Monthly Meteorological Register, at the Provincial Magnetical Observatory, Toronto, Canada West.—January, 1855.

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. 6 A.M.	2 P.M.	10 P.M.	Mean.	Temp. of the Air. 6 A.M.	2 P.M.	10 P.M.	M'N.	Mean Temp. + or — of the Average	Tension of Vapour. 6 A.M.	2 P.M.	10 P.M.	M'N	Humid'y of Air. 6 A.M.	2 P.M.	10 P.M.	M'N	Wind. 6 A.M.	2 P.M.	10 P.M.	Mean Vel'y	Rain in Inch	Snow in Inch.
1	29·998	30·003	29·998	30·011	27·4	28·7	28·5	28·4	+ 3·2	0·131	0·127	0·129	0·129	·88	·80	·81	82	E b N	E	E b N	9·79	...	...
2	30·006	30·004	30·020	30·011	28·7	38·2	35·5	33·9	+ 8·6	·137	·137	·177	·148	87	60	80	77	E	E	E b N	5·39	...	...
3	30·026	29·991	29·888	29·963	33·7	44·5	37·5	38·0	+12·9	·149	·226	·184	·181	77	78	82	80	E b S	S E	Calm	1·60	...	...
4	29·797	·963	30·261	30·024	41·0	48·2	28·4	38·1	+13·0	·215	·319	·136	·210	84	95	87	88	Calm	NWbW	N b W	3·40	0·070	...
5	30·382	30·333	30·181	30·271	24·4	31·5	28·7	28·2	+ 3·0	·111	·145	·132	·132	82	81	82	84	Calm	E b N	E b N	10·93	0·040	...
6	29·975	29·898	29·799	29·881	35·5	45·8	44·9	41·9	+16·7	·192	·248	·269	·235	93	82	91	89	E b N	S S E	S E b S	4·40	0·015	...
7	·785	30·036	—	—	17·0	36·0	—	—	—	·312	·186	—	—	98	88	—	—	S W	W S W	—	9·40	...	...
8	30·552	30·454	30·279	30·394	21·9	33·2	30·2	27·6	+ 2·5	·103	·111	·150	·123	84	59	83	80	Calm	Calm	Calm	0·43	...	...
9	30·065	30·020	30·088	30·067	26·6	39·1	29·9	31·7	+ 6·6	·123	·138	·141	·131	83	58	84	73	Calm	W b S	Calm	6·32	...	...
10	30·275	30·213	29·935	30·127	21·1	25·1	24·1	23·2	— 1·8	·103	·114	·115	·108	89	82	80	84	N	S E b E	E S E	4·87	...	0·2
11	29·603	29·414	·302	29·427	25·1	31·8	31·0	30·0	+ 4·9	·121	·151	·162	·150	87	85	94	90	Calm	Calm	S W b S	1·55	0·040	...
12	·287	·291	·134	·231	34·8	39·5	37·6	37·3	+12·2	·168	·205	·222	·199	84	86	93	90	Calm	Calm	Calm	0·00	...	0·2
13	·026	·316	·728	·104	30·9	25·1	14·7	21·9	— 3·2	·158	·076	·072	·096	92	55	80	75	N W	NWbW	NWbW	18·50	...	...
14	·903	·780	—	—	4·7	16·0	—	—	—	·028	·076	—	—	73	74	—	—	N b E	S S W	—	6·92	...	0·2
15	·480	·496	·621	·539	24·4	29·2	25·6	26·4	+ 1·3	·089	·133	·125	·115	65	81	89	78	W S W	W b S	NWbW	3·82	...	0·7
16	·619	·712	·714	·691	17·2	25·1	24·8	22·3	— 2·7	·090	·105	·120	·106	91	76	88	85	N E b N	Calm	S E	4·02	...	0·3
17	·390	·304	·364	·350	29·4	38·4	33·0	33·6	+ 8·5	·139	·189	·173	·165	86	81	93	86	E	Calm	Calm	3·95	...	...
18	·393	·467	·537	·469	30·2	36·3	29·8	31·1	+ 6·1	·156	·138	·140	·137	89	64	84	78	Calm	SWbW	NWbW	7·94	...	Inap.
19	·558	·501	·475	·505	26·6	28·4	21·9	25·3	+ 0·5	·134	·105	·083	·109	91	66	70	78	W N W	N W	Calm	5·73	...	...
20	·332	·333	·483	·389	22·3	27·3	29·5	26·6	+ 1·8	·110	·127	·152	·131	88	84	94	89	Calm	N N W	SWbW	1·00	...	Inap.
21	·529	·231	—	—	27·7	28·0	—	—	—	·131	·134	—	—	86	87	—	—	N b E	E N E	—	14·40	0·360	3·0
22	28·717	·036	·411	·097	29·1	25·1	14·0	21·0	— 3·7	·149	·126	·078	·107	94	87	89	89	W S W	SWbW	SWbW	17·39	...	...
23	29.571	·621	·688	·633	5·4	15·1	10·4	9·9	—14·7	·056	·067	·065	·060	90	73	88	81	W	W S W	W b N	6·77	...	...
24	·676	·662	·712	·687	3·6	20·2	8·8	10·4	—14·2	·047	·072	·036	·051	84	64	52	67	Calm	W S W	Calm	2·90	...	...
25	·693	·495	·328	·482	4·0	22·6	21·9	16·8	— 7·9	·053	·103	·102	·086	92	82	84	83	Calm	N W	N	7·87	...	7·0
26	·124	·066	·042	·076	18·3	21·5	10·1	17·0	— 7·5	·091	·101	·064	·087	88	84	88	88	N	N	N N W	15·87	...	3·5
27	·131	·197	·334	·234	12·9	19·9	16·4	16·1	— 8·3	·063	·076	·086	·074	76	69	90	76	W N W	W N W	W S W	13·91	...	0·1
28	·348	·311	—	—	14·0	27·3	—	—	—	·075	·130	—	—	85	90	—	—	W N W	E b S	—	10·52	...	5·5
29	28·917	·034	·247	·080	26·9	33·3	20·2	23·3	— 0·9	·137	·115	·101	·117	93	88	90	91	N b E	S W b S	SWbW	16·52	...	2·0
30	29·385	·439	·593	·492	16·5	21·5	21·2	19·8	— 4·3	·076	·092	·103	·092	78	77	88	83	SWbW	SWbW	W S W	14·58	...	0·4
31	·686	·741	·774	·730	22·8	26·9	16·7	20·9	— 3·1	·111	·121	·073	·096	87	81	74	81	W S W	N N W	N	7·20	...	0·2
M	29·617	29·630	29·664	29·639	23·7	30.1	25·0	25·9	— 1·1	0·119	0·136	0·126	0·125	86	76	85	82	6·93	8·22	7·23	7·67	0·525	23·3

Highest Barometer..... 30·552, at 6 a. m. on 8th } Monthly range.
Lowest Barometer..... 28·717, at 6 a.m. on 22nd } 1·835 inches.
Highest registered temperature 49°·0, at a.m. on 7th } Monthly range:
Lowest registered temperature —5° 4, at a.m. on 14th } 54° 4.
Mean Maximum Thermometer..... 32° 83 } Mean daily range:
Mean Minimum Thermometer..... 17° 54 } 15° 29.
Greatest daily range.....35°·0, from a.m. of 13th to a.m. of 14th.
Least daily range ..... 5°·6, from p.m. of 1st, to a.m. of 2nd.
Warmest day..... 6th. Mean temperature..... 41°·87 } Difference,
Coldest day..... 23rd. Mean temperature..... 9°·95 } 31°·92.
Greatest intensity of Solar Radiation, 54°·0 on p.m. of 3rd } Range,
Lowest point of Terrestrial Radiation, —7°·8 on a.m. of 14th } 61°·8.
Aurora observed on 1 night: viz. 24th.
Possible to see Aurora on 8 nights.
Impossible to see Aurora on 23 nights.
Raining on 5 days. Raining 9·8 hours; depth, 0·525 inches.
Snowing on 13 days. Snowing 70·1 hours; depth 23·3 inches.
Mean of Cloudiness, 0·79.

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

North.	West.	South.	East.
1437·11	2890·78	1200·84	1525·57

Mean direction of the Wind, W 10° N.
Mean velocity of the Wind, 7·67 miles per hour.
Maximum velocity, 31·3 miles per hour, from 9 to 10 a. m. on 21st.
Most windy day, the 13th; mean velocity, 18·50 miles per hour.
Least windy day, the 12th; mean velocity, 0·00 " "

The early part of this month was remarkably fine and mild, being distinguished by very high readings of the Barometer. On the 8th, at 6 a.m., the reading was 30°·552, being the highest on record, and the mean for that whole day 30°·3942, is also the highest recorded. A great depression succeeded, reaching its lowest point between the 21st and 22nd, from which period the character of the weather changed to cold and stormy, with downfalls of snow, high winds prevailing for the next 14 days, and giving a mean velocity for that period of 11·48 miles per hour.

The monthly range of the Barometer (1·835 inches) is the greatest recorded. the temperature on the whole is 1° 6 above the average, and the fall of rain is 1·176 inches less, and that of snow 9·9 inches more than the mean of 15 years.

Comparative Table for January.

Year.	Temperature. Mean.	Dif. from Av'ge.	Max. obs'vd	Min. obs'vd	Range	Rain D's.	Rain Inch.	Snow. D's.	Snow. Inch.	Wind. Mean Velocity.	
1840	17·0	—7·3	40·6	—13·8	54·4	4	1·395	11	...	...	
1841	25·6	+1·3	41·7	— 4·1	45·8	2	2·150	14	...	0·36	lb.
1842	27·9	+3·6	45·8	+ 1·3	44·5	5	2·170	9	...	0·78	lb.
1843	28·7	+4·4	54·4	+ 1·5	52·9	6	4·295	12	14·2	0·69	lb.
1844	20·2	—4·1	44·6	— 7·7	52·3	7	3·005	11	24·6	0·70	lb.
1845	26·5	+2·2	43·0	— 3·4	46·4	5	Impf.	9	22·7	0·70	lb.
1846	26·7	+2·4	41·2	+ 0·3	40·9	5	2·335	10	6·0	0·55	lb.
1847	23·3	—1·0	42·6	— 2·2	44·8	7	2·135	5	7·5	1·09	lb.
1848	28·7	+4·4	51·5	—12·0	63·5	7	2·245	8	7·1	5·82	Miles.
1849	18·5	—5·8	40·1	—15·2	55·3	4	1·175	10	9·2	6·71	Miles.
1850	29·7	+5·4	46·3	+10·6	35·7	5	1·250	8	5·2	5·80	Miles.
1851	25·5	+1·2	43·2	—12·8	56·0	4	1·275	10	7·8	7·69	Miles.
1852	18·4	—5·9	37·3	— 7·0	44·3	0	0·000	19	30·9	7·67	Miles.
1853	23·0	—1·3	40·9	— 6·6	47·5	1	0·290	6	7·5	6·34	Miles.
1854	23·6	—0·7	45·2	— 4·3	49·5	7	1·270	11	7·5	6·86	Miles.
1855	25·9	+1·6	48·2	— 4·7	52·9	5	0·525	13	23·3	7·67	Miles.
										0·70	lbs.
M'n.	24·32		44·16	—5·01	49·17	4·6	1·761	10·4	13·4	6·82	Miles.