

Jan ^y	Morning			Wm			Rain		
	E	A	Bar	Hg	dir.	form	Square	R	
1	40.8	37	29.965	40.6 39.0	S	4	0.050	0.055	0. m
2	45.1	39.9	29.854	45.8 44.8	SW	5	0.015	0.062	0. d. m
3	40.1	39.9	29.792	39.6 38.1	SW	7	0.183	0.378	0. y. v
4	31.8	36.3	29.176	31.8 31.3	SWW	4	frozen	frozen	b. v strat cum
5	32.1	36.5	29.303	31.3 31.3	SW	0	—	—	b. fog
6	30.0	38-	29.889	30.2 30.2	SSE	1	—	—	b. m
7	38.2	38.6	30.099	37.8 36.5	S	5	0.119	0.242	b. v strat circ
8	37.7	37.5	29.967	37.5 36.3	SSE	5	0.039	0.092	0 rain
9	35.4	36.6	29.741	35.1 34.1	SESS	2	0.206	0.232	0 m
10	33.8	35.9	29.545	33.3 33.3	NSE	2	0.190	0.297	0. snow
11	34.5	35.3	29.833	34.1 34.1	NNE	2	0.082	0.078	0 b. m
12	34.1	34.9	29.800	34.1 31.8	ENE	4	0.194	0.013	0 v fine snow
13	34.0	34.2	29.661	33.8 31.6	E	7	0.014	—	0. v g. wet bulb frozen
14	25.3	32.5	29.579	24.7 24.7	NSE	1	frozen	frozen	b. v g. in g=3 snow wet bulb frozen
15	19.5	28.2	29.419	22.2 22.2	SW	3	—	—	b. circ cum. cum. m (wet bulb not wetted)
16	30.4	29.2	29.697	30.2 29.3	SW	3	—	—	b. circ strat m.
17	36.2	33.2	29.333	36.5 34.2	S	6	0.603	0.670	0 rain
18	40-	36.2	29.373	39.6 38.8	NWWS	3	0.069	0.151	b. v circ cum strat
19	35.6	34.3	29.845	35.2 35.2	ENE	3	—	—	b. cum strat v
20	38	35	29.956	37.7 34.7	SESS	6	0.363	0.421	0. y. v
21	40	40	30.196	39.7 39.7	SWSS	3	0.007	0.016	0 m - strat
22	43	40	30.284	42.1 42.1	SWWS	5	0.001	0.001	0. m
23	42.5	40	30.133	42.1 40.2	SWSS	3	—	0.001	0. m
24	41	40.2	29.592	40.9 40.6	WSS	2	0.120	0.136	0. d. m
25	45	42.1	29.332	44.9 43	WN	4	0.243	0.370	0. y
26	33.5	35	30.190	32.9 30.2	S	5	—	—	b. stratus, v
27	47.2	42	29.560	47.2 46.4	SW	7	0.011	0.364	0. y. v
28	39.5	42	29.808	39.1 38.5	NW	1	—	—	b. cum. m
29	42.2	41.8	29.940	42.2 41.2	SSE	3	—	—	0. g. m
30	46	43	29.608	46.2 44.2	SSE	5	0.220	0.340	0. d. v. y Bar heaving
31	47.7	45.3	29.270	47.5 46.5	SSW	5	0.046	0.161	0. r. m
	37.36	37.34	29.716				2.775	4.083	

35.1
32.8

Hy 365
35.2

1850	Evening 10			Wind					
Jan	E	A	Bar	Hggt	Dir	Force	Man	Mer	
1	38.1	35.9	29.976	37.93 36.73	S	5	40.8	33.5	o. cl
2	39.	37.3	29.964	38.23 38.23	SW S	4	45.1	37.9	o. g. m
3	44.	40	29.664	44.83 43.83	W S	2	48	36	o. g. v
4	33.	37.8	29.265	32.33 32.	W S	2	42.2	29.8	6 v snow
5	36.1	36.6	29.316	36.33 34.43	NW	4	38.3	30.6	6 v cum. luminous clouds NNE
6	25.5	33.9	29.623	28.63 28.63	S	1	32.9	24.5	6 m
7	34.5	34.3	29.998	34.12 34.12	SW	5	38.3	28.9	6 cirrus v
8	40.3	38. —	30.021	40.12 38.12	SE	8	40.5	37.5	o v. luminous clouds N W SE
9	36.4	37. —	29.958	36.93 35.43	SE	2	38.6	31.5	rain dark
10	34.9	35.7	29.424	34.33 32.83	SE	8	35.2	32.5	sleet dark
11	33.5	35.5	29.724	32.73 31.93	NN	3	34.1	32.2	o. dark
12	34. —	34.8	29.796	33.43 31.43	NE	5	35.3	31.8	o. dark wet bulbs frozen
13	32.4	33.6	29.757	32.13 29.43	NE	6	34.5	30.9	6 cirr strat luminous clouds - d
14	31.2	33.4	29.569	30.83 29.43	NE	1	34.5	22.8	o. ug. light aurora. slight v. n. s. $\alpha = 5^\circ$ wet bulbs frozen
15	18.2	29.5	29.406	—	NN	0	27.5	15.6	6 v. cirr str all round horizon Hggt below 18° ab frz
16	24.9	28.6	29.550	24.83 23.63	WSW	3	29.9	19.2	6 v cum at NW 10° frz
17	30.7	30.5	29.727	30.33 29.33	S	3	36.5	27.2	o. v. 10° frz
18	40.4	35.4	29.229	40.23 39.23	SW	6	45.2	35.4	o. rain d
19	34. —	35.1	29.681	34.13 33.13	SE	2	43.2	29.8	6 cum strat v
20	35.1	34.8	29.857	34.83 33.13	SE	6	38	34	o. g. cl
21	39.2	36.4	30.100	38.73 38.73	S	5	40	35	o. v
22	45	39.	30.240	42.23 41.23	SW	5	45.5	39.1	o. v
23	42.9	40.	30.216	42.83 41.23	SW	4	43.8	41.2	o. cl. v
24	39.2	39.8	29.876	39.93 37.93	S	5	44.1	38	o. stratus. v. halo.
25	46	42.	29.144	45.83 43.33	SE	5	48.5	40.1	o. g. v. v
26	30.1	37.8	30.072	29.23 27.23	NW	0	45.7	26.1	6 v
27	41.8	38.5	29.700	40.33 38.33	SW	11	48	32	o. g. v The bulbs form a continuous circle in the v. g. u. l. s.
28	45.4	42.5	29.600	45.23 43.83	NN	2	52	38	o. v
29	40.5	42	29.850	40.13 39.03	E	5	44.9	39.1	o. cl.
30	42.1	42	29.863	41.93 41.93	SE	6	46	39.5	o. g. v
31	47.2	44.8	29.460	47.13 46.73	SW	6	50.2	44.1	o. v, but some stars visible thro stratus
mean	36.63	36.85	29.730				40.48	32.36	

February	Morning 22			Wind			Rain		
	H	A	Bar =	Hygr =	Dir	Force	Squ:	R	
1	47	45.5	29.347	47.9	SSW	4	0.065	0.247	o. v. m
2	42.1	43	29.462	41.8	WSW	5	0.037	0.258	h. cum strat v
3	38.5	40.5	29.582	38.7	SW	4	0.006	0.023	o. m. v
4	38.2	39.2	29.094	38.1	SW	6	0.060	0.090	o. g. d. m
5	40.1	46	28.984	39.8	NW?	7	0.057	0.869	o. g. v. v no mistake in the gages
6	39.5	39	29.336	38.9	W	1	0.034	0.240	h. cum strat. v
7	49.8	43.6	29.268	49.6	WSW	6	0.080	0.366	o. v. v
8	43.4	44	28.864	43.2	W6S	6	0.077	0.185	o. g. v
9	40.2	40.4	29.740	39.8	SW6W	4	0.020	0.100	h. cum strat. v
10	44.6	40.4	28.888	44.2	SW6S	5	0.161	0.634	o. v. m
11	35.8	39	29.078	35.9	W6S	3	0.164	0.366	h. cum strat v
12	33.9	46	29.942	33.8	SW	2	gages frozen		h. m.
13	48.8	42.1	29.588	48.9	SSW	5	0.040	0.156	o. g. m. v
14	51.2	46.1	29.594	51.3	SW6W	6	0.031	0.209	o. cum strat v
15	42.4	44.	29.890	42.0	NW6W	3	0.137	0.499	h. cum strat. v
16	49.9	46.	29.939	49.8	WSW	6	0. —	0.002	o. g. v
17	49	47.2	29.842	49.1	WSW	4	—	—	o. v
18	51	48.5	29.600	51.6	SW	5	—	0.007	o. g. v
19	46.	47.6	29.803	46.6	W6N	5	—	0.074	0.317
20	50.2	47.5	29.888	50.3	NW6W	6	0.014	0.144	o. g. d. v squales fearful
21	48.6	47.	30.207	48.7	W	4	—	—	o. v
22	44.8	46.	30.045	44.6	SW	3	—	—	o. v
23	46.2	45.	30.040	45.9	SW	1	—	—	o. m
24	49.1	47.8	30.055	49.4	SW	3	0.017	0.023	h. cum strat v
25	47	45.5	30.014	47.1	SW	5	—	—	o. g. v
26	48.9	47.	29.954	48.6	S $\frac{1}{2}$ W	6	—	—	o. g. v
27	48.2	46.	29.958	48.2	SW	3	—	—	o. m. v
28	49.3	51.1	30.020	49.3	W6S	4	—	—	h. cum. cum strat. v
mean	45.13	44.68	29.644				1.374	5.035	

Hyg = $\frac{41.8}{38.9}$

1850	Evening 10			Wind			Thermo		
Febma	E	A	Bar:	Hght:	Dir:	Force	Max	Min	
1	47.2	45.6	29.310	47.1	SWbW	8	54	44.8	o. r. q.
2	43.8	45.5	29.376	43.2	SWbW	7	53.9	39	b. c. q. v. Aurora behind clouds
3	37.7	42.8	29.696	37.2	SWbS	4	46.5	34.5	b. hare. v
4	40	42	29.470	39.8	WNW	3	44	33.5	o. g
5	44.2	41	28.389	43.2	W	11	49.5	34	b. c. r. q. Much thunder in night
6	34.9	39.3	29.184	34.2	WbN	3	41	33.8	b. bright auroral arch in NW
7	38	40.8	29.467	37.2	WSW	3	50	37.2	b. stratus, v faint aurora
8	48.5	45.8	29.157	48.2	SW	9	51.8	42	o. but 4 visible. q. v
9	35.2	41	29.387	34.2	SWbW	5	45.1	35	b. stratus, v
10	37.5	40	29.752	37.2	SW	5	44.2	35	Starry cum thro thick haze
11	36	39	29.138	35.2	SWbW	4	45.5	33	o. v
12	33.5	38.1	29.403	32.7	NWbW	3	39	30	b. cum shot aurora showed fallen
13	39.7	39.2	29.750	39.2	SW	7	49	33	q. g. q. fleet
14	50.2	44.2	29.524	49.2	SWbW	6	52	45	o. g. q.
15	49.9	47.2	29.427	49.2	SWbW	7	54.5	38.5	o. r. q. (cleared to the north at 12)
16	43.	44.6	30.040	42.7	WbS	7	49.9	41	b. v q
17	48.9	47.5	29.876	48.2	SWbW	9	57	47.1	o. q. v
18	49.5	47.8	29.777	49.2	SW	5	51.5	48.5	o. q. v
19	49.2	50.1	29.511	49.2	WSW	5	56.2	42	o. q. v slight aurora behind clouds circ cum
20	43.1	45.2	29.781	43.2	SW	7	—	32.?	o. q. v M lost on the under moon
21	48.8	47.3	30.060	48.2	WNW	6	52	46	b. c. q. v by the window showing
22	45.2	47	30.182	45.2	WbS	2	50.8	43	o. v
23	43.6	45.2	30.020	43.2	SWbW	2	48	43	o. v
24	44.9	45.2	30.028	44.8	S	3	49.5	42.1	o. v
25	44.0	45.8	30.094	43.7	SW	4	53.8	42.5	o. v
26	47.1	47.5	29.912	47.2	SSW	7	53	45	o. q. v
27	45.2	46.3	29.916	45.2	SSE	3	51.5	44.2	o. v
28	44.2	46.8	29.929	44.2	SWbS	4	52	46	b. cum stratus v Bar = 29.927
mean	43.32	44.21	29.627				47.78	39.51	

1850	Morning		22		Wind		Rain		
March	E	A	Bar:	Hygr:	Dir	Force	Sq =	Ro	
1	52.7	49.8	29.864	42.87	SWbW	5	—	—	b. cumstrat. v
2	45.9	48.	29.400	43.57	WSW	5	0.046	0.103	o. v
3	41.7	44.	30.109	44.57	NNW	3	0.014	0.027	b. cumstrat. v Hyg 41.5
4	45.2	45.	30.234	45.27	WSW	5	0.029	0.088	o. d. q. v
5	49.8	46.2	30.369	46.87	SWbW	4	0.001	0.004	o. v
6	49.2	47.	30.392	47.17	WbS	2	—	—	o. v
7	48.2	47.	30.294	48.27	NW	0	—	—	o. v
8	45.	44.9	30.000	48.37	SWbW	3	—	—	o. d. m
9	45.9	44.1	30.164	48.97	W	3	0.004	0.024	o. v
10	43.1	43.5	30.389	49.67	WNW	1	0.001	0.006	b. cumstrat. v It is dew not rain
11	46.9	44.8	30.152	49.77	WbS	2	—	—	o. m
12	45.2	43.2	30.433	49.87	NWbW	1	—	—	o. m
13	48.6	49.1	30.419	49.97	NEbN	2	—	—	b. cum. v
14	46.1	47.9	30.333	50.27	EbS	2	—	—	b. trace of cum at hor. v
15	38.7	41.8	30.221	50.87	WbN	0	0.001	0.011	fog
16	42.	44.1	30.149	51.17	SW	3	—	—	o. m
17	43.2	42.9	30.178	51.87	SWbS	3	—	—	o. v haze
18	47.9	45.	30.139	52.67	NNW	2	—	—	o. v
19	48.5	45.2	30.136	53.77	N	2	—	—	o. v.
20	45.8	44.1	30.196	54.27	NNE	3	—	—	b. cum. v A few drops of rain
21	47.5	45.1	30.020	54.77	WbN	5	—	—	o. v
22	36.1	43.	29.645	55.27	NNW	4	0.020	0.080	b. cumstrat. v some sleet in morn
23	31.1	39.5	29.770	55.77	NbE	3	0.013	0.003	b. cumstrat. v snow showers
24	32.1	39.	29.690	56.87	NWbW	4	0.027	0.015	b. cumstrat. v
25	36.5	39.8	29.474	57.57	NbE	4	open	0.062	b. cumulus and cumulostrat. v
26	37.	40.2	29.776	58.47	WNW	2	0.056	0.035	b. cumulus v
27	39.3	38.	29.848	58.57	WbN	1	0.008	0.013	b. strat in hor. h. v
28	43.5	41.1	29.702	58.77	SSE	6	drizzle	0.006	o. q. v wind very unsteady
29	42.	40.7	29.316	59.77	SSW	—	0.404	0.634	o. q. v wind very unsteady SE to W
30	51.2	45.2	29.208	59.77	SbE	8	0.075	0.037	b. cum strat q. v
31	49.9	47.3	29.164	59.87	SE	6	0.042	0.087	b. o. v.
mean	44.06	44.08	29.982				0.721	1.235	

1880	Evening 10			Wind		Therm		
March	E	A	Bar	Hyg	Wind Force	Max	Min	
1	47.5	49.5	30.026	47.5 ⁵ 26.5 ⁵	SWbW 5	55	46	b. c. g. v
2	49.6	50	29.544	49.6 ⁵ 28.6 ⁵	SWbS 6	55.5	43	o. g. Exceptionally dark
3	41.9	45.5	29.618	41.9 ⁵ 38.7 ⁵	N ¹ / ₂ W 5	47.8	35	b. clouds moving very fast. v
4	39.5	45.5	30.212	39.5 ⁵ 37.2 ⁵	SW ¹ / ₂ W 4	47	38	b. staccato thin stratus, v
5	44.2	46.1	30.300	44.2 ⁵ 23.1 ⁵	SW 4	51	43	b. clouds at horizon. v
6	48.8	47	30.400	48.8 ⁵ 23.5 ⁵	WbS 3	52.8	46.5	o. v
7	47	47	30.353	47 ⁵ 28.3 ⁵	W ¹ / ₂ S 2	50.5	45	o
8	45.2	47	30.118	45.2 ⁵ 28.4 ⁵	SWbS 2	49.5	43	o
9	39.5	45.5	30.061	39.5 ⁵ 38.1 ⁵	WSW 4	50.8	37.5	b. bright Aur. arc and faint stream
10	40	45	30.276	40 ⁵ 39.5 ⁵	WSW 2	49	35	b. black cloud under aurora NW. v
11	40	45.5	30.397	40 ⁵ 38.2 ⁵	SW 1.0	49	38	b. cumulus in hor. v
12	37.9	45.8	30.444	37.9 ⁵ 36.1 ⁵	SW ¹ / ₂ W 1	52	34	b. m
13	44.8	45.2	30.422	44.8 ⁵ 23.2 ⁵	N ¹ / ₂ W 1	50	42.8	o. g
14	45.5	47	30.364	45.5 ⁵ 23.5 ⁵	ES 1	53	39.6	o. g
15	37.5	46.9	30.255	37.5 ⁵ 36.1 ⁵	WNW 0	49.5	31.6	b. haze
16	39.1	45.7	30.165	39.1 ⁵ 36.4 ⁵	WbN 1	48.9	38.7	b. black stratus aurora NNW stratus SE
17	40.1	43.7	30.185	40.1 ⁵ 37.2 ⁵	SW 2	44	37.7	exceptionally dark
18	42.2	44.2	30.150	42.2 ⁵ 40.3 ⁵	W 1	48.3	42.6	o
19	44.8	45.2	30.134	44.8 ⁵ 42.3 ⁵	WNW 2	50.1	41.1	o luminous clouds all over
20	43	45.5	30.135	43 ⁵ 40.8 ⁵	NbW 1	50.2	37	b. or cirr cum
21	42.2	46.7	30.207	42.2 ⁵ 20.2 ⁵	WbN 1	51.9	38	b. cum. v
22	45.8	46	29.644	45.8 ⁵ 23.5 ⁵	W ¹ / ₂ N 6	52	31	o. g. v
23	29.2	38.2	29.678	29.2 ⁵ 28.2 ⁵	NbW 6	40.9	26.9	o. snow
24	27.5	37.8	29.777	27.5 ⁵ 25.3 ⁵	NbW 1	39	24	b. cumstrat v snowing
25	32	38	29.508	32 ⁵ 36.2 ⁵	SWbW 6	37.8	30.7	b. cumstrat. v
26	30.5	37.5	29.720	30.5 ⁵ 38.5 ⁵	NWbW 0	38.8	27	b. m. v
27	30.8	38.8	29.833	30.8 ⁵ 28.6 ⁵	WSW 2	43	27.5	b. m
28	38.2	40	29.772	38.2 ⁵ 35.2 ⁵	SEbS 6	43.8	37	o. stratus. v
29	41.2	41	29.504	41.2 ⁵ 34.2 ⁵	SE 10	45.8	37	o. g. v a fearful gale
30	45.1	40.2	29.195	45.1 ⁵ 23.2 ⁵	W 9	51.5	?	o g very unsteady Mon. gale at 10.0?
31	46	46.1	29.289	46 ⁵ 44.8 ⁵	SbW 6	55.2		b. g black cloud at north aurora behind merging
mean	40.86	44.29	29.992			48.16	36.74	Min only 29 days

1850	Morning 22			Wind		Rain			
April	E	A	Bar	Hyg:	Dir	Force	Squ:	R	
1	52.2	49.3	28.784	53.1	SE?	6	0.378	0.524	o. y. v. Wind most unsteady
2	52.1	49.5	28.850	52.2	SW	5	0.005	0.024	o. y. v.
3	51.2	48.5	28.565	51.8	NW	0	0.078	0.110	o. h. v.
4	50.	51.	29.178	49.8	W. N.	6	0.088	0.234	6. Cum strat. y. v.
5	52.8	49.2	29.273	48.6	SW	5	0.047	0.069	6. Cum. y. v.
6	54. —	50.4	29.197	48.5	SW	7	0.024	0.059	6. cum v. Merc: heaves
7	51.4	50.2	29.150	48.2	SSE	3	drop	0.007	o. strat cum h. v. dr.
8	52.1	49.8	28.896	48.5	NE	2	0.230	0.234	o. y. Cum. strat.
9	48.9	49.2	29.064	48.4	SW	5	0.016	0.039	d. o. v.
10	51.6	47.9	29.263	48.1	E. N.	3	0.059	0.119	6. v. h. q. cum
11	51.2	50.1	29.599	48.6	N. N.	1	—	drops	6. v. h. cum strat & SE horizon
12	53.6	51.6	29.573	48.4	SE	4	—	—	the shutter had been shut all morning 76 mm
13	53.2	50.	29.650	48.7	SSE	2	atraa	0.011	6. cum strat haze. q.
14	47.7	49. —	29.014	48.4	SE	5	0.224	0.327	6. cum strat. v.
15	50.1	50.8	28.790	48.2	SE	4	0.447	0.477	6. cum strat. v. Merc: heaves
16	48.8	49.9	29.220	48.5	W. N.	5	0.015	0.035	6. nimbus. v. v.
17	53.	49.8	29.672	48.5	SW	4	0.001	0.008	o. h. v.
18	56.	54.8	29.612	48.5	SW	5	0.113	0.272	6. Cum. v.
19	54.5	51.9	29.242	48.2	SW	4	0.185	0.237	6. cum strat. v.
20	52.	50.2	29.628	48.9	N. N. W.	2	0.035	0.033	6. cum strat. v.
21	47.5	48.	29.895	48.2	NNW	2	—	—	6. cum ad cum strat. v.
22	51.	50.	29.841	48.2	E. S.	5	—	—	6. Cum. v.
23	47.9	48.	29.922	48.5	SE	4	—	—	o. v.
24	50.9	49.	29.542	48.5	E. S.	3	0.569	0.637	o. d. v.
25	47.9	49.1	30.128	48.2	ENE	3	0.024	0.048	o. h.
26	49.1	49.	30.135	48.5	E. S.	4	—	—	6. cumulos strat. v.
27	48.	49.1	30.235	48.5	NE	1	—	—	o. v.
28	50.	49.4	30.337	48.5	NE	1	—	—	6. cumulu. v.
29	47.	48.	30.220	48.5	E. NE	2	—	—	o. v.
30	51.	47.2	30.050	48.5	NE	3	—	—	o. v.
	50.89	49.63	29.461				2.536	3.507	

1850

Evening 10

Wind

Therm

April

E

A

Bar:

Hyg

Dir

Force

Max

Min

April	E	A	Bar:	Hyg	Dir	Force	Max	Min	
1	48.9	48.5	28.837	47.8	SE	8	52.5	47	o. q. v
2	48.	48	28.676	47.8	SSW	7	54.5	45	o. q. v
3	49.	49.1	28.558	47.5	SSW	6	53.5	47.8	b. h. q. v
4	48.1	49.2	28.984	47.2	W 6 S	7	59	45.8	o. q. g
5	41.9	49.1	29.554	49.0	SW	1	58.9	41.5	b. h. v.
6	45.	49	29.255	44.8	SE	6	55.2	45	o. g.
7	50.7	51.4	29.211	49.6	S	6	58.5	45.3	o. r. d. more: heaves
8	47.7	50.	29.004	47.7	E 6 S.	2	54.8	46	o. g. d
9	47.5	51.	28.945	47.5	WSW	3	55.5	44	o. g.
10	46.1	49.	29.662	45.6	S	2	54.2	40.3	o. m.
11	45.	50.7	29.350	44.2	N. W. S.	0.	55.4	40.8	b. m. Max = 55.4 Min = 40.8
12	48.	52.5	29.685	47.6	W 6 N	1	59	46.7	b. cirro cum. d.
13	47.1	47.7	29.592	46.7	WSW	5	55	42	o. d.
14	47.	50.5	29.382	46.3	SE	6	54.6	43.4	o. v
15	46.	49.5	29.820	45.3	SE 6 S	5	53.5	44.	b. Cumstrat. v Heavy rain at 7
16	46.	50.	29.010	46.3	SW	5	54.6	46.	o. g
17	43.4	49.9	29.508	47.1	SW	5	55.2	41	b. v
18	49.	50.8	29.620	48.1	SSW	5	58	48.5	b. stratus. q. v
19	48.6	52.	29.309	47.1	S 1/2 E	5	60.5	43.5	o. v
20	45.1	52.	29.309	44.7	NNW	2	61	42.5	b. cumstrat. & stratus v
21	43.5	49.5	29.809	42.3	N 6 E	4	54.5	38	b. Cumstrat. in hor. v
22	40.9	50.	29.910	40.3	N 1/2 W	1	54	36	b. v
23	41.2	48.8	29.803	40.3	ESE	5	51.8	37	b. v
24	46.9	48.	29.776	46.5	SE	4	57.2	44	o. v
25	47.	49.8	29.870	46.3	NE 6 E	5	58	44.5	o. d
26	45.4	50.	30.128	43.1	NE	3	54.8	43.5	o. Cumstrat. strat. h
27	42.9	49.8	30.170	42.1	NE	3	54.9	38	b. a little cumstrat. v
28	42.5	48.8	30.292	41.3	NE 1/2 N	2	50.6	39.8	b. h.
29	41.9	49.	30.287	41.1	N 6 W	1	53.6	40	b. cumstrat. v
30	41.2	48.8	30.142	40.7	N	2	52.9	37.9	b. h.
mean	45.72	49.68	29.484				54.94	42.56	

18	Morning 22			Wind			Rain		
May	E	A	Bar:	Height:	Dir	Force	Squ.	In.	
1	51.2	50.2	30.115	51.4	WNW	2	—	—	b. cum. v. Some rain fell but not enough to show in gauge
2	53.5	50.1	30.067	53.9	W	3	—	—	b. cum. v
3	46.1	49.8	29.800	46.5	NW	3	0.008	0.015	b. cum. v. g. v
4	43.9	46.1	29.558	44.1	NNW	4	0.007	0.007	b. cum. v
5	45.8	46.1	29.675	45.2	NNE	4	0.001	0.004	b. cum. v
6	48.7	46.5	29.572	47.5	NE	2	a drop	—	b. cum. v.
7	50.8	48.1	29.327	51.5	NW	3	—	0.002	o. d. v
8	45.4	45.2	29.682	45.2	SSE	3	—	—	b. cum. v
9	50.8	48.4	29.500	51.8	SW	5	0.035	0.078	b. raining
10	50.5	50.1	29.652	50.6	SW by W	3	0.019	0.024	b. raining
11	45.8	49.5	29.772	43.3	NW by W	4	0.028	0.047	b. raining
12	50.1	49.8	30.114	50.2	NNW	2	0.004	0.011	at 0.4 Hg ^l = 52.1 43 } Δ = 9°
13	49.	49.4	29.890	48.9	NW by W	4	0.035	0.033	b. raining
14	51.5	48.5	29.896	50.5	N by E	3	—	—	b. v. cum.
15	51.	49.7	29.808	49.5	NW by W	3	0.015	0.016	b.
16	55.	51.6	29.808	51.6	NW by W	3	0.014	0.025	b.
17	50.4	51.6	29.520	51.1	NW by W	2	0.096	0.095	b. raining
18	52.9	49.8	29.538	52.4	N. N. E	1	0.104	0.102	b.
19	54.8	52.	29.712	54.5	E	3	—	—	b. hazy
20	56.8	54.3	29.696	56.5	NE	2	—	—	b.
21	55.5	55.2	29.442	55.6	N	1	—	—	b.
22	59.7	55.7	29.378	52.2	SSE	2	—	—	b. v
23	60.1	56.	29.340	54.3	NNE	1	—	—	b. v. raining
24	53.8	56.3	29.222	53.8	NNW	1	0.326	0.314	b. v. raining
25	55.6	55.8	29.120	52.9	WNW	1	0.782	0.782	b. v. raining
26	58.6	56.1	29.378	53.1	SE	2	0.304	0.301	b. v
27	58.3	56.4	29.694	53.3	S. W.	2	0.737	0.558	b. bar hearing & rising
28	60.1	58.3	29.806	60.8	S.	7	—	—	b. bar hearing & rising
29	58.9	57.4	29.828	58.2	SSW	5	—	—	b.
30	61.	56.2	30.014	60.7	N	1	—	—	b.
31	65.	64.1	30.146	65.6	SSW	2	—	—	b.
mean	52.76	51.69	29.679				2.525	2.414	

5th May 1850

Min Max
below
story

5th	23		
5 th	23		
6 th	26	27	
7 th	23	60	
8 th	35	39	34
9 th	27	35	27
10 th	42	61	41
11 th	31	68	32
12 th	30	62	30
13 th	34	69	34

Palace Garden
J. Yeoman

Possible pre-discovery observations of Noctilucent Clouds

Occasional notes concerning various unusual phenomena such as sunspots, haloes and luminous clouds were recorded beside the daily meteorological readings in the record books. On 1 May 1850, the observer notes "*Strange luminous clouds in NW, not auroral*". These may be early pre-discovery observations of the unusual, high altitude (c 80km), noctilucent clouds to which reference was later made by Arago. Noctilucent Clouds were first recognised as a new phenomena in 1884/5 after the eruption of Krakatoa.



Noctilucent Clouds from Co. Tyrone (MEB)



Noctilucent Cloud

1850	Evening 10			Wind			Therm		
May	E	A	Bar	Hyg	Dir	Force	Max	Min	
1	45.	49.	30.064	44.8 ¹ 41.1 ¹	NW	1	54	41.2	0.9 Translucent clouds in NW not auroral
2	42.3	49.8	30.120	46.8 ² 43.1 ²	NW	0	56	38	6. v
3	46.	50.5	29.936	48.6 ³ 45.1 ³	W	5	57	41.5	6. cum strat v
4	37.	47.	29.625	36.1 ⁴ 32.1 ⁴	NW	1	49.2	33	0.9. but some luminous patches or aurora behind
5	38.	44.5	29.637	37.2 ⁵ 35.1 ⁵	NE E	5	48	32.9	6. v
6	37.2	45.8	29.653	38.2 ⁶ 35.9 ⁶	NE.	1	50.1	32.5	6. v
7	41.5	47.2	29.428	41.2 ⁷ 38.3 ⁷	W	1	53.2	40	0.9. v
8	38.7	46.5	29.508	38.1 ⁸ 34.4 ⁸	NW	2	52.8	34	6. c. v
9	44.2	47.	29.620	44.8 ⁹ 40.8 ⁹	SW S	5	54.	43.5	6 cum. strat. v
10	48.5	49.5	29.605	48.8 ¹⁰ 45.8 ¹⁰	SW W	4	57.7	46.	0. v
11	46.3	50.	29.657	46.7 ¹¹ 43.7 ¹¹	W	2	55.5	40	6. cum v
12	42.3	49.3	29.984	41.6 ¹² 39.5 ¹²	N.W	2	56.6	39.5	6. - v reverse Max & Min
13	43.5	50.	30.061	43.5 ¹³ 41.5 ¹³	SW W	3	55.	43.5	6 cum v
14	42.	47.7	29.878	41.2 ¹⁴ 39.2 ¹⁴	NW	0	51.4	39	6. v
15	44.2	50.5	29.874	43.7 ¹⁵ 41.7 ¹⁵	SW	0	57.	43	6
16	49.7	51.5	29.854	49.7 ¹⁶ 47.7 ¹⁶	NW	2	61	49.2	6
17	50.1	53.	29.678	50.3 ¹⁷ 47.3 ¹⁷	SW W	0	61.5	47.5	6
18	44.8	50.7	29.840	44.3 ¹⁸ 42.3 ¹⁸	N	1	57.	41.5	6. Stars faintly v. thro haze
19	47.4	52.	29.642	47.6 ¹⁹ 45.7 ¹⁹	NNE	1	58.5	47.	6
20	51.	53.2	29.640	50.8 ²⁰ 49.2 ²⁰	N	2	58.5	49	6. very heavy 0. v
21	54.4	55.4	29.594	54.4 ²¹ 51.3 ²¹	S.S.W	3	63.6	46.5	0. cum cum. v
22	50.6	56.	29.357	50.6 ²² 48.8 ²²	N.N. 2	3	64.	47.6	6. c. v - clouds moving from S.S.W
23	52.7	57.7	29.405	52.7 ²³ 50.5 ²³	N.W	0	67.5	48.	6. v. cir. strat
24	54.9	57.	29.320	54.9 ²⁴ 52.8 ²⁴	N	2	67.	52.5	0. v. cum - thunder at 8 ^h
25	52.2	55.4	29.100	52.2 ²⁵ 51.4 ²⁵	SW	3	60	51	0. r
26	57.6	55.4	29.286	57.6 ²⁶ 55.3 ²⁶	S.W	3	60	50.5	0. r
27	51.8	56.	29.487	51.8 ²⁷ 51.1 ²⁷	WSW	0	64.	48.5	0. Cum - Thunder at 3 ^h
28	54.8	57.	29.787	54.8 ²⁸ 51.8 ²⁸	S	6	67	53.5	0. v 0.721 Rain fell in 30 ^m
29	53.	56.5	29.793	52.8 ²⁹ 50.9 ²⁹	S.S.E	7	62	53.	6. v. cir strat. cum
30	54.5	57.7	29.932	54.5 ³⁰ 48.7 ³⁰	S	3	66	48.3	6. v. cir. cum
31	57	60.	30.080	57.1 ³¹ 52.1 ³¹	SW	4	70.6	50.6	a trace of stratus at horizon
mean	47.33	51.89	29.682				58.37	43.99	

1850	Morning			Wind			Rain		
June	E	A	Bar:	Hggt:	Dir	Force	Squ	R	
1	69.1	68.	30.220	59.53	S	2	—	—	o. stratus. v
2	68.1	66.	30.173	59.63	S	3	—	—	6. cum. strat. v
3	67.	65.1	30.012	59.23	SSW	2	—	—	6. cum. strat. v
4	59.	61.2	29.750	59.19	WSW	2	0.029	0.032	6. cum. strat. v
5	58.	59.5	29.200	58.8	SSW	2	0.538	0.530	o. d. v
6	58.5	58.9	29.296	58.7	NW	1	0.374	0.359	o. r. v
7	58.2	58.5	29.740	58.3	SW	3	0.010	0.005	6. cum. strat. v
8	60.9	59.	29.900	60.93	SWbS	4	0.015	0.018	6. cum. strat. v
9	59.9	58.	29.795	60.3	SSW	5	0.023	0.031	6. strat. v
10	59.0	59.1	29.673	59.4	WN	3	0.022	0.029	6. cum. v
11	58.	58.2	29.358	58.23	WSW	6	0.120	0.241	6. strat. v
12	56.2	56.8	29.404	58.1	W	5	0.462	0.449	6. r. cum. strat. v
13	57.1	55.3	29.218	57.4	NNE	2	0.221	0.236	o. d. v
14	54.	55.8	29.650	57.8	NE½N	3	—	—	6. cum. v
15	57.7	57.8	29.782	57.63	SSE	4	—	—	o. various forms of stratus. v
16	62.	57.9	29.840	56.13	SSE	1	0.182	0.182	6. cum. strat. v
17	61.7	58.5	30.108	61.73	NWbW	1	—	—	6. cum. strat. v
18	65.	63.	30.208	61.23	SW	2	—	—	o. cum. strat. v
19	63.	61.7	30.064	63.2	SW½W	4	—	0.003	o. cum. strat. v
20	61.4	62.	29.810	62.2	SSW	6	—	—	o. v
21	59.6	60.	29.900	60.33	SWbS	5	—	—	o. v at 21 ^h . 15 ^m
22	61.7	61.8	30.125	61.73	S.W	2	—	—	o. m
23	66.	63.5	30.138	66.1	S.W	2	—	—	o. m
24	60.2	63.	30.100	60.53	NNE	2	—	0.002	o. v
25	59.	60.9	29.939	59.1	NbW	2	—	0.001	o. v
26	61.	59.4	29.973	61.83	N.E	2	—	—	6. v
27	60.6	62.3	29.721	60.53	N.W	2	—	—	o. m
28	58.3	58.7	29.608	58.43	WbS	5	—	—	6. v. h. cum. cum.
29	58.	59.	29.620	57.23	SW	3	0.006	0.013	o. d. v
30	57.8	57.9	29.455	57.2	SW½S	4	0.142	0.240	o. trace of blue. cum. strat. v } at 21 ^h
mean.	60.10	60.23	29.793				2.144	2.371	

1850

Evening 10

Wind

Therm

June

E

A

Bar

Hyg

Dir

Force

Max

Min

1	59.0	62.2	30.160	52.33	S	2	71.9	57	6 cum strat. m
2	61.2	63.1	30.212	51.74	SW	2	71.8	58.5	0. v
3	59.5	63.8	30.080	52.21	S $\frac{1}{2}$ W	3	71.0	56.1	0. v
4	59.0	63.5	29.872	53.21	SSE	3	70.5	55	0. v
5	51.5	62.	29.512	52.84	S $\frac{1}{2}$ E	1	66.2	51.5	0. v
6	53.2	58.8	29.044	52.73	SEBS	1	61.2	51	0. v
7	50.	59.	29.555	49.23	W	2	61.7	47.5	6 stratus
8	52.3	58.1	29.888	52.03	SW	2	62.8	52.5	6 cum strat. v
9	54.8	58.5	29.864	52.73	S $\frac{1}{2}$ W	4	63.2	52.6	6 cum strat. v
10	57.7	59.8	29.695	53.91	SWBS	5	65.5	54.2	0. v
11	58.8	60.	29.622	53.43	SSW	6	59.0	54.2	0. v
12	51.7	57.3	29.375	51.07	WSW	8	61.7	49.3	6 r. v q
13	50.5	57.2	29.526	47.93	WBS	3	61.4	48	0. v
14	48.5	55.	29.392	47.53	NEBN	6	57.5	46	0. v
15	48.2	57.	29.775	46.23	NW	1	61.2	47.5	6 cum. v
16	52.2	56.2	29.772	50.73	SSW	1	62	50.7	6 o. d. v
17	53.5	58.	29.976	52.43	WBS	1	67	49.9	6 cum. v
18	58.1	59.	30.178	58.23	W $\frac{1}{2}$ N	1	67	58	0. v
19	60.1	61.5	30.152	60.33	SW	2	71	57.2	6 cum strat. v
20	58.	61.2	29.971	58.13	SWBS	4	65.7	56.8	0. v
21	57.3	60.	29.884	57.83	SW $\frac{1}{2}$ S	5	63	57	0. v
22	60.	63.	30.001	60.83	S.W	4	70.7	59.	0. v
23	63.2	63.	30.150	62.73	S.S.W	1	68.6	60	0. m
24	60.8	65.	30.122	61.33	NNE	2	75	55	0. v
25	51.3	63.	30.020	58.23	NLE	2	66.2	48.2	6 cum strat. v
26	47.1	60.	29.972	46.83	NW	2	65.	45.	23 cum strat. v
27	55.	62.3	29.886	51.13	S.E	3	67	52.2	a trace of cum strat. in N. v
28	49.8	61.1	29.650	49.23	WNW	2	68.5	47.2	6. v
29	50.2	59.5	29.641	50.53	SW	3	62	49.5	6 stratus
30	58	61.	29.504	57.1	SW	8	66.7	51.2	6 cum strat. v

mean

55.02

60.30

29.815

65.04

53.02

Morning 27

Wind

Rain

July

E

A

Bar:

Hyg:

Dir

Force

Squ

R

1	58.	56.5	29.564	58.1	SW	6	5	0.090	0.133	6. Cumstrat
2	58.2	58.2	29.243	58.8	W	7		0.299	0.462	1. Nimbus q.v
3	57.	57.	29.444	58.6	SSW	3		0.011	0.016	4 cum. & Cumstrat. q.v
4	57.	56.5	29.855	56.7	NW	6	W	0.156	0.163	0. d. v
5	55.	57.	29.664	57.1	SE	2	E	0.546	0.616	4. cum
6	55.5	55.8	29.898	57.5	NNW	3		0.235	0.242	4. cumstrat. v
7	57.5	56.8	29.978	57.2	NW	2		0.003	0.009	0. r. q. m
8	55.2	57.	29.954	57.5	NW	6	W	0.012	0.012	6. cumstrat. q.v
9	60.	58.	29.967	59.8	W	1	N	a trace		6. cumstrat v
10	63.	59.	29.960	57.4	W	2	S	0.012	0.012	0. v
11	65.	61.	29.969	60.9	S	0		0.019	0.019	0. d. m
12	62.2	61.2	29.986	61.2	N	2	E	0.001	0.001	0. v
13	66.7	62.5	30.012	63.8	E	2	N	0.001	0.006	6. trace; cumstrat. v
14	65.	63.9	29.922	64.9	E	3	N			6. cumulus
15	64.	65.	29.839	64.7	NE	3				7. cirrocumulus v
16	63.7	65.	29.824	64.1	NE	1		0.060	0.059	6. light cumo cum. m. v
17	62.	65.1	29.872	62	NNE	3		0.001	0.001	4. cumulus & stratus. m. v
18	63.8	64.	29.902	63.8	N	1				0. cumulo curus. m. v
19	63.2	63.9	29.832	63.6	SW	4	W			0. m
20	63.2	63.8	29.605	59.9	SSE	6		0.034	0.042	6. stratus cumo strat. v
21	59.3	62.	29.620	59.5	SE	7	S	0.162	0.228	0. v
22	59.2	61.8	29.615	59.2	E	5	S	0.483	0.504	0. r. q. m Barom. heaving
23	58.	61.	29.685	57.9	WSW	4		0.250	0.301	0. r. m
24	58.1	59.9	29.626	55.3	NE	2	N	0.260	0.270	0. v
25	62.2	60.	29.637	57.2	NW	3	W	0.053	0.016	6. cum & trace of stratus. v
26	59.6	60.2	29.800	57.8	NW	5	N			6. cum
27	60.	61.	30.012	56.8	NW	3	W			3. stratus v
28	60.	60.	30.094	59.2	NE	2	N			0. v
29	68.8	63.	30.076	64.7	SW	1	W			6. cumulus
30	58.9	66.7	30.063	58.3	N	3	W			6. a little cumo strat. v
31	61.4	62.	30.087	57.2	N	2	W			6. the rest light cumo strat. v
mean.	60.40	60.80	29.825	56.73				2.688	3.142	6. cumulus all over sky
										0. cumulus & cirrostratus
										6. stratus & cumulus & cirrostratus. a shower of rain in evening

1850	evening 9 ^h				Wind		Max	Min	
July	E	A	Bar	Hyg	Dir	Force			
1	52.1	58.1	29.445	52.93	SW	4	60.5	48.5	b. cumstrat. v
2	51.9	57.2	29.336	51.92	SW	5	64	50.1	o. r. q
3	54.5	60.1	29.597	54.23	SW	4	62.8	49	o. v
4	53.2	59.2	29.719	52.83	WbS	3	62.8	49.1	b. cumstrat. v
5	53.	59.8	29.984	53.13	NWbW	1	64	50.2	b. cirrostrat. m. v Halo at 7.40 ^h
6	52.3	57.9	29.700	52.3	NbE	5	61	48.5	o. r. q
⑦	52.1	57.8	29.972	51.92	WNW	4	62	50.2	b. cumstrat. v
8	54.1	58.5	29.975	54.23	WNW	2	62.8	52	o. d. v
9	54.9	58.1	29.970	54.83	NW	1	62.1	54	o. v
10	59.0	59.2	29.950	59.33	W	2	66	57.5	o. v
11	59.4	61.	29.977	59.73	W	0	67.5	59	o. r. m
12	61.	62.	29.937	62.23	WbS	0	69.9	57.5	o. m
13	62.1	65.5	29.977	62.53	NbE	2	73.8	55.5	b. m. v
⑭	59.5	66.2	29.977	59.53	NNW	2	72.8	55.2	b. stratus. m. v
15	62.5	67.	29.881	62.53	NE	3	73.2	58.2	b. m. v
16	61.8	67.	29.822	62.13	NW½N	1	72	60	o. cumstrat. v
17	59.1	68.	29.853	59.23	NEbN	4	74.1	57	o. d. m. v
18	58.8	67.	29.907	58.83	NNE	3	69.5	54.3	b. cirrocum. v
19	59.9	66.5	29.898	60.13	NbW	2	70.7	54	o. v clouds high a bright Halo at 5 ^h
20	61.	66.5	29.727	61.33	S½W	4	—	—	o. r. v
⑳	60.2	63.5	29.550	60.7	SSE	7	65	59	o. q. v
22	58.9	62.	29.667	58.23	SbE	6	63	58	o. d. v
23	58.2	62.5	29.555	58.43	SSE	5	66	55.1	o. v
24	56.	62.2	29.710	56.23	SbW	2	66.4	51	o. v
25	56.3	62.8	29.592	56.13	NNW	2	65.6	54	b. cum. cirrostrat. v
26	55.1	62.7	29.731	55.23	NWbW	4	67.5	53	b. stratus. v
27	58.2	64.	29.978	58.5	NW	2	69	54.5	b. cumulostrat. v
⑳	56.	63.5	30.072	56.53	NW	1	69	51	b. cirrostrat. v
29	60.8	65.7	30.095	61.43	NbE	3	73.8	57	b. cirrostrat. cumstrat. v
30	66.7	69.0	30.019	68.23	SbW	2	76.2	60.1	b. cumstrat. v
31	63.9	64.9	30.105	63.23	N	3	67.2	57.8	b. cirrus. cumulostrat. high. v
mean	57.50	62.75	29.828				67.03	53.98	only 30 days max & min.

1830	Morning 21-21				Wind		Rain		
August	E	A	Bar	Hyg	Dir	Force	Sqa.	R	
1	63.3	64.2	29.894	63.87	W	3	0.003	0.008	6 cum. cirrus stratus v
2	64.	63.5	29.912	58.73	WSW	2	—	—	6 cumulus v.
3	64.	63.5	29.371	64.57	SWWS	5	0.175	0.306	0 s dr.
4	63.5	61.9	29.524	62.43	SW	2	0.001	0.002	6 cirrus cirrostratus cumulus h
5	59.4	60.6	29.588	58.97	WNW	3	0.066	0.060	6 cumulus v
6	60.3	59.1	29.627	60.33	SLW	4	0.088	0.074	6 cumulo stratus cirrus v
7	63.3	62.0	29.413	63.53	SW	4	0.119	0.175	6 cumulo stratus v
8	60.0	59.8	29.245	59.53	W	3	0.188	0.227	6 cumulus v
9	61.2	61	29.620	61.53	SW	3	0.009	0.013	6 cum. stratus v
10	54.9	57.5	29.237	54.43	S	7	0.012	0.024	0 r. q/ rain commenced at 1/2 p.m.
11	61.5	58.3	29.685	61.73	N	4	0.147	0.174	6 cumulus v
12	60.2	59.	29.817	59.93	WSW	3	—	—	0 m. v
13	59.9	61.	30.035	60.2	NNW	1	—	—	0 v
14	66.	63.4	30.018	65.63	WNW	2	—	—	0 m
15	64.2	64.4	29.931	64.43	NE	4	—	—	6 cum. stratus v
16	60.	64	29.933	60.53	NW	2	—	—	6 cum. stratus v
17	60.5	62.5	29.548	61	SW	6	0.030	0.064	0 v
18	56.1	59.5	29.544	56.13	WNW	5	0.010	0.018	6 cum. stratus v
19	53.	56.5	29.512	53.3	NW6W	4	0.193	0.230	6 cum. stratus v
20	50.9	55.2	29.498	50.33	WNW	3	open	0.057	6 cum. v
21	50.9	54.5	29.350	50.53	SWWS	5	0.062	0.086	0 v. solid
22	49.6	51.	29.607	49.2	SWWS	4	0.070	0.080	
23	52.2	53.	29.775	52.2	SWW	1	0.232	0.224	6 cum. cum. cum. m. v
24	60.5	57.	29.422	61.3	SW	7	0.129	0.299	0. q. v
25	56.2	57.	29.772	56.23	NW	5	a trace	—	6 cum. v
26	54	54.5	29.607	52.3	SWW	4	0.252	0.267	0 d. solid. m
27	51.9	54.	29.996	51.73	NW6W	5	0.211	0.290	6 cum. stratus v
28	53.	52.9	30.082	53.3	WNW	5	0.022	0.026	0 v
29	53.9	53.7	30.146	53.2	WNW	4	0.010	0.010	0 v
30	54.2	55.	30.164	54.23	SW	4	0.002	0.065	0 d. m
31	60.3	55.8	30.253	60.3	WNW	4	—	0.001	0 d. v
Mean,	58.09	58.56	29.714				2.031	2.720	

1850	W ^g 9 th .			Wind			Max	Min	
August	E	A	Bar	Hyg	Dr.	Force			
1	60.2	63.1	29.971	60.2 ² 57.2 ²	S.	4	68.5	60.	6 cirrus stratus cumulat v
2	56.9	63.	29.939	57.6 ¹ 53.6 ¹	N	3	68.8	56	6 cirrocumulus stratus v
3	60.2	64.3	29.689	60.2 ² 56.3 ³	SE	5	66.3	56.8	0 cirrostratus & cumulus v. q
4	59.0	64.6	29.499	59.2 ² 57.3 ²	SWW	4	69.8	54.5	6 cirrocumulus v
5	56.7	63.9	29.527	56.4 ³ 53.7 ³	SSW	0	68.9	52.3	6 cumulus nimbus lightning m
6	53.5	62.8	29.673	53.3 ³ 51.7 ³	WbN	3	68.8	48.8	6 stratus m
7	60.9	61.3	29.314	61.2 ³ 60.4 ³	SW	6	64.7	58.5	0 cumulostratus v
8	55.2	61.9	29.328	52.8 ³ 52.2 ³	SW	5	67.6	54.3	6 cirrus v
9	57.8	62.5	29.563	57.7 ³ 54.4 ³	SW	4	61	54.5	6 cirrostratus v. q = 6 quiet = 4 but very noisy
10	58.1	63.1	29.544	57.8 ³ 54.3 ³	SWbS	6	66.4	48.9	6 cumulus v the night afterwards became cloudy & bright till 3.
11	53.8	59.8	29.379	53.7 ³ 52.7 ³	SE	2	62.6	52.9	6 stratus v
12	54.5	61.8	29.843	54.2 ³ 52.2 ³	NNW	2	67	52	6 stratus v
13	55.	62.8	29.883	55.1 ³ 50.1 ³	NW	1	67.5	55.5	0. v
14	62.	64.	30.048	62.5 ¹ 61.5 ¹	NW	0	69.6	59.5	0. v
15	63.2	65.8	29.996	62.5 ¹ 61.5 ¹	NW	2	72.5	61	0. v
16	62.3	67.	29.888	63.1 ¹ 61.1 ¹	W ¹ N	2	72.8	57.5	0. v
17	57.1	65.	29.908	57.2 ² 53.4 ²	SW	2	68	57	0. v
18	53.7	60.9	29.524	53.3 ² 50.2 ²	SWbW	6	65.8	51	0. v. q. v
19	47.5	59	29.509	46.8 ² 45.8 ²	SW ¹ W	4	61	45	6 cumulat. v
20	48.2	58	29.517	47.5 ² 45.9 ²	WSW	3	58	44.9	6 cumulat. v
21	49.	56.5	29.383	48.5 ² 45.0 ²	SWW	4	58	43.8	0, cirrostrat. v
22	45.	54.5	29.557	44.4 ² 41.8 ²	SW ¹ S	4	54.	40.2	6 cum. v
23	47.	54.2	29.676	45.6 ² 42.3 ²	SWW	4	58	41.2	6 cumulat. v
24	51.5	56.1	29.784	51.5 ² 48.3 ²	SSW	4	62	49	0. v
25	57.9	58.	29.494	57.8 ² 50.8 ²	SWbW	7	66.5	50.8	0. v generally q, but some cloud bright
26	49.7	55.	30.005	49.5 ² 48.5 ²	WSW	3	62.8	48	6. v
27	48.9	56.3	29.809	48.9 ² 46.9 ²	W. NW	2	63.2	44.1	6. v
28	46.2	53.8	30.041	46.5 ² 44.5 ²	WbN	3	56.8	44.5	6 str. v clouds breaking up & stars appearing brilliantly
29	50.	54.5	30.091	49.7 ² 48.0 ²	WbN	3	56.1	48	0. q
30	52.5	55.9	30.179	52.4 ² 50.5 ²	WbS	4	61.8	50	0. q
31	55.8	56.	30.206	55.9 ² 55.3 ²	W ¹ S	4	60.9	54	0. q
Mean	54.60	60.24	29.734				64.13	51.13	

	Therm			Wind		Rain		
Septemb	E	A	B	Hgt	Dir	Force	Quan	Qual
1	58.5	57.2	30.313	58.73 52.03	WNW	3	some dew	o. m. v
2	58.5	56.8	30.148	58.93 54.83	WNW	3		b. cum v
3	56.3	56.6	30.235	56.23 52.33	ENE	4		b. cum. v
4	53.7	52.2	30.215	52.63 49.93	SW	2	0.001 dew	o. m
5	52.6	52.	30.253	52.33 48.93	NE	4	0.001 dew	b. some cumule. m. v
6	53.1	52.5	30.336	52.63 46.73	SELS	5	0.001 dew	b. cumule. v
7	54.8	53.7	30.359	53.93 50.33	ELS	5	0.001 drops	b. cumule v. hazy
8	57.9	54.	30.213	56.63 52.33	S.E	2		b. clouds at the horizon towards the south.
9	54.5	51.3	30.118	57.33 52.43	SE	3		b. stars very brilliant -
10	58.6	57.	30.019	58.33 54.83	SE	5	0.001	b. cumule. v { an upper stratus - while lower moving ahead
11	59.2	57.	30.062	59.13 55.03	SSE	4		o. cum. strat. m
12	57.	55.	30.114	55.93 53.93	E	4		b. cum. strat. m.
13	55.8	56.	30.158	55.53 52.23	NELE	3		b. cumule. v
14	48.9	54.2	30.216	48.63 47.93	NW	0	dew 0.009	b. cum. m
15	55.8	54.8	30.258	55.93 53.03	N.E	2		o. cum. m
16	55.	55.	30.207	55.53 51.03	SWW	2		b. sky covered with cirrocum. m
17	57.	56.2	29.780	57.13 53.23	SSE	5		o. m
18	55.1	56.	29.540	55.13 54.33	SELE	3	0.124 0.127	o. d. m
19	56.9	56.	29.388	56.93 55.93	ESE	3	0.145 0.150	o. d. m
20	51.3	57.	29.187	51.53 57.33	WNW	4	0.852 0.772	o. r. m
21	53.5	53.	29.545	53.23 50.23	SW	5	0.207 0.265	b. cum. m. v
22	51.9	55.	29.747	51.63 50.93	SW	0		b. thin cum. strat. m
23	50.6	53.2	29.660	49.93 49.13	W	0	0.005 0.010	b. cum. m. at 1:30. a halo round the sun
24	54.2	55.	29.492	54.13 50.93	S.E	5	0.0028 0.0028	b. cum. strat. v bar heavy
25	55.	55.	29.296	54.93 51.13	SLW	7	0.229 0.290	b. cum. strat
26	55.2	54.2	29.385	55.43 52.53	SWBW	6	0.017 0.040	b. cum. strat. v
27	52.5	55.	29.436	52.23 48.53	SWW	8	0.958 0.766	b. cum. strat. v
28	49.9	51.5	29.420	49.33 46.63	SWS	6	0.027 0.015	b. sky covered with cir. strat. v
29	48.5	49.5	29.161	48.23 47.93	SW	5	0.088 0.135	b. cum. strat. m
30	53.	52.	29.424	52.83 49.23	N	3	0.090 0.096	b. cum. strat. v
Mean	54.83	53.36	29.657				2.344 2.711	
			856					

1850	Log 9 A			Wind			Max	Min	
September	E	A	Bar	Hg	Dir	Force			
① 1	57.5	59.	30.313	57.23	W	2	66.2	52.6	o.d
2	55.3	57.7	30.228	55.23	SW	3	62.2	53.8	o.d
3	55.6	58.6	30.139	56.33	SW	1	64.4	51.	o.d
4	47.6	54.2	30.236	47.33	SE	2	61	42.1	6. v definition very fine to
5	46.8	55.6	30.232	46.73	N $\frac{1}{2}$ E	2	61.5	41.5	6. v. Aurora
6	47.7	53.	30.291	47.23	E	5	61.8	40.6	6. v
7	47.2	53.	30.362	47.13	E $\frac{1}{2}$ S	3	59.1	45.0	6. cum. m. v
① 8	47.	53.	30.315	46.83	SE	3	58.7	38.	6. v
9	46.1	54.	30.150	45.23	N.6.W	2	61.9	38.4	6. v stars very brilliant (S.H.R)
10	50.	56.5	30.043	44.33	SE	4	61.5	47.2	6. m Aurora in NNW
11	52.6	58.	30.036	43.23	NE $\frac{1}{2}$ E	3	62	52	6. m. a halo at 5 ^h
12	53.2	59.4	30.111	43.13	SE $\frac{1}{2}$ E	4	65	44.2	6. m. v, bright halo in morning
13	51.	59.9	30.148	42.83	E	3	62.5	45	6. m
14	46.5	58.	30.183	42.23	E	0	61.2	40	6. m. filling the valley
① 15	52.8	58.2	30.259	42.73	ESE	2	60.6	47	o. g.
16	51.1	57.3	30.250	42.9	SE	1	60.9 48.2	48.2	o. v - soon visible through thin v.
17	54.	59.	30.058	42.7	SSE	4	62.5	50	o. v { broken clouds,
18	54.7	58.	29.620	42.33	SE $\frac{1}{2}$ S	5	60.5	52	o. v
19	53.2	57.2	29.466	42.83	SE	4	59	52	o. v
20	54.	59.5	29.391	42.1	WSW	0	65	51.2	o. cum. m
21	50.	54.5	29.400	41.83	SSW	6	58	46	6. cum. v
① 22	51.	55.3	29.706	40.83	SSW	4	60.1	46.5	6. cum. v
23	49.1	55.2	29.726	40.83	N $\frac{1}{2}$ W	2	60.8	44.3	6. cum. m
24	53.9	57.2	29.564	40.93	S	5	61	48.5	o. v
25	52.2	56.7	29.304	40.73	SSW	8	60	50	o. p. v
26	52.7	55.9	29.304	40.53	S $\frac{1}{2}$ W	7	60.5	52.2	6. v
27	57.	57.	29.088	40.23	SW	7	61.2	46.8	o. v
28	48.2	54.8	29.509	40.23	SW	8	56	44	6. cumulostrat. p. v.
① 29	44.9	53.	29.184	40.73	W $\frac{1}{2}$ S	2	56	40.2	6. cumulostrat. v
30	48.3	53.5	29.012	40.73	W $\frac{1}{2}$ N	2	56.8	46	o. v. Aurora behind clouds
mean	51.04	56.40	29.856				60.63	46.45	

1850	21 st Morning			Wind			Rain		
October	E	A	Bar	Height	Dir	Force	Square	Round	
1	28.4	51.2	29.674	28.13	W	2	0.001	0.007	0. m
2	50.5	52.5	29.740	28.2	NW & W	3	0.025	0.025	6. cirrocumulus m
3	50.2	52.8	29.644	29.1	SW & S	3	0.028	0.041	0. m.
4	46.8	49.1	29.526	28.63	SW & S	4	0.035	0.028	6. cumulus stratus v. g
5	47.3	49.	29.339	28.33	SE	5	0.024	0.031	0. r. m. v
6	51.	51.	29.124	28.83	NW & W	7	0.172	0.276	6. cumulus of stratus v. v Bar heavy
7	51.	51.2	29.474	29.23	NW	4	0.149	0.173	6. cumulostrat cirrocumulus m. v
8	46.2	50.	29.828	28.23	NW	4	0.003	0.004	6. cumulus stratus v
9	45.9	48.	30.016	28.93	W	3	0.041	0.047	6. cumulostrat v
10	45.6	46.7	30.160	28.33	N	5	0.091	0.142	6. v. stratus
11	44.8	45.3	30.338	28.23	WSW	0			6. haze
12	47.2	46.7	30.147	28.93	WS	3	0.002	0.003	6. v cum stratus
13	51.6	49.3	29.796	28.23	WSW	4		0.001	6. v. stratus & cumulostrat
14	44.6	45.2	29.886	28.43	SW & W	2	0.130	0.149	6. v haze cirrocum. stratus
15	50.0	49.3	29.808	28.83	SW	4			6. v cirrocum. cumulostrat. stratus cirrostrat
16	52.2	51.	29.758	28.23	SW	4	0.004	0.013	0. r. m
17	54.9	52.	29.896	28.13	WSW	5	0.010	0.032	0. m. v
18	52.8	53.	29.813	28.73	WNW	5	0.004	0.023	6. cumulostrat. v
19	47.8	51.	29.920	28.23	NW	1	0.001	0.003	6. cirrostrat. bright Halo. m
20	44.5	48.2	29.106	28.23	N & W	2		0.002	6. cumulus m. v
21	42.1	44.5	30.014	28.83	SW & S	5			0. m
22	40.5	48.5	29.259	28.53	NW	3	0.100	0.229	6. cumulostrat. m
23	42.	45.8	29.229	28.23	NNE	6	0.273	0.288	6. cumulostrat m. v
24	43.5	45.2	29.574	28.33	NNE	5	0.147	0.188	0. v.
25	41.3	44.	29.670	28.63	WSW	1	0.002	0.002	6. cirrocumulus m
26	43.9	46.	29.612	28.9	SSW	4	0.045	0.062	0. r. m
27	40.2	45.	29.244	28.23	NW & W	4	0.184	0.268	6. cum. m
28	40.5	43.	29.421	28.53	WSW	5	0.003	0.004	sky covered with cirrostratus v
29	51.9	47.	29.348	28.23	WS	6	0.003	0.033	0. r. g. m
30	49.8	48.5	29.664	28.23	SW & S	5	0.003	0.024	0. m
31	55.8	52.2	29.592	28.3	SW & S	8	0.048	0.142	0. g. m
mean	47.25	48.46	29.698				1.528	2.240	

1850	Humboldt Sound								
October	E	A	Bar	Wyg	Dir	Force	Max	Min	
1	46.6	54	29.665	46.2 45.3	N. NW	1.	59.1	42.	6. v. { <i>Strong Aurora at N. W. horizon</i> <i>proceeding upwards in two pencils of light from the S.W.</i>
2	50.1	53.8	29.646	50	SSE	2	54.5	47	0.9. d
3	51.2	55.2	29.734	51.1 49.0	SW 1/2 S	3	58	49	0.9.
4	44.7	50	29.558	46.2 42.5	SW	3	57	40.5	6. m { <i>on whole sky bright, I suppose</i> <i>it showed an auroral arc to the</i> <i>W. when southward</i>
5	45.	52.7	29.507	45.1 43.8	SW	5	54	41.8	6. r. v. <i>Aurora NW at 5" an attempt at</i> <i>a perihelion bar heaving</i>
6	49.2	52.2	28.693	49.1 48.0	SW	8	55.	44.5	0.9.9.
7	48.3	52.2	29.266	48.1 47.8	WNW	6	54	47.2	0.9.9.
8	44.9	51.8	29.725	44.3 43.4	WNW	3	55.2	42.2	6. v.
9	41.2	51.	29.996	40.1 39.3	NW	0	56	38.2	9. b. stratus in E. v. faint Aurora
10	44.8	50.2	30.000	44.1 40.7	NNW	4	52.1	39.2	6. cumstrat. v
11	39.	50.8	30.347	38.5 37.5	W. S. W.	1.	49.9	37.2	6. Haze. Larger stars visible
12	44.9	49.4	30.289	44.3 42.3	W. S. W.	21	49.8	41.5	6. Haze 0 aurora behind clouds
13	47.	50.9	29.987	46.9 45.2	SW	4.	51.6	46.4	0. v. light aurora behind clouds, mizzling rain
14	46.7	49.5	29.841	46.6 45.6	N. NW	2	52.8	38.0	0. v. Haze halo round D, about 30° in radius.
15	49.	49.8	29.813	48.7 46.3	SW	6	50.8	43.5	0. v. cirrocum. stratus <i>bright line at hor. SSE.</i> <i>light aurora seen</i>
16	49.5	51.8	29.784	49.5 47.4	S. SW	5	55.7	49	0. v.
17	52.1	53.2	29.877	52.1 50.2	SW 6 W	5	57.5	50	0. v. cirrocum cumulus
18	55.	53.	29.805	55.2 53.2	SW 1 W	8	58	50.5	0.9. v
19	50	53.5	29.860	50.5 48.5	WNW	5	57.8	45	6. cumstrat. v
20	44.2	52.8	29.902	43.2 42.2	NW	0	53.2	39.4	6. cum. v
21	40.1	44.6	30.195	39.7 37.5	NW 6 W	3	50.2	36	6. cum. v
22	47.5	48.8	29.420	47.2 46.3	NW	6.	49.9	41	6. cum. strat. v.
23	41.8	48.	29.192	40.8 40.3	WNW	3	47.8	38.5	9.0. r
24	42.2	46.7	29.455	40.3	NE	4	45	38.5	0. v. v
25	41.	46.9	29.589	40.4 39.2	W 6 N	0	46.6	36.1	0. v
26	43.6	48.	29.477	43.3 42.3	SW 6 S.	4	47.8	40	0. v.
27	42.6	47.2	29.368	42.5 42.3	SW	4	50	37.5	6. cumulostrat. v
28	37.	46.5	29.312	36.3 35.8	WSW	6	47	35	6. stratus faint Aurora
29	42.5	46.5	29.422	42.3 40.5	SW 6 W	6	52	40	9.0. g.
30	48.9	49.2	29.553	48.2 46.5	W 1/2 S	5	55.5	47.2	6.9. v
31	53.9	51	29.608	53.9 53	SW	7	56.2	49	0.9.9.
mean	45.77	50.33	29.674				52.58	42.21	

[illegible]

1850	Evening 9 th				Wind		Max	Min	
Noon	E	A	Bar	Hyg	Dir	Force	T	T	
1	56.	55.	29.600	55.8	SW	7	58.8	49.5	o. r. g.
2	49.1	51.	29.677	48.7	SW	8	54.5	46.9	b. cumulostrat. q. v. Auroral light from NW & E
3	51.	52.	29.488	49.2	SW	9	54.5	43	o. q. g.
4	43.8	48.	29.672	43.2	WSW	9	52.6	42.5	b. cumulostrat. q. v.
5	45.2	49.5	29.762	45.3	WSW	5	54.1	44	b. m.
6	48.3	50.5	29.842	48.1	SSW	5	52.9	46.5	b. m. a halo round sun at 2:15 P.M.
7	46.	48.8	29.978	46.7	WbS	7	52.6	42	b. cumulostrat. v.
8	41.9	48.5	30.027	41.5	SSW	4	51.6	40	o. some stars faintly vis.
9	53.9	51.5	30.003	53.2	SW	5	55	49.5	o. q. g.
10	52.9	52.	29.902	52.8	WSW	7	56	52	o. q. g.
11	53.5	53.	29.859	53.5	WSW	3	58.5	46	o. g. d.
12	40.3	46.	29.951	40.8	SW	1	51.	39	b. Anomal. strat. m.
13	44.	49.	29.959	43.3	NNE	1	47.8	41.2	o. v.
14	43.5	46.5	30.051	43.3	S	3	48.8	41.9	o. d. v.
15	49.1	49.	29.828	49.1	SW	5	51.2	44.5	o. v.
16	41.2	47.	29.867	40.8	SSW	3	51.2	39.5	b. Cumulostrat. v.
17	45.9	47.6	29.750	44.9	SW	5	47.5	37.5	o. v. clouds high
18	50	47.5	28.828	49.7	ESE	6	54.5	39	o. r. g.
19	46.	47.6	28.347	44.6	N.N.W	7	54	44	o. v. heavy rain at 18.23.30 D=27.976
20	45.5	48.	29.344	45.7	NWbN	3	50.8	38	o. v. 19.0 - - - 27.984
21	42.8	44.7	29.412	42.5	S.bW	3 1/2	52.5	40.7	o. v. 1.35 - - - 28.003
22	53.2	50.	28.841	53.2	SE	8 1/2	59.1	42.5	o. v. rain
23	42.2	45.3	29.064	42.2	SEW	7	52	41.1	b. v. cirro-stratus
24	45.2	48.8	28.469	45.2	WSW	7	51.8	42.	b. cumulostrat. v. { a terrible gale at 3 ^h about 12
25	40.4	45.1	28.991	39.8	W.bS	3	48.3	35	b. v. dense clouds at horizon all round
26	39.	45.8	29.500	38.3	N.N.W	1 1/2	44.4	34.6	b. v. dense clouds at wind point: off
27	29.9	35.5	29.936	29.9	SW	2	30.5	27.7	b. v.
28	38.3	39.5	30.010	37.8	S	6	41.5	31.	b. haze. at 0 ^h Fall. a halo round sun.
29	40.8	42.	29.954	40	SE	6	44	39	b. stratus v.
30	38.5	42.5	29.876	38.5	E & N	2	45	36.5	o. g. "a star or two" visible
Mean	45.08	47.57	29.862				50.54	40.96	

	Moms 21 ^h			Wind			Rain		
	E	A	Bar	Hys	Dir	Form	Sqm	Row	
1	50	26.5	29.714	49.5	SSE	4	0.062	0.130	o. r. h. v
2	29.2	46	29.672	49.13	SSE	9	0.020	0.029	o. q. h. v
3	26.2	28.2	29.735	45.93	SW	24	0.029	0.070	4 cumulus
4	55	51	29.787	55.13	SEW	7	0.024	0.049	5 cumstrat m
5	50.1	49	30.092	53.8	S	8			o. v
6	45.9	49	30.085	45.33	SEBS	2	See		6. q. h. v
7	46.5	47.5	30.065	45.93	SSE	3			6. trace of stratus h. v
8	43.2	46.	30.078	43.93	SE	34			6 cumstrat. h. v
9	45.8	46.	29.844	45.83	SEBS	8			6 h
10	51.9	49.3	29.500	51.13	S	7	0.055	0.066	o. h. v
11	40.6	44.5	29.636	40.33	S. SW	5	0.044	0.028	o. q. v
12	45.7	45.9	29.305	45.33	S	8	0.056	0.126	6 v
13	42.2	41.5	29.946	42.53	SSE	11	0.013	0.035	o. q. v
14	37.5	39.9	28.920	37.53	SWBS	8	0.125	0.485	6 stratus
15	37.5	40.	28.834	37.13	SWBS	6	0.027	0.071	6 cumstrat. h. v
16	39.	39.9	28.820	38.73	WSW	5	0.095	0.220	o thin cirrostrat, cumstrat. m
17	32.5	38.	29.154	32.73	SSW	1			o. q. v
18	32.7	38.5	29.416	31.5	NEBN	3	0.166	0.208	6 cirrostrat. m. hard part
19	34.1	36.2	29.981	33.83	SSW	3			6 stratus h. v
20	45.	49.8	29.843	44.23	SWBS	54	0.013	0.080	6 cumulus h.
21	38	39.9	30.241	38.23	SWBS	4	0.009	0.032	o. q. v. m
22	44.6	44.8	30.324	44.63	SWBS	8			sky covered with Cirrostrat. m
23	44.1	43.7	30.123	44.23	SbW	6			o. v
24	36.6	40.4	29.838	36.23	SbW	3	0.052	0.214	o. v.
25	46.8	44.	30.037	46.53	SW	34	0.040	0.041	6 v.
26	46.6	45.	30.019	46.23	SW	44	0.003	0.010	6. v cumulus
27	44.5	42.8	30.103	44.23	SW	5	0.003	0.026	o. v
28	46.9	44.5	29.936	46.53	SW	6	0.001	0.015	6. v. cumulus.
29	49.1	47.	29.547	49.73	SWBS	8	0.018	0.191	o. d. m
30	47.0	45.5	29.234	47.03	S	10	0.010	0.050	o. q. m. is then no leak in sq.
31	48	48.	29.161	47.9	SWBS	10	0.092	0.286	o. q. v. m
Mean	43.99	44.53	29.677				0.924	2.462	o. q. cumstrat Nimbus SE v

1850	Evening 9 h				wind		Max	Min	
December	E	A	Bar:	Hygr.	Dir	Force	T	T	
1	46.9	44.8	29.700	46.77 45.85	SSE	8	50	38.	0. g. v
2	51.3	47.	29.772	51.37 50.93	S	6	52.2	48.	0. g.
3	50.8	48.5	29.511	50.73 49.73	SSE	9	53	45.2	0. g. g. r
4	48	47.6	29.786	47.83 46.83	SELS	7	55.6	45	0. g. g.
5	55	52.8	29.992	55.3 54.3	SEW	7	58.5	45	0. g.
6	47.2	50.	30.112	47.23 46.23	SSE	2	53.5	44.5	6. v faint aurora in N
7	46.7	48.4	30.032	46.33 45.33	ESE	6	51	43.5	6. v Diffused light. Auroral
8	43.5	47.	30.064	43.33 42.33	N	3	49.8	38.5	6. v Diffused light. Auroral
9	44.	47.	30.024	44.33 43.33	ESE	3	50	41.5	6. v Cum. strat. h.
10	47.9	47.5	29.648	47.93 46.93	SSE	6	52.7	45.2	0. g. v
11	44.7	47.5	29.552	44.73 43.73	SSE	5	53.4	39.3	6. v r
12	42.5	45.	29.572	42.53 41.53	S	74	46.2	40.8	0. g. v
13	39.7	43.	29.297	39.73 38.73	S	64	46.5	37	6. v v. v.
14	36.7	40.7	28.922	36.73 35.73	SW	9	46.8	34.0	6. v v.
15	38.7	41.2	28.788	38.73 37.73	WSW	5	42.5	36.0	6. v stratus
16	37.	39.9	28.872	37.33 36.33	WSW	5	41.5	35.2	0. v.
17	37.5	40.7	29.041	37.53 36.53	NW6W	4	41	31	0. v
18	38.2	39.1	28.925	38.23 37.23	NE	52	39.03	33.0	0. v.
19	31.3	36.5	29.824	31.33 30.33	SW6W	3	39	29.5	6. m.
20	39.2	39	29.941	39.23 38.23	S6W	6	45.2	34	0. g. d
21	36.8	40.6	30.112	36.83 35.83	S6W	5	46	36	6. v sci. strat. h. Inden of Moon streak
22	43.7	41.3	30.275	43.73 42.73	SW6S	52	48.5	38	6. v sci. cum. v. g
23	45.7	43.6	30.315	45.73 44.73	SSW	6.	52.5	42.2	0. g. d. g.
24	42.6	44.2	29.684	42.63 41.63	SW6S	5	41.2	35.1	0. g. d. g.
25	42.7	43.6	29.996	42.73 41.73	WSW	22	42.5	36.5	0. g. g.
26	45.2	44.2	30.060	45.23 44.23	SW6W	3.	48.5	45.	0. g. mizzling rain
27	40.9	44.1	30.110	40.93 39.93	WSW	22	49.2	39.5	6. v Aurora in N. white-
28	43.2	44.5	30.121	43.23 42.23	W6S	3	47	40.9	0. v faint aurora in N.
29	48.2	45.6	29.820	48.23 47.23	SW6W	3	49	46	0. g. mizzling rain
30	44.2	46.1	29.434	44.23 43.23	WSW	6	52	40	6. v mist round horizon
31	51.1	49.1	29.044	51.13 50.13	S6W	8	53.8	46	0. v
mean	43.59	44.52	29.689				48.03	39.47	
				43.61 29.75			48.32	39.66	

1850	Evening			Morning			Rain		Vapour tension	Wind		Thermometric	
	E	A	Bar	E	A	Bar	□	O		Force	Direct ⁿ	Max	Min
Jan ^y	36.63	36.85	29.765	37.36	37.34	29.776	2.775	4.083				4 29-52.0	15 ⁰ 15.6
Feb ^y	43.32	44.21	29.627	45.13	44.68	29.657	1.374	5.035				17-	57.0 20-32.0
March	40.86	44.29	30.008	44.06	44.08	29.999	0.721	1.235				2-	55.5 24-24.0
April	45.72	49.68	29.484	50.89	49.63	29.461	2.536	3.507				20-	61.0 22-36.0
May	47.33	51.89	29.677	52.76	51.69	29.674	2.525	2.414				31-	70.6 6-32.6
June	55.02	60.30	29.788	60.10	60.23	29.766	2.144	2.371				23-	75.0 26-45.
July	57.50	62.75	29.793	60.40	60.80	29.795	2.688	3.142				30-	76.2 196-48.5
August	54.60	60.24	29.707	58.09	58.56	29.692	2.031	2.720				16-	72.8 22-40.2
Sept ^r	51.04	56.40	29.860	54.83	53.36	29.848	2.347	2.711				1-	66.2 9-38.4
Oct ^r	45.77	50.33	29.674	47.25	48.46	29.703	1.528	2.240				1-	59.1 28-35.0
Nov ^r	45.08	47.57	29.567	45.37	46.83	29.580	1.564	3.214				22-	59.1 27-27.7
Dec ^r	43.59	44.52	29.704	43.99	44.53	29.692	0.924	2.462				5-	58.5 19-29.5
Summer	51.83		29.745	55.52		29.746	13.263	13.598					
Winter	43.24		29.698	44.39		29.693	14.271	16.865					
Year	47.21		29.721	50.02		29.719	23.157	35.134					
	Rain Days	Mean Ther	Meane Bar	Rain on 241 days					Mean Temperature of year = 48.61				
Jan ^y	20	37.10	29.758						Max - - - July 30 - - - = 78.2				
Feb ^y	19	44.22	29.650						Min - - - Jan ^y 15 - - - = 15.6				
March	17	44.17	30.003						Mean Baromet ^r - - - = Inches				
April	20	48.30	29.472						Max - - - - - = 29.720				
May	17	49.99	29.675						Min - - - - - = 30.452				
June	16	57.56	29.777						Min - - - - - = 28.016				
July	20	58.96	29.794						Nov 18. 21. 30 = 27.976				
Aug ^t	24	56.34	29.699						Gallons of Rain on an Eng. Square Mile = 308.611.167				
Sept ^r	16	52.93	29.844						5 ⁰ - - - - - = 794.705				
Oct ^r	24	46.51	29.688						On the 30 th of May 0.721. Rain fell in 30				
Nov ^r	23	45.22	29.573						which, on Eng. Square Mile - - - = 10.437.430. Gall				
Dec ^r	22	43.79	29.698						" "				

Term observation Dec 21

Date E A Bar Hyg Dir Term Squa Roun

20. 18	43.8	41,	29.826	43.23	S.S.W.	21.4	—	—	0.9. v
19	43.1	41.1	.821	42.87	S.b.W.	18.6	—	—	se
20	44.2	41.5	.821	44.07	S.S.W.	23.3	—	—	0.9 d. m
21	45. +	41.8	.843	43.83	S.W.b.S.	17.8	0.013	0.080	0.9 r. m
22	46.	42,	.889	44.73	W.	7.2	0.005	0.020	0.2. v.
23	45,	41.8	.920	45.23	S.W.b.H.	9.2	0.003	0.010	0. cum: strat. v.
21. 0	45.2	41.8	.932	44.13	W	10.4	0.001	0.002	b in N.W. cum: strat. v.
1	44.9	42.4	.963	45.53	W.b.S.	5.25	—	—	circ: strat. halo:
2	44.2	42.4	.987	43.73	W.	9.0	—	—	b cirro-strat. h. v.
3	42.6	42.8	30.012	42.83	W.b.S.	6.4	—	—	some cum -
4	39.9	42,	.036	40.73	W.S.W.	8.5	—	—	b in same parts. cirro-strat. h. but v.
5	38.9	42.5	.076	39.13	W.S.W.	9.0	—	—	b cirro-strat. h. v.
6	38.2	42,	.099	38.33	S.W. & W.	8.8	—	—	b trace of stratus. h: v.
7	37.3	41.3	.107	37.63	S.W. & W.	10.6	—	—	b h.
8	39.2	41,	.119	36.73	S.W.	11.9	—	—	b cum: strat: h
9	36.8	40.6	.112	36.33	S.S.W.	15,	—	—	b h. moon red.
10	37.8	40.7	.125	35.23	S.S.W. & W.	16.7	—	—	b cum in N. h.
11	38.6	40.6	.144	36.13	S.W. & S.	14.5	—	—	b cir-strat: haze rising up.
12	37.6	40.5	.155	37.53	S.W.b.S.	13,	—	—	0. v
13	37.7	40.2	.160	36.23	S.W.	15,	—	—	0. v. q.
14	37.8	40.	.170	35.43	S.W. & W.	15,	—	—	0. v. q
15	37.3	39.9	.172	36.23	S.W. & W.	16,	—	—	0. v. Brilliant halo round
16	37.4	39.8	.169	35.23	S.W. & W.	16.5	—	—	haze. large stars visible. halo round
17	37.5	39.8	.178	36.13	S.W. & W.	14,	—	—	haze clearing off. cirrus in E: halo less intense
18	36.9	39.8	.192	35.33	S.S.W.	14.5	—	—	b strat: v. q. halo nearly disappeared.

0.2. v.
0.9 d. m
0.9 r. m
0.2. v.
0. cum: strat. v.
b in N.W. cum: strat. v.
circ: strat. halo:
b cirro-strat. h. v.
some cum -
b in same parts. cirro-strat. h. but v.
b cirro-strat. h. v.
b trace of stratus. h: v.
b h.
b cum: strat: h
b h. moon red.
b cum in N. h.
b cir-strat: haze rising up.
0. v
0. v. q.
0. v. q
0. v. Brilliant halo round
haze. large stars visible. halo round
haze clearing off. cirrus in E: halo less intense
b strat: v. q. halo nearly disappeared.
b strat: v. a rainbow colored ring round
b strat: clear. v.