

1848	Morning 22			Wind					
Janu ^{ry}	E	A	Bar	Hys	Dir	Force	Squ	gl.	
1	42.5	39.9	29.195	42.9	S	7	0.075	0.137	r
2	57.2	46.1	29.156	57.2	S	9	0.180	0.323	o m
3	38.9	41.2	29.519	39.3	SSW	2	0.030	0.126	b c m
4	37.5	40.7	29.246	37.7	S	2	0.074	0.324	b c m
5	35.8	37.0	29.635	36.9	SSW	2	—	0.004	b c m
6	35.6	38.5	29.278	36.5	SW	3	0.038	0.137	b c v
7	38.3	38.8	29.475	38.2	WSW	2	—	—	b c m
8	37.9	38.5	29.998	37.7	E	2	—	0.003	o m
9	35.2	35.5	29.975	35.2	S	4	—	—	o v m
10	34.9	36.7	30.360	34.8	SSW	2	0.043	0.153	b c m
11	39.9	38.2	30.375	38.7	W S	2	—	0.002	c v
12	42.2	39.1	30.373	42.2	W	2	—	0.004	b c v
13	42.2	41.1	30.064	41.7	SW S	2	—	—	qtr (b) r
14	36.5	37.8	29.909	36.2	WSW	2	0.004	0.038	b c v
15	40. —	38.4	29.644	39.2	SW S	4	—	—	o v
16	31.9	37.2	29.163	31.5	SW	3	—	—	b c v snow had fallen
17	32.3	36.9	29.103	32.4	SW	2	—	—	b c v more snow had fallen in night
18	34.3	35.9	29.397	34.1	N E	2	0.114	0.238	o m
19	30.8	33.9	29.727	32.7	SSW	1	—	—	o m
20	33.5	32.7	29.971	32.7	SSW	1	—	—	b c
21	36.6	35.2	29.725	36.4	SSE	5	0.003	0.154	o v
22	35. —	35.9	30.006	34.7	NE	3	0.098	0.191	o m
23	32.1	34.8	30.383	32.1	S E	1	—	—	b m
24	28.9	31.6	30.339	28.6	NE E	0	—	—	fog
25	34.2	32.9	29.988	33.8	NE E	5	—	—	b c v
26	35. —	34.2	29.919	34.8	NE E	3	0.007	0.028	o v
27	28.7	32.7	29.684	28.3	NE E	3	—	—	b c snow - v
28	35. —	31.7	29.409	34.7	SE E	6	0.006	0.005	o v. s.
29	32.2	32.9	29.193	31.6	E S	2	—	—	snow
30	35.2	32.2	29.179	34.8	N	2	—	—	b m
31	38.7	33.9	29.707	33.3	SW W	4	—	—	b c m sn
	35.90	36.57	29.713				0.682	1.867	

As the "wet bulb" was not wetted - the uncovered one had a coat of ice on it - at the point of the other was frozen.

1848

Evening 10

Wind

January

T

A

Bar

H_g

Dir

Force

Max

Min

1	34.9	37.	29.447	34.32	SW	1	43.2	31	0
2	42.7	40.1	29.175	38.9	S	3	51.8	40.3	?
3	38.7	43.	29.552	38.3	SW	2	52.1	32.8	bc
4	41.7	41.9	29.253	41.3	SW	9	42.5	34.2	bc
5	32.9	38.3	29.2403	32.6	SW	4	39.4	31.7	bu
6	39	38.3	29.320	38.4	SSW	8	40.7	34.2	r
7	37.8	38.6	29.350	37.7	SW	3			bc
8	38.9	39.4	29.769	38.7	NW	2	42.8	33	oor
9	32.9	37.	30.	32.3	S	1	38.6	32.3	bu
10	36.9	37.2	30.061	36.6	SSW	3	37.5	32.1	0
11	35	37	30.402	33.9	SW	2	41.2	33.8	bu
12	42.9	38.9	30.367	42.7	WNW	2	43.7	37.5	bcu
13	39.9	39.7	30.285	39.3	W	1	45	38.5	bcum -
14	39.3	41.5	29.848	38.6	W	2	43.6	31.9	bcu
15	36	38.7	29.841	35.4	SW	3	43.4	33.8	bcu
16	39.2	40.2	29.234	38.9	SW	7	42.3	31.3	oru
17	27.1	34.8	29.198	26.3	SW	2	32.4	27	bcu
18	34.3	35.7	28.957	34.5	E	3	36.6	32.3	oru
19	30.2	35.2	29.605	29.3	SSW	1	36.8	27	bcum
20	28	33	29.951	27.4	SW	0	33	22.7	fog
21	34.1	34.7	29.993	33.7	SE	4	36.4	32.7	0.0
22	36.2	35.4	29.662	35.3	SE	5	34.9	32.9	oru
23	29.6	35	30.292	29	SE	1	37.8	27.6	bcum
24	25	34.3	30.371	24.3	NE	0	31.4	22.8	fog
25	30.2	32.4	30.177	32.8	NE	1	34	23.9	0
26	33.5	34	29.892	32.9	E	5	36.8	32.2	o.v.
27	30.9	32.9	29.863	30.8	E	6	35.2	25.5	bcu
28	20.8	30.1	29.597	-20	SE	1	34.3	19.2	bcu
29	32.8	32.9	29.285	30.9	SW	6	37.2	30.9	bu
30	25.8	32.5	29.038	25.2	N	4	34.5	24.8	bu
31	30.9	33.5	29.492	30.3	NW	3	37.7	27.9	bu

22.49 36.55 29.697

Auroral arch SW to NE

the cov^d bulb had not been wet for hourswet bulb highest 7' after being wetted
lower 12' after being wetted
Auroral cov^d bulb about 2' below 20

snow quite gone

O spots

1848	Morn'g. 22			Wind			Squ	gl		
February	E	A	Bar	H'g	Dir	For				
1	37.6	35.9	29.967	37.23	SW	4	0.241	0.374	6cu	
2	41	38.4	29.786	36.4	S	6	—	0.003	0v	
3	49	42.9	29.621	41.4	SW	3	—	0.072	0m	
4	50.1	47	29.731	48.8	SW & S	4	0.063	0.431	0v	
5	49.8	47.8	29.900	48.6	SW	2	0.117	0.246	0m	
6	49.2	47	29.687	49.3	S.W	3			0.r	
7	47.5	46	29.400	48.2	S.W	8			0.r	
8	44.2	46	28.606	47.2	W & N	8	0.700	1.188	0.r	
9	39.5	41.3	28.535	43.1	S.W	5	0.068	0.182	b.v	
10	44.5	42	29.082	43.6	W & N	2	0.089	0.155	b.c.v	
11	44.8	41.2	29.400	42.2	S.W	10	—	—	0.v	a squall at 22 ^h
12	50.2	45.3	29.361	45.5	S.W	10	0.000	0.500	0.r	
13	45	44	29.446	47.8	S.W	5	0.040	0.427	b.c.v	
14	38	42	29.310	45.5	N.W	4			6m	
15	33.1	41.1	29.694	37.8	W	1			6m	
16	31.8	37.8	30.220	36.7	SSW	1			0m	
17	37.6	37.8	29.960	31.6	S	6			0.v	
18	42.5	40.1	29.433	30.1	S.W	4	0.115	0.464	b.c.v	
19	42.3	40	29.450	43.2	N.W	3	0.069	0.115	0.m	
20	40.6	39.8	29.462	42.2	S.W & W	4			0.v	
21	49.2	43.3	28.777	40.6	S.S.W	9	0.277	0.425	0.r	
22	43.3	41.5	28.812	46.8	W & N	6	0.060	0.302	0.r	blew hard during night
23	43.3	42	28.780	43.3	SSW	3	0.136	0.209	0.r	
24	47	44	28.544	42.2	S.S.W	5	0.429	0.600	b.c.v	
25	43.5	43.2	28.636	46.6	N & E	3			0.m	
26	44.2	43.2	27.987	42.2	SE	8	0.190	0.493	0.r	
27	44.6	43	28.796	43.7	S.W	5	0.055	0.049	0.v	
28	42.6	41.6	28.908	42.3	S.W & W	4	0.023	0.119	b.c.v	
29	40	42.2	28.644	40.8	N & E	2	—	—	0.v	
	31	42.32	29.239	38.3			2.572	6.764		

1848		Evening 10			Wind			Max	Min	
February		E	A	Bar	Hz	Dir	Force			
♂	1	35.8	35.1	29.807	35.73	SW	5	37.8	33.7	b.c.v
	2	36.9	37.4	29.956	36.33	SW & S	5	41.8	35.5	b
	3	43.8	40.2	29.625	43.43	SW	7	49.8	39.9	o.r
	4	52.	45.3	29.612	52.33	SSW	6	53.2	43	o
	5	49.2	47.2	29.758	48.83	SSW	6	52.4	48.9	o. gusty
⊙	6	48.2	47.4	29.802	47.33	SW	4	52.	47.	o.f
	7	44.	45.	29.676	43.33	SW	4	49	41	o
	8	48.2	47.	28.870	48.33	S	7	50.5	43.	o.r
	9	40.	43.7	28.681	49.53	W & S	5	41.	35	b.c.v
	10	37.3	42.	28.583	46.33	W & N	2	44.5	37	o.r
	11	37.7	41.5	29.484	37.23	SW & W	3	46.5	34.	o.v
	12	40.5	43.	29.616	40.33	SW	4	51.	39	b.v
⊙	13	46.6	46	29.368	46.33	S.W	9	53.5	40.5	o.v
	14	40.2	44.	29.327	40.53	S.S.W	3	47.6	38	b.c.v
	15	32.4	38.1	29.442	31.33	W	2	42	27.2	b.v
	16	32.8	40.1	30.018	31.73	SW & S	1	39.7	29	⊙ spots
	17	34.2	39.4	30.260	33.73	S	3	42	32.1	b.m
	18	42.	41.	29.540	41.63	W	4	44.	37.	b.c.m
	19	40.3	41.	29.204	40.73	SW & S	3	48	35	o.r.m
⊙	20	35.4	40.4	29.627	35.33	S.S.W	4	45.5	34	b.c.v
	21	40.8	40.7	29.330	40.23	S & W	3	50.	40	o.m
	22	41.2	42.	28.520	40.43	W.S.W	10	57.	39	o.v
	23	39.3	41.8	28.979	39.33	S.W	6	48	38	b.c.v
	24	47.2	44.5	28.409	47.13	S	8	49	41	o.r.m
	25	41.	44.	28.542	41.63	S.S.E	2	52	39	b.c.v
	26	41.3	44.	28.827	42.23	SW & E	4	49	38	b.c.v
⊙	27	44	44.	28.500	44.23	S.W	9	46	41	o.r
	28	38.5	42	28.909	37.23	SW & S	8	48	37	b.v
	29	37.4	42.	28.622	36.33	S.E & S	2	46	35.5	o.v
		40.97	42.41	29.273						

bright aurora between the clouds

aurora

1848	Evening 10			Wind						
March	E	A	Bar.	Hg	Dir	Force	Max	Min		
7	1	35.5	40.6	28.950	35.42	S.S.W	4	46.	36.	b.e.v.
	2	37.3	42.6	29.807	37.42	N.W	5	48	36.5	o.v.
	3	38.	42.	29.881	38.73	S.E	4	48	33.5	o.v.
	4	45.	43.3	29.493	44.33	S.W.S	5	46	37.5	o.v.
8	5	33.8	42.	29.792	33.73	S.S.W	3	46.6	31.	b.v.
	6	41.3	41.2	29.448	40.73	S.E.S	3	45.	38.5	o.v.
	7	41.3	43.	29.916	40.33	S.W.S	5	50.	40.	o.m
	8	46.	46.5	29.695	48.23	SW	6	51.8	46	o.m
	9	36.8	44	29.200	36.73	SSW	7	55.2	35	b.c.v.
	10	40.	42.6	28.864	39.83	S.W.S	7	46.8	35.2	rg
	11	38.	40.8	28.567	37.43	W.N	6	44	34	o.v.
9	12	37.	41.2	29.137	36.33	N.W	3	47.5	33.5	b.v.
	13	34.	41.	29.557	34.13	S.W.S	2	47.	33.	b.e.v.
	14	41.4	43.2	29.587	40.43	N.W.N	6	46.6	36.	o.v.
	15	40.3	43.7	29.364	39.73	W	4	49.3	37.5	o.v.
	16	39.6	42.4	29.615	39.33	N	6	51.5	37.5	b.c.v.
	17	38.3	41.	29.550	38.53	N	7	43.4	36.3	b.c.v.
	18	39.	42.1	29.087	38.23	S.W	4	46.4	33.5	o.v.
10	19	33.5	40.7	28.657	34.23	S.W	5	45.	31.5	b.e.v. Aurora
	20	33.6	39.5	28.625	33.23	S.E	4	43	33.	b.c.v. D?
	21	34.6	41.	29.157	33.33	S.S.W	4	46	31.5	b.v.
	22	49.5	45.5	28.940	49.23	S	9	50	41	o.v.
	23	44.3	44.1	29.683	44.23	W.S.W	7	49	39	o.v.
	24	46	46.8	29.960	45.23	SW.S	1	55.2	45	b.v.
	25	44.5	47.	29.760	43.73	W.S	2	55	36.5	b.c.v. Aurora
11	26	39.5	46.4	29.556	38.53	ENE	0	52	33	b.v.
	27	37.5	46.	29.509	38.23	N	1?	50.5	35.5	b.m
	28	37	43.8	29.602	38.23	S	3	47	34.2	b.v.
	29	43.2	45.	29.404	42.9	S	6	53	41.5	b.c.v.
	30	44	48.	29.640	43.5	NNW	1	54.5	36	?
	31	42.9	48.	29.860	42.23	S.E	3	52.5	49.5	b.c.v. Aurora to north streamer
		39.96	43.39	29.414						

	Morning 22 nd			Wind			Rain		
April	E	A	Bar	Hg	Dir	Force	Sq. in	row	
1	49.2	48.	29.755	49.8 ³ 47.0 ³	N	1	—	—	o. m
2	53.9	51.	29.820	54.3 ³ 53.0 ³	W	1	0.050	0.058	b. c. m
3	52.8	51.	29.900	52.7 ³ 50.2 ³	WSW	3	—	—	b. c. v
4	47.5	50.4	29.760	47.5 ³ 45.3 ³	W	6	—	0.024	o. m
5	44.3	47.	29.644	43.8 ³ 41.9 ³	NNW	5	0.012	0.013	o. v
6	43	47.4	29.474	42.8 ³ 40.7 ³	N	1	—	—	b. c. v
7	41.6	47.4	29.450	41.5 ³ 39.3 ³	NE	3	0.160	0.258	o. v
8	41	42.	29.598	37 ³	NE	3	0.020	0.110	b. c. v
9	41.2	43.8	29.044	42.2 ³ 40.0 ³	SE	3	0.113	0.236	b. c. v
10	43.2	43.1	29.520	42.5 ³ 40.5 ³	E by S	1	0.040	0.064	b. c. v
11	42.9	44.	29.187	42.3 ³ 40.3 ³	NNE	4	0.078	0.120	o. m.
12	45	45.5	29.550	44.4 ³ 42.4 ³	N by W	0	—	—	b. c. v
13	45.1	43.5	29.800	45.7 ³ 43.7 ³	NW	1	—	—	b. c. v
14	40.5	44.	29.65	40.7 ³ 38.7 ³	SE	5	0.110	0.170	Q. R
15	49.6	46.	29.430	47.3 ³ 45.3 ³	SE	4	0.079	0.116	0
16	52	47.	29.245	46.5 ³ 44.1 ³	SW	4	0.030	0.098	b. c. m
17	49.0	47.2	29.135	49.3 ³ 47.1 ³	SE	6	0.042	0.103	o. m
18	50.5	48.2	28.920	50.1 ³ 48.1 ³	SE	4	0.149	0.484	0
19	50	48.	29.310	49.5 ³ 47.5 ³	NE	1	—	—	0
20	53.7	49.	29.520	54.3 ³ 51.7 ³	N by E	2	0.168	0.180	b. c. m
21	48.8	49.	29.650	48.5 ³ 46.5 ³	N	2	0.240	0.242	o. v
22	46.1	49.	29.640	47.3 ³ 45.4 ³	N	1	0.587	0.655	o. v
23	47.8	47.	29.806	48.1 ³ 46.1 ³	NE by N	4	0.338	0.361	o. v
24	46.4	47.1	29.810	47.1 ³ 45.1 ³	N by N	3	0	—	—
25	43.9	45.	29.860	43.2 ³ 41.2 ³	N	3	—	—	b. c. v
26	47	46.2	29.608	47.2 ³ 45.2 ³	SW	3	—	—	b. c. v
27	44.1	44.6	29.547	44.2 ³ 42.2 ³	NW	5	0.009	0.025	b. c. v
28	45	42.2	29.730	45.5 ³ 43.5 ³	SW	2	0.001	0.004	b. c. v
	49	44.	29.950	49.2 ³ 47.2 ³	S	0	0.002	0.002	b. c. v
	54	42.	29.904	53.5 ³ 51.5 ³	SE	2	—	—	b. c. v
Mean	45.94	46.32	29.574			sum	2.239	3.320	

1848	Evening 10"			Wind			Max	Min	
April	E	A	Bar	Weg	Dir	Force	T	T	
1	47	57	29.800	22.23	S	1	59	40.2	b. c
2	50.2	57	29.760	22.73	NNE	1	62.9	49	o
3	46.1	53	29.845	22.73	WSW	2	60.7	46.4	b. c. v
4	51.2	53.4	29.854	22.83	SWNW	4	61	45.4	ov
5	38.7	49.8	29.638	22.83	WES	1	49.2	36.2	6m
6	36.7	44.4	29.654	22.83	NW	1	48.4	32	6m
7	35.2	43.6	29.290	22.43	E	2	50	33.1	6v
8	36.2	43.5	29.598	22.9	NE/N	2	44	31.5	b. c. v
9	36	42	29.24	22.53	S	4	49	34.5	
10	37	43.5	29.265	22.43	NE	4	44.8	31.2	o
11	40	44.3	29.230	22.63	E	2	48.5	38.5	o. v
12	42	45	29.370	22.23	N	2	48	36	o
13	37.5	45.5	29.610	22.53	NLE/E	0	50.9	34	b. v
14	42	46	29.740	22.63	E/S	5	51.3	39	b. c. v
15	43.2	44.2	29.662	22.23	S/E	3	51	39	b. c. v
16	44.6	47	29.230	22.73	S/W	1	52	41	b
17	43.8	47	29.304	22.93	S	3	55.2	43.2	b. c. m
18	47.5	47	28.792	22.63	E	8	51	44.7	o. v
19	46	47.5	29.150	22.83	NE	1	52.5	42	b. c. v
20	45	48.5	29.458	22.23	N/E	2	59	37	b. c. v
21	47.1	50	29.612	22.63	NNW	3	58.5	45.8	o
22	50.1	50	29.710	22.73	N	2	59	45	o. v
23	46.5	48.5	29.720	22.53	NE/N	2	48.5	41	o. v
24	44.7	50	29.840	22.73	N	1	54	38	b. c. v
25	39	45.5	29.844	22.83	NW	3	52.2	36	b. v
26	38	46.5	29.791	22.83	NW	1	49	31	b
27	37	44	29.420	22.53	WSW	7	50.8	37	b. c. v
28	34.9	43.8	29.716	22.23	SW/W	1	48	32	b. v faint Aurora in NW
29	38.6	45	29.846	22.53	SE/S	1	50	32	b. c. v bright star behind clouds
30	45	47.5	29.904	22.53	SE	2	55	41	
Mean	42.24	46.83	29.563						

1848	Therm 22			Wind			Rain		
May	E	A	Bar	Hg	Dir	Force	Sq. in	Row	
1	52.5	50,	29.885	56.23	SE & E	1	0.018	0.012	0. V
2	58.6	51.8	29.842	58.63	S	4	—	—	b. c. v blowing 6 in squalls
3	56,	52,	29.921	57.48	S. W	1	—	—	b. c. v Misted at 19 hours
4	55.9	52.2	29.940	55.77	NW	1	—	—	0. m
5	55.2	51,	29.984	59.23	SW	2	—	—	b. c. v
6	56	53,	29.640	55.73	SW & S	5	—	—	0
7	53, 1	52, 5	29.836	52.17	SW & W	2	0.124	0.250	b. c. v
8	58, 4	55, 2	30.044	58.23	SSW	2	—	—	b. c. v
9	59	53,	30.112	52.33	WSW	1	—	—	b. v
10	65	58,	30.075	64.23	S. W	5	—	—	b. v
11	65.2	58,	29.998	64.73	SW & W	5	—	—	b. c. v
12	66	60,	30.050	66.17	SW	1	—	—	b. m
13	56	58.3	30.090	67.57	NNE	2	—	—	6
14	64.3	63,	29.640	65.17	S W	4	—	—	0. m
15	58	61,	29.170	68.23	WSW	7	0.051	0.082	b. c. v
16	51	54.7	29.152	50.43	N	2	—	—	0. v
17	53.8	55,	29.160	48.53	WSW & W	2	0.039	0.013	b. c. v { the number under 6 means that $\frac{5}{10}$ of the sky is cloudy }
18	52	54,	29.278	54.53	SE & S	6	0.021	0.021	c. v
19	54	53.3	29.840	56.83	TNW	2	0.387	0.116	b. c. v
20	61.3	56.5	29.970	63.33	SW	5	0.016	0.025	b. c. v
21	63	57.5	30.216	63.23	SW	2	—	—	b. c. v
22	66	59,	30.220	66.93	N. by E	1	0	—	—
23	67	63, 2	30.190	64.23	W	1	—	—	b. c. m
24	61	62,	30.145	60.23	SE	1	—	—	b. c. m
25	68, 5	67,	29.958	70.83	SSW	2	—	—	b. c. m
26	62.2	63, 5	29.980	64.83	NNE	1	—	—	0. m
27	55.6	60,	29.943	55.53	NNE	1	—	—	0. v
28	60.8	61.1	29.829	59.23	W & S	1	0.150	0.135	0. v
29	57.2	59,	30.050	58.23	NW	2	0.017	0.017	b. c. v .017
30	52, 1	57,	29.624	54.23	W	4	0.135	0.204	0. v
31	51	54, 8	29.560	51.23	SW	3	0.036	0.048	0. v
	58.70	56.99	29.830				0.994	1.239	

1848	Evening 10 th			Wind			Max	Min	
May	E	A	Bar	Hygr	Dir	Force	T	T	
1	47.5	50.5	29.888	47.23	ESE	1	56.5	44	0
2	49.1	52	29.856	48.53	S	3	60	44	b.c.v
3	52.0	53.2	29.870	50.3	S	3	62	47.5	b.v faint Aurora in NW
4	51	54	29.902	50.33	SW	1	66	44	b.v
5							62.2	40.5	
6	50.2	53.8	29.804	49.53	SW by S	5	60.2	47	0
7	52	54	29.630	51.63	SW by W	5	59	46	0.r
8	46	53.5	30.004	48.33	SW by W	1	60	42	b.c.v light stratus
9	51.5	53.8	30.008	48.3	S	4	61.5	42	b.c.v
10	57.8	57.5	30.098	52.13	S	4	69.5	50	b.v
11	58	58.5	30.020	57.53	SW	4	70.6	53.2	0
12	57	61.2	30.008	57.83	S by W	1	73	48	b.v
13	51.5	60.5	30.084	52.93	NE	4	74	50	0
14	58.0	62	29.964	57.23	SSW	2	71	55.9	b.c.v lofty cumulus
15	54.1	58.5	29.448	51.83	SW	4	69	53	0.r squally
16	50	57	29.250	49.13	W	0	63	44.5	0
17	47.8	55	29.112	47.13		0	61.5	45	0.r
18	45.8	53	29.265	45.83	S	1	60.5	45	b.c.v light stratus to S. Rain in NE
19	51.1	55.1	29.460	51.23	W by N	1	59	44	0.r
20	53.2	55.2	29.950	53.53	S	1	64	51	0.v
21	52	58	30.120	56.73	WN by S	2	65.8	52	b.c.v
22	56.8	61	30.228	52.93	SW	1	73	53	b.c.v
23	59	61.8	30.168	51.53	S	1	72	52.5	b.c.v
24	52	60	30.228	52	NE by N	3	72	54.5	0.v
25	60.5	64	29.993	60.23	SW by W	3	75	55.5	0.v
26	63	65.8	29.886	62.3	WSW	2	76.8	53.5	0.v
27	53.3	62.5	30.011	57.93	NNE	2	68.7	51.5	0.v
28	57	62.8	29.824	56.23	S by E	1	69.5	54.5	0.r
29	48.5	59	29.964	47.53	W by N	1	64.5	47.8	b.c.v
30	52.2	59.5	29.952	51.33	SW by S	2	62.9	49.5	0.r
31	47.5	56.5	29.698	43.7	W	4	58.7	46	b.c.v
	52.85	53.18	29.856						

Morning 20				Wind			Rain		
	E	A	Bar	Temp	Dir	Force	Squar	Round	
1	54.5	54.2	29.108	54.33 50.33	—	0	0.079	0.106	6.c.v
2	56.2	55.8	29.113	56.23 50.93	N $\frac{1}{2}$ E	1	0.002	0.005	6.c.v
3	57.8	56.2	29.258	58.23 54.73	NE $\frac{1}{2}$ N	1	0.028	0.032	6.c.m
4	57	55.5	29.400	58.23 52.93	N	1	0.240	0.222	0.v
5	55.8	55	29.535	58.23 51.73	SSW	2	0.134	0.127	0.v
6	54.1	53.5	29.470	54.23 49.03	—	—	—	—	0.v at 2 past 7 am
7	58	55	29.500	57.23 52.53	SW $\frac{1}{2}$ W	2	0.002	0.009	6.c.v
8	54.3	54.2	29.487	54 50	SSW	4	0.177	0.230	0.v
9	55.2	54	29.464	57.23 51.23	N $\frac{1}{2}$ E	2	0.050	0.053	6.c.v
10	54.1	53	29.650	54.53 51.53	WNW	1	—	—	6.c.v
11	58.2	55.5	29.572	58.23 51.73	S	2	0.004	0.007	6.c.v
12	52.8	55.8	29.350	52.83 52.73	N	1	0.170	0.169	0.v
13	55.2	53.5	29.460	56.2 50.5	SW	7	0.182	0.179	6.c.v
14	56.5	56	29.661	56.63 50.93	E $\frac{1}{2}$ S	2	0.004	0.005	0.m.v
15	63.2	57.8	29.760	64 59.93	NE	3	—	—	0.m
16	60	59	29.736	63 61.23	NE $\frac{1}{2}$ N	2	—	—	0.m
17	62	59.5	29.820	63.53 61.23	N	1	0.144	0.143	0.m
18	59	58	30.074	59.8 55.9	N $\frac{1}{2}$ W	1	—	—	0.v
19	66	59.5	30.024	66.83 61.83	N $\frac{1}{2}$ W	1	—	—	6.c.m
20	61.5	61	29.916	61.63 59.83	E $\frac{1}{2}$ N	1	—	—	0.m
21	62.5	61.5	29.840	63.23 57.33	SE $\frac{1}{2}$ S	3	—	—	6.c.v
22	58.2	62	29.604	58.13 55.13	ESE	5	—	—	0.m
23	55.2	59.5	29.362	56.13 52.93	ENE	5	0.160	0.247	0.m.d
24	62.5	60.2	29.645	64.13 58.83	NNE	1	0.001	0.002	6.c.v
25	63.5	61.2	29.800	66.83 60.83	S $\frac{1}{2}$ W	3	—	—	0.v
26	60.3	61	29.450	60.1 58.1	SW	2	0.215	0.300	0.v.v
27	59.5	59	29.492	60.1 57.33	W	5	0.030	0.067	0.v.v
28	60	59	29.440	59 56.83	NW $\frac{1}{2}$ W	2	0.664	0.644	0.v
29	55	58.1	29.312	55.13 50.93	W $\frac{1}{2}$ S	5	0.001	0.004	6.c.v.v
30	55	57	29.628	54.53 48.93	NW $\frac{1}{2}$ N	4	0.172	0.182	6.c.v
	58.10	57.16	29.564				2.659	2.730	

1848	Evening 10 th			Wind			Max	Min	
Jun	E	A	Bar	Hyg	Dir	Force	T	T	
1	48.5	55.3	29.288	47.23 46.03	SWbW	4	56.5	44.5	6 c.v
2	47	58	29.121	45.83	N	1	59.8	45.5	6 c.v
3	50.8	57	29.172	50.83 48.83	NNE	1	63	48.9	o.d.v
4	51	56	29.332	58.83	SW	0	59.5	49.5	o.d
5	48.9	56.5	29.528	47.63	N	0	61.5	47	6 c.v
6	50	55	29.468	50.43	SW	5	59.9	47	o.v
7	48.3	55.3	29.520	49.53 48.53	SWbW	4	60.3	44.2	6 c.v
8	49	56	29.491	48.73	SW	1	63	46	6 c.m Thunder in afternoon
9	49.2	55.8	29.390	49.53 47.53	N $\frac{1}{2}$ W	1	61.2	44.5	o.v
10	46.9	56	29.542	48.83	N $\frac{1}{2}$ E	1	61.3	44.5	6 c.v
11	51.5	57	29.624	51.23 49.33	SSW	1	64	49	o.v
12	50.2	57.8	29.500	49.83	E $\frac{1}{2}$ S	1	64.8	48.2	6 c.v Then stratus
13	47.9	53.5	29.380	47.23	WSW	7	57	44.5	o.v
14	54	56.5	29.562	53.53 51.53	N $\frac{1}{2}$ E	4	63.5	53	o.v
15	56.5	57.5	29.739	55.3	NNE	1	66	54.5	6 c.v
16	60	60.5	29.736	60.23 58.03	NE $\frac{1}{2}$ E	3	72	57	6 c.v
17	59	60.5	29.744	58.7	N $\frac{1}{2}$ E	2	65.9	56	o.v
18	54.9	58.5	29.989	54.73 52.73	NWbW	1	70.5	48.1	o.v
19	53	61.2	30.078	53.3	NNE	0	67	50	6 c.v Some streaks of Cirrus
20	57	63.4	29.961	56.3	NNE	0	74.9	52	6 c.v Cirrus
21	58.8	62.2	29.884	58.53 56.53	SW	1	71	56	6 c.m
22	59	62.5	29.721	58.9 56.9	ENE	1	69.2	58	o.v
23	56.2	62	29.431	56.23	E $\frac{1}{2}$ N	6	64.5	52	o.v.s
24	56.5	60	29.460	56.23 54.23	NE $\frac{1}{2}$ N	4	63	55	o.d
25	55	61.2	29.772	54.7 53.2	NE	1	69.8	54	6 c.v
26	58.8	60.5	29.650	58.83 57.53	S	5	68	55.5	6 c.v
27	56.9	60	29.434	56.9 54.9	SWbE	6	66	55	o.v
28	55.2	59	29.574	55.23 53.23	SWbW	5	65.5	52.2	o.v.s
29	54.5	58.8	29.428	54.53 53.23	SW	3	64	50	o.v
30	50.2	57.5	29.404	50.23 49.13	N	2	59.9	47.5	o.v
	53.16	58.30	29.531				79.30.5	5	

Morning 7 ²²				Wind			Rain		
July	E	A	Bac	Hg	Dir	Force	Sym	Row	
1	56	56.5	29.563	50.2 ¹ / ₂	WSW	4	0.035	0.055	6 ¹ / ₂ c.v
2	56	55.8	29.594	50.2 ² / ₂	NbW	1	0.103	0.120	6 ¹ / ₂ c.v
3	56.2	56	29.890	50.5 ¹ / ₂	NbW	1			6 ¹ / ₂ c.v
4	62.5	60.2	29.954	50.2 ² / ₂	SE	2			6 ¹ / ₂ c.v
5	64.5	60.1	29.818	50.5 ¹ / ₂	SWbS	3	0.319	0.391	0. v
6	64	62.2	29.468	50.2 ² / ₂	S	5			6 ¹ / ₂ c.v
7	59.2	60.8	29.610	50.2 ³ / ₂	WSW	6	0.030	0.069	6 ¹ / ₂ c. g. v
8	58	57.8	29.545	50.2 ⁴ / ₂	SSW	1	0.229	0.289	0. v
9	58.5	58	30.081	50.2 ⁵ / ₂	NWbW	1	0.018	0.017	6 ¹ / ₂ c.v
10	60	60	30.261		S.Wb.S	1			0. v
11	69	62	30.350	50.2 ⁶ / ₂	SW	1			0. v
12	72	66	30.348	50.2 ⁷ / ₂	SSW	2			0. v
13	59.5	64	30.302	50.2 ⁸ / ₂	N	2			0. v Registered at 19 ^h . 30 ^m
14	63.2	64	30.220	50.2 ⁹ / ₂	NW	1			0. v
15	62.2	63.2	30.226	50.2 ¹⁰ / ₂	NE	1			6 ¹ / ₂ c.v
16	62	63.5	30.129	50.2 ¹¹ / ₂	NWbW	1			0. v
17	62.5	62.9	29.844	50.2 ¹² / ₂	SW	3			6 ¹ / ₂ c.v
18	61.3	62	29.212	50.2 ¹³ / ₂	SSW	5	0.165	0.270	0. v
19	50.7	61.5	28.875	50.2 ¹⁴ / ₂	N.W	8	0.496	0.686	0. v Registered at 0 ^h
20	61.2	58.8	29.323	50.2 ¹⁵ / ₂	S.Wb.S	6	0.001	0.010	0. v Do.
21	58.5	59.1	29.421	50.2 ¹⁶ / ₂	S.Wb.S	3	0.075	0.090	0. v Do.
22	58.5	57.1	29.506	50.2 ¹⁷ / ₂	S.Wb.S	6	0.208	0.285	6 ¹ / ₂ c.v 22 Hours
23	59.5	57.3	29.559	50.2 ¹⁸ / ₂	S.W	5		0.007	0. v
24	58.4	58	29.237	50.2 ¹⁹ / ₂	S.W	4	0.425	0.480	0. v
25	60.3	58	29.426	50.2 ²⁰ / ₂	S.WbW	3	0.001	0.011	6 ¹ / ₂ c.v
26	56.6	57	29.404	50.2 ²¹ / ₂	S.W	8	0.040	0.091	6 ¹ / ₂ c. g. v
27	59.1	57.8	29.838	50.2 ²² / ₂	W	1			0. v
28	61.8	60.5	29.888	50.2 ²³ / ₂	SE	4	0.014	0.031	0. v
29	57	58.5	29.460	50.2 ²⁴ / ₂	S	4	0.270	0.388	0. v
30	59	57.3	29.283	50.2 ²⁵ / ₂	S.Wb.S	4	0.260	0.275	0. v
31	59.5	58.5	29.233	50.2 ²⁶ / ₂	NW	1	0.355	0.354	0. v
	60.21	59.85	29.707				3.047	3.920	
								3.919	

Nocturnal Cloud

1848	Evening 10 ^h			Wind			Max T	Min T	
July	E	A	Bar	Hyp	Dir	Force			
5 1	49.5	57	29.654	49.0 ³ 48.8 ³	WSW	3	60.8	48	0. V
9 2	51.9	56.9	29.556	51.5 ³ 51.4 ³	WSW	2	62	47	6. c. v
3	50.6	58	29.741	49.8 ³ 47.2 ³	N	1	63	44.5	6. c. v
4	51	58	29.977	50.3 ³ 50.3 ³	E	2	71.5	47.2	6. v
5	58	60.6	29.859	58.2 ³ 58.2 ³	S	3	67	57	0. d. v
6	58.4	62.5	29.690	58.1 ³ 58.3 ³	SE	1	72.2	57.5	6. c. v
7	55.8	60.2	29.510	55.2 ³ 55.2 ³	SW	6	67	54	6. c. v. v
8	53.8	59	29.734	53.1 ³ 53.1 ³	SW	5	64.5	50.8	0. v
9	55.2	60	29.754	55.2 ³ 55.2 ³	N	2	64	49.5	6. c. v
10	55.3	60	30.216	55.3 ³ 55.2 ³	N. E. by N	2	70	52.1	6. c. v
11	60.8	62.1	30.307	60.4 ³ 60.4 ³	SW by S	2	74	59	6. v
12	60	64	30.320	60.7 ³ 60.7 ³	S by W	1	78	59.5	0. m
13	61	66	30.321	60.8 ³ 60.8 ³	N by E	3	78.5	57	0. v
14	58	64	30.260	58.2 ³ 58.9 ³	NE	0	75.5	56	6. c. v
15	58.8	63	30.237	58.5 ³ 58.5 ³	NNE	3	71	55.5	0. v
16	58.1	65.1	30.184	58.2 ³ 58.2 ³	N by E	2	70.1	55.1	0. v
17	57	64	30.038	56.8 ³ 56.8 ³	W	1	67	55	0. v
18	58.2	61.5	29.568	56.5 ³ 56.5 ³	SW by S	5	67	56	0. d. v
19	57.1	62.5	29.000	56.8 ³ 56.8 ³	SW by W	6	67.7	50.7	0. v
20	48.3	57.1	29.300	48.3 ³ 47.3 ³	S. W	6	62.	46.5	6. c. v
21	54.1	59.1	29.380	54.6 ³ 51.3 ³	S. W	2	63	53	0. v
22	54.7	58	29.248	53.7 ³ 51.1 ³	S. S. W	10	60.5	47.5	0. v
23	52.3	58.3	29.570	53.4 ³ 51.4 ³	S. W. by N	5	64.5	50.	6. c. v
24	56.3	59.1	29.419	56.5 ³ 56.5 ³	S by W	6	63.5	54	0. v
25	53.7	59.1	29.437	53.2 ³ 51.1 ³	S. W by S	4	64.	50.8	6. c. v
26	55.3	59.1	29.333	53.3 ³ 51.8 ³	S. W by S	8	65.8	50.3	0. v
27	52.6	58.	29.687	52.3 ³ 50.2 ³	S. W	3	63.5	50.5	6. c. v
28	53.0	59.1	29.882	52.5 ³ 51.8 ³	NE	1	67	46.1	6. c. v
29	58.9	60	29.745	58.2 ³ 58.2 ³	S by W	4	65.8	57.8	0. v
30	53	58	29.381	52.2 ³ 51.1 ³	SW by W	2	66.5	49.5	6. v
31	54.5	59.1	29.122	53.1 ³ 53.1 ³	S	1	66.7	53.8	0. v
	55.09	60.21	29.756						

Register at 11.30

clear in the evening

Plutonium at horizon

1866	Therm 22 nd			Wind			Rain		
Aug	E	A	Bar	Hys	Dir	Force	Squar	Row	
1	58	57	29.655	57.7	SW	4	0.070	0.070	6. c. v
2	56.1	56.9	29.586	56.2	W by S	3	0.058	0.072	6. cum. v
3	60.1	56.2	29.470	56.2	SSW	3	—	—	6. c. v
4	59	58	29.242	58.8	S	4	0.001	0.003	0. v
5	62	58	29.394	58.8	SW by S	2	0.003	0.008	6. c. v
6	57	55.9	29.672	57.8	WSW	2	0.248	0.248	6. c. v
7	60	58	29.636	58.2	SW by S	1	0.048	0.077	6. c. v
8	59.5	56	29.628	59.1	W	1	—	—	6. c. v
9	58.8	57	29.817	58.9	N by E	1	0.027	0.034	6. c. v
10	56.2	55.5	29.895	58.9	NE by E	3	—	—	6. c. v
11	56.9	55.1	29.924	56.5	N by W	1	—	—	6. cumulus. v
12	60	56.2	29.860	59.2	E by N	2	—	—	6. cumulus. v
13	54.9	57.1	29.750	57.9	E.	4.5	—	—	0. v wind veering greatly
14	54.8	56.5	29.750	57.8	ESE	4	—	—	0. v
15	57.1	56.3	29.663	57.6	SSE	5	0.044	0.059	0. v
16	57.5	56.5	29.556	57.1	NW	5	0.192	0.316	6. cum. strat. v
17	59	55	29.782	59.5	SSW	3	—	—	0. v
18	58	56.5	29.350	58.5	SW	6	0.427	0.647	6. c. v
19	58.6	57.5	29.629	58.8	WSW	4	0.052	0.094	6. cum. str. v
20	50	54.9	29.141	59.9	N by E	2	0.840	0.863	0. v
21	55.2	55.8	29.278	55.1	SW by W	4	0.340	0.337	6. cum. strat. v
22	55	55	29.547	56.2	NW	1	0.056	0.063	6. cum. v.
23	55	54.2	29.763	55.2	W by N	1	0.045	0.062	6. cum. str. v
24	58.1	57.2	29.772	58.8	S	2	—	—	0. v
25	61.5	58	29.356	62.1	SSW	6	0.030	0.081	0. v
26	58.5	58.5	29.564	58.5	SW	3	0.142	0.275	6. cum. v
27	58	56.9	29.420	58.8	SW	3	0.007	0.027	6. cum. str. v
28	58.5	56.4	29.625	58.2	SW by S	6	0.000	0.020	6. c. v
29	55.8	55.4	29.807	57.3	S. W. S	3	0.077	0.120	0. v
30	57	55.2	30.017	57.5	N. W	2	—	—	0. v
31	58.5	55.1	30.060	59.3	S. W. by W	4	—	—	6. c. v
	57.53	56.38	29.633				2.787	3.476	

1848	Evening 10 th				Wind		Max	Min	
August	E	N	Bar	Height	Dir	Force	Ther	Ther	
1	52.1	58.5	29.510	51.51	WSW	2	62.8	48.8	b.c.v
2	51.2	58	29.642	50.93	SSW	2	62.7	47.3	b.c.v
3	51.8	58	29.520	50.51	W6S	2	66	48	b.c.v
4	54	57.5	29.370	52.5	S	2	66.8	45.2	om
5	54	58.1	29.200	52.9	WSW	1	66.8	44.5	0
6	49	57	29.550	52.3	SW	4	65.5	46.5	b.v
7	52.3	57	29.690	52.3	W6N	0	65.5	46.5	0.v
8	52	57.2	29.592	51.2	SW6W	1	62.5	47.8	b.c.v Bright Aurora
9	52.5	57	29.724	50.9	WSW	0	64	51	b.c.d
10	50.5	57	29.884	50.3	NELE	1	63.5	45.9	b.c.v Shooting stars in number
11	50	56	29.924	50.9	NNE	0	62	42.5	b.c.v
12	51.2	58.2	29.888	50.9	NE	0	64.5	47.2	b.m
13	50.7	58.8	29.830	49.7	E6S	2	63	49	b.cum.v
14	52.8	57	29.704	52.4	E6S	6	58	50.6	0.v
15	54.4	57.4	29.706	54.8	E	4	58	53.5	0.v
16	56	57.8	29.612	55.0	SSW	4	62.5	52.5	0.v
17	50	56.2	29.811	52.9	SW	2	62	45.1	b.v
18	58.9	57.2	29.112	59.5	S	8	61.5	51.1	0.v
19	49.2	56	29.572	50.3	SW	3	61.2	47	b. stratus.v
20	51	56	29.600	50.1	S6W	1	62.8	49	b. cast. v
21	49.9	54.9	29.320	48.2	SW	3	56.5	47	b.c.v Fine Red Aurora from NW to NE
22	48.1	55.5	29.337	47.5	SW	2	61.8	47.1	b.c.v
23	47.9	55.5	29.660	48.8	WSW	3	59.5	44	b.v
24	49.9	56	29.817	47.0	S6W	2	61.6	45.5	b.c.v
25	55.5	57	29.544	52.0	SE	5	61.6	55	0.d
26	56.2	59.1	29.397	56.1	SW	4	68	49.2	0.d
27	55	58.5	29.412	54.8	SSW	5	64.8	51.5	0.v
28	54.1	58.	29.593	54.3	S.W.6S	9	63.3	51.5	b.c.v
29	50.6	57	29.668	50.3	S.W.	5	61.8	50.6	b.c.v
30	48.8	56.6	29.928	48.3	S.W.6W	3	61.	47	b.c.v
31	50.4	57.1	30.078	47.4	W	2	62	45	b.c.v
	51.94	56.13	29.622						

1848		Morning 22 knots wind					Rain		
Sept.		E	A	Bar	Temp	Direction	Force	Square	Globe
♀	1	58	56.9	30.232	58.03	W 1/4 N	1	---	---
	2	56.9	56.1	30.186	58.83	SW	3	---	6. (cu. str) v
⊙	3	58.8	57	29.888	59.23	SE	2	---	6. v
	4	64	65	29.436	59.13	S	5	---	6. cumstrat. v
	5	57.1	58	29.507	58.93	SW 1/4 E	4	0.232	0.333
	6	56.7	58	29.710	57.3	SW 1/4 S	5	0.008	0.026
	7	58.9	57	29.527	58.93	SW 1/4 S	6	0.062	0.106
	8	53.1	55	29.586	58.8	SW	3	0.009	0.036
	9	51.5	54.2	29.582	57.23	N 1/4 W	1	0.499	0.504
⊙	10	50.5	52	30.024	53.23	NNW	2	0.000	0.004
	11	53	53	30.220	52.53	SW 1/4 W	1	---	6. cumstrat v
	12	54.9	54	30.123	54.23	SW	4	---	0. v
	13	55.5	55.5	30.160	55.63	NW	2	---	6. Cumstrat & Cumulus. v
	14	58.2	55.2	30.150	59.13	SE	5	---	0. v
	15	60.5	61.5	30.164	58.83	SW 1/4 S	3	---	6. cum. v
	16	55.8	57.1	30.210	58.13	N	1	0.033	0.037
⊙	17	54.8	53.3	30.161	54.43	SW	2	---	0. m
	18	57	56	29.540	57.73	S	5	---	0. v
	19	54.5	55.2	29.443	54.53	SW 1/4 S	3	0.075	0.102
	20	55.7	56.2	29.628	55.23	SE 1/4 W	4	---	6. Stratus, mist halo
	21	58.2	58.2	29.638	58.73	SE	2	---	6. cum. v Wind veered in night 3.00
	22	59.8	56	29.444	58.23	SE 1/4 E	1	---	0. v
	23	59.2	58	29.196	59.23	ESE	5	0.489	0.489
⊙	24	57.9	56.2	29.396	57.93	ESE	3	0.564	0.603
	25	53.7	56	29.571	53.23	N	2	---	6. cum. v clouds a soft morning fog
	26	56	56.2	29.739	56.53	NE 1/4 N	3	---	0. m. d
	27	53.2	55	29.892	53.13	NNE	4	atran	0.008
	28	53.2	53	29.767	52.83	NNE	3	20	0.002
	29	52.5	55.2	29.620	54.53	NE	2	0.107	0.107
	30	53.3	55.8	29.382	53.23	SW 1/4 S	2	0.011	0.017
		56.15	56.15	29.764				2.089	2.379

1848		Running 10 hours				Wind		Thermometer		
September		E	A	Bar	Hg ²	Direction	Force	Max.	Min.	
♀ 1	54.5	56.5	30.145	52.5	SW	6S	1	63	54	0
2	54	57	30.230	51.7	SW		1	63	48.1	6
3	56.1	58.5	30.026	52.3	SW	W	4	65.8	46.5	6. v
4	61	61	29.650	51.7	S		6	66.2	58	0
5	54.5	58	29.364	52.5	SSW		6	65	54.8	6. v
6	55.5	58	29.670	52.3	SW		7	61.2	52.9	0
7	57	57.8	29.635	52	SW	6S	6	62	51	0
8	51.5	56.1	29.631	52	WSW		4	62.8	49	0
9	50	56	29.538	49.1	SW		2	57.2	48.1	0. v
10	44	53	29.798	50.9	NNW		1	56.5	41.5	6. c. v
11	47.9	53.2	30.176	47.1	NW		0	56.5	45.9	6. c. v
12	49.8	53.2	30.190	47.2	SW	6S	1	55.5	47.5	0. v
13	52	55	30.124	52	SW	6W	1	59.8	51	0. v
14	50	55.5	30.172	52.3	W		2	61.5	48.8	6. cumulus. v
15	59.1	58	30.169	52	S		2	63	56	0. v
16	56.	58.5	30.120	52.6	SW		3	64.4	52	6. c. v
17	47.3	56.3	30.245	45.6	W	6N	1	61.	41	6. c. v
18	53.2	55.8	29.882	52.9	S		5	59.8	50.1	7. c. v
19	56.1	57	29.358	52.9	S		5	61.8	51	0. d. v
20	49.9	56.5	29.576	49.3	SE	W	3	61.2	41.3	6. c. v
21	50.5	55.2	29.582	50.5	SE		3	60	49	6. stratus. v
22	50.6	56	29.660	49.3	NE		1	63.1	50	6. m
23	57.3	59.1	29.187	57.3	SW		4	67.8	51	0. d
24	53.5	57.5	29.124	52.5	N	6E	3	61.7	49	0. v
25	52	57.2	29.544	52.6	NE	6E	5	62.7	49.1	6. c. v
26	52.5	56.1	29.664	52.3	NE		4	59	50	6. c. m. v
27	52	56	29.812	51.9	NNE		2	59.8	49	0
28	49	54.5	29.875	49.2	NNE		2	56.4	44	0. m
29	50.5	54.5	29.712	49.3	N	6E	0	56.5	50.5	0
30	53	55	29.493	52.8	WSW		1	58.5	49.2	0
		52.61	56.41	29.779						

from 11 to 12 hours
occasional
flashes of lightning at 13 hours
thunder at some distance

upper current from W

Esseab returned

October	Morning 22 hours				Wind		Rain		Remarks
	E	A	Bar	Thyr	Dir	Force	Sy	Rained	
1	56.2	56	29.241	56.23	SSE	4	0.059	0.074	o.c. r
2	53.8	57	29.340	53.93	SSE	4	—	—	b. cum
3	56.5	56.3	29.320	56.9	SW	—	—	—	b. cum. fr. v
4	59	58	29.650	59.23	SW	2	0.340	0.564	r. o. m
5	59	61	29.820	58.93	WSW	6	0.142	0.175	b. c. v
6	60.1	58.5	29.850	58.13	SSW	3	0.080	0.083	b. cum. r
7	57.5	57.5	29.724	57.23	SSW	5	0.001	0.011	b. cum. v
8	54	56	29.597	53.83	SW/S	3	0.002	0.016	b. c. m
9	55.3	55	29.646	55.43	N	5	0.014	0.039	b. cum. v
10	50.2	52.4	29.859	50.43	E	2	—	0.010	o. m.
11	47.7	50.9	29.884	47.73	NE	1	—	0.011	o. m
12	51.3	49.8	30.137	51.43	NE	4	0.008	0.014	b. c. v
13	—	48.9	30.172	48.23	NE/E	4	—	—	b. c. v
14	49.5	49.5	29.985	49.43	NE/N	3	—	—	b. c. v
15	49	50.5	29.825	48.53	NNE	4	0.068	0.091	o. v r
16	43.7	47.5	29.991	43.23	NNE	5	0.001	0.016	b. c. v
17	39.8	47.2	29.819	38.93	NNE	4	0.006	0.026	b. c. v. sleet
18	41.9	42.2	29.855	40.33	NNE	4	—	—	b. r
19	36.8	40.5	29.901	36.83	S	2	—	0.004	b. m.
20	45.9	42	29.713	45.33	SSE	3	—	—	b. c. m
21	47	45.9	29.216	47.33	N	1	0.184	0.268	o. m
22	45.6	44.5	29.207	45.43	SW	4	0.156	0.237	b. v. c
23	55	48.5	29.140	53.33	SW	2	0.067	0.110	b. m
24	38.5	43	29.230	38.43	SW	2	—	—	b. m
25	46.2	44.3	29.500	46.23	SSW	6	—	—	b. m. c
26	49.8	49	28.995	48.53	SSE	4	0.693	0.912	o. r
27	47	46	28.814	45.13	SW	4	0.251	0.455	b. m
28	44.7	44	29.186	44.13	SE	1	0.006	0.031	o. v
29	46	45	29.240	43.53	NE	2	—	—	o. v
30	47	46.5	29.450	46.23	NNE	3	—	—	o. v
31	42	43	29.510	41.73	W	1	—	—	—
	49.20	51.21	29.575				2.078	3.147	

1848	Evening 10 hours Wind						Ther	Mer	
October	E	A	Bar	Hyg	Dir	Dir			
1	52.2	52.5	29.332	52.23	S	4	58	52.1	o.d
2	50.	53.8	29.280	50.3	SE	3	58.8	48.2	b.c.v
3	57	55.1	29.186	57.3	S	7	61	53	r
4	57.1	56.5	29.542	57.13	SSE	5	61.5	53.5	o
5	58.9	58.1	29.621	58.23	SSE	7	63	53	o.v
6	54.5	58	29.848	54.53	SSE	4	63.8	54	b. stratus .v
7	56.5	59	29.702	56.53	SSE	3	64.5	53.5	b.c.v
8	51.5	56	29.754	51.53	SSW	4	61.5	57.1	b.c.v
9	52	55	29.542	52.23	W	5	58.9	48.1	o. y. v
10	46.9	55.4	29.852	46.9	SW	2	57.8	42.5	b.c.v
11	42.4	51.8	29.855	42.43	S	3	57.8	40.3	b.m.c.v
12	44.8	51.5	30.014	44.83	NNE	1	52.6	40.9	b.c.m
13	43.6	50.5	30.196	43.63	NESE	2	50	43.2	b.o.m.v a small colored halo
14	43.6	50.2	30.125	43.63	NESE	3	52.2	41.6	b.c.m.v large halo. of auroral band. NW & E ends
15	46.6	50.5	29.845	46.63	NESE	4	57.7	46.5	o.r.v
16	42	48.9	29.905	42.33	NNE	3	50	40.1	b.c.v
17	34.2	45.3	29.920	34.23	N	3	46.5	31.4	b.c.v Snow at 8^H
18	34.2	42.3	29.843	34.23	NSE	3	41.6	32	b.c.v single aurora col^d central
19	32	42.3	29.885	32.33	NE	0	44.8	28.2	b.v
20	35	43.1	29.845	35.33	SSE	1	44.2	33.5	b.c.m
21	45.9	45.2	29.413	45.93	SSE	6	48.7	44.5	r
22	42	45.2	29.111	42.33	SSW	5	48.9	40	r
23	44.2	47.2	29.063	44.23	E	3	51	40	
24	38.1	45.3	29.237	38.13	S	1	49	43.5	b.m
25	39.3	45.8	29.357	39.33	SSE	4	49	37.5	b.m
26	51.6	48.1	29.180	51.63	SSE	9	54	45	90.m at 10^H max = 57.6; to it
27	42	48	29.938	42.33	SE	6	47	41.1	b.p.v rose 2.4 in the night
28	41.6	46	29.107	41.63	S	6	47	36	b.c.v
29	43.5	46	29.240	43.53	S	3	52	37	70.v
30	45.2	45.5	29.343	45.23	NSE	4	48	43	o.r
31	39.4		29.524	39.43	NSE	3	47	31	
	45.32	50.75	29.571						

1848	Morning 22 nd				Wind		Rain		
Nov	E	A	Bar	Hys	Dir	Force	Squm	Roud	
♀ 1	43.6	47.7	29.628	43.43 40.93					b. c. v
2	38.5	43.3	29.424	38.3 37.3	NbE	7	0.767	1.112	o. v
3	35.2	39.2	29.696	33.2 32.5	NbW	1	0.005	0.015	o. snow
4	46	42.5	29.500	45.5 44.2	W	3	trace	0.023	b. cum. strat. v
5	46.1	43.9	29.468	42.2 40.2	NW	4	—	0.016	o. m. cl
6	38.8	41.2	29.548	37.4 37.4	NbNW	3	0.028	0.061	o. v
7	39.9	41.2	29.040	39.7 38.2	NWbN	3	0.013	0.020	b. c. v
8	36.2	40.5	30.308	36.1 33.5	NWbN	1	0.028	0.046	b. anastrotus v
9	43	41	30.309	42.8 42.2	W	0	0.012	0.020	o. v m
10	43.2	42.2	30.412	43.2 42.2	N	0	—	0.008	o. m
11	44.3	43	30.485	44.2 41.2	N. E. b. N	3	—	—	o. v
12	36.5	40	30.420	36.5 36.7	S	3	—	—	b. c. m
13	46	42.6	30.307	46.3 43	N. W	2	—	0.021	o. v
14	40.2	40.8	30.370	39.4 38	SWbS	3	—	—	b. c. m
15	42.7	43	30.093	43.7 43	S. W	3	—	0.021	b. c. m
16	47.2	44.3	29.780	47.3 45.4	WbS	5	0.063	0.233	o. m
17	46.3	44.2	29.384	46.5 42.5	W	7	0.087	0.177	o. v
18	39	41.2	29.765	38.8 37.5	SWbS	4	—	0.030	b. m stratus & cumulonimbus
19	51.1	48.5	29.096	51.1 49.5	SW	10	0.041	0.287	o. v
20	44.1	46	29.248	43.5 41.2	SW	6	0.047	0.198	b. v. a trace of cumulus
21	48	45	28.728	47.2 45.9	SE	5	0.094	0.195	o. v
22	41.8	43.5	28.899	42.1 41.4	N. b. W	3	0.135	0.210	b. cirrocumulus & v
23	38.9	40.9	29.640	37.8 36.9	SW	3	—	0.008	b. cirrocumulus v
24	46.1	43.5	29.469	45.9 44.7	SW	7	0.002	0.028	o. d. v
25	48	46	29.433	47.5 46.3	SWbS	6	0.040	0.218	b. c. v
26	46.2	44.5	29.700	45.6 44.7	WbS	2	0.002	0.015	b. v
27	50.5	46.8	29.611	50 48.8	SW	6	—	0.029	o. v
28	47.8	47.1	29.603	47.6 45.5	SW	3	—	0.007	o. m
29	40.2	43.4	29.674	38.5 37.9	SWbW	4	0.218	0.390	o. m
30	38.7	41	29.283	37.4 37.4	SWbW	5	—	0.009	b. v
	43.47	43.37	29.677				1.585	3.698	

1848		Twining 10 hours			Wind			Max	Min	
Hour		E	A	Bar	Height	Dir	Force			
1	42.5	44	29.510	42.5	WT	2				
2	43.7	46	29.402	43.4	SW	4	49	37	0.0	
3	33.1	40.9	29.656	42.8	N6E	2	39	30.2	6. v	
4	36	40	29.688	42.8	SW	1	46	33.2	0. v	
5	46.2	42.8	29.512	42.8	N6W	5	49.5	43.5	0. v	
6	40	43.3	29.358	42.2	W	5	49.8	34.1	0. v	
7	36.5	41.5	29.821	42.2	NW	2	41	33.5	6. c. v	
8	41.2	42	29.988	42.2	NW6N	2	43	32.8	6. c. v	
9	35.2	40.2	29.332	42.2	SW6S	2	43	33	0. cumulus. v	
10	42.9	42.9	30.400	42.2	N6E	1	46.8	33	0. v	
11	41.6	43	30.419	41.4	N. x. E	1	44.8	41	0. v	
12	35	42	30.480	42.7	W6W	2	45.7	32.6	6. m	
13	44	42	30.317	42.7	N. W	5	46	36	6. c. v	
14	39	42.8	30.335	42.2	NW6W	1	47	33.5	6. c. v	
15	41.2	43	30.209	41.8	S. W	4	45	39.5	0. v	
16	44	43.2	30.039	44.3	S. W	6	49	42	0. m	
17	45.1	44.6	29.600	45.4	S. W	5	49.5	42	6. c. v bright aurora from S ^W toward	
18	37.8	42.8	29.481	37.8	W6S	5	46.9	35.5	6. v the South 9 round to N.E converging	
19	47.2	46	29.510	47.8	SW	10	51.1	38.5	9 to the Magnetic Zenith	
20	42.9	45.2	29.120	41.9	SW	10	52.8	41	6. stratus. v faint aurora	
21	44	45	29.108	42.9	S6E	5	48	42	0. v aurora bright thru cloud	
22	40.2	43.5	28.726	40.9	SE6S	5	49.8	39.5	6. c. v. bright aurora in gap	
23	37.5	42	29.320	36.8	NW6W	4	45.9	34.5	6. stratus. v faint aurora NE. NW	
24	40	41.8	29.739	38.8	S6W	5	46.5	37	0. v aurora behind clouds	
25	46.9	45.1	29.409	46.4	SW6S	9	51.2	42	6. c. v	
26	41.9	45.1	29.441	44.7	SW6S	7	49 -	41.8	6. c. v	
27	44.9	45 -	29.736	44.9			50.8	43.5		
28	53.8	50	29.424	53.3	W	9	54.7	46 -	0. v	
29	40.1	45	29.521	39.8	SW	3	48.5	38.8	6.	
30	39.4	42	29.489	38.9	SW6S	3	42.5	32.4	C	
		41.56	41.46	29.670						

1848	Morning 22 nd			Mend			Rain		
Feet	E	A	Bar.	Hygi.	Sir	Forc	Squ:	R	
1	38.3	39.2	28.923	37.2	WIN	4	0.051	0.390	0 P Heaving
2	35.6	36.8	29.349	34.9	S	5	—	0.010	0 m. snow on ground
3	38.5	41.2	28.641	37.8	SW	5	0.182	0.432	6 c u
4	41.4	40.5	28.824	40.8	W6S	4	0.074	0.506	6 c u
5	41.1	40.6	28.723	40.5	SW	4	0.182	0.226	0
6	37.8	40. —	29.181	37.3	N	2	—	—	6 c m
7	47	43.8	29.300	46.6	SSW	6	0.160	0.227	6. m
8	53	46.5	29.497	52.5	SW	7	0.035	0.075	0. v
9	52.5	49.5	29.727	52.9	SW	6	0.020	0.134	6. ^{direct} strat } v
10	48.9	49	29.721	49.7	SSW	4	—	0.010	0. v
11	50.9	47.8	29.679	50.5	SW	5	—	—	0. v
12	58.3	52	29.486	53.6	SW	7	0.020	0.082	6 c m
13	50.4	51	29.125	50.2	SSE	8	0.007	0.037	0. m. v
14	48	47.2	28.876	47.5	ESE	8.225	0.192	0.390	0. m. r. v
15	37	43.2	29.589	36.2	S	3.	0.003	—	6. c. v R blown down
16	40.8	41	29.492	40.5	S	5	—	—	6. stratus. v
17	48.5	46.2	29.266	47.5	SSE	9	0.006	0.016	0. d. v
18	35.6	41.2	29.748	35.8	SW	2	—	—	6. cumulus. on.
19	28.7	44.9	30.042	27.2	NLE	0	—	—	6. trace of cumulus. on
20	38.2	40.8	30.092	37.9	SW	5	—	0.014	0. v
21	33	36.2	30.179	32.2	NLE	0	—	—	6. m
22	36.9	37	30.165	36.4	SW	3	—	—	6 c
23	34.7	37	29.759	34	ES	4	—	—	6 c
24	43.3	38	29.523	42.8	NE	2	—	0.008	0 v
25	48.8	45.5	29.213	41.4	S	5	0.129	0.275	06. heaving
26	40	50.5	29.911	39.2	SW	3	0.012	0.144	6. stratus. m. v.
27	27.1	37.2	29.998	26.6	EN	0	—	—	on
28	43.1	41	29.959	42.3	S	0	0.005	0.010	0. v
29	40.9	41	29.953	40.4	ES	1	0.016	0.025	0. v
30	37.3	40	29.957	38.5	ES	2	—	—	0. m
31	37.2	39	29.012	37	NE	1	0.003	—	0. m
	41.53	40.40	29.509				1.097	3.011	

1848		Evening 10 H			Wind			Max.	Min.	
Decr		E	A	Bar.	Hygr.	Dir.	Force			
♀	1	37.2	40.1	28.901	$\frac{36.8}{35.7}$	SW W	6	45.7	34	o.c. aurora behind the clouds
	2	32.1	37.2	29.239	31.5	SW	5	40.9	31.2	bu shown on ground
	3	50.2	44.8	28.694	$\frac{42.2}{42.9}$	S	7	52.2	31.9	o.c. c
	4	42.2	42.2	28.221	$\frac{41.8}{41.4}$	SW W	6	41.1	24.8	o.v. c 41.1?
	5	37.4	41.7	28.825	$\frac{36.9}{36.6}$	S	3	40.5	35.7	o.v.
	6	34.8	38.5	29.083	$\frac{34.8}{33.8}$	SS W	3	62.5	34.8	o.v.
	7	40.8	40.5	29.262	$\frac{42.2}{41.7}$	W N	2	43	38.0	o.v.
	8	46.1	44	29.531	$\frac{45.1}{45.2}$	S	6	54	45	o.m.
	9	53.2	48.9	29.733	$\frac{53.2}{52.2}$	SS W	6	56	51.2	o.v.
	10	50	49	29.582	$\frac{49.8}{49.2}$	S	10	—	48	b.c.v. the mass. under had got into the bulb at top. Now.
	11	46.2	48.1	29.840	$\frac{46.2}{44.9}$	SS W	4	51	41.2	b.c.v.
	12	54	51.8	29.468	$\frac{54.1}{53.1}$	S	8	54	50	o.v.
	13	51.8	50.5	29.374	$\frac{51.9}{50.9}$	SE	9	55	50.4	o.v.
	14	44	47.5	29.381	$\frac{44.6}{43.6}$	SS W	6.250	52.8	41.5	b.v. v.
	15	41	44.5	29.300	$\frac{40.2}{37.5}$	SW W	9.519	61	36	b.v. a very heavy gale during day for notes min B 28.8116
	16	36.9	41	29.520	$\frac{36.3}{34.7}$	SS W	4	41	35.6	b. station. v
	17	47	44.5	29.370	$\frac{46.5}{43.3}$	SE	10	48.8	40	o.d.v.
	18	43.2	46	29.414	$\frac{46.6}{46.0}$	W	6	50.1	34.1	o.v. Vane of Anem. broken by the gale
	19	32.9	41	29.945	$\frac{31.8}{30.9}$	—	0	39.8	28	b.m.
	20	43.1	41.5	30.035	$\frac{42.8}{42.0}$	S.	5	43.1	29	o
	21	31.9	36.6	30.100	$\frac{30.8}{28.8}$	S	3	38.8	29.8	b.c.v.
	22	36	37.2	30.220	$\frac{35.2}{33.7}$	E S	3	39.5	31.8	b. cloud in horizon. v
	23	37	37.2	29.503	$\frac{36.9}{36.7}$	N E	1	39.2	33.3	o.v.
o	24	38.3	37.5	29.455	$\frac{38.4}{35.4}$	SE	5	43	33	o.d. to dash the cups hardly discernible
	25	45.6	45.6	29.989	$\frac{44.3}{44.4}$	SE	2	52.1	42.7	o.v.
	26	48.5	46	29.364	$\frac{48.5}{48.0}$	SW	8	51.5	38.2	o
	27	33.2	41	29.925	$\frac{32.7}{32.7}$	S. W	0	43	26.8	b.m.
	28	33	38	29.972	$\frac{32.7}{32.7}$	E S	0	43	26.5	b.c.m.
	29	42.9	41.1	29.940	$\frac{42.5}{42.0}$	SE	5	43.3	40	o.d.
	30	37.5	40	29.920	$\frac{37.8}{35.8}$	E S	2	42	37	o
	31	37.2	39	29.996	$\frac{37.0}{35.5}$	ENE	3	37.5	34.5	o
		41.46	40.41	29.517						

1848	Evening		Morning		Rain		Vapour Tension	Wind		Thermometer	
	F	Bar	F	Bar	Squon	Round		Force	Dir.	Max	Min
Jan	33.49	29.732	35.90	29.748	0.682	1.867				3 ⁰ - 52.1	27 - 19.2
Feb	40.97	29.295	43.31	29.261	2.572	6.754	6.954			13 - 53.5	15 - 27.2
March	39.96	29.433	43.84	29.449	2.026	3.769	3.767			30 - 54.5	5 - 31.0
April	42.24	29.571	45.94	29.582	2.239	3.320				2 - 62.9	26 - 31.0
May	52.85	29.848	58.70	29.822	0.994	1.239	1.256			26 - 76.8	5 - 40.5
June	53.16	29.509	58.10	29.542	2.659	2.733				20 - 74.9	10 - 41.0
July	55.09	29.729	60.21	29.680	3.047	3.920	3.919			13 - 78.5	3 - 44.6
Aug ⁺	51.94	29.603	57.53	29.614	2.787	3.476				4 - 66.8	11 - 42.6
Sept.	52.61	29.763	56.15	29.748	2.089	2.379				23 - 67.8	17 - 41.0
Oct	45.32	29.571	49.20	29.572	2.078	3.147				7 - 64.5	31 - 31.0
Nov.	41.56	29.694	43.47	29.696	1.585	3.698				20 - 52.8	3 - 30.2
Dec.	41.46	29.544	41.53	29.536	1.097	3.011				15 - 61.0	4 - 21.8
Summer	51.89	29.670	56.63	29.662	13.654	16.894					
Winter	40.14	29.555	42.53	29.556	10.201	22.419					
Year	46.06	29.612	49.60	29.609	23.855	39.313	39.527				

45.89

49.49

Mean Temperature of Year = 47.83
 Max. July 13. — 78.50
 Min. Jan 27 — 19.20
 Mean Barometer — 29.611
 Max. Nov. 11. 22 — 30.485
 Min. Feb 26. 22 — 27.987

Rain on 221 Days