

Meteorology.

From the Records of the Montreal Observatory, Lat. 45° 31' North; Long. 4h. 54m. 11 sec. West of Greenwich. Height above the level of the sea, 182 feet. For the month of December, 1871. By CHARLES SMALLWOOD, M.D. LL. D., D.C.L.

DAYS.	Barometer corrected at 32°			Temperature of the Air.			Direction of Wind.			Miles in 24 hours.
	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	7am	2pm	9pm	
	1	29.900	29.886	29.834	-2.5	19.2	10.0	w	w	
2	.997	30.051	.994	1.0	27.0	22.2	w	w	w	221.11
3	.996	29.988	.860	28.0	46.0	33.0	sw	sw	sw	77.81
4	.601	.284	.132	35.0	37.3	55.5	w	ne	w	66.15
5	.397	.504	.711	3.0	2.8	-1.0	w	w	w	102.17
6	.900	.852	.647	-10.7	10.9	9.8	w	w	sw	124.10
7	.320	.416	.452	20.1	27.0	24.0	w	w	w	90.64
8	.999	.974	.930	20.4	24.8	24.0	w	w	w	67.20
9	.766	.984	.971	17.5	19.0	18.2	nw	w	w	104.10
10	.788	.701	.637	24.0	26.3	26.0	w	sw	w	86.27
11	.726	.732	.747	19.2	30.0	23.0	w	w	w	91.12
12	.898	.984	30.090	20.2	30.1	25.0	nw	nw	w	99.12
13	.961	.824	29.781	10.9	21.0	15.1	ne	ne	ne	71.26
14	.894	.946	.994	17.2	19.0	12.0	w	w	w	84.29
15	30.021	30.026	30.030	8.7	15.1	12.0	w	w	nw	161.74
16	.025	.001	29.993	10.3	14.3	14.1	w	w	w	67.71
17	29.849	29.930	30.080	26.3	32.0	32.0	sw	w	sw	59.12
18	30.050	.767	29.850	28.5	29.2	39.0	w	ne	w	26.10
19	29.991	.667	.551	11.7	16.6	13.1	w	ne	ne	87.71
20	.448	.473	.632	3.8	9.1	-1.6	nw	nw	nw	89.20
21	.759	.946	30.280	-22.4	-2.2	-12.9	w	w	w	166.14
22	30.360	30.176	.104	0.0	18.2	12.0	sw	sw	sw	210.71
23	.100	29.660	29.380	14.5	34.0	39.0	se	sw	sw	91.11
24	.000	30.160	.964	31.1	30.0	31.0	w	w	w	114.12
25	29.801	29.798	.989	34.8	39.6	30.0	sw	sw	sw	84.10
26	30.181	30.162	30.000	8.0	10.0	10.0	w	ne	ne	24.12
27	29.614	29.663	29.904	11.4	18.6	10.0	ne	w	w	125.17
28	30.149	30.162	30.170	0.0	24.9	15.0	w	sw	sw	206.14
29	.045	.004	.250	16.6	26.3	19.0	sw	sw	w	79.12
30	.462	.425	.311	-1.0	6.0	15.0	ne	ne	ne	104.12
31	29.996	29.941	29.900	31.5	32.0	25.3	sw	sw	sw	206.16

REMARKS.

The highest reading of the Barometer was on the 30th day, and was 30.462 inches; and the lowest on the 4th day, 29.132 inches. The monthly mean was 29.885 inches, and the monthly range 1.330 inches.
 The highest temperature was observed on the 3rd day, 46°; the lowest 22° 9' (below zero), on the 21st day. The monthly mean was 18° 50', which is two-tenths of a degree lower than the "Isotherm" for Montreal for the month of December.
 Rain fell on 3 days, amounting to 0.413 inches. Snow fell on 21 days, amounting to 26.79 inches.

—Observations taken at Halifax, N. S., during the month of Dec. 1871; Lt. 44° 39' N., Lg. 63° 36' W.; height above the Sea 175 feet by Sergt. Thurling, A. H. Corps, Halifax.

Barometer, highest reading was on the 25th.....	30.524 inches
lowest " " 20th.....	28.997
range of pressure.....	1.527
mean for month (reduced to 32°).....	29.755
Thermometer, highest in shade on the 24th.....	49.7 degrees
lowest " " 22nd.....	-4.0
range in month.....	53.7
mean of all highest.....	34.4
mean of all lowest.....	15.7
mean daily range.....	18.7
mean for month.....	25.0
maximum reading in sun's rays.....	97.2
minimum reading on grass.....	-6.0
Hygrometer, mean of dry bulb.....	26.4
mean of wet bulb.....	24.8
mean dew point.....	16.7
elastic force of vapour.....	.093
weight of vapour in a cubic foot of air.....	1.1 grains.
weight required to saturate do.....	0.6
the figure of humidity (Sat. 100).....	65
average weight of a cubic feet of air.....	568.5 grains.
Wind mean direction of North.....	14.25 days.
" " East.....	0.25
" " South.....	2.25
" " West.....	14.25
mean daily force.....	2.3
mean daily horizontal movement.....	265.2 miles.
Cloud, mean amount of, (0-10).....	8.1
Ozone, mean amount of, (0-10).....	3.9
Rain, No. of days it fell.....	6 days.
Snow, No. of days it fell.....	18
Amount collected on ground.....	3.93 inches.
Fog.....	3 days.

From the Records of the Montreal Observatory, Lat. 45° 31' North; Long. 4h. 54m. 11 sec. West of Greenwich. Height above the level of the sea, 182 feet. For the month of January, 1872. By CHARLES SMALLWOOD, M.D., LL. D., D.C.L.

DAYS.	Barometer corrected at 32°			Temperature of the Air.			Direction of Wind.			Miles in 24 hours.
	7 a. m.	2 p. m.	9 p. m.	7 a. m.	2 p. m.	9 p. m.	7am	2pm	9pm	
	1	30.100	30.575	30.530	34.5	25.0	19.0	w	w	
2	.611	.041	.004	16.6	21.3	7.2	ne	ne	ne	81.27
3	.251	.162	.125	8.6	18.2	18.0	ne	ne	ne	98.74
4	.021	.001	.090	19.1	26.0	31.0	ne	ne	ne	90.64
5	.020	29.994	29.846	29.0	32.0	31.0	ne	ne	w	84.61
6	29.601	.863	30.071	31.0	30.0	5.0	w	w	w	79.24
7	30.175	30.218	.327	-9.9	3.6	3.5	w	nw	nw	284.20
8	.366	.309	.261	7.6	16.0	4.0	w	w	w	287.91
9	.067	29.989	.000	2.3	26.2	23.0	w	w	w	104.12
10	.080	30.041	.025	23.1	28.5	28.0	w	w	w	96.66
11	29.912	.642	29.411	27.5	32.5	32.5	w	sw	sw	104.12
12	.399	.548	.551	30.5	42.0	34.0	w	w	w	118.17
13	.532	.724	.975	34.0	30.0	16.1	w	n	ne	91.12
14	30.100	30.112	30.150	5.0	26.0	8.0	n	n	w	104.20
15	.082	.036	.025	-1.2	16.0	6.5	w	nw	w	84.12
16	.000	.017	.149	0.4	20.0	16.0	ne	ne	ne	52.10
17	.201	.097	.051	7.6	24.2	17.6	w	n	w	109.24
18	29.862	29.776	29.830	7.5	23.7	27.0	w	w	w	184.12
19	.974	30.000	.831	26.5	30.5	28.0	w	w	w	94.24
20	.421	29.401	.636	12.4	34.0	25.0	sw	w	w	86.29
21	.750	.682	.700	15.2	33.1	24.6	w	w	w	114.12
22	.610	.522	.475	26.6	31.0	30.2	w	ws	w	129.00
23	.261	.612	.752	31.0	16.1	11.0	sw	w	w	201.17
24	.886	.671	.711	-3.4	19.7	2.1	w	w	w	251.19
25	.550	.502	.475	2.0	22.0	12.1	w	w	w	97.14
26	.402	.416	.430	9.8	32.0	20.0	w	w	w	209.17
27	.460	.519	.601	14.8	23.8	21.0	w	w	w	110.14
28	.500	.511	.500	-19.5	23.2	20.0	w	w	w	96.00
29	.451	.530	.742	14.9	18.2	8.0	w	w	w	186.13
30	.961	30.000	30.025	0.5	26.0	16.2	w	w	w	204.17
31	.980	29.999	.010	10.1	31.1	12.0	w	w	w	181.16

REMARKS.

The highest reading of the Barometer was on the 1st day, and was 30.530 inches; the lowest on the 23rd day, 29.260 inches. The monthly mean was 29.747 inches.
 The highest temperature was on the 12th day, 42° 0'; the lowest on the 7th day, 9° 9' (below zero). The monthly mean was 19° 34', which is 5° 34' higher than the "Isotherm" for Montreal for the month of January.
 Rain fell on 3 days, amounting to 0.576 inches. Snow fell on 11 days, amounting to 13.60 inches.

—Observations taken at Halifax, N. S., during the month of Jan. 1872; Lt. 44° 39' N., Lg. 63° 36' W.; height above the Sea 175 feet by Sergt. Thurling, A. H. Corps, Halifax.

Barometer, highest reading on the 3rd.....	30.385 inches.
lowest " " 26th.....	29.125
range of pressure.....	1.260
mean for month (reduced to 32°).....	29.588
Thermometer, highest in shade on the 5th.....	46.0 degrees
lowest " " 25th.....	-3.0
range in month.....	49.0
mean of all highest.....	32.0
mean of all lowest.....	15.1
mean daily range.....	16.9
mean for month.....	23.5
highest reading in sun's rays.....	86.0
lowest on grass.....	-5.0
Hygrometer, mean of dry bulb.....	25.4
mean of wet bulb.....	23.7
mean dew point.....	14.3
elastic force of vapour.....	.083
weight of vapour in a cubic foot of air.....	1.0 grains.
weight required to saturate do.....	0.6
the figure of humidity (Sat. 100).....	61
average weight of a cubic foot of air.....	566.4 grains.
Wind, mean direction of North.....	20.75 days.
" " East.....	0.50
" " South.....	3.25
" " West.....	6.50
daily horizontal movement.....	276.7 miles.
daily force.....	2.4
Cloud, mean amount of (0-10).....	7.1
Zone, mean amount of (0-10).....	3.7
Rain, No. of days it fell.....	4 days.
Snow, No. of days it fell.....	13
Amount of rain and melted snow collected.....	3.27 inches.