Monthly Meteorological Register, at the Provincial Magnetical Observatory, Toronto, Canada West.—February, 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	29·596	29·458	29·510	29·524	15·4	25·4	—1·4	12·3	—11·6	0·080	0·108	0.034	0·070	·87	·78	·71	·78	Calm	W	Calm	7·47	...	0 5
2	·335	·263	·195	·260	8 6	21·7	20·5	17·1	— 6·8	·058	·088	·098	·080	83	71	86	80	W S W	W S W	W	11·40	...	0·4
3	·264	·314	·391	·350	4·8	14·8	7·5	8·1	—15·6	·050	·066	·011	·052	85	73	66	75	W	W	W S W	13·97	...	0·5
4	·513	·425	—	—	-11·0	1·7	—	—	—	·021	·038	—	—	75	75	—	—	N b E	Calm	Calm	4·13	...	0·3
5	·356	·316	·686	·457	—9·0	6·6	—15·1	-7·6	—31·2	·019	·048	·010	·025	61	75	41	66	N N W	W N W	N	8·27	...	0·1
6	·763	·746	·763	·753	-24·2	-10·4	-10·6	-14·4	—37·9	·007	·020	·027	·023	45	65	90	68	N N E	N E b N	N E b N	9·19	...	2·5
7	·686	·527	·416	·546	—9·8	2·5	6·1	-0·3	—23·7	·023	·012	·058	·013	77	80	92	85	N E b N	N E	N E	13.21	...	2·5
8	·181	·155	·196	·481	5·0	15·6	13·8	11·1	—12·3	·054	·066	·081	·063	90	71	93	80	N b E	N b E	N b W	6·92	...	0·1
9	·196	·560	·692	·591	11·5	18·0	—2·5	9·3	—14·0	·069	·088	·031	·061	89	85	84	84	N b W	W N W	N N W	3·52	...	Inap.
10	·730	·716	·631	·691	10·7	23·3	19·0	17·7	— 5·6	·064	·088	·092	·082	83	69	85	80	Calm	S W b W	S W b S	6·06	...	4·0
11	·467	·551	—	—	19·4	28·7	—	—	—	·075	·099	—	—	68	62	—	—	S	Calm	Calm	2·07	...	...
12	·819	·764	·696	·759	14·4	28·7	28·7	14·2	+ 0·9	·076	·116	·115	·118	86	92	92	87	N b E	E S E	E b S	11·11	...	5·0
13	·624	·592	·505	·571	31·2	35·0	34·1	33·5	+10·3	·160	·168	·195	·175	92	83	99	92	E S E	E b N	E b N	12·36	1 705	...
14	·433	·451	·545	·480	34·8	36·2	33·9	34·8	+11·6	·199	·207	·179	·193	99	98	93	96	E N E	N N E	Calm	2·44	0·065	...
15	·526	·469	·441	·473	31·2	37·3	31·6	33·1	+ 9·8	·161	·193	·162	·171	91	87	92	91	S W b S	N W	N W	6·65	...	4·0
16	·359	·402	·488	·423	28·4	32·7	29·1	28·6	+ 5·2	·142	·161	·149	·143	90	89	91	90	N W b W	W S W	W	4·86	...	1·5
17	·526	·553	·611	·567	23·7	32·1	26·6	26·8	+ 3·5	·113	·157	·130	·130	86	87	89	87	W S W	W	W N W	5·51	...	0·2
18	·622	·612	—	—	25·2	34 1	—	—	—	·123	·162	—	—	89	82	—	—	W	N W	N W b N	11·50	...	*Inap.*
19	·691	·685	·751	·717	22·6	28·4	24·1	23·9	+ 0·4	·107	·139	·115	·114	85	89	86	86	N W b N	N N W	N N W	13·95	...	0·2
20	·830	·870	·965	·910	19·7	31·2	19·9	23·1	— 0·5	·094	·129	·081	·100	85	75	73	78	N N W	N W b N	N W	8·83	...	...
21	·991	·962	·859	·936	14·8	33·5	15·4	20·8	— 3·0	·078	·130	·061	·090	86	69	68	75	W N W	S W b S	S W b S	1·95	...	...
22	·696	·650	·776	·712	26·2	33·3	21·4	26·5	+ 2·6	·132	·114	·120	·126	91	75	89	86	S W	N W b W	N b W	11·76	...	...
23	·834	·831	·858	·843	5·0	11·6	0·7	4·6	—19·3	·043	·053	·032	·041	73	67	65	69	N	N N W	N N W	7·77	...	...
24	·858	·771	·776	·797	—6·4	13·6	—1·4	2·3	—21·9	·027	·067	·037	·042	76	77	81	75	W N W	W b N	W b N	6·90	...	...
25	·676	·522	—	—	—8·2	13·1	—	—	—	·024	·045	—	—	71	53	—	—	W b S	W	W	12·66	...	...
26	·443	·382	·463	·435	6·1	16·3	13·3	11·7	—12·8	·013	·060	·069	·058	70	63	81	73	W b N	W b N	W	12·75	...	Inap.
27	·536	·679	·829	·705	11·5	17·2	6·1	11·3	—13·4	·068	·069	·017	·059	86	69	76	75	N N W	N W b W	N N W	8·87	...	...
28	·928	30·002	30·076	30·011	1·5	20·8	10·1	11·4	—13·5	·040	·050	·059	·051	80	44	80	67	W b N	N N E	W N W	2·65	...	...
M	29·617	29·602	29·644	29·625	11·6	21·9	13·9	15·4	— 8·3	0·080	0·104	0·086	0·088	·85	76	82	·80	6 19	Miles. 10·14	Miles. 8·56	Miles 8·17	1·770	21·8

Highest Barometer..... 30·088, at 12 p.m. on 28th } Monthly range:
Lowest Barometer..... 29·172, at 12 p.m. on 2nd } 0·916 inches.
Highest registered temperature +39° 0, at p.m., 15th } Monthly range:
Lowest registered temperature —25°·4, at a.m. on 6th } 64° 4.
Mean Maximum Thermometer..... 23°·19 } Mean daily range:
Mean Minimum Thermometer..... ..... 4°·81 } 18° 38.
Greatest daily range.....34°·2, from p.m. of 5th to a.m. of 6th.
Least daily range ..... 5°·9, from p.m. of 13th, to a.m. of 14th.
Warmest day..... 14th. Mean temperature.....+34° 83 } Difference,
Coldest day..... 6th. Mean temperature.....—14° 38 } 49°·21.
Greatest intensity of Solar Radiation, +60° 5 on p.m. of 15th } Range,
Lowest point of Terrestrial Radiation, —31°·0 on a. m. of 6th } 91°·5.
Aurora observed on 4 night: viz. 9th, 11th, 20th, and 21st.
Possible to see Aurora on 12 nights. Impossible on 16 nights.
Raining on 2 days. Raining 20·5 hours: depth, 1·770 inches.
Snowing on 14 days. Snowing 98·0 hours; depth 21·8 inches.
Mean of Cloudiness, 0 71.

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

North—2713·64 West—2786·04 South.—463·75 East—937·49.
Mean direction of the Wind, N 37° W.
Mean velocity of the Wind, 8·17 miles per hour.
Maximum velocity, 25·0 miles per hour, from 3.30 to 4.30 p.m. on 1st.
Most windy day, the 3d; mean velocity, 13·97 miles per hour.
Least windy day, the 21st; mean velocity, 1·95 " "
Most windy hour, 9 p.m. Mean velocity, 10·45 miles per hour.
Least windy hour, 4 a.m. Mean velocity, 5·92 miles per hour.
Mean diurnal variation, 4·53 miles.

The mean temperature of this month has been 7°·7 below the average, being the coldest month during the 16 years, with the single exception of February, 1843. The minimum temperature, —25°·4, is the lowest on record; the nearest approach to it being —18°·4, which occurred on January 16th, 1840.

The first ten days of the month were remarkable for a continuance of extreme cold, the fifth and sixth days (—7°·6 and —14°4) being the coldest yet recorded, the next coldest day of the whole series being Jan 10th, 1848, the mean temperature of which was —5° 3 The range of temperature on the whole month has been very great (64°·4), and has only once been surpassed, namely, in April, 1842, in which month the extreme range (69°7) was caused by an unusually high temperature for the season (89°·8), supposed to be occasioned by a fire in the western woods. The barometer has been remarkably steady during the month, and high winds have been prevalent, though without attaining extreme violence. The velocity of the wind for the whole month is not only the greatest for any February yet recorded, but absolutely the highest for the eight years, with the single exception of December, 1854.

23d, at 7 a.m.—Segment of halo round the sun, and very bright Parhelion on the south side of the halo.

Comparative Table for February.

Year.	Temperature Mean.	Dif. from Av'ge	Min. obs'vd	Max. obs'vd	Range	Rain. D's.	Inch.	Snow. D's.	Inch.	Wean M Velocity.	
1840	28·0	+4·9	— 8·3	49·1	57·4	8	1·475	6	...	...	
1841	22·4	—0·7	— 0·3	43·4	43·7	1	0·000	9	...	0·61	lb.
1842	26·9	+3·8	+ 2·5	48·7	46·2	8	3·625	9	...	1·03	lb.
1843	14·5	—8·6	—10·2	37.5	47·7	1	0·475	21	14·4	1·05	lb.
1844	26·0	+2·9	— 0·4	47·1	47·5	4	0 430	7	10·0	0·43	lb.
1845	26·0	+2·9	— 3·9	46·6	50·5	5	Impf.	9	19·0	0·99	lb.
1846	20·4	—2·7	—16·2	41·4	57·6	0	0·000	13	46·1	0·65	lb.
1847	21·5	—1·6	— 1·0	42·2	43·2	2	0·550	13	27·3	0·69	lb.
1848	26·6	+3·5	— 0·6	46·9	47·5	4	0·775	8	10·8	5·69	Miles.
1849	19 5	—3·6	— 9·2	41·1	50·3	2	0.240	13	19·2	6·58	Miles.
1850	26·0	+2 9	+ 1·3	49·2	47·9	7	1·235	9	23·1	7·61	Miles.
1851	27·6	+4·5	+ 1·3	50·2	48·9	7	2·600	4	2·4	6·94	Miles.
1852	23·4	+0 3	— 3·2	4. 2	44·4	3	0·650	11	13·0	6·42	Miles.
1853	24·1	+1·0	— 0·6	43·4	44·0	4	1·030	15	12·6	7·29	Miles.
1854	21·1	—2·0	— 5·7	42·7	48·4	5	1·460	15	18·0	6·91	Miles.
1855	15·4	—7·7	—25·0	37·3	62·3	2	1·770	14	21·8	8·17	Miles.
										0·78	lbs.
M'n.	23.09		—4·97	44·25	49·22	3·9	1·088	11.0	18·3	6·95	Miles.