

H.M. Magnetic Observatory, Toronto, C. W.—JULY, 1852.

Elevation above Lake Ontario, 108 feet.

Humidity of Air				Wind			Rain:	WEATHER.
6 A.M.	10 A.M.	3 P.M.	10 P.M.	6 A.M.	2 P.M.	10 P.M.	inches	
.67	.87	.85	N b E	NE b N	N	0.590	Overcast. Constant rain from 0.40 pm. till 10pm	
82	57	60	66	NW	W N W	W b S	Cloud'd with d'tach'd masses. Halo rou'd moon	
70	58	86	70	W	W	Calm	Few light clouds am. Uncloud'd, very fine pm.	
84	63	..	..	Calm	S	S	Am unclouded. A few passing clouds pm. Fine.	
92	63	77	78	Calm	ESE	Calm	unapp Clear with faint aurora fr'm 10pm cont'g till mid	
84	75	84	78	Calm	Calm	"	0.200 Thund'rs fr'm 7 am, auroral streamers 10 to 11 pm	
90	69	88	82	Calm	Calm	"	Constant light'n'g fr'm 8 pm, aur fr 9.30 till midt.	
81	69	81	79	Calm	SSR	"	Gen'y clear, sheet and forked lightning 8 to 9 pm	
84	93	96	89	Calm	S b W	"	0.960 Heavy thunderstorm 1 to 3 pm, rain and hail.	
76	67	79	74	N b E	E b S	NNE	Faint auroral light from 9.30 pm till midnight.	
90	53	..	..	E b N	SSR	W b N	0.180 W'ly cloud'd, thud'st'm. It n'g, rain 3 to 3.30pm	
90	71	85	78	W b S	SE b E	Calm	0.005 Faint aurora from 10.45 pm, shower during night	
87	87	81	86	E b N	E	NNW	0.130 Occasional showers, distant thunder during day.	
91	49	79	66	NW b W	NW b N	N b W	.. Almost unclouded. Very fine.	
76	59	72	67	N	S b E	Calm	.. Unclouded but slight haze diffused. Very fine.	
82	48	83	68	Calm	SSE	E b N	.. Very heavy dew a m, light clouds and haze, fine.	
73	57	74	68	N b E	SSE	N	.. Light clouds dispersed, generally clear and fine.	
65	71	..	..	NE b N	SE b S	Calm	.. Light clouds am, uncloud'd and very fine p.m	
81	55	81	66	Calm	ESE	ENE	.. Generally clear, a few passing clouds, fine.	
90	61	85	75	Calm	S b E	S	.. Light clouds and haze during day, clear fr'm 10pm	
90	39	69	63	Calm	SW b W	Calm	.. Light detached clouds, haze round horizon, fine.	
75	57	64	57	Calm	S	NW b N	.. Unclouded, haze round horizon, fine day.	
78	60	77	61	Calm	SSE	N	.. Almost unclouded. Very fine day.	
74	51	81	67	N b E	SE	Calm	.. Light flexuous clouds dispersed, mostly clear.	
83	81	..	..	Calm	Calm	"	0.160 Overcast, it rain fr'm 1.40 pm. Foggy at midnight	
91	49	69	66	Calm	NNW	NNW	.. Light passing clouds. Mostly clear.	
74	51	73	66	NW b N	S b E	NE	.. Almost unclouded. Very fine.	
79	53	85	77	Calm	SE b E	Calm	.. Clear, save a few passing detached clouds, fine.	
86	71	72	78	Calm	S	WNW	1.860 Thud'st'm 2 to 4 pm great do. fr'm 10.30pm to mid	
91	57	72	66	SW b S	W b N	NW	.. Dense passing clouds, with large clear intervals.	
86	57	81	75	Calm	W b N	Calm	.. Gen'y overcast, light clouds, faint aur. at 11pm	
.63	.63	.77	.72	Miles: 1.63	Miles: 5.83	Miles: 1.81	1025	

Sum of the Atmospheric Current in Miles, resolved into the four Cardinal Directions:

North.	West.	South.	East.
1063.59	977.60	651.28	505.17
Mean velocity of the wind—3.33 miles per hour.			
Max. velocity—17.9 miles per hour, from 2 to 3 p.m. on 30th.			
Most windy day—30th: mean velocity—10.16 miles per hour.			
Least windy day—25th: mean velocity—0.20 ditto.			
Hour of greatest mean velocity—3 p.m.: mean velocity—5.84 do.			
Hour of least " —4 a.m.: do. —1.10 do.			
Mean diurnal variation—4.74 miles.			

The velocity of the wind for a space of four minutes during the thunderstorm on the night of 29th, was at the rate of 38 miles per hour.

COMPARATIVE TABLE FOR JULY.

Year	TEMPERATURE				RAIN		Wind.	
	Mean	Max.	Min	Range	Days	Inches	Mean velocity.	
1810	65.84	79.4	47.2	31.2	6	5.270	Miles.	
1811	65.01	86.3	41.2	45.1	10	8.150		
1812	64.25	90.5	32.0	48.5	4	3.650		
1813	61.13	86.1	40.2	45.9	8	1.665		
1814	65.61	87.1	40.5	46.6	12	2.875		
1815	66.21	91.6	45.6	46.0	7	2.195		
1816	67.7	94.0	44.9	49.1	9	2.895		
1817	67.93	87.5	43.8	44.7	8	3.355		
1818	65.72	82.7	46.7	36.0	10	1.890		4.91
1819	64.32	89.1	51.0	38.1	4	3.415		5.52
1850	69.01	81.9	52.8	32.1	12	5.270		4.96
1851	65.41	82.7	52.1	30.6	12	3.625		4.13
1852	66.68	90.1	49.5	40.6	8	4.025		3.33
Mean	66.31	87.23	49.19	41.04	8.5	3.889		4.19.