

MONTHLY METEOROLOGICAL REGISTER AT H. M. MAGNETICAL OBSERVATORY, TORONTO, C. W.—JANUARY, 1846.

Latitude 43°. 39' 4". N. Longitude 79°. 21' 5". W. Elevation above Lake Ontario, 108 Feet.

DAY.	Barometer at Temp. of 32°.		Tension of Vapour.		Temperature of the Air.			Humidity of the Air.			Wind.			Snow.	WEATHER.					
	7 A.M.	3 P.M.	10 P.M.	Mean.	7 A.M.	3 P.M.	10 P.M.	Mean.	7 A.M.	3 P.M.	10 P.M.	Mean.	7 A.M.			3 P.M.	10 P.M.			
1,	29.684	29.469	29.239	29.364	133	176	190	175	29.0	32.3	35.4	33.3	82	96	92	.91	E.	E.	E.	Slight snow a.m., raining p.m.
2,	29.907	28.835	29.043	28.982	215	198	148	177	36.6	35.6	32.0	33.7	100	95	82	.90	Calm.	S.W.	W.	Rain a.m., snow p.m.
3,	29.356	29.407	29.477	29.482	151	153	112	152	39.6	35.6	32.0	32.6	91	73	78	.82	N.W.	W.N.W.	Calm.	Clear a.m., had 10 p.m., w'd fresh a.m.
4,	29.548	29.538			141	161			39.6	34.7			85	82			N.N.E.	Calm.	Calm.	Clouded.
5,	29.716	29.832	29.634	29.861	144	171	148	149	28.2	34.6	29.0	29.5	83	86	91	.91	S.W.	S.W.	S.W.	Mostly clouded.
6,	30.016	29.911	29.773	29.801	169	170	175	173	32.8	33.2	32.8	32.7	96	95	95	.93	N.E.	N.E. by E.	E.N.E.	Clouded a.m., snow and rain p.m.
7,	29.360	29.200	29.271	29.283	132	213	190	196	31.8	36.3	31.8	35.1	95	100	95	.96	E.	E.	S.W.	Clear a.m., w'd fresh, w'd & squ'ly a.m.
8,	29.415	29.473	29.573	29.566	170	152	162	158	33.4	33.6	29.6	31.5	90	78	98	.89	W.S.W.	W. by N.	S.W.	Showing slightly, occasionally.
9,	29.547	29.555	29.553	29.553	146	138	132	143	27.8	39.8	38.6	38.7	96	83	82	.82	Calm.	W.S.W.	Calm.	Generally light detached clouds.
10,	29.470	29.378	29.278	29.318	147	142	151	141	29.9	31.0	31.0	29.2	87	81	89	.87	S.W.	S.W.	S.W.	Overcast with dense haze.
11,	29.186	29.190	29.218	29.318	147	142	151	141	29.9	31.0	31.0	29.2	87	81	89	.87	W. by S.	W. by S.	S.W.	Overcast, slight snow p.m.
12,	29.339	29.438	29.627	29.627	132	113	080	098	34.6	24.9	18.1	20.8	89	82	77	.84	N.	N.	N.W.	Densely overcast.
13,	29.785	29.818	29.738	29.760	068	097	104	097	9.7	23.8	22.6	21.1	94	74	83	.82	Calm.	W.	S.W.	Detached clouds.
14,	29.662	29.615	29.636	29.630	130	152	140	135	28.0	31.8	28.6	28.0	84	74	89	.87	S.W.	W.	W.	Slight snow a.m.
15,	29.646	29.509	29.552	29.550	128	181	187	166	24.8	40.2	38.0	34.9	83	74	82	.82	S.S.W.	S.W.	S.W.	Generally clear.
16,	29.482	29.470	29.486	29.491	143	115	096	113	30.6	26.6	21.2	24.0	86	79	81	.83	N. by W.	N. by W.	N. by W.	Halo a.m., hazy.
17,	29.547	29.580	29.772	29.739	084	085	050	053	10.6	12.4	7.0	9.3	85	67	77	.74	N. by W.	N.N.W.	Calm.	Halo a.m., hazy. Clear p.m.
18,	29.913	29.889			096				5.9	16.6			98				Calm.	N.N.W.	N.N.W.	Overcast.
19,	30.116	30.156	30.148	30.132	088	075	059	062	7.0	15.8	8.0	10.2	60	72	87	.83	N. by W.	N. by E.	N. by E.	Clouded a.m. Clear p.m.
20,	30.073	29.893	29.692	29.822	067	114	111	099	9.4	22.2	24.6	19.5	95	92	82	.88	N. by E.	Calm.	N.N.E.	Overcast with dense haze.
21,	29.596	23.525	29.712	29.659	112	126	078	093	22.2	22.6	14.1	17.5	91	89	89	.88	N. E.	N. by W.	N.N.E.	Overst a.m. Sn'ing 9 a.m. to 4 p.m.
22,	30.120	30.184	30.029	30.214	040	075	072	064	04.1	19.1	13.2	10.5	87	69	85	.84	N.N.W.	N.W.	N.W.	Clear and w'd fresh. W'd brisk to fresh all day.
23,	30.319	30.181	30.041	30.142	061	094	082	082	5.4	21.8	16.1	15.7	100	78	87	.88	Calm.	S.S.W.	S.S.W.	Clear. Aurora light in N. p.m.
24,	29.891	29.618	29.061	29.068	090	153	153	146	19.1	34.6	31.8	29.9	83	75	86	.86	S.W.	S.W.	S.W.	Clouded a.m. Generally clear p.m.
25,	29.498	29.514			168	226			34.0	39.9			86	93			S.W.	Calm.	Calm.	Light clouds generally.
26,	29.322	29.246	29.430	29.363	131	215	157	175	34.0	37.2	30.4	32.0	98	98	93	.91	Calm.	Calm.	Calm.	Clear a.m. Snow from 6 p.m.
27,	29.638	29.664	29.526	29.616	084	107	138	115	15.8	23.4	27.8	23.9	90	82	89	.86	S.W.	S.W.	W.S.W.	Clear. Rain from 3 p.m.
28,	29.658	29.722	29.677	29.677	159	165	177	166	31.6	36.8	33.3	33.8	90	76	94	.86	S.W.	W.S.W.	W.S.W.	Densely overcast.
29,	29.679	29.540	29.409	29.497	164	181	205	183	33.1	35.0	36.2	35.7	85	91	94	.90	E. by S.	E. by S.	E. by S.	Clear a.m. Raining from 3 p.m.
30,	29.262	29.201	29.202	29.263	216	230	209	205	37.1	40.9	37.8	36.1	99	94	93	.94	Calm.	Calm.	N.N.W.	Clear a.m. Snowy all day.
31,	29.590	29.824	29.089	29.837	073	082	066	074	15.6	19.8	11.8	15.8	79	74	81	.78	N. by W.	N.	Calm.	Clear a.m., day clear. Clear p.m., w. fresh.
Mean	29.627	29.596	29.610	29.614	126	143	131	133	23.6	29.5	26.1	26.1	90	83	87	.87				6.04

* Rain, 0.700. † Rain not appreciable. ‡ Rain, 0.415. § Rain, 0.375. ¶ Rain, 0.070. ** Rain, 0.550. †† Rain, 0.230.

To be corrected in the Register for December, 1815, { Temperature, at 7 a.m., on the 12th, for 1.6, read -1.6, or 1.6 below zero. Proportion of Wind from each Quarter—

Highest Barometer, ..	..	30.256 at 9 a.m. of 23d.
Lowest do. ..	..	28.929 at 2 p.m. of 2d.
Highest Temperature, ..	..	44° on 25th, p.m.
Lowest do. ..	..	1° 3' on 22d, a.m.
Mean Daily Range, ..	..	13°.9
Extreme Daily Range, ..	..	29°.3 on 31st, p.m.—1st Feb., a.m.

Proportion of Calm,

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 of the air capable of sustaining it at the existing temperature, saturation being represented by 100. The Instruments are Standard Instruments. The Rain Gauge 27 Feet above the soil. The Means entered are the Means by 24 hourly Observations, from 6 a.m. to 6 p.m.

The quantity of Rain received each 24 hours, is noted at 9 a.m., and is marked in inches.

The Observation entered in the column for 7, a.m., or Sundays, is actually taken at 9 a.m. The two Observations taken on Sunday are not included in any of the means.

Mean Temp. for Jan.,	179
1810	17.7
1841	25.5
1842	27.8
1843	27.8
1844	29.7
1845	29.7
1846	29.4