MONTHLY METEOROLOGICAL REGISTER AT H. M. MAGNETICAL OBSERVATORY, TORONTO, C. W.,—AUGUST, 1848.

Latitude 43°. 39′.4. *N.* *Longitude* 79°. 21′.5. *W.* *Elevation above Lake Ontario,* 108 *Feet.*—(*For the Brit. Amer. Jour. of Med. and Phys. Science.*)

Day.	Barometer at Temp. of 32°.				Temperature of the Air.				Tension of Vapour.				Humidity of the Air.				Wind.			Rain in. on surf.	Weather.
	7 A.M.	3 P.M.	10 P.M.	Mean of 24 h.	7 A.M.	3 P.M.	10P.M.	Mean of 24h	7A.M	3P.M	10P.M	Mean of 24h	7A.M	3P.M	10P.M	Mean of 24h	7 A.M.	3 P.M.	10 P.M.		
1,	29.443	29.536	29.649	29.570	60.4°	73.1°	54.0°	61.1	.389	.310	.330	.344	.76	.39	.81	.66	W. N. W.	N. W. 1.0	Calm.	0.005	Light clouds am. Unclouded but hazy.
2,	29.759	29.757	29.770	29.769	56.6	76.8	59.9	65.5	.375	.479	.411	.448	.83	.53	.81	.73	Calm.	S.	Calm.	—	Gen. clear, light passing clouds.
3,	29.803	29.741	29.665	29.722	60.4	73.7	67.0	68.8	.442	.533	.537	.524	.86	.66	.83	.76	Calm.	E. S. E.	Calm.	—	O'rcast, hazy. Halo r'nd sun at 3 pm.
4,	29.548	29.357	29.348	29.405	65.4	72.6	65.9	65.5	.563	.613	.529	.560	.93	.79	.85	.92	Calm.	S. W. 1.0.	W.	.455	R'ng till 11h 20m am. Day cl'd. Showers 6 to 7 pm.
5,	29.460	29.559	29.664	29.593	66.6	71.8	59.0	63.8	.461	.469	.409	.433	.72	.62	.83	.75	WbyN 1.0	N. N. W.	Calm.	.075	Generally clouded. Clear spaces.
6,	29.781	29.754	—	—	66.2	71.2	—	—	.295	.402	—	—	.47	.51	—	—	Calm.	S. S. W.	——	—	Clear, exc a few light cl'ds round hor.
7,	29.836	29.790	29.787	29.807	58.1	75.4	61.8	65.5	.369	.453	.427	.451	.78	.53	.79	.74	Calm.	S. S. W.	S. W.	—	Unclouded. Hazy round horizon.
8,	29.853	29.774	29.757	29.795	58.8	77.8	59.4	66.2	.388	.485	.344	.401	.80	.52	.69	.63	Calm.	S. E.	Calm.	—	Uncl'd till 9 pm. Aur. light, 9 to 11 pm.
9,	29.781	29.695	29.686	29.710	65.0	82.7	66.4	71.0	.474	.600	.527	.556	.78	.55	.84	.76	Calm.	S. by E.	Calm.	—	M'tly cl'r. A few dense cl'ds in N & NW
10,	29.681	29.609	29.590	29.624	69.4	84.9	68.0	73.1	.550	.662	.543	.577	.79	.57	.81	.73	Calm.	S. by E.	Calm.	—	M'tly cl'r. A few light pass. clouds.
11,	29.614	29.594	29.664	29.637	70.3	84.0	66.0	72.1	.579	.643	.586	.595	.80	.57	.95	.79	Calm.	S. by W.	Calm.	—	Gen. cl'd. Distant thunder 4 to 7 pm.
12,	29.725	29.699	29.740	29.721	69.2	81.2	68.4	72.9	.602	.641	.611	.631	.87	.62	.91	.81	Calm.	S.E. by E.	Calm.	—	M'tly cl'r. Light cl'ds & haze r'nd hor.
13,	29.792	29.736	—	—	76.8	80.0	—	—	.646	.627	—	—	.72	.63	—	—	S.	E. S. E.	——	—	Unclouded. Hazy round horizon.
14,	29.711	29.636	29.657	29.669	73.6	86.6	71.6	76.6	.699	.685	.639	.688	.87	.55	.85	.78	Calm.	S. 1.0	W S W	—	Gen. clear. Sheet lightn. in W & NW.
15,	29.725	29.728	29.743	29.731	71.4	78.0	71.8	71.9	.630	.666	.659	.638	.84	.72	.87	.81	N. by E.	N.E by N	E. S. E.	—	Densely clouded all day.
16,	29.650	29.567	29.582	29.600	70.2	77.8	66.6	71.2	.673	.699	.545	.629	.91	.76	.86	.84	E. S. E.	Calm.	N. by. W.	—	O'rc't P't cl'ds all day. Sl't r'n 11.49 pm
17,	29.606	29.595	29.615	29.609	63.2	66.0	63.4	63.8	.505	.528	.490	.504	.89	.85	.86	.87	N. by E.	N.E by N	N E by E	.065	Sl't r'n till 9 am. Dens. o'rc't all day.
18,	29.618	29.590	29.635	29.617	62.8	72.2	62.0	66.4	.475	.583	.392	.415	.85	.76	.72	.66	N. by E.	E.	N. N. W.	not ap	Light det. cl'ds till 3 pm. Rem. clear.
19,	29.659	29.653	29.642	29.649	62.0	73.2	56.2	63.9	.365	.435	.409	.365	.67	.54	.92	.67	N.	S. by W.	Calm.	—	Cl'r save a few cl'ds r'nd hor. 2 & 3 pm.
20,	29.655	29.620	—	—	71.5	73.1	—	—	.376	.464	—	—	.50	.59	—	—	E.	E.	——	—	Light clouds generally dispersed.
21,	29.653	29.690	29.709	29.701	59.3	70.4	59.0	63.6	.336	.489	.415	.447	.67	.68	.85	.78	N. by E.	E. by S.	Calm.	—	L't det cl'ds am. Aurora from 9 to 11 pm
22,	29.760	29.718	29.705	29.726	61.2	72.6	64.4	66.7	.359	.594	.482	.493	.67	.76	.81	.78	N E by N	E.	E.	—	Mostly o'rc't. Light clouds & haze.
23,	29.704	29.669	29.658	29.679	67.6	75.7	67.0	69.6	.529	.463	.558	.535	.80	.53	.87	.77	N. E.	E. by S.	E.	—	L't det cl'ds dispers. Sl't r'n dur night.
24,	29.695	29.711	29.710	29.711	66.4	71.9	67.2	69.6	.571	.525	.588	.583	.91	.70	.91	.83	Calm.	E.	Calm.	not ap	Mostly o'rc't. Light clouds & haze.
25,	29.751	29.745	29.783	29.772	65.0	73.0	65.2	69.4	.591	.469	.565	.571	.98	.59	.94	.83	Calm.	E.	Calm.	—	L't cl'ds & haze am. M'tly clear pm.
26,	29.845	29.843	29.852	29.798	63.0	72.6	63.0	68.9	.511	.527	.486	.530	.91	.68	.87	.78	Calm.	E.	Calm.	—	L't cl'ds to 10 am. Rem. of day uncl'd.
27,	29.803	29.695	—	—	71.0	72.6	—	—	.585	.527	—	—	.80	.68	—	—	S S E	E. by N.	——	—	Hazy. Perf. halo round sun 1 to 2 pm.
28,	29.303	29.296	29.492	29.378	68.6	77.0	66.4	70.5	.658	.662	.493	.611	.97	.73	.77	.82	S.by W 1.0	N.N.W.	N. 1.0	.355	Raining occas. am. Aur. l't 9 to 11 pm.
29,	29.570	29.555	29.575	29.577	61.8	75.8	63.2	68.5	.505	.550	.523	.562	.94	.63	.93	.84	Calm.	S.W.by S.	Calm.	not ap	Cl'r exc. a few cl'ds on hor. in N & NW
30,	29.612	29.536	29.489	29.534	63.8	78.2	64.3	69.9	.485	.570	.561	.545	.84	.61	.95	.78	Calm.	S. E.	Calm.	—	Mostly clear. Pass. cl'ds. Sl't fog 11 pm
31,	29.395	29.234	29.278	29.286	67.6	75.0	66.2	69.2	.609	.623	.379	.505	.92	.73	.60	.71	Calm.	S. by W.	W.	—	Clouded till 3 pm. Remainder clear.
Mean	29.658	29.625	29.646	29.6441	64.7	75.9	64.2	68.34	.507	.554	.498	524.	.84	.64	.81	.77	0.17	0.39	0.12	0.855	

Highest Barometer, 29,865 on 26th, at 9 a.m. } Monthly
Lowest do. 29,222 on 1st Sep, at 5 a. m. } Range 0.643
Highest Temperature, 87°.0 on 14th, at 2 p.m. } Monthly
Lowest do. .. 48°.7 on 7th, at 5 a.m. } Range 38.3
Mean Max. Therm., 76.33—Mean Min. Therm., 58.08.
Mean Daily Range, .. 18°.25
Extreme Daily Range, 30° .2 from 5 am to 2 pm on 8th
Warmest Hour, 2 pm, Mean temp., 76.11 }
Coldest do, 5 am, do, 59.33 } Differ., 16.78

Proportion of Wind from each Quarter—
From N. 770.4
W. 739.8
S. 1405.3
E. 931.9
Mean velocity of the Wind, 4.55 miles per hour.
Maximum velocity, 17.2 miles from 4 to 5 pm., on 31st
Most Windy Day, 4th.—Mean velocity per hour, 8.41 miles
Lenst do, 30th. " " 1.90
Daily variation.—Velocity greatest at 5 pm, 7.83
" least at 6 am, 2.38

Temperature for August.

Year.	Mean.	Max.	Min.	Range.
1840, ...	65.1°	82.4°	47.7°	34.7°
1841, ...	64.6	84.8	45.7	39.1
1842, ...	65.9	81.8	43.9	37.9
1843, ...	66.49	83.1	44.0	39.1
1844, ...	61.16	86.8	43.5	43.3
1845, ...	67.86	84.8	41.5	43.3
1846, ...	63.41	86.4	49.5	36.9
1847, ...	63.93	82.6	44.6	38.0
1848, ...	68.34	87.0	48.7	38.3

Rain.

No. Days.	Inches.
12	2.905
9	6.170
6	2.500
4	4.850
17	imper.
9	1.725
9	1.770
10	2.140
8	0.855

Wind.

Winds.	Calms	Mean force.
157	155	0.19
379	269	0.30
282	366	0.12
295	353	0.16
366	258	0.19
293	331	0.17
295	329	0.19
177	93	0.26

The approximate mean of the Barometer is derived from ten observations daily; the means of the other elements are taken from four observations daily, viz., 9 and 10 a.m., and 9 and 10 p.m. The whole are close approximations to true means. Further explanatory notes will be found at the foot of all the Registers of 1845, 1846 and 1847.

agnetic Disturbances, August 8th, 15h to 8th 11h Gott., slight, 20′.0 of Declination. August 21st, 15h to 21st, 16h Gott., slight, 15′.6. of Declination.