

MONTHLY METEOROLOGICAL REGISTER AT H. M. MAGNETICAL OBSERVATORY, TORONTO, CAN. W.—D. DECEMBER, 1883.  
 Latitude 43°. 39'. 4. N. Longitude 79°. 21'. 5. W. Elevation above Lake Ontario, 108 Feet.

DAY.	Barometer at Temp. of 32°.			Temperature of the Air.			Tension of Vapour.			Humidity of the Air.			Wind.			Rain inch on surf.	WEATHER.						
	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.								
1,	30.111	29.955	29.602	29.902	13.4°	27.3°	31.6°	27.05	0.78	1.32	1.45	1.30	.91	.87	.81	.85	Calm.	E. N. E.	E. by N. E.	E. by N. E.	Caln.	0.440	Clear to 6 am. Overcast with haze fr 7 am
2,	29.558	29.347	29.215	29.334	34.6	42.3	43.4	40.91	1.89	.247	.253	.229	.95	.93	.91	.89	ENE 2.0 lb	E. N. E.	E. N. E.	E. N. E.	Caln.	0.440	Density cold. Rong fr 2h 30m till 11 am
3,	29.312	29.401	29.583	29.401	33.6	32.0	27.0	30.00	1.39	1.28	1.20	1.17	.72	.70	.80	.76	WSW 2.5	W. S. W.	W. S. W.	W. S. W.	Caln.	0.050	Density cold. Particles of snow pm
4,	29.700	29.853	29.992	29.906	25.8	34.1	32.0	31.56	1.24	1.55	1.62	1.47	.87	.79	.90	.83	WSW 2.5	W. by S.	W. by S.	W. S. W.	Caln.	—	Generally clouded. Clear intervals.
5,	30.125	30.092	30.110	30.043	29.4	28.9	30.1	31.83	1.44	1.55	1.36	1.49	.89	.79	.81	.83	Calm.	E. by N.	E. by N.	N. N. E.	Caln.	—	Density clouded. Dark and dull.
6,	30.201	30.129	—	—	—	28.2	—	—	1.10	1.38	—	—	.83	.89	—	—	N. N. E.	E. by N.	E. by N.	E. by N.	Caln.	—	Lightly clouded all day.
7,	29.721	29.434	—	—	—	38.6	—	—	38.09	1.51	1.67	—	.928	.902	.96	.88	E. by S.	E.	E.	E.	Caln.	0.495	Into P-d mth am. Den cold. Rong fr 8 pm
8,	29.312	29.381	—	—	—	37.4	—	—	1.92	1.65	1.53	1.61	.86	.75	.85	.80	Calm.	N. N. W.	N. N. W.	N. N. W.	Caln.	—	Clear fr 7 am. Dens. Overcast all day
9,	29.603	29.746	—	—	—	32.0	—	—	31.09	1.44	1.44	1.39	.86	.78	.81	.82	Calm.	N. N. W.	N. N. W.	N. N. W.	Caln.	—	Density clouded all day
10,	29.554	29.395	29.353	29.389	32.0	32.0	26.8	29.38	1.58	1.75	1.37	1.50	.88	.97	.93	.92	WSW 3.0	W. S. W.	W. S. W.	W. S. W.	Caln.	—	Density cold. Sfr snow 9 am to 7 pm
11,	29.584	29.696	—	—	—	29.0	—	—	25.75	1.10	1.33	1.31	.83	.82	.81	.85	N. N. W.	N. N. W.	N. N. W.	N. N. W.	Caln.	—	Gen. clouded. Clear fr 8 am to 2 pm
12,	29.889	29.871	—	—	—	17.6	—	—	0.94	0.92	0.88	0.90	.93	.81	.88	.87	Calm.	N. N. W.	N. N. W.	N. N. W.	Caln.	—	Density clouded. Sfr snow 7 to 10 am
13,	29.892	29.885	—	—	—	18.8	—	—	0.90	0.87	—	—	.85	.77	—	—	N. N. W.	N. N. W.	N. N. W.	N. N. W.	Caln.	—	Clouded all day.
14,	29.331	29.932	—	—	—	16.6	—	—	1.635	0.89	0.99	0.78	.92	.81	.91	.86	N. N. W.	N. N. W.	N. N. W.	N. N. W.	Caln.	—	Clear & unclouded. Very fine.
15,	29.900	29.842	—	—	—	7.2	—	—	1.564	0.66	0.84	0.77	.079	1.00	.56	.98	Calm.	N. W. by N.	N. W. by N.	N. W. by N.	Caln.	—	Clear & unclouded. Very fine.
16,	29.789	29.686	—	—	—	13.4	—	—	2.277	0.67	1.15	1.19	.107	.79	.78	.84	Calm.	E. by N.	E. by N.	N. E.	Caln.	—	Light passing clouds generally.
17,	29.538	29.509	—	—	—	22.4	—	—	21.19	1.13	1.30	1.01	.103	.89	.85	.92	N. E. by N.	N. E.	N. E.	N. N. E.	Caln.	—	Part. cold am. Clear from 6 pm
18,	29.382	29.158	—	—	—	12.8	—	—	25.74	0.63	1.27	1.19	.110	.80	.77	.78	W. N. W.	W. by N.	W. by N.	N. N. E.	Caln.	—	Clear to 7 am. Mostly clouded from.
19,	29.039	29.144	—	—	—	20.4	—	—	1.34	1.49	1.28	1.27	.81	.80	.80	.79	W. N. W.	N. W. 2.5	W. N. W.	N. N. W.	Caln.	—	Overcast all day. Slight snow 8 & 9 am
20,	29.491	29.463	—	—	—	21.8	—	—	1.33	1.52	—	—	.98	.92	—	—	N. N. W.	W.	W.	W.	Caln.	—	Clear am. Clouded pm.
21,	29.613	29.835	—	—	—	21.0	—	—	21.60	0.92	0.88	0.86	.092	.80	.68	.88	N. N. W.	N. W.	N. W.	N. W.	Caln.	—	Slight snow on to 3 am. Uncl'd from 11 am to midnight
22,	29.802	29.964	—	—	—	25.8	—	—	20.23	1.04	1.08	1.18	.095	.91	.75	.83	N. E.	Calm.	Calm.	Calm.	Caln.	—	Den cold. Raining stdy 10h 30m pm
23,	30.180	30.186	—	—	—	4.4	—	—	16.10	0.58	0.96	0.85	.086	1.00	.88	.88	Calm.	Calm.	Calm.	Calm.	Caln.	—	Uncl'd till noon. Rem part clouded
24,	29.841	29.584	—	—	—	27.9	—	—	29.85	1.41	1.58	1.69	.142	.91	.79	.83	S. S. E.	S. W. by W	S. W. by W	S. W.	Caln.	—	Density clouded all day.
25,	29.312	29.400	—	—	—	36.2	—	—	1.96	2.02	—	—	.92	.99	—	—	Calm.	N. W. 3.0	N. W. 3.0	S. S. W.	Caln.	—	Rain am; snow pm; Very high wind pm.
26,	29.903	29.639	—	—	—	16.8	—	—	30.87	0.90	1.41	1.46	.148	.92	.77	.83	Calm.	S. S. W.	S. S. W.	S. S. W.	Caln.	0.135	Generally clouded.
27,	29.040	29.930	—	—	—	41.8	—	—	3.52	2.96	—	—	.97	.85	—	—	N. S. W.	S. S. W.	S. S. W.	N. W. by W	Caln.	—	Lightly overcast. Very mild day
28,	29.177	29.383	—	—	—	30.8	—	—	28.88	1.43	1.27	1.00	.123	.70	.74	.71	N. S. W.	N. N. W.	N. N. W.	N. N. W.	Caln.	—	Density clouded. Clear spaces 9 am
29,	29.002	29.804	—	—	—	28.4	—	—	28.71	0.92	1.24	1.42	.135	.85	.78	.83	Calm.	E.	E.	E.	Caln.	—	Mostly cold. Raining stdy 10h 30m pm
30,	29.254	29.453	—	—	—	28.3	—	—	36.25	2.10	1.93	1.86	.199	.97	.84	.95	E. by S.	S. W.	S. W.	S. W.	Caln.	0.095	Raining slightly 1 to 6 am. Dark & dull
31,	29.657	29.440	—	—	—	40.1	—	—	37.32	1.86	2.07	2.07	.205	.96	.84	.95	Calm.	N. E. by N.	N. E. by N.	N. E. by N.	Caln.	—	Density clouded; dull; r'ng from 4 pm
Mean	29.6657	29.6381	29.6257	29.6424	24.28	30.97	27.77	27.64	1.22	1.41	1.37	1.34	.87	.79	.86	.84						1.215	Toronto Bay frozen over on the night of the 14th and morning of the 15th.

\* Snow, not appreciable on 1st, 4th, 19th, and 24th.—† Snow, on 10th, 0.1; 11th, 3.0; 12th, 0.1; 22d, 2.5; 23d, 0.3; total, 6.0.

Highest Barometer, 30.285 at 10 a.m. on 23d. } Range 1.318  
 Lowest do, 28.920 at 3 p.m. on 27th. }  
 Highest Temperature, 49° 4' on 2d, 11 p.m. } Range 45.5  
 Lowest do, 3° 9' on 23d, 7 p.m. }  
 Mean Daily Range, 10° 7' }  
 Extreme Daily Range, 21° 8' from 23d, pm, to 23d, am.

Under the head of "Tension of Vapour," is given the elastic force of the aqueous vapour in the atmosphere at each observation, in decimals of an inch of Mercury; or the proportion of the barometric pressure due to its presence. Under the head of "Humidity of the Air," is given the proportion the aqueous vapour bears to the quantity the air is capable of sustaining at the existing temperature, saturation being represented by 1.00. The instruments are Standard Instruments. The Rain Gauge is 27 feet above the soil.—The Means entered are the Means by 24 hourly observations taken on Sundays are not included in any of the means. The observations entered at 7 a.m., on Sundays, are actually taken at 9 a.m.

Proportion of Wind from each Quarter—  
 N.W. 1667 Total 1810  
 S.W. 95 Calms, 423 1810  
 S.E. 60 Calms, 201 1810  
 N.E. 102 Calms, 181 1810  
 N.P. 102 Calms, 181 1810  
 N.P. 102 Calms, 181 1810

Mean force, 0.57 lbs; Max. force, 10 lbs; }  
 on 25th, at the 4th pm. }  
 Obsr., 625 }  
 1845 }  
 1845 }  
 1845 }  
 1845 }

Temperature for December.  
 Mean, 21.9°  
 Max., 42.1°  
 Min., 8.9°  
 Range, 43.0°  
 No. Days, 3  
 No. Winds, 6  
 Calms, 233  
 Mean force, 1.32  
 Max. force, 1.74  
 Min. force, .53  
 Range, 1.21  
 No. Days, 6  
 No. Winds, 433  
 Calms, 201