder storm and heavy squall on the 30th, the velocity of the wind from 2h. 26m. to 2. 45m. p.m., averaged 31 miles per hour.

The observed Temperature on the 24th, at 2 p.m., was +25°.7, and at 4 p.m., +23°.9 above the mean normal Temperature of those hours respectively.

The observed Maximum on the 24th at 2 p.m. (98°.1), and the registered Maximum on the same day (99°.2), were the highest entries ever made at this Observatory.

Very few shooting stars were observed from the 9th to the 13th of this month, which is one of the periods usually given for the annual return of those Meteors.

Comparative Table for August.

Year.	Temperature.						Rain.		Wind.	
	Mean.	Dif. f'm.	Max.	Min.	Range.	D's.	Inch.	Mean.	Vel'y.	
	°	°	°	°	°	°				
1840...	64.6	-1.7	80.1	47.4	32.7	12	2.905	...		
1841...	64.4	-1.9	83.5	46.7	36.8	9	6.170	0.19	Ib.	
1842...	65.7	-0.6	80.7	45.3	35.4	6	2.500	0.30	Ib.	
1843...	66.4	+0.1	85.5	44.4	41.1	4	4.850	0.12	Ib.	
1844...	64.3	-2.0	82.5	44.3	38.2	17	Impt.	0.16	Ib.	
1845...	67.9	+1.6	82.5	44.4	38.1	9	1.725	0.19	Ib.	
1846...	68.4	+2.1	86.3	50.4	35.9	9	1.770	0.17	Ib.	
1847...	65.1	-1.2	83.1	44.9	38.2	10	2.140	0.19	Ib.	
1848...	69.2	+2.9	87.5	49.3	38.2	8	0.855	4.55	Miles.	
1849...	66.3	0.0	79.5	51.4	28.1	10	4.970	3.76	Miles.	
1850...	66.8	+0.5	84.2	43.0	41.2	13	4.355	4.46	Miles.	
1851...	63.6	-2.7	79.8	43.6	36.2	10	1.360	4.62	Miles.	
1852...	65.9	-0.4	81.2	46.7	34.5	9	2.695	3.30	Miles.	
1853...	68.6	+2.3	91.6	47.6	44.0	11	2.575	4.23	Miles.	
1854...	68.0	+1.7	98.1	47.0	51.1	5	0.455	4.74	Miles.	
M.P.	66.35		84.41	46.43	37.98	9.6	2.809	4.26	Miles.	