

1860	10. A.M			Hygr	Wind		Rain		
Jan Y	E	A	Bar:		Force	Dir:	Square	Globe	
1	47.4	46.7	28.988	47.6	5	SWbW	0.130	0.296	o. y. rain - n.
2	44.3	43.1	29.051	44.7	10	SW	0.210		
3	39.	41.6	28.797	39.5	15	NEbE	0.238	0.128	o. y. 27. K. KS. n. occasional showers
4	42.5	43.4	28.426	42.9	16	SW	0.288	0.423	o. m. q. n. much rain
5	37.	40.6	28.486	37.7	4	NE E	0.351	0.466	o. m. rain n.
6	37.5	39.	29.461	37.4	1 1/2	N	0.326	0.138	o. y. rain. n.
7	34.3	37.9	29.995	34.3	2 1/2	SWbW	0.242	0.023	b. y. K.S.
8	41.5	40.8	29.870	41.2	3 1/2	SW	0.268	0.001	o. y. c. CS. S
9	36.7	39.4	29.897	36.2	0	WNW	0.001	0.074	a. y. K. KS. S
10	30.9	37.	30.027	30.9	2 1/2	WbS	0.023	0.265	o. m. m. n. rain.
11	33.	36.1	29.940	33.7	2	SbW	0.246	frozen	b. m. m. K. CK. Hygr frozen
12	39.5	38.3	29.780	40.2	1	ES E	frozen	frozen	o. m. K. KS.
13	41.6	40.4	29.878	42.8	4	S	0.009	0.040	o. m. K.S.
14	44.	42.1	29.600	44.4	3	SbE	0.019	0.057	o. m. K.S.
15	50.2	46.1	29.021	50.3	9	SbW	0.051		o. y. K. CK.
16	36.2	38.1	29.767	36.3	6	SSW	0.037	0.316	o. m. q. rain n. Bar. heaving
17	34.6	37.	29.835	34.9	4	SSW	0.163	0.178	b. y. K. S. CK.
18	39.	40.1	29.367	39.3	6	SS E	0.001	0.135	b. y. CS
19	39.2	40.	29.387	39.4	2	SW	0.093	0.135	o. m. q. rain n.
20	35.7	40.	29.039	35.1	2 1/2	SW	0.026	0.261	b. y. CS. CK. KS. S.
21	40.9	39.6	28.241	41.2	11	SSW	0.176	0.292	b. y. CS. CK. S
22	38.2	39.5	28.884	38.8	5	WbS	0.187	0.486	o. m. q. K. n. Bar. heaving
23	34.9	38.1	29.031	35.5	4 1/2	SWbW	0.230	0.950	b. y. K. CK.
24	32.8	37.2	28.396	32.3	0	SWbW	0.324	0.005	b. y. CS.
25	35.	37.2	29.228	35.3	3	WNW	0.000	frozen	fog.
26	33.6	35.1	29.424	33.6	3	S	0.232	frozen	b. y.
27	34.8	36.1	29.254	34.2	4	ES S	frozen	frozen	o. y. KS. S. Hygr frozen
28	31.6	32.9	29.761	31.7	4 1/2	SbW	0.360	0.794	o. y. K.
29	35.	35.9	29.316	35.3	4	SW	0.385		o. y. KS. Hygr frozen
30	37.1	37.1	28.671	37.3	4 1/2	E	0.149	0.310	b. y. c. CK.
31	32.1	35.4	29.519	32.1	1	SW	0.158	0.205	o. y. rain. n.
mean	39.73	39.09	29.301	37.97	-	Sum	0.212		b. m. KS. S Hygr frozen
				36.93			3.797	5.744	

Bar. heaving

at 11 1/2 Am -	28.214
- 0.002 -	28.202
- 0.002 -	28.153
- 1. -	28.160
- 1 1/2 -	28.131
- 2 -	28.120
- 3 -	28.109
- 3 1/2 -	28.055
- 4 -	28.057
- 4 1/2 -	28.093
- 5 -	28.079

1860	10 P. M.			11	Wind		Max:	Min:		
Jan 5	E	A	Bar:	Hyg.	Force	Dir:	T	T		
1	40.2	43.6	29.020	40.2	8	SWbS	53.7	41.	b ₁₀ .Y.	
2	41.5	43.8	29.341	42.1	7	SbW	47.3	39.5	o.Y.	KS.S
3	45.3	42.6	28.418	40.2	1½	E	46.9	39.6	o.m.	KS.
4	38.8	42.1	28.425	40.4	7	SWbS	47.	39.5	o.Y.	KS.n. light rain.
5	36.6	39.1	28.900	38.2	2½	N	40.7	36.8	o.VV.	K.KS.
6	33.6	39.7	29.893	35.1	2½	SbW	41.7	34.3	b ₁₀ .VV	
7	39.4	39.2	29.834	33.5	6	SbW	40.5	32.1	o.VV.	KS
8	37.3	40.	29.928	32.8	1	W	43.8	37.5	o.V.	Bar. heaving - drizzle n.
9	33.4	39.1	29.925	32.6	2	NbW	39.9	34.	fog.	
10	33.1	37.1	30.034	33.6	0	SWbW	35.6	29.9	o.Y.	K.
11	37.	38.4	29.770	32.4	2	SE	38.2	31.1	o.V.	KS.
12	42.3	39.	29.848	37.2	3	SbE	43.5	37.4	o.Y.	KS.S. n. rain immediately
13	44.8	42.1	29.767	43.2	7	SE	46.3	39.6	b ₁ .Y.	KS.K.
14	44.	43.7	29.348	45.4	7	S	47.8	41.3	o.m.	light rain. n.
15	38.8	39.5	29.528	44.6	4½	SWbW	52.	34.7	b ₈ .V.	KS.
16	31.9	39.	29.831	43.7	4	SWbW	41.9	32.2	b ₁₀ .V	
17	40.1	40.4	29.535	32.5	6	SEbS	41.4	30.9	b ₁ .Y. 99.	KS.S.
18	38.8	40.2	29.372	32.1	0	SEbE	42.	39.3	o.m.	n. rain
19	40.1	40.4	28.965	38.7	7½	SbE	41.6	37.2	o.g.	drizzle. n.
20	32.9	38.4	29.104	39.1	3	SW	43.7	33.4	b ₁₀ .V.	
21	41.6	40.7	28.374	40.3	9	WbN	42.7	33.5	b ₁ .Y. 99.	KS. Bar. heaving very much -
22	35.1	39.1	28.996	32.3	4	WbS	43.5	35.3	b ₉ .Y.	S
23	34.9	38.1	28.404	35.4	0	WbW	38.2	33.5	o.m.	KS. at 11½ N
24	33.7	37.	28.695	35.2	2	NbE	36.5	31.4	b ₇ .Y.	S. stars dim
25	28.3	36.7	29.550	34.7	3	SSW	39.7	29.1	b ₁₀ .V	
26	34.7	36.	28.874	34.3	2	SE	36.3	27.9	o.Y.	KS. much snow & sleet in the afternoon
27	26.8	33.7	29.839	35.1	2	SbW	37.3	27.6	b ₉ .Y.	S. Hyg. frozen
28	34.8	36.1	29.305	27.1	3	SW	39.1	26.9	b ₉ .Y.	Low auroral arch over W
29	33.1	37.2	29.242	34.2	3	SWbS	39.9	31.7	b ₈ .Y.	S. CS.
30	34.3	36.6	29.308	32.2	4	SE	39.	33.4	b ₄ .VV.	K. CK.
31	27.6	36.1	29.572	34.6	1	SW	37.1	27.9	b ₇ .m.	K. CK. Hyg. frozen -
Mean	36.45	39.16	29.320	31.3			42.09	34.15		

1860	10 A.M.			Hyg ^r	Wind		Rain				
February	E	A	Bar:		Dir:	Force	Square	Round			
					Force	Direction					
♀ 1	30.1	34.4	29.719	29.93	0	SW	frozen	frozen	a. y. m.	K. CK. Hyg ^r frozen	
2	34.9	35.2	30.084	35.6	3	SWW	do	do	b. y.	K. CK.	
3	34.4	35.5	30.194	34.2	3	SWbW	do	do	b. y.	K. CK. CS. KS. Hyg ^r frozen	
4	45.1	39.8	29.965	45.5	6	WSW	—	0.028	b. m.	CK. K.	
○ 5	44.	42.4	29.667	44.3	5	W	—	0.022	0.164	0. y.	S. CS. CK.
6	34.2	37.9	29.761	34.7	4	WbN	frozen	frozen	b. y.	K. CK. Snow on ground	
7	38.3	37.4	29.753	38.2	6	SWbS	0.024	0.128	0. y.	K. KS.	
8	41.9	41.3	29.357	41.3	4	WbN	0.207	0.366	0. y.	K. KS. S.	
9	31.4	35.1	29.825	31.3	1	N	frozen	frozen	b. y.	Hyg ^r frozen.	
10	30.3	34.	29.884	30.5	2	WbN	frozen	frozen	b. y.	Hyg ^r frozen.	
11	35.	36.1	29.511	35.1	0	SWbW	frozen	frozen	b. y.	C. CS.	
○ 12	32.7	34.	30.215	32.6	3	NbE	frozen	frozen	b. y.	K. KS. S.	
13	29.2	33.	30.551	29.7	1	N	frozen	frozen	b. y.	S.	
14	27.	31.2	30.572	27.1	1	SW	frozen	frozen	b. y.	S. CS. Hyg ^r frozen.	
15	37.6	35.1	30.480	37.6	1 1/2	NbW	0.118	0.147	0. y.	S. CS. Hyg ^r frozen.	
16	44.3	38.4	30.228	44.5	3	N 1/2 W	—	0.011	0. y.	K. KS.	
17	42.9	39.7	30.415	43.5	3	N	—	—	0. y.	K. KS. S.	
18	43.4	40.	30.457	43.8	2	WNW	—	—	0. y.	K. KS.	
○ 19	42.	40.6	29.519	41.9	6	WNW	0.003	0.010	b. y. g.	K. CK. Bar. heaving	
20	34.6	35.4	29.515	34.9	6	N. & W	frozen	frozen	b. y.	K. CK. Hyg ^r frozen.	
21	35.6	36.9	29.647	35.4	0	WbS	frozen	frozen	b. y.	K. CK. KS.	
22	37.	36.5	29.761	37.1	4 1/2	SSW	0.009	0.070	0. y.	K. CK. KS. S.	
23	43.5	40.7	29.747	42.9	6	SbW	—	—	0. y.	K. KS.	
24	44.8	42.	29.641	45.3	6	SSW	0.024	0.121	0. m.	K. KS.	
25	44.1	42.7	29.481	44.4	8	SSW	0.004	0.011	0. y. g.	K. KS. S. Bar. heaving	
○ 26	44.	42.5	29.040	44.3	4	SW	0.021	0.447	0. y.	K. KS. CK.	
27	36.8	39.1	28.935	37.1	7	WbN	0.145	0.558	b. y. g.	K. CK. Bar. heaving	
28	37.3	39.1	29.091	37.4	4	SWbW	frozen	frozen	0. y.	KS. about 3 inches of snow on ground.	
29	33.4	37.1	29.728	34.2	4	WbS	frozen	frozen	b. y.	S. more snow during night	
				33.1							
mean	37.58	37.69	29.812	37.71			0.395	2.061			
				36.13			1.128				

1860	10 P.M.			Hygr	Wind		Max.	Min.		
February	E	A	Bar:		Force	Dir $\frac{2}{2}$	T	T		
1	33.4	35.8	29.970	33.6	3	NbW	38.4	26.9	6 ₂ .VV.	K. CK.
2	31.7	36.1	30.283	30.7	2	NbE	38.2	30.8	6 ₁ .VV.	K.
3	40.1	38.	30.032	32.0	5	SW	41.4	31.5	0. Y.	KS
4	45.5	41.5	29.845	40.6	8	WSW	47.5	40.	0. VV. 2.	K. Bar: heaving
5	34.	40.1	29.556	39.2	3	WbN	46.4	35.1	6 ₈ .VV.	K. CK.
6	30.6	38.4	29.990	46.1	3 $\frac{1}{2}$	NW	40.4	31.9	6 ₇ .VV.	KS. Hygr frozen
7	43.7	41.	29.533	44.2	6	WSW	46.7	31.3	0. VV. 9.	K.
8	31.5	37.	29.648	34.4	2	N	45.6	32.	6 ₆ .VV.	K. CK.
9	27.5	36.1	29.941	31.5	1	NW	45.2	27.1	6 ₆ .VV.	K. Hygr frozen.
10	32.5	35.2	29.503	29.6	8	SW	34.8	25.6	0. Y.	K. snow on ground
11	32.8	35.6	29.919	32.6	3 $\frac{1}{2}$	NbE	38.8	31.2	6 ₆ .Y.	S
12	30.4	35.	30.436	31.7	3	NbE	38.9	28.	6 ₉ .Y. Auroral arch -	Hygr frozen
13	24.8	34.1	30.580	30.4	0	NE	35.7	24.9	6 ₁₀ .Y.	Dr
14	32.5	35.1	30.475	25.2	2 $\frac{1}{2}$	WbN	36.4	22.3	0. Y.	KS. K. Sun
15	39.3	37.1	30.315	25.1	4	NbW	43.6	31.4	0. Y.	K. KS.
16	40.4	39.3	30.348	31.9	4	N.	46.3	38.9	6 ₁ .Y.	K. KS.
17	40.4	40.4	30.399	41.	1 $\frac{1}{2}$	N.	46.3	38.9	0. Y.	KS
18	41.7	41.1	29.875	39.8	1	WNW	46.7	39.5	0. Y.	KS
19	28.7	36.1	29.511	40.9	8	WSW	44.8	40.1	6 ₁ .Y.	K. Bar: heaving
20	32.6	37.2	29.633	42.2	4	NW	45.6	28.2	6 ₁ .VV.	{ violent gusts of wind during the day with snow showers -
21	33.1	37.4	29.732	40.6	1	NW	37.9	27.9	6 ₁₀ .V.	KS. S
22	38.5	38.9	29.748	32.7	0	WNW	39.6	31.9	0. Y.	KS. S
23	42.2	42.	29.637	33.2	4	SSW	41.5	32.1	0. Y.	K. KS.
24	42.1	42.1	29.708	38.9	8	S	46.6	38.6	0. Y.	KS
25	43.2	43.2	29.077	37.9	3	SbW	48.4	42.1	0. m.	drizzle - KS. n.
26	34.6	40.6	28.781	42.6	8	SbW	46.7	39.9	6 ₄ .Y. 9.	K. KS Bar: heaving
27	35.8	39.8	29.363	41.7	6	WbS	48.6	35.	0. m.	much rain. n.
28	30.6	38.1	29.515	42.1	5	NbW	43.1	34.1	0. Y.	KS.
29	33.4	39.1	29.684	43.6	3	WSW	40.5	31.6	6 ₈ .VV.	CK. K snow showers during the day
				34.3	5	SSW	42.1	29.1	6 ₁₀ .VV.	snow on ground.
Mean	35.43	38.33	29.828	35.66			42.63	32.38		

1860	10 th A.M.			Hygr	Wind		Rain			
Month	E	A	Bar		Force	Dir $\frac{2}{4}$	Square	Round		
2	1	40.3	37.8	29.448	40.5	9	S	0.402	0.490	b. y. gg. KS. S. K. Bar. heaving
	2	37.6	38.2	29.542	42.8	5	SW	0.069	0.154	b. yv. K.
	3	38.8	37.6	29.567	35.3	7	SSW	0.026	0.036	b. y. K. CK. KS.
⊙	4	41.5	41.2	29.609	39.1	3	W	0.009	0.094	b. yv. KS.
	5	40.	38.8	30.209	38.	3	NW	0.024	0.013	b. y. CS.
	6	46.3	41.1	30.283	41.4	4	WbS	0.001	—	o. y. K. KS
	7	40.	41.6	30.283	45.3	4	ENE	—	—	b. yv. K. CK.
	8	36.9	38.1	30.234	40.2	2	SW	0.035	0.086	b. y. K. CK. C. KS.
	9	39.3	37.9	30.011	37.1	2	SbW	0.001	0.003	b. y. CK. KS. S
	10	41.3	42.2	29.695	38.5	4	NWbW	0.003	—	b. y. CK. KS. C.
⊙	11	41.3	40.2	29.200	32.	10	SS E	0.042	0.083	o. y. y. KS. S
	12	40.6	40.2	29.297	41.6	3	WSW	0.038	—	b. y. K. CK.
	13	39.1	39.6	29.450	37.8	4	WSW	0.080	0.100	b. y. K. CK.
	14	34.1	38.9	29.221	38.1	5	NbE	0.091	0.021	b. y. K. CK.
	15	43.	37.6	29.623	39.2	5	WSW	0.000	—	o. m. snow falling n.
	16	42.8	40.7	29.820	36.	4½	SWbS	0.001	—	b. y. K. CK. KS.
	17	48.6	45.5	29.745	42.7	5	SW	0.150	0.158	o. y. S. KS.
⊙	18	45.5	45.1	29.611	40.9	8	WSW	0.097	0.107	o. y. K.
	19	45.6	43.7	29.620	43.	11	SWbW	0.202	0.033	b. yv. K. CK
	20	44.1	44.3	29.212	42.7	11	SWbW	—	0.213	b. y. gg. K. CK.
	21	41.1	41.2	29.172	45.8	3	WbN	0.033	0.291	m. r. g. KS. N
	22	40.9	43	29.625	44.7	5	WNW	0.073	0.217	o. m. h. snow. y
	23	42.3	41	28.835	40.2	8	SSW	0.045	0.086	b. v. h. g. KS. CS
	24	41.4	40.8	28.728	37.5	4	NWbW	0.060	0.330	o. r. g. KS. N
⊙	25	43.2	42	29.261	42.3	4	NWbW	0.163	0.090	o. v. g. KS. N
	26	42.7	42.3	29.557	41.7	4	NWbW	0.025	0.560	b. y. g. KS. CS
	27	46.3	42.5	29.505	39.0	126.5	NbE	0.053	0.072	b. y. K
	28	46.3	44.	29.443	43.5	144.0	WbN	0.039	0.060	h. y. g. KS. K
	29	48.1	46.5	29.233	43.	149.5	WSW	0.020	—	h. y. m. m. KS. N
	30	43.6	43.	29.300	46.3	89	WbS	0.035	0.126	o. v. m. r. KS
	31	46.7	45.	28.490	47.6	192.5	S	0.033	0.063	o. v. m. KS
					45.7		SSE	0.045	0.246	o. v. g. KS
mean		42.24	41.34	29.511	42.37			1.725	4.172	
					39.71			2.036		

1860	10 th P.M.			Hyg	Wind		Max:	Min:		
March	E	A	Bar:	W	Force	Dir ⁿ	T	T		
1	34.8	39.3	29.479	35.2 33.7	4	SWbS	43.2	33.9	6 ⁹ .V.V.	KS
2	34.	38.7	29.650	34.3 33.3	4 $\frac{1}{2}$	SWbS	43.4	33.1	6 ² .V.V. 7.	KS. CS.
3	34.6	39.3	29.544	35. 33.8	4	WbS	45.5	32.5	6 ¹⁰ .V.V.	
4	35.	40.5	29.897	35.3 33.4	2 $\frac{1}{2}$	NW	45.5	33.5	6 ⁹ .V.V.	S.
5	38.4	41.6	30.328	38.1 37.4	1 $\frac{1}{2}$	NW	47.7	31.6	0. V.	K.
6	44.7	44.	30.140	45.2 43.4	6	WNW	52.5	38.4	0. V. KS	Clouds driving fast
7	30.1	41.4	30.385	30.8 30.4	2	SWbS	47.5 47.5	32.3 32.3	6 ¹⁰ .V.	
8	31.3	40.8	30.169	31.2 30.2	1	NEbE	47.5	29.3	6 ⁴ .V.	CK.
9	37.2	40.4	29.767	37.6 36.8	4	SbW	47.5	30.6	0. m. g.	KS.
10	33.4	39.1	29.501	34.7 32.7	2 $\frac{1}{4}$	SWbS	47.5	33.7	6 ⁹ .V.	S.
11	38.3	40.4	29.188	38.7 37.5	2	SbW	42.5	33.7	0. g.	KS. K.
12	35.7	40.3	29.295	36.2 34.9	3	SWbW	44.6	35.6	0. V.	KS. S
13	35.7	40.2	29.414	36.3 34.4	2 $\frac{1}{2}$	W	44.4	33.6	0. V.	KS.
14	31.7	38.6	29.568	32.2 31.2	1	NEbW	40.5	32.4	6 ⁹ .V.	S
15	38.1	41.	29.764	38.6 36.5	3	WbS	46.8	31.5	6 ⁸ .V.	KS. S. aurora.
16	47.7	43.1	29.689	48.2 47.7	6	WbS	48.8	35.3	0. g. drizzle - N.	
17	45.3	46.7	29.537	46.8 43.	10	WbS	54.2	46.4	6 ⁹ .V.V. 99.	S faint diffused Aurora.
18	40.1	43.3	29.696	40.4 32.4	3	WSW	51.1	38.4	6 ⁹ .V.	KS. S.
19	42.4	45.5	29.542	42.8 41.3	4	WSW	51	38	0. g.	
20	37.5	42	29.348	37.8 35.8	5	SW	52.1	38	6 ⁵ Thick haze all round horizon	
21	36.6	42.2	29.545	35.8 34.4	3	WbS	44.2	34.4	0. g. d. KS?	
22	38.1	42	29.472	38.4 37.2	8	SW	45.8	34	0. g. r	
23	33.8	40.2	28.785	33.8 32.8	4	W	44.2	33.8	6 ⁹ .V. KS in horizon faint Aurora	
24	36.8	40.9	28.946	36.9 35.9	6	NWbN	46.2	33	0. g. r	
25	37.6	42.2	29.516	37.5 36.5	2	NW	48.3	35.5	6 ¹⁰ .V. faint Aurora	
26	40.4	43.2	29.521	40.9 39.8	108.0	NWbW	48	33	0. g. r	
27	44.5	45	29.437	45.3 43.9	139.5	W $\frac{1}{2}$ N	50.5	36.5	0. V. KS. d	
28	47.8	45.8	29.340	48.2 47.2	163.5	W	52	42	6 ⁹ .V. KS. CS	
29	36.3	44.8	29.496	36.8 35.2	101.5	WbS	52.6	38	6 ⁸ .m. CS. KS Aurora in N	
30	44.8	45.5	28.972	45.2 44.1	217	SSW	50.8	37	6 ⁸ .V. KS. K	
31	43.7	46.	28.450	44.2 42.4		W $\frac{1}{2}$ S	53	44	0. V. KS. K	
Mean	38.27	42.06	29.528	38.67 37.340			47.73	35.12		

1860	10 Am				Wind		Rain		
April	E	A	Bar	Thy	Dir	miles in 12 H	Squa	Rain	
① 1	48.3	45.2	28.727	48.2 45.8	W 6 S	151	0.225 0.313	0.347	O.V. q. KS
2	42.1	43.3	28.818	42.5 39.6	NW 6 W	46.5	0.011 0.019	0.053	h. v. KS. CS
3	46.8	44	29.144	46.8 42.9	SW 6 S	199	0.000 0.005	0.009	h. v. q. KS. K
4	45.5	43.9	29.544	45.8 43.5	SE	101	0.090 0.103	0.107	O.V. d. KS
5	42.2	42.5	29.915	42.2 37.5	NE 6 N	76.5	0.000 0.001	0.005	h. v. K. KS
6	43.8	42.3	29.764	43.2 41.2	NE	13	—	0.001	h. m. K. — Min on roof 25.1
7	49.6	45.5	29.581	49.8 46.3	SW	151.5	—	—	O.V. q. KS
① 8	—	—	—	—	—	240.5	—	—	—
9	In these two days the wind traverses either 265° or 625°: likely the latter								
10	41	40.8	29.741	41.0 37.2	NW 6 N	—	0.097 0.336	0.630	h. v. KS. K. C
11	25	42	29.896	44.8 39.5	SW 6 W	102	—	0.002	h. v. CS. CK. KS.
12	46.1	42.2	29.894	46.1 43.2	S ½ W	99	0.255 0.222	0.323	O.V. KS
13	46	43.5	29.950	46.6 42.0	NNW	114.5	0.124 0.105	0.173	h. v. q. KS. K
14	41.1	42.5	30.158	41.3 38.2	E ½ S	58	—	—	O.V. h. CS. KS
① 15	46	43	30.146	46.2 41.3	SE 6 S	88	—	—	O.V. KS
16	49	46.5	30.248	49.2 44.5	NE	72	—	—	h. v. h. CS. K
17	47	44.5	30.235	47.1 42.3	E	158.5	Trace	0.006	h. v. q. K. KS
18	46	46	30.257	46.5 41.8	NNE	151.5	—	—	h. v. q. KS. K
19	45	45	30.210	45.5 41.7	N	109.5	—	—	h. v. q. K. KS
20	45.4	45	29.956	45.8 39.5	N	141.5	—	—	h. v. q. K
21	42.7	43.8	29.733	42.8 37.8	NW	107.5	—	—	h. v. K. KS
① 22	43.0	42	29.688	43.1 37.2	NW	66	0.022 0.030	0.000	h. v. KS. K Hail on 21 st at 3 Pm
23	34.2	40.2	29.481	38.2 34.7	N ½ E	146	0.165 0.188	0.306	O. m. snow. r. q
24	42	44	29.764	42.3 39	NE	109.5	0.002 0.002	0.009	O.V. q. KS. K
25	47.5	42.1	29.946	47.1 43.8	NE 6 N	20	—	—	h. v. K.
26	50.9	46.6	30.075	50.3 47.2	NW 6 N	21	—	—	h. v. haze to the N.
27	53.7	49.1	30.134	53.4 47.2	NW 6 W	23.5	—	—	h. v. d
28	55.4	49	30.000	55.5 51.1	SE	101.5	—	—	O. h. S. CS. halo round ①
① 29	49.7	49.6	29.911	50.1 48.5	S	276.5	0.005 0.033	0.036	O.V. q. rain. K. m
30	58.9	52.3	30.185	58.9 55.5	SW	90.2	0.020 0.091	0.110	h. v. K. C. CS
mean	46.21	44.51	29.825	46.31 42.50			1.011 1.468	2.119	

1860

10 PM

Wind

Men Men

April

E

A

Bar

Hyg

Dir

Miles
in 12h

Men

Men

1	38.	44.5	28.782	38.5 37.5	SW6W	175.5	51.1	39.
2	39.	44.1	28.983	39.5 37.2	WSW	142.5	46.5	35.5
3	39.2	45	29.342	39.6 38.	SW	167	51.5	37.5
4	39.7	45.1	29.825	39.9 38.	NE4N	118.5	51.	38.
5	37.2	45.3	29.861	37.7 36.	E6S	69	47.5	33.
6	39.3	46.	29.670	39.7 38.8	SSW	69.5	52.8	31.7
7	43.6	47.	29.500	45.2 43.3	WSW	247.	53.	38.5
8	-	-	-	-	-	-	-	-
9	33.6	41.	29.512	33.9 32.8	WIN	-	52	32.
10	32.2	41.2	29.942	37.8 37.6	W4N	93.5	44.2	31.
11	38.7	41.	29.804	38.9 37.9	SSE	150	46.8	32.3
12	41.4	45.	29.828	41.6 40.9	WNW	122.5	51.	38.9
13	38.2	44.	30.081	38.6 37.2	NNW	108	50.	37.
14	39.3	43.	30.153	39.8 38.5	E	84.5	46.5	37.
15	40.7	44.3	30.166	40.9 39.2	SE6S	133	49.5	37.5
16	44.1	46.2	30.238	44.7 43.2	E	122.5	53.	37.6
17	42.6	46.2	30.221	42.8 39.2	NE	158.5	51.5	37.
18	39.4	45.8	30.247	39.3 38.2	E	109.5	53.5	37.
19	43.8	45.9	30.065	44.5 41.5	NNW	155	50.	34.
20	38.1	44.2	29.838	38.4 34.9	NW	185.5	49.	38.
21	34.9	43.	29.700	35.1 33.8	NW6W	104.5	46.8	35.
22	38.1	44.2	29.662	38.5 37.	W6N	112	53.	31.
23	38	42.8	29.714	38. 36.2	N6W	133.5	46.8	32.
24	37.2	44.	29.889	37.2 36.4	N6E	101.	49.1	35.5
25	40.9	46.1	30.012	41.2 39.2	E6N	80.	53.8	33.5
26	40.9	48.7	30.093	41.4 40.	SSW	57.	58.3	35.4
27	43.9	50.	30.105	44.9 41.4	SSW	50.	60.3	37.4
28	46.3	49.4	29.940	46.8 45.	S	184.5	57.8	40.4
29	50.1	50.3	30.022	50.3 50.1	S	241.5	57.8	46.7
30	49.	54.	30.273	49.9 49.4	E6N	55.	68.3	48.6

b. v. CS. KS

o. v. q. KS

b. v.

b. v. K?

b. v.

b. m. S. CS

o. n.

Absent, J. M. 2. ill.

o. s. KS Aurora at 10^h. 30^m

b. v. KS

o. g.

o. g. v

b. v. K. KS Bright Aurora in NW

o. v. KS

b. g. KS

o. g.

b. v.

b. v. K in North horizon Faint Aurora

o. g. Bright Aurora behind cloud

b. v. g. KS Aurora in NW

b. v. K Aurora with streamers

o. g.

b. v. Aurora

b. v.

b. v.

b. v.

b. v.

o. v. g. K. KS. S. Bar: heaving much.

o. v. KS.

o. m. KS.

Mean	40.03	45.43	29.840	40.68 38.97			51.81	36.46
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1860	10 AM			Height	Wind		Rain		
May	E	A	Bar		Miles travelled	Dir ⁿ	Square	Round	
♂ 1	58.4	52.8	30.263	58.9 55.4	55.5	NE	—	—	b. h. K.
2	56.6	53.6	30.158	56.6 50.1	86.	Nob E	—	—	b. v.
3	60.7	53.6	30.125	60.3 54.9	56.7	E	—	—	b. v.
4	63.	54.4	30.018	62.8 56.8	14.5	SEW	—	—	b. h.
5	50.9	55.1	30.004	51.5 48.9	82.	Eb N	—	—	o. h. K.S.
⊙ 6	53.1	52.8	29.928	53.1 49.3	132	SEbS	—	—	o. v. h. K.S.S
7	60.3	55.3	29.552	60.2 49.3	42.5	SEbS	—	—	b. v. K.S.S. CS. C.
8	52.3	53.7	29.160	52.6 51.2	101.1	WSW	0.021 0.120	0.099	o. m. rain. K. K.S.
9	46.	48.9	29.453	45.8 41.8	74.5	W	0.200 0.238	0.241	b. vv. K. CK.
10	51.4	47.4	29.468	51.6 47.1	58.2	SEbS	—	—	b. vv. Rain Commencing. K. K. CS. S
11	61.6	57.8	29.391	62.3 60.3	99.3	S	0.096 0.100	0.110	b. v. K. CK. (at 0.2 ^H a "garden max. Therm. was temporarily fixed in place of the broken one."
12	59.1	56.1	29.458	59.4 55.8	113.6	SEW	—	0.002	o. v. K.
⊙ 13	56.1	55.2	29.576	55.6 53.6	9.6	NWbW	0.511 0.767	0.640	b. v. K. CK.
14	49.9	53.2	29.671	50.3 49.6	34.	SEbE	0.001	0.002	o. m. K.S.
15	60.1	57.4	29.576	60.6 56.6	110.5	SS E	0.008 0.010	0.009	b. v. K. CK.
16	58.4	55.1	29.466	58.3 56.2	137.	Sb E	0.123 0.125	0.210	o. v. Rain K. K.S. K.
17	52.9	54.1	29.189	53.3 52.3	114.8	SEbS	0.157 0.157	0.149	o. v. heavy rain. K.
18	58.1	53.7	29.182	58.2 54.2	131.5	Sb E	0.013 0.032	0.016	b. vv. K.
19	60.	55.4	29.505	59.5 52.9	27.	SW	—	—	b. vv. K. CS. S.
⊙ 20	62.2	55.9	30.020	62.3 56.3	21.6	Eb N	—	—	b. v. K. CK. (at 10.10 ^{AM})
21	61.3	59.2	30.141	61.4 56.	100.	SSW	—	—	b. v. K. CK. CS. C.
22	60.	59.1	29.900	60.7 58.6	135.	Sb W	0.055 0.130	0.128	o. v. K.
23	61.2	58.6	29.603	61.4 58.9	136.3	SW	0.192 0.190	0.230	b. vv. K. heavy showers at intervals
24	57.5	57.2	29.815	57.2 51.1	69.	Wb N	0.045 0.049	0.039	b. vv. K
25	60.9	57.7	29.433	61.4 57.3	149.3	Sb W	0.026 0.026	0.058	o. v. K.S. K. in SW occasional showers
26	53.2	57.5	29.193	53.3 53.3	59.2	Wb N	0.316 0.353	0.304	o. v. g. heavy rain. Thunder in SE
⊙ 27	52.3	52.5	29.534	52.6 46.1	91.	WSW	0.808 0.808	0.033	b. vv. g. K.
28	46.1	50.	29.540	46.5 42.8	81.7	NWbW	0.642 0.675	0.653	b. vv. g. K. CK. heavy showers at intervals, with hail -
29	50.7	52.	29.784	51. 47.1	115.	Wb N	0.048 0.050	0.047	b. v. g. K. CK. CS.
30	52.1	52.1	29.755	52.2 47.8	69.5	NWbW	0.007 0.007	0.001	o. vv. K.
31	52.5	52.4	29.468	53.2 48.1	83.5	E b S	0.003	0.006	o. v. K.S. S
mean.	56.10	54.51	29.657	55.80 52.25		Sum	2.650 3.082	2.977	

10th Ins. In trying to adjust the
 Max^m Therm. it was broken

1860	10 PM			W. ind	Max.	Mini.	Max. Therm. broken on the 10 th		
May	E	A	Bar.	W. ind	T	T	A Max. on the roof used till Dec. 6.		
1	49.9	54.1	30.197	50.3 48.3	112.	NE 66	62.6	47.9	b ₁₀ . Y.
2	51.8	55.3	30.096	52.5 48.4	128.4	ES	62.7	41.7	b ₁₀ . Y.
3	48.6	55.8	30.087	49.5 48.1	83.	ES	65.	45.2	b ₁₀ . Y.
4	53.	59.4	29.963	53.8 51.5	55.	NEW	70.7	45.5	b ₉ . h
5	45.	53.3	29.973	45.4 44.3	150.	ENE	56.2	45.	b ₅ . Y.
6	42.3	51.8	29.767	44.3 41.4	82.	ES	57.3	41.5	b ₈ . Y.
7	50.	55.1	29.319	50.5 48.8	128.	S	59.8	39.6	o. g.
8	39.3	51.	29.284	39.8 39.1	42.5	NTW	61.6	39.3	b ₉ . YV.
9	40.	50.	29.598	40.6 39.4	100.	WSW	?	37.4	b ₇ . YV.
10	51.4	50.9	29.322	51.8 51.8	91.4	SE	57.4	36.5	o. Y.
11	52.1	55.5	29.380	52.2 51.3	166.2	S	63.2	49.	o. g.
12	52.6	55.7	29.493	53.3 53.1	58.3	SEW	62.6	53.5	o. Y.
13	49.2	56.2	29.677	50.4 49.9	45.5	NE 65	57.1	59.1	b ₇ . Y.
14	48.2	51.3	29.581	48.9 47.4	110.	SE	59.6	44.5	o. Y.
15	50.7	55.1	29.596	51.4 50.4	130.1	SEW	62.7	48.1	b ₇ . Y.
16	50.9	55.3	29.405	52.1 51.1	88.5	SW	64.9	51.	b ₇ . Y.
17	47.3	54.	29.180	48.2 47.2	125.	SSW	60.4	48.7	b ₆ . YV.
18	47.1	54.4	29.262	47.5 47.4	98.5	SEW	59.7	49.6	b ₉ . YV.
19	49.6	56.7	29.828	50.3 49.6	42.	ENE	65.	44.9	b ₁₀ . Y.
20	53.1	57.4	30.088	53.8 51.	97.8	S	68.	44.8	b ₇ . Y.
21	52.9	59.2	30.082	55.8 53.5	111.5	SEW	65.	48.2	b ₇ . Y.
22	55.4	58.1	29.737	56.3 54.3	172.5	SSW	62.2	45.8	o. Y. g.
23	53.6	58.1	29.629	54.4 52.2	69.1	W 6 S	64.5	47.5	o. Y.
24	54.5	57.8	29.722	52.2 52.2	76.9	W 6 S	62.2	50.	o. Y.
25	56.7	56.5	29.270	52.2 51.9	104.	SEW	62.7	49.5	b ₇ . Y.
26	42.8	50.4	29.390	43.4 40.4	121.	NTW 6 W	60.9	41.2	b ₇ . YV.
27	38.3	52.	29.263	38.4 38.4	64.6	NE 6	55.8	38.9	o. Y. heavy rain. n.
28	42.3	50.	29.703	42.6 40.6	121.	W 6 N	51.	38.5	b ₈ . YV.
29	43.4	51.1	29.820	43.5 41.8	103.1	W	55.	42.9	b ₉ . YV.
30	48.4	52.4	29.651	49.2 47.	27.4	SE 6 S	55.4	41.8	o. YV.
31	50.6	53.	29.328	51.1 50.	118.6	E	54.2	41.	o. Y. n. KS
mean	48.71	54.39	29.639	49.34 47.88			60.91	44.84	

Max. Therm. broken on the 10th
A Max. on the roof used till Dec. 6.

CK (at 10.20^m)
S. CS
S. round horizon

K. KS.

K.

CS. S. (Max. Ther. out of order)

K. KS. (The Max. T. on the roof.)

KS. S. at 10^m. 30^m

KS. S.

KS. S. CK.

S.

K.

K. KS.

KS. CS. CK.

KS.

CK.

S. KS. CK. CS.

KS. K.

KS. K. S. at 3 PM. Thunder in SW. distant -

Bar. heaving much.

K. CK.

KS. S

heavy rain. n.

K. CK.

Sudden & frequent showers during the day.

KS.

K.

KS

1860		100m			Hgt	Wind		Rain			
June	E	A	Bar.			miles travelled	Dir ^o	Square	Round		
♀ 1	53.	53.	29.289	53.42	63.5	SW	0.173	0.222	0. V.	K.	
2	58.1	55.4	29.353	51.7	35.	NE	0.210	0.008	0. V.	K. CK.	
⊙ 3	58.1	54.	29.208	58.1	69.	N.W.	0.008	0.008	0. V.	K. CK.	
4	52.4	53.9	29.291	50.3	66.	Wb N	0.380	0.368	0. V.	Rain -	N. K.
5	52.7	53.4	29.360	49.9	148.5	SW	0.323	0.077	0. VV.	K.	
6	55.8	55.4	29.418	52.8	93.5	S	0.076	0.196	0. V.	K. CK.	
7	50.6	52.4	29.430	51.6	71.5	SW	0.056	0.057	0. V.	K. CK. N.	soon after heavy rain
8	55.7	53.6	29.565	52.3	31.	SW	0.124	0.381	0. V.	K. CK. N.	
9	56.8	54.9	29.518	52.3	12.	SW	0.403	0.007	0. V.	K. CK. N.	
⊙ 10	57.1	54.9	29.525	45.6	7.1	NW	0.455	0.079	0. V.	K.	at 0 ^h 1/2 Thunder & lightning in SW
11	60.8	54.8	29.532	50.2	25.5	NW	0.003	0.139	0. V.	K. CK.	
12	58.7	56.8	29.048	50.1	194.8	SE	0.001	0.027	0. V.	K. CK.	(Distant Thunder N.E. at 11 a.m.)
13	55.	56.1	28.877	55.2	112.1	SE	0.004	0.509	0. V.	K. CS. S. CK.	
14	53.4	53.	29.212	55.6	146.	SW	0.292	0.063	0. V.	Rain. K. KS. N.	
15	57.7	55.4	29.353	52.3	91.5	SW	0.054	0.323	0. V.	Rain. K. KS. N.	
16	59.6	56.1	29.537	52.3	31.5	SE	0.250	0.198	0. V.	K. CK.	
⊙ 17	55.5	53.4	29.611	51.7	9.	SE	0.324	0.098	0. V.	K. CK.	
18	59.6	55.9	29.618	58.2	17.6	SWbW	0.162	—	0. V.	KS. S. (at 2 ^h 30m. much Thunder in S.E.)	
19	61.1	56.1	29.588	52.2	57.5	SWbS	0.132	0.120	0. V.	K. N.	Thunder at 10 ^h 1/2 a.m.
20	57.5	56.4	29.509	59.3	106.2	NE	0.141	0.080	0. V.	K. KS. S.	
21	59.1	57.4	29.635	54.3	47.5	NE	0.088	—	0. H.	KS. S.	
22	62.1	57.1	29.713	58.1	47.5	NWbW	0.160	—	0. H.	K.	
23	56.3	56.8	29.553	54.7	32.6	S	—	0.131	0. V.	K. S.	
⊙ 24	62.5	56.4	29.790	52.4	126.4	S	0.075	0.122	0. V.	K. S.	
25	64.3	57.2	29.357	52.9	47.6	NW	0.351	0.474	0. VV.	K.	
26	59.7	56.3	29.538	52.9	122.7	SEbE	0.374	—	0. VV.	K. CK. CS.	
27	61.7	57.3	29.351	56.1	47.5	Wb S	0.276	0.300	0. V.	Rain. N.	
28	59.1	57.1	29.380	54.4	164.6	SWbS	0.253	0.085	0. V.	Rain. N. K.	{ 58.2 = Hgt } { 52.1 = Hgt }
29	59.1	57.2	29.693	52.2	127.4	SWbW	0.093	0.070	0. V.	K. CK.	
30	53.8	55.7	30.138	52.5	51.	Wb N	0.026	—	0. VV.	K. KS. CS.	
				52.2		NW	0.077	—	0. VV.	K. CK.	
				50.2		NWbN	0.094	—	0. VV.	K. KS.	
				50.2			0.001	—	0. VV.	K. KS.	
mean	56.93	55.45	29.467	57.10		Sum	3.635	4.188			

1860	10 PM.			Height	Wind	Bar.	max.T	min.T		
June	E	A	Bar.	miles travelled	Dir.	Bar.	max.T	min.T		
1	47.7	54.2	29.356	47.3	SEW	60.6	49.4	b. vv.	KS	
2	51.7	56.1	29.230	51.9	NbE	59.5	47.4	o. m.	KS. S.	
3	49.7	53.6	29.252	50.1	NW	53.2	48.8	o. v.	K.	
4	48.6	52.3	29.345	48.7	WSW	53.9	49.4	o. y.	Rain. n. K.	
5	49.7	53.1	29.419	49.1	SW	57.1	47.6	o. y.	light rain. n. KS. S.	
6	49.4	54.4	29.402	49.2	SSW	59.4	49.8	o. y.	go n. KS. S	
7	48.1	53.9	29.511	48.8	WNW	57.	46.6	o. m.	KS. S.	
8	49.9	55.8	29.568	48.3	SW	62.2	45.2	o. m.	KS. n. rain	
9	48.3	54.1	29.483	51.3	NbW	58.6	49.1	o. v.	K. KS.	
10	49.8	56.	29.595	48.1	NbW	61.2	46.8	b. vv.	K. CK. Thunder at 10 ^N in NW	
11	49.1	55.7	29.360	50.2	E	61.9	46.6	o. m.	Rain. K. n.	
12	50.9	56.	29.801	49.4	SEbS	59.3	49.5	b. v.	K. KC. S. CS.	
13	48.6	54.2	29.115	51.2	SW	59.7	49.	o. v.	light rain. K. n.	
14	49.7	54.2	29.298	49.3	SWbW	55.9	49.8	o. v.	K. KS.	
15	49.8	55.7	29.458	50.8	EbS	59.8	48.7	b. vv.	K. KS.	
16	46.6	54.2	29.596	48.8	SWW	61.3	48.6	b. vv.	KS.	
17	50.2	56.2	29.611	47.3	SWbW	63.5	44.4	o. v.	KS. K. CK. S.	
18	50.5	57.6	29.637	51.1	S ¹ / ₂ E	62.5	50.6	b. vv.	CS.	
19	53.9	59.	29.547	50.7	NE	61.6	45.3	o. m.	KS. S.	
20	50.	57.4	29.564	53.3	NNW	65.	51.4	b. v.	CS.	
21	50.2	57.1	29.723	50.8	WSW	60.3	50.	b. v.	K. CK	
22	53.1	56.	29.351	49.7	SE	61.8	47.6	o. y.	Rain. n.	
23	49.8	58.2	29.831	53.6	NbW	62.2	51.4	b. y.	S (at 10 ^h 35 ^m)	
24	53.6	59.	29.566	50.8	SEbS	62.3	48.	o. v.	S. KS. CS. KB.	
25	50.2	56.8	29.477	52.5	SW	61.7	51.9	b. vv.	S.	
26	54.2	57.1	29.470	51.4	SEW	60.4	48.6	o. y.	K. KS.	
27	51.	58.5	29.356	52.9	SWbS	63.9	52.4	b. vv.	KS. S. CK. C.	
28	50.	58.6	29.511	51.2	W	63.6	50.2	b. v.	light rain. n. K. CK.	
29	49.7	57.7	29.997	50.1	NW	65.	51.2	o. vv.	K.	
30	52.	57.5	30.235	49.4	NbW	59.2	49.6	o. vv.	K. KS	
mean	50.20	56.01	29.489	50.83		60.45	48.83			

1860	10 Arr			Wind		Rain			
July	E	A	Bar:	Hyg ^r	Force	Direction	Square	Round	
					miles travelled				
1	58.8	56.9	30.236	58.7 54.3	43.	NNW	—	—	0. Y.
2	60.	57.4	30.295	60.4 56.1	63.3	WNW	—	—	S: Ks.
3	62.8	60.1	30.287	63.1 58.4	43.5	WNW	—	—	0. YV.
4	61.4	60.	30.122	60.6 58.	76.9	NTW	—	—	0. Y.
5	61.9	60.	30.170	62.3 59.2	22.1	NNW	—	—	K. Ks.
6	57.	59.2	30.177	57.7 54.6	32.6	NNW	—	—	0. Y
7	62.7	58.4	30.160	63.1 57.1	20.7	N&E	—	—	K. Ks.
8	65.2	59.8	30.127	65.5 59.7	12.9	SE	—	—	0. YV.
9	69.3	61.1	30.025	69.2 61.7	16.3	SE	—	—	0. Y.
10	68.	63.7	29.874	68.1 62.2	21.6	ESE	—	—	CK. S. CS. C.
11	62.8	63.5	29.871	63.4 59.2	4.	SWW	0.114 0.134	0.114	CS.
12	60.1	61.4	29.853	60.2 58.2	13.5	SSW	0.163	0.163	S.
13	65.5	62.6	29.630	65.9 58.4	84.6	SSW	—	—	K.
14	62.4	61.3	29.495	62.9 57.8	95.3	SW	0.029 0.037	0.105	K. Ks.
15	64.4	61.6	29.510	64.9 59.2	76.7	SW	0.045 0.044	0.041	0. V.
16	63.1	61.6	29.791	63.1 56.1	11.4	NW	0.006	0.004	0. YV.
17	64.1	60.3	29.745	63.9 58.5	14.	WWS	—	—	K.
18	59.7	61.4	29.602	61.3 57.	40.	SE	0.078 0.026	0.014	K. CK.
19	59.1	60.9	29.557	59.9 57.	9.0	WSW	0.227 0.243	0.257	S. Ks. CK. C
20	60.1	59.6	29.687	60.1 53.2	40.2	WSW	0.304 0.351	0.292	0. Y.
21	58.7	59.2	29.576	58.3 54.5	78.	SE	0.024 0.024	0.021	0. YV.
22	59.7	59.1	29.730	60.1 52.5	46.6	NNW	0.047 0.052	0.055	K. CK
23	60.2	59.7	29.481	60.1 56.1	75.	WWS	0.026 0.026	0.032	K.
24	55.7	59.2	29.841	56.3 50.2	35.5	NNW	0.162 0.151	0.132	K. CK.
25	57.6	56.9	29.930	58.2 51.7	24.9	NNW	—	—	K. CK.
26	57.6	58.1	29.851	58.2 52.1	22.9	NTW	—	—	0. YV.
27	62.5	59.1	29.604	62.7 57.7	38.	SWW	—	—	K. Ks.
28	60.	58.6	29.686	60.4 55.1	45.4	WWS	—	—	K. Ks. S
29	58.9	58.5	29.909	58.8 53.1	40.3	NNW	0.040 0.030	0.044	K. CK. Ks.
30	59.4	57.1	30.036	59.2 53.4	33.5	WWS	—	—	K. CK. Ks.
31	59.8	58.5	29.895	60.3 55.3	58.	SW	0.144 0.164	0.163	K. Ks.
mean	61.24	59.83	29.863	61.53 56.41		Sum	1.444 1.394	1.437	K. Ks.

1860	10 P.M.			Height	Wind		Max:	Min:		
July	E	A	Bar:		Force	Direction	Ther ^m	Therm ²		
					miles travelled					
1	54.	58.4	30.268	54.6	43.	WNW	60.7	50.4	0. Y.	K.S.S very slight drizzle.
2	52.6	59.4	30.319	53.4	42.6	W	63.3	54.3	6. YV.	S.C.S. C
3	53.9	61.1	30.190	52.1	69.5	WbN	65.9	53.8	6. YV.	K. CK. K.S.
4	55.3	61.1	30.172	52.7	42.	WNW	64.	55.	0. Y.	K. K.S.
5	55.4	61.8	30.177	54.3	62.1	NWbW	65.4	55.9	0. Y.	S. K.S.
6	54.7	59.4	30.183	54.3	54.9	N.	62.	57.4	6. YV.	
7	52.1	62.3	30.165	49.2	52.6	NNW	65.5	47.6	6. Y.	
8	54.1	63.1	30.083	52.9	72.5	SE	70.6	50.4	6. Y.	stratitus.
9	55.3	63.6	29.950	54.1	62.	SE	70.4	51.9	6. Y.	S.
10	60.1	65.1	29.832	56.6	76.4	SWbS	69.	49.8	0. Y.	K.
11	55.7	63.9	29.916	56.3	27.8	N.	67.8	57.6	0. Y.	K.
X 12	55.9	62.4	29.751	57.2	103.6	SE	68.7	52.	0. Y.	K. K.S (+ at 11.30.)
13	59.2	62.1	29.454	55.9	210.8	SW	65.4	55.4	0. Y.	K. Bar: heaving
14	57.1	61.6	29.507	60.1	71.1	SW	63.9	54.6	0. Y.	K.S.S
15	56.7	62.8	29.662	58.4	55.6	WbS	65.3	56.9	6. YV.	K. K.S.
16	54.1	63.2	29.792	56.6	20.8	SW	65.5	55.	6. Y.	K. CK. C.
17	57.4	63.4	29.683	54.8	74.8	SW	67.1	50.	0. Y.	K. K.S.
18	54.8	61.8	29.572	53.3	58.	SE	62.	55.5	0. Y.	K. K.S.
19	54.3	60.4	29.653	55.7	31.	WbN	60.8	55.4	0. Y.	K. K.S.
20	53.8	60.1	29.584	54.5	53.7	SW	63.	52.	0. Y.	light rain. N. K.S.
21	52.4	60.1	29.695	53.8	86.2	NWbN	62.4	52.4	6. YV.	K. K.S. C.S.
22	53.7	60.6	29.635	50.9	57.	SW	63.5	51.9	0. Y.	K. K.S. S
23	51.2	59.9	29.650	52.6	55.	NbW	63.8	53.	6. YV.	K. K.S. C.S. C.
24	47.7	58.	29.945	51.2	55.5	NWbN	59.3	50.1	6. YV.	S. in horizon
25	47.9	58.1	29.931	48.3	52.8	NbE	62.	46.6	6. YV.	
26	54.9	60.3	29.701	47.7	31.5	WbW	63.4	43.6	0. Y.	S. K.S.
27	54.	60.2	29.591	55.9	36.5	NWbW	62.7	52.5	0. Y.	light rain. K.S. N.
28	52.1	59.4	29.803	52.6	46.5	NWbW	62.1	51.4	6. YV.	K. CK.
29	49.8	58.8	30.052	51.1	46.1	NbW	62.7	49.5	6. YV.	C.S.
30	54.5	59.4	29.911	50.2	60.	WbW	62.	47.4	6. Y.	K. K.S.
31	53.9	60.1	29.973	49.2	56.1	NWbN	62.9	53.2	0. Y.	K.S. S
mean	53.96	60.71	29.865	54.63			64.29	52.47		

1860	10 Am			Hyg	Wind		Rain		
August	E	A	Bar		miles travelled	Direction	Square	Round	
1	59.7	59.3	29.853	60.13	76.	SWbW	—	—	0. Y. K. KS.
2	62.4	59.6	29.811	55.3	52.6	WbN	0.013	0.020	6. Y. K. CK.
3	60.6	60.7	29.542	65.4	64.6	W	0.011	0.036	1. Y. K.
4	59.3	60.6	29.408	64.1	90.3	WNW	0.031	0.108	6. Y. K. KS. CK
5	59.9	57.5	29.495	58.8	157.	WbS	0.030	—	0. Y. K. KS. S
6	57.1	57.	29.437	54.4	45.5	N	0.023	0.051	6. Y. K. CK.
7	58.6	57.6	29.577	58.2	95.5	WbN	—	—	0. Y. K.
8	57.4	57.4	29.381	52.1	100.6	WbS	0.252	0.310	6. Y. K. CK
9	59.7	57.2	29.568	55.6	43.1	NTW	0.306	—	6. Y. K. CK
10	55.7	57.5	29.540	53.7	77.8	WSW	0.044	0.051	0. Y. Rain. N. KS. S (at 10.15)
11	58.1	57.4	29.478	54.1	37.3	NTWbW	0.062	0.305	0. m. drizzle - N. KS.
12	59.	57.4	29.694	54.2	66.3	WNW	0.315	—	0. Y. K. KS.
13	57.1	57.2	29.588	58.9	26.7	E	—	—	0. Y. drizzle N. K. KS.
14	59.3	56.3	29.550	57.9	10.	SSW	—	—	6. h. K. KS.
15	59.3	58.2	29.445	55.1	55.	SWbW	0.003	—	6. Y. KS. S
16	62.3	59.	28.959	56.7	104.2	SSW	0.002	1.314	6. Y. 9. K. (at 10.15)
17	54.3	57.5	29.016	60.1	28.1	NbW	1.254	0.271	0. m. Rain. N.
18	54.8	56.4	29.144	62.6	126.1	WNbW	0.310	0.928	0. Y. 9. K.
19	57.7	56.9	29.601	54.6	56.	WbS	0.056	0.027	0. Y. Rain. K. KS.
20	56.2	56.5	29.675	54.4	70.	WNbN	0.265	0.045	0. Y. K.
21	59.4	57.	29.825	52.9	41.8	NbW	0.027	—	0. Y. K. KS.
22	56.6	56.3	29.428	54.2	15.	WNW	0.023	0.230	0. Y. Rain. N. K.
23	58.3	54.3	29.519	56.3	89.5	SW	0.054	0.101	6. Y. K. CK. Thunder at 2 1/4 & 3
24	52.7	53.4	29.416	58.4	88.6	SSW	0.028	0.062	6. Y. K. CK. C in N. W.
25	55.8	53.1	29.432	50.2	103.7	SWbS	0.012	—	6. Y. K. CK.
26	56.8	55.2	29.544	56.1	80.2	WbS	0.080	0.784	6. Y. K. CK.
27	56.1	55.4	29.523	51.4	50.5	SWbS	0.600	0.024	6. Y. K. CK.
28	57.5	55.3	29.530	51.9	54.	SW	0.831	0.002	6. Y. K. CK. KS
29	57.3	56.2	29.184	52.5	148.5	SW	0.036	0.049	0. Y. 9. K. N.
30	54.6	55.1	28.761	52.9	196.1	SW	0.019	0.465	6. Y. 9. K. CK
31	52.9	55.	29.212	52.1	94.6	WbS	0.340	0.028	6. Y. K. CS. C
Mean	57.73	55.47	29.456	54.01			2.516	4.291	
							4.954	5.211	

1880	10 P.m.			Height	Wind		Rain			
August	E	A	Bar.		miles travelled	Direction	Square	Round		
							max	min		
x 1	54.8	59.6	29.803	55.4	84.7	W.N.W	62.9	53.9	0. Y.	H. K.S. S (x at 10.33 ^{h. m.})
2	57.5	60.8	29.651	53.7	73.8	SW	64.8	55.	0. Y.	K.S. S
3	56.6	61.2	29.433	58.3	55.1	W.N.W	63.6	57.4	0. g.	K.
4	52.	59.2	29.491	55.5	97.6	W	60.8	53.	b. Y.	K. CK.
5	50.9	59.3	29.427	52.6	50.2	N.E. & E	61.	47.7	0. Y.	K.S. S.
6	50.3	57.6	29.527	51.2	70.	N.W	60.8	48.5	b. Y.	K. CK.
7	52.8	57.7	29.597	50.8	89.5	W.S	58.9	49.4	0. g.	Rain. n.
8	47.6	57.8	29.525	51.7	57.5	N.W	62.3	50.1	b. Y.	K.
9	51.1	57.6	29.631	47.2	58.3	W.S	60.6	47.	b. Y.	K.S. S (at 10.15 ^{h. m.})
10	54.	58.1	29.410	52.3	73.8	SW	59.5	51.	b. m.	K.S. K.
11	50.2	58.	29.628	54.4	59.3	N.W & W	62.	52.2	b. Y.	S.
12	52.6	58.6	29.645	51.1	12.4	N.W & N	62.5	52.5	0. Y.	K. K.S.
13	52.5	60.1	29.592	53.7	40.	E.S.E	64.8	52.	b. Y.	S (at 8.5)
14	55.3	59.6	29.488	52.8	71.	S.E	64.7	48.8	0. Y.	K.S. S
15	53.5	59.1	29.307	56.2	56.1	N.N.E	63.7	53.8	0. g.	n. rain. (at 10.25 ^{h. m.})
16	54.6	58.4	28.965	56.1	138.2	N.	61.	53.8	0. g.	n. drizzle
17	51.9	56.1	28.938	54.8	92.2	S.S.W	56.8	52.	0. g.	n. rain Bar. heaving
18	53.1	57.1	29.491	52.2	54.	N.W	56.8	52.4	b. Y.	K.S.
19	53.7	57.7	29.637	53.1	47.8	W.S	60.6	52.1	0. g.	K. K.S.
20	53.6	57.	29.784	54.4	83.3	N.W	58.1	52.	b. Y.	K. K.S.
21	53.7	57.7	29.616	52.2	33.	W.N.W	60.8	51.8	0. g.	K.
22	47.6	55.3	29.539	52.6	63.3	W.S	56.7	48.5	b. Y.	K.S. S.
23	47.8	54.6	29.461	48.2	83.4	W.S.W	58.6	45.5	b. Y.	n. K.S. S
24	48.6	55.7	29.388	47.4	77.4	SW & S	59.5	43.1	b. Y.	S
25	50.1	57.4	29.365	49.3	71.	N.W & W	60.8	45.	0. g.	heavy rain - n.
26	47.	56.3	29.577	50.5	67.8	W	61.5	45.9	b. Y.	S.
27	49.3	55.6	29.538	48.	90.	SW & S	58.8	47.4	b. Y.	K.S. S.
28	54.4	57.5	29.125	47.2	181.	S.E	59.8	48.5	0. Y. g.	drizzle. n. K.S. Bar. heaving
29	49.2	56.1	28.920	54.9	183.5	S.W	59.6	49.	b. Y.	K. CK.
30	50.2	55.4	29.020	49.3	206.5	SW & W	59.5	48.7	b. Y. g.	light rain - n. K.
31	48.8	56.2	29.420	50.	59.4	W.S.W	63.3	48.	b. Y.	CK. C. S
mean	51.75	57.70	29.450	49.1			60.55	49.91		

1860,	10	Am.	Hyg	Wind	Rain						
Sept	E	A	Bar:	Miles Traveled	Direction	Square	Round				
1	53.1	55.1	29.578	53.2	NbW	0.063	0.058	0. Y.	K. KS.		
2	52.6	54.2	29.846	52.6	NW	0.002	0.003	0. Y.	K. KS. S		
3	55.6	55.1	29.988	56.1	NW	0.002	—	0. Y.	K.		
4	56.1	55.1	30.063	56.5	W	0.001	—	0. Y.	S		
5	59.	56.4	30.123	59.2	W	—	—	0. Y.	K. KS.		
6	61.4	57.4	30.216	61.8	NNE	—	—	0. Y.	K. KS.		
7	64.9	60.2	30.183	65.1	SW	—	—	0. Y.	K. CK. C.		
8	54.9	60.	30.052	55.3	NbE	—	—	0. Y.	K. KS.		
9	53.2	57.1	30.072	53.7	E. NE	—	—	0. Y.	K. CK.		
10	54.4	52.9	30.024	54.4	NbE	—	—	0. Y.	K. CK		
11	54.7	51.1	30.153	53.9	WbN	—	—	0. Y.	K. CK		
12	54.1	53.4	30.051	54.4	SbW	—	—	0. Y.	K.		
13	55.1	54.3	29.455	55.8	SbW	0.016	0.012	0. Y.	KS. S		
14	58.8	52	28.788	58.2	SW. LS	0.007	0.081	0. m. d. q. KS	Bar heaving		
15	56	53.5	29.456	56.2	NNE	0.085	0.332	0. V. K			
16	54.8	54.5	29.311	54.7	SW	0.039	0.092	0. m. d. N			
17	52.8	56.5	29.383	52.8	W	0.113	0.298	0. V. K. KS	at 10.28		
18	55.	57	29.282	55.2	SSW	0.306	—	0. V. KS. K	at 11.40		
19	51.7	54	29.305	51.9	EbN	0.107	0.107	0. m. d. KS. N			
20	52.1	53.5	29.532	52.2	S. b. W	0.070	0.085	0. V. CK. CS.			
21	52	51	29.788	52.1	SWbW	0.077	0.005	0. V. K. CS?			
22	51.1	52.5	29.362	51.2	W	0.001	0.107	0. V. KS. K			
23	50.2	51	29.384	50.9	SSW	0.033	—	0. V. K			
24	51.8	51	29.619	51.5	S	0.092	—	0. V. K	The wind for the 26 th		
25	51.2	52	29.543	51.3	NW	—	—	0. V. K			
26	50.2	50.2	29.595	50	EbS	0.013	0.035	0. V. K. CS	Halo (C) at 2 ^h		
27	50	50	29.650	50.1	NEbN	0.010	—	0. V. K. KS.			
28	50.8	49.8	29.802	50.9	N	—	—	0. V. K			
29	50.2	49.	29.017	50.2	NE 1/2 N	—	—	0. Y. K			
30	49.2	49.1	30.011	49.2	WbN	—	0.005	0. Y.	K. CK.		
	53.63	53.70	29.718	53.2		0.553	1.220				

1860	10 PM.			Height	Wind		Max:	Min:		
Sept.	E	A	Bar:	—	miles Travelled	Direction	T	T		
1	49.7	55.6	29.756	50.2	36.	NW	59.1	49.1	0. Y.	KS. K.
2	48.7	55.2	29.901	49.3	36.	WNW	58.1	48.6	0. Y.	K
3	50.4	56.3	30.052	50.9	28.	NW	60.	48.6	6. Y.	S. CS.
4	52.4	56.4	30.077	55.1	56.5	WES	59.4	49.8	0. Y.	KS. S
5	56.7	58.1	30.197	57.4	37.7	NNE	63.	54.	0. Y.	KS.
6	59.8	60.	30.256	59.8	30.5	SE 60	68.5	55.	0. V.	KS
7	57.9	61.8	30.105	58.6	37.	N 6 E	68.5	57.9	0. Y.	KS.
8	50.	56.9	30.019	57.3	42.5	NW 6 N	59.4	51.2	0. V.	KS.
9	43.	55.4	30.060	43.3	52.7	NE	56.6	45.2	6. Y.	S.
10	40.8	52.4	30.084	41.4	42.1	N	56.2	40.	6. Y.	
11	46.5	52.4	30.162	46.9	37.5	SW 6 S	57.7	38.8	6. Y.	
12	51.8	52.4	29.726	51.8	194.	S 6 W	57.3	44.9	0. g. g.	KS. & lightning Bar: hearing much.
13	56.1	57	29.062	57.1	269	S 6 W	58	51	0. g. g.	KS
14	49.9	53.1	29.007	49.8	158.5	NNW	58.8	48.8	0. g. r	
15	51.6	56	29.477	52.1	40	W	60	48	0. g. r	
16	52	55	29.260	52.7	39.5	W ½ S	58.5	49	0. g. r	At 10 ^h 21 ^m
17	43.3	53.2	29.402	43.4	50.5	SW ½ W	56.5	44	6. V. h	At 10 ^h 55 ^m Aurora ft
18	51.2	54.1	29.178	51.8	59.0	SSE	57	42.5	0. g.	
19	47.2	53.6	29.531	47.9	36.4	NW 6 W	55.8	48	0. V. p	KS
20	48	53	29.575	48.5	112	W	56.2	42	0. V. g.	KS
21	48.9	52.8	29.554	49.5	114.5	SSW	57.4	42	0. g.	KS
22	42	50.2	29.363	42.2	106	SSW	55.	41.5	6. V.	
23	41	52	29.498	41.5	—	NE	56.	38.5	6. V.	K. S
24	41	50.7	29.628	41.2	24.5	NE	55	37.	6. V.	m. CK.
25	44	51	29.548	44.2	62.5	S ½ W	56.5	37.5	6. V.	K
26	46.5	51	29.603	46.5	111.	NE ½ E	53.	37.5	0. V.	CK
27	42.8	50.8	29.734	42.9	71.	N ½ W	54.2	43.	6. V.	CS a very thin film of cloud
28	45.6	51.	29.948	45.1	50.	NW	53.	42.	0. V.	K. CK
29	38.9	51.1	30.005	39.4	26.	N.	54.8	39.2	6. V.	m.
30	41.6	50.7	30.108	41.4	19.6	W	54.	38.4	6. V.	K. CK.
	48.02	54.20	29.796				57.77	45.10		

1860

10 A.M.

Hyg?

Wind

Rain

Oct?

E

A

Bar.

miles
travelled

Direction

Square

Round

Oct?	E	A	Bar.	Hyg?	miles travelled	Direction	Square	Round	
1	49.8	49.2	30.127	49.5 48.3	33.5	WbS	0.002	0.008	b. v. m. K. KS. S. CS
2	50.6	50.1	30.202	50.6 48.6	34.9	WbW	0.014 0.048	0.045	b. v. CK. S.
3	53.4	52.	30.000	53.8 52.1	200.	WbN	0.004 0.026	0.072	b. v. g. CK. K
4	58.9	50.	30.173	58.9 57.9	195.	WbS	0.001 0.002	0.004	o. m. d. KS. S. n.
5	56.9	63.2	29.734	57.5 54.3	225.	WbN	0.010 0.095	0.262	o. v. g. K (at 10 ^h 13 ^m)
6	57.	53.8	30.009	57.3 55.2	108.	SW	0.001 0.001	0.002	o. v. K. KS. n. (at 10 ^h 10 ^m)
7	51.7	53.2	29.970	52. 46.2	93.5	WbS	0.018 0.042	0.044	b. v. K. CK
8	46.5	50.	29.925	46.4 44.4	105.3	WbS	0.022 0.081	0.064	b. v. K. CK.
9	44.1	48.4	29.988	44.3 40.1	93.8	WbW	0.015 0.075	0.076	b. v. K. CK. KS (at 10 ^h 12 ^m)
10	51.7	47.9	29.521	51.2 51.2	102.7	SWbW	0.062 0.410	0.458	o. m. d. n. KS.
11	43.	47.7	29.639	43.4 38.2	125.	WbN	0.013 0.026	0.030	b. v. K. CK
12	40.1	44.3	29.718	40.4 38.4	46.5	W	0.001	0.002	o. v. rain. n.
13	48.2	47.1	29.163	48.1 46.2	110.3	SWbW	0.012 0.050	0.041	b. v. CK. KS. S.
14	49.7	47.7	29.577	50.1 47.5	163.	WbW	0.052 0.082	0.153	b. v. K. S.
15	56.5	50.9	29.114	57. 56.6	176.5	SW	0.067 0.238	0.397	o. m. d. KS. n. K
16	46.6	48.	29.148	47. 44.1	114.3	SW	0.023 0.095	0.085	b. v. g. CK. K
17	45.9	47.	29.592	45.9 42.2	131	SWbW	0.019 0.134	0.147	b. v. g. CS. KS
18	51.1	50.5	28.996	51.5 50.7	281	SW	0.030 0.178	0.346	o. v. r. KS. N The square gap on roof lost water
19	51.1	49.5	29.176	51.5 49.6	168.5	SWbS	0.041	0.056	o. v. g. KS
20	47.7	47.9	29.699	48.0 44.2	196.1	WbN	0.026	0.054	b. v. K. CK
21	48.2	48.3	29.930	48.2 46.1	58.2	SWbS	0.002	0.017	b. v. S. CS.
22	53.7	52.6	29.511	53.3 53.	300.1	SW	0.084	0.116	o. v. rain. K. KS. n. (at 10 ^h 15 ^m)
23	51.9	53.2	29.722	52.2 50.1	134.6	SWbS	0.030	0.022	o. v. KS. K
24	52.2	50.3	29.527	52.3 51.3	215.	S 1/2 E	—	—	o. v. KS. K. S
25	54.8	51.1	29.679	55.1 52.1	237.5	SSW	—	0.007	o. v. g. K.
26	55.7	55.5	29.372	56.1 52.2	308.	S 1/2 W	—	0.009	o. v. h. g. KS. CS Ben heavy
27	40.1	46	29.655	40.1 39.1	13?	W	0.217	0.228	o. m.
28	42.2	45.5	29.953	42.2 41.7	29	WbS	—	0.007	b. m. S. K
29	47.1	47.5	29.981	47.1 47.1	83.5	NE.	0.035 0.054	0.054	o. v. m. r. KS. N
30	54.4	49	29.978	55 54.7	33.5	SSW 1/2 S	0.050 0.050	0.085	o. m. KS. 10 ^h 30
31	51	50.1	30.014	51.5 51.2	41	SEbS	frac	—	o. m.
	49.81	49.69	29.686				0.479 2.119	2.901	

1860	10 P.M.			Height	Wind		Max:	Min:		
Oct.	E	A	Bar:		miles travelled	Direction	T	T		
1	50.6	53.2	30.032	51.8 50.8	69.3	SW	53.6	41.	0. Y.	KS.
2	52.1	53.6	29.830	52.6 51.6	86.7	SSW	55.8	43.1	6. Y. 9.	KB. S
3	43.1	51.6	29.182	43.5 42.1	108.7	WbN	56.4	44.1	6.10. YV.	
4	50.4	52.	29.858	51. 48.4	141.3	SW	54.5	41.4	0. Y.	KS. S.
5	50.4	53.1	30.007	51.1 50.	65.5	WbS	56.8	50.1	0. Y.	KS. S
6	52.8	55.1	29.927	55.5 54.1	128.3	SW	59.5	50.4	0. Y.	KS. S
7	44.6	52.2	29.962	44.7 43.4	113.	SW	55.5	46.	6. Y.	K.
8	41.7	50.9	29.885	42. 39.9	94.	W	50.9	42.	6.10. Y.	
9	40.7	48.	30.105	42.1 39.9	70.8	WNW	47.5	40.1	0. Y.	K. KS.
10	47.8	50.1	29.325	48. 46.9	85.	WbN	54.5	41.9	0. Y.	KS. S
11	35.5	48.9	29.791	35.8 35.1	86.	NW	48.9	37.3	6. YV.	S.
12	42.2	43.1	29.373	42.6 42.2	136.5	SW	42.8	35.8	0. Y.	KS.
13	44.9	47.6	29.157	45.1 43.9	127.	WSW	52.8	41.7	6. Y.	rain. n. KS.
14	48.4	49.1	29.552	48.9 47.9	63.	WbN	52.4	43.7	0. Y.	KS.
15	46.9	50.1	29.123	47.3 46.9	79.1	SW	56.8	47.6	6. Y.	K.
16	41.7	47.8	29.300	46.6 47.3	180	WSW	51.2	41.5	6. Y. KS	Aurora N to E
17	48	49.	29.432	48.2 47.3	191	SW bS	51.8	39.5	0. Y. KS	10 ^H 15 ^m
18	44.8	49.	29.253	45. 44.2	170.5	SW	53.	45.	6. Y. KS.	Faint Aurora
19	42.3	48.	29.230	42.6 41.	197.	SWbW	54.7	43.5	6. Y. S.	
20	41.8	48.	29.889	42.1 41.6	101.2	WSW	50.8	42.4	6.10. Y.	
21	47.5	49.1	29.666	47.8 45.5	166.8	SbE	57.6	42.3	6. Y. 9.	S.
22	46.	50.4	29.613	46.6 46.2	85.4	SWbS	55.5	46.7	6. Y.	CS.
23	51.4	52.1	29.707	50.9 50.	169.	S	56.6	44.9	6. Y. 9.	CS. S. CK.
24	45.9	50.	29.575	46.2 45.2	187.5	SbW	54.5	46.2	6.10. Y. 9.	
25	50.9	52.5	29.541	51. 49.8	227.5	S	57.2	44.5	6. Y. 9. thin CS.	Fine Halo round D
26	42.3	51	29.555	42.9 42.9	180	WbS	56	43	6. Y. R	
27	39.2	46	29.754	39.3 39.1	18.5	WbS	45.5	36	0. m	
28	40	47	30.031	40.2 39.9	44.5	NbE	49	36	0. Y. CK. K	
29	49.5	48.2	29.939	50. 49.2	80	NEbE	50	40	0. m	
30	50.9	50	30.004	51.2 51.2	59	SSE	57	49	0. Y. m. CK. K. KS	
31	47.2	50.5	29.992	47.8 47.2	29	NE	53.5	47	0. m	
	45.89	49.91	29.696				53.31	43.01		

1860		10 Am				Wind		Rain		
Nov.?		E	A	Bar	Hg	Dir	Miles	Sq.	Round	
4	1	47.7	49.5	29.993	47.8	NE 1/2 E	50	0.010	0.008	o. m.
	2	46.2	49.2	30.036	46.6	NE	72	0.006		6. v. h. K. KS
	3	45.8	46	29.970	45.6	ENE	42			6. v. h.
0	4	46.8	47	29.881	46.8	ESE	103			6. v. q. K and S round horizon
	5	45.0	46.5	29.983	45.5	E 1/2 S	160.5			o. v. q. KS
	6	45	46	30.242	45.0	E 1/2 S	118.5			o. v. KS
	7	44	45	30.395	45.2	E 1/2 S	79			o. v. h. KS
	8	41.9	45	30.310	44.9	NE 1/2 E	56.5			o. m.
	9	41.1	43.5	30.239	41.5	ENE	80	0.081	0.107	6. v. h. KS
	10	42.8	44.2	30.070	42.2	NE	137	0.101	0.029	o. v. KS
0	11	43.4	44	29.723	43.6	NNE 1/4 N	118.5	0.021	0.025	o. v. h. KS
	12	40.4	43	29.599	42.1	NE 1/4 N	11.1	0.011	0.007	o. m. KS M 10.30
	13	40.2	43	29.371	40.4	N. W	91	0.006		o. m. commencing
	14	35.3	40	29.290	39.1	S 1/2 W	124	0.005		6. H. S. at 9.30
	15	39.3	41	28.860	37.3	S. W	140	0.234	0.280	o. rain
	16	35.2	40	29.250	35.2	S W	122	0.295	0.102	6. H. S. c. 50
	17	29.	36.5	29.300	35.	S. W	57.5	0.002	0.025	o. m.
0	18	33.	37.	29.811	33.	W	61.	0.025		6. H. S. at 9.
	19	38.7	38.8	29.885	38.2	SW 1/2 W	99			o. m. H. S. 9.15
	20	44.6	43.	29.504	44.2	S 1/2 E	215	0.032	0.065	o. v. 2ain
	21	45.	45	28.760	47	S 1/2 E	395x	0.295	0.625	o. n. r. for 24 hours. Clock stopped.
	22	43.2	44	29.085	43.6	SW 1/2 S	215	2.450	0.026	o. v. H. S. n.
	23	42.	43.3	29.589	42.5	NE	127	0.025		o. v. KS
	24	31.5	39.	29.662	41.2	NE	21			6. m. H. S. c. at 9 th
0	25	40.	41	29.373	40.3	NE 1/4 N	128	0.002	0.010	o. v. H. S.
	26	37.7	40	29.513	37.6	NE 1/4 N	183	0.028	0.230	6. v. H. in horizon 8 th
	27	37.7	38.3	29.427	37.7	NE	189.5	0.155		6. v. H. S.
	28	38.	39.2	29.503	38.3	NE 1/2 E	140.5			o. v. KS. S. at 10 th
	29	45.9	41.9	29.519	36.8	S 1/2 S	108.7	0.122	0.172	6. v. K.
	30	42.	42.4	29.595	42.3	NE 1/2 E	110.5	0.166	0.452	o. m. S. KS. 80
		41.11	41.36	29.661				1.466	2.049	
			42.73					1.842		

1860	10 P.M.			Wind			Thermom		
Nov	E	A	Bar.	Hyg	Dir	Miles	Max	Min	
1	45.1	49.7	30.014	45.5 45.1	NE	72.5	50.5	45	6. m. K
2	39.8	47.2	29.984	39.8 39.1	ENE	76.5	50	37.5	6. v. h heavy dew
3	38	47	29.921	38 38	NE	106	48.5	36	6. v. m. Sky covered with thin CS or mist
4	44.6	47	29.898	44.9 43.8	SELE	165	47.8	38.5	0. v. KS
5	43.9	45.5	30.112	43.9 40.5	SELE	165	48.2	43	6. v. KS
6	44	46	30.321	44.2 40.5	SE	122	47.3	44	6. v. KS
7	42.4	45.1	30.366	42.8 39.5	E $\frac{1}{2}$ N	51	46.4	37.5	0. g.
8	39.7	44	30.225	40.1 38.9	E $\frac{1}{2}$ N	55	44	39	0. g.
9	40	43	30.166	40.1 38.7	ENE	114	43.5	37	6. v. KS
10	41.1	43.5	29.890	41.5 40.1	NNE	183	44.4	39.5	0. g. d
11	39.8	43	29.823	40.1 38.5	NNE	49.5	44.5	39	0. g.
12	38.7	43	29.516	38.9 38.2	N	18	42	38.5	0. g.
13	34.7	42	29.280	35.3 35.1	SWBS	80	44.1	35	6. H.
14	37.5	43	28.927	37.8 37.3	S.W	130	42.9	31.5	9. m. H is the $\frac{1}{2}$ divided?
15	35	40.5	29.172	35.3 34.9	WBS	126.5	46	31	at 11 P.M.
16	31.3	39.1	29.316	31.4 31.1	SWBS	92	40.2	31.5	" 10. "
17	34.7	38	29.469	35.4 34.4	NWBS	60	36.7	26	6. H.S.
18	36.6	39.4	29.857	36.7 35.7	WBS	129	41.5	29.5	6. H. H.S
19	40.5	40.5	29.696	40.7 39.1	S	120	41.5	33	0. v. H.S
20	42.2	43	29.409	42.3 41.9	S		47	39.5	0. v. K.
21	41.9	44.6	29.054	42.2 41.3	S.SW	254.5	50	42	6. v. H.S in horizon
22	43.3	44	29.365	43.5 42.7	N.E	145	45.8	40	6. v. H.S. at 11 P.M
23	36.0	42.3	29.765	36.2 34.8	N26N	131	46	36.2	6. v. H.S in horizon
24	40.7	40.8	29.356	40.8 37.9	26N	78	41.5	30	0. v. H.S. -
25	38.4	40	29.467	38.5 36.8	N.E	161	42	35	0. v. H.S. n.
26	35.8	39	29.495	35.8 32.4	N.26N	174.5	41	35.5	6. v. H.S toward the South
27	37.8	39	29.435	38.1 35.9	NE	253	39.4	34.9	0. v. g. K.
28	40.1	40.6	29.470	40.6 39.7	E	157	42.2	37.5	0. v. light rain. K. n. (at 11 th)
29	44.7	42.2	29.568	44.2 44.2	SEBS	106.4	48.2	40.6	0. m. Rain. n. (at 10 th)
30	40.6	43	29.450	42 40.4	N.N.E	27.5	44.8	40.4	0. m. H.S.
	39.66	42.55	29.653				44.46	36.79	"

1860	10 AM			Wind			Rain			
Dec:	E	A	Bar:	Hyg	Dir	Miles	Square	Round		
h	1	44.4	42.5	29.290	44.7	ENE	93	0.025	0.043	0. m. 11.5
o	2	42	43.5	29.310	42	S	80.5	0.045	0.328	6. v. h. K
	3	46.9	45	29.236	41.5	NNE	267	0.308	0.180	0. v. g. h. KS (miles for 2h ⁿ)
	4	41.2	44	29.250	47.2	NESE	108.5	0.358	0.188	0. v. h. g
	5	42.8	43.8	29.140	46.2	SEW	9.8	0.130	0.032	m
	6	46.8	45.8	28.833	43.1	S	217.5	0.178	0.240	0. v. KS
	7	44.8	45	28.698	42.9	SEW	107.5	0.031	0.358	6. v. h. KS. K
	8	42.2	43.3	28.560	42.7	SSE	133	0.240	0.358	6. v. h. KS. CS. K
o	9	40.4	43.5	28.831	41	WSW	11.5	0.318	0.013	m
	10	40.7	42	29.281	40.7	SWW	68.5	0.357	0.013	f.
	11	40.8	42.2	29.650	40.5	NW	13.5	0.013	0.100	6. v. h. KS. CK
	12	34.1	40	29.922	41.1	NWSE	37.5	0.000	0.106	f.
	13	40.8	40	29.934	40.2	SE	91	0.100	0.023	6. v. h. CS. K
	14	40.7	40.5	30.046	39.2	SEW	120.5	0.009	0.060	0. v. g. h. KS
o	15	37.8	41	30.143	38	NWSE	25.5	0.013	0.060	6. m. K
	16	39	41.8	30.020	37.7	NWSE	46	0.034	0.060	6. v. h. KS. CS. CK
	17	31.2	36.2	29.780	35.5	W	17	0.030	0.060	6. m. K
	18	31	39	29.452	31	WSE	49.5	0.030	0.060	f.
	19	26.1	33.5	29.244	30.8	WNW	20.1	0.030	0.060	6. m. s. CS. KS
	20	20.1	31.2	29.710	29.9	WNW	30.5	0.030	0.060	6. m. CS
	21	22.7	29	30.023	29.1	SSW	40.3	0.030	0.060	6. m
	22	22.3	33	29.868	28.5	WSS	0	0.030	0.060	6. m
o	23	25.3	30	29.521	27.5	SW	23	0.030	0.060	6. m. CS at 10.15
	24	23.1	27	29.197	26.5	SSE	25	0.030	0.060	0. m. (in frozen) 10.30
	25	25	28.7	29.160	25.4	SSE	82	0.030	0.060	6. m
	26	34.4	31	29.207	24.5	SSE	135	0.030	0.060	6. v. h. CS 10.30
	27	34	32	29.282	23.4	SE	153.5	0.030	0.060	0. v. KS
	28	32.1	38	29.697	22.8	SSW	79.3	0.030	0.060	6. m. CK. K
	29	36.6	35	29.777	21.8	SSE	171	0.030	0.060	0. v. g. KS
o	30	39.1	36	29.188	20.8	ESS	239.5	0.030	0.510	0. v. m. KS
	31	40.7	37	29.340	20.9	SE	101	0.030	0.085	0. v. m. KS
		35.74	38.08	29.44	43.8			1.799	2.266	

1860

10 PM

Wind

Dec.:	E	A	Bar:	Hyg.	Dir	Miles	max T	min T	
1	42.9	43	29.284	⁴³ 42.8	SE 6 S	51	46	40	6. v. CS. CK. KS
2	43.6	44.5	29.190	⁴⁴ 43.2	E 6 S	—	46.5	41	o. g. q. r. KS?
3	43	44.5	29.271	⁴³ 42.3	NE 6 N	140.5	48.1	43	o. g. d
4	44.5	43.5	29.178	^{41.8} 41.7	N 6 E	47.9	45	41	o. g. d
5	44	44	29.047	^{44.2} 43.5	SE	89	45	41	o. g.
6	40.9	45	28.747	^{41.3} 41.4	SSW	67.8	48	41	6. m. KS
7	40	44.2	28.526	^{40.3} 40.1	S 6 W	84	44 *	40	o. g. <u>A new Maximum by Casella</u>
8	41	44	28.641	^{41.2} 40.9	NE	29.5	46.	39	o. g.
9	38.4	42.3	29.077	^{38.9} 38.8	SW	57.5	42	39	o. g.
10	38.4	42	29.294	^{38.8} 38.6	NW	27	41.1	38	o. g.
11	37.8	42	29.870	^{38.1} 37.9	W	37.5	40.9	36.5	o. g.
12	37	38	29.877	³⁷ 36.8	SE 6 S	9.8	39.1	29	6. v. KS Aurora at 12.20 ^h m
13	38.2	41	29.997	^{38.4} 37.1	S 6 E	154	43	36.5	o. v. KS
14	41.2	41.5	30.073	^{41.7} 41.2	SSE	94	43.5	38.5	o. g. r
15	38.3	41.5	30.108	^{38.8} 37.9	W 6 S	25	41.2	35	o. g.
16	33.2	39.7	29.897	^{33.2} 32	N 6 W	69	38	32	6. v. Very 6 ^h Auroral arch from NNW to WNW
17	28.8	37	29.562	²⁹ 28.8	W	18.5	34.2	29	6. m
18	31.9	36	29.260	^{32.1} 31.9	NW	52.4	34	27	o. g. snow
19	28.2	34	29.481	²⁸ 27.5	N 6 W	80	32.2	22	6. v. KS, CS
20	19.8	30	29.917	—	NE 6 N	5.7	31	19	6. m I believe there are no clouds
21	22.2	30.5	29.945	^{22.4} 22.2	W 6 S	11	28.1	18.5	6. m
22	23	29	29.700	—	SW	0	27	20	6. m. light H. S
23	17.7	28	29.318	—	SW 6 S	38	25	17	6. m. CS at 9.45 - D halo
24	30.5	29	29.135	³¹ 29.3	S	84	32	15.5	o. v. H
25	25.3	29.5	29.189	^{24.5} 23.3	E 6 S	65	29	22	6. v. CS D halo
26	31.9	31.5	29.202	^{31.9} 30.3	E 6 S	122	34	26	o. v. KS?
27	32.6	32.2	29.214	^{32.8} 31.9	SE	132.7	36	30	o. v. KS
28	33.0	34	29.892	^{33.1} 32.8	SW	62.5	36	30	o. v. m. CS?
29	36	35	29.282	^{36.5} 35.1	SE 6 S	225	38	32	o. v. q. KS a heavy gale since morn
30	38.5	36	29.214	³⁹ 38.2	NE 6 E	60	41	35.5	o. m. d
31	38.7	38.6	28.983	^{38.9} 38.0	ENE	197.7	42	38	o. m. d. q. KS
	34.87	37.87	29.442		000		38.61	32.65	

for 1860

A

Summer - $\frac{1}{45}$
 Winter - $\frac{1}{90}$
 Year - $\frac{1}{60}$

Winter = 40.09

Leave for

1860	104 Am			104 Pm			Rain			Thermometers	
	E	A	Bar	E	A	Bar	Squan on Lan	Glob		Max	Min
			at read								
January	37.73	39.09	29.301	36.45	39.16	29.320	3.503	5.744		53.7 - 1 st	26.9 - 28 th
February	37.58	37.69	29.812	35.43	38.33	29.828	1.128	2.061		48.6 - 26	22.3 - 14
March	42.24	41.34	29.511	38.27	42.06	29.528	2.036	4.172		54.2 - 17	29.3 - 8
April	46.21	44.51	29.825	40.03	45.43	29.840	1.468	2.119		68.3 - 30	31.0 - 10 th 23
May	56.10	54.51	29.657	48.71	54.39	29.639	3.082	2.977		70.7 - 4	36.5 - 10
June	56.93	55.45	29.467	50.20	56.01	29.489	3.749	4.188		66.0 - 20.29	44.4 - 17
July	61.24	59.83	29.863	53.96	60.70	29.865	1.394	1.437		70.6 - 8	43.6 - 26
August	57.73	55.47	29.456	51.75	57.70	29.450	4.954	5.211		64.8 - 13	43.1 - 24
September	53.63	53.70	29.718	48.02	54.20	29.796	0.981	1.220		68.5 - 6.7	37.0 - 24
October	49.81	49.69	29.686	45.89	49.91	29.696	2.119	2.901		59.5 - 6	35.8 - 12
November	41.11	42.73	29.661	39.66	42.55	29.653	1.842	2.049		50.5 - 1	26.0 - 17
December	35.78	38.08	29.438	34.87	37.87	29.442	2.122	2.266		48.1 - 3	15.5 - 24
Summer	55.89	54.75	29.627	49.71	55.46	29.641	16.279	17.934			
Winter	40.09	49.56	29.587	35.79	40.89	29.595	12.099	18.411			
Year	48.04	47.71	29.606	42.81	48.23	29.619	28.378	36.315			

	Rain Days	Mean Ther ^y	Mean Bar		
Jan'y	22	37.05	29.311		
Feb	12	36.46	.820		
March	27	40.26	.519		
April	16	43.12	.833		
May	20	52.41	.635		
June	25	53.56	.478		
July	14	57.60	.864		
Aug ^t	21	54.74	.453		
Sept ^r	13	50.81	.757		
Oct ^r	28	47.85	.691		
Nov ^r	14	40.38	.657		
Dec ^r	14	35.32	.440		
	226				

Mean Temperature of Year = 45.74

Max - May 4 = 70.7

Min - Dec 24 = 15.5

Mean Baromet^y = 29.612

Max. Feb 13. P.M. = 30.580

Min. Jan'y 21. A.M. = 28.241