

Observatory,

ARMAGH,

Sept. 14, 1916.

Armagh Meteorol. Observations
1853-65.

This book is to be returned, registered, to

Rev. Charles Faris

The Close

Armagh

to whom further correspondence on the observations should be addressed.

On no account should the book be returned to me, as my movements from the 22nd on are uncertain.

J. L. E. Dreyer

of

the
& other.

corr^s

J. L. E. D.

1882

(97)

Armagh Observatory.

By 36 comparisons in April & May 1871 the corrections of
the Max. & Min. Thermometers were
-2.961 -0.594

C. Faris

These corrections have evidently not been applied to the
readings, as I find by comparisons with the Max. & Min.
of the "Hourly Readings" for April & May 1881 the corr:
to the old instruments to be $-3^{\circ}.2$ & $-0^{\circ}.3$

J. L. E. D.

This Max. Therm. was in use Dec 1860 - Sept. 1882

Copied from the next book.

To take the Mean of the Means for n Months

{ Summer Months. from
May to Oct^r both inclusive

$$M = \frac{m + m' + m'' + \dots + \left(\frac{m_{30} + m'_{30} + \dots}{30} \right)}{n + \frac{x + x' + x'' + \dots}{30}}$$

Where x is the excess above 30 days; — Form the Numerator & divide by n, then lessen this result by its $\frac{x' + x'' + \dots}{30n}$ th part, for the winter Months by $\frac{1}{180}$ th, for Summer by $\frac{1}{45}$, & for the whole Year by $\frac{1}{72}$. — Unless for leap year, when, the winter Months by $\frac{1}{90}$; the Summer by $\frac{1}{45}$; & the Year by $\frac{1}{60}$

For Reducing the Barometer to 50°; — $\pm 10^\circ = 0.027$ ^{Inch}, to be added to the readings below 50°, and to be subtracted when the temperature is above 50°

14476324 x Inches = Gallons of rain on an English Square Mile
22619,256 x Inches = ————— acre

The Cistern of the Barometer is 210 feet above the ^{mean} level of the sea
Max Thermom broken in May 1860, Max by Casella from Dec. 1860.
For Corrections see opposite

The readings, plus ^{Inch} 0.232, reduces our barometer to the Sea level
In 1853 Nov^r, a square Rain gage was set on the lawn in front of the house, as the action of the Wind on the House evidently interfered. No indications are entered below the upper one till March 1861 after which it only was registered

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1853	9. AM			Wind		Rain			
Jan:	F	A	Bar	Hg.	Dir	Force	Square	Round	
1	40.2	45,	29.507	45.1	SSW	6	0.055	0.230	a. v. g. K: KS S
2	40,	43,	29.324	43.1	SW S	5	0.049	0.050	b. v. K. CK round horizon
3	36,	41,	29.343	35.3	SW S	5	0.220	0.278	b. v.
4	51,	47.3	28.911	50.5	SSW	8	0.121	0.442	o. m. heavy rain
5	40,	41.1	29.164	39.2	SW S	7 1/2	0.300	0.562	b. vv. KS-
6	40,	40.2	28.896	39.4	SE	3	0.182	0.222	o. g. rain
7	42.8	42.5	28.604	42.4	SEW	7	0.130	0.273	b. vv. gg.
8	39.5	40.6	28.955	39.1	SW S	6	0.007	0.030	a. v. g. KS,
9	42.1	41,	29.215	41.6	SW S	5	—	—	b. v. K. KS, S
10	43.3	42,	29.202	43.1	SE	3	—	—	o. v. KS, S
11	38.8	41.2	28.948	38.2	SW	9	0.058	0.170	b. vv. g.
12	36.7	40.2	29.021	36.2	W S	5	0.185	0.237	o. v. K
13	40.5	41.2	28.928	40.1	W S	6	0.028	0.045	b. v. K. CK
14	34.7	39.6	29.582	34.5	W	2	—	—	b. m. S. CS
15	40,	41.2	29.011	39.4	SW S	5	0.273	0.386	b. v. KS, light rain: clear at SW horizon
16	33.9	39.5	29.004	33.9	SE	1 1/2	—	—	b. vv. KS, CS
17	32.4	38.3	29.332	31.4	SE	0	frozen	—	b. m. h. KS round horizon
18	37.2	38.9	29.650	36.7	SW S	4	0.200	0.218	b. v. KS. K. CK
19	46.3	43.8	29.488	46.8	SSW	6	0.150	0.186	o. m. one uniform grey cloud
20	45.8	45.8	29.192	45.3	W	6	0.165	0.885	b. vv. K. KS
21	39.3	44.7	29.091	38.7	SW	4 1/4	0.030	0.060	b. vv. KS, S at horizon
22	38.	40.8	29.596	37.5	W N	3	0.012	0.052	b. v. K, a little snow during night
23	37.1	40.5	30.082	36.5	W N	0	—	—	o. m. KS, S
24	34,	38,	30.045	33.4	S	2	—	—	o. m. KS
25	41.	40,	29.441	40.8	SE S	6	—	—	o. v. K.
26	36.5	39.9	29.540	38.2	SE S	2 1/2	—	—	b. h. KS
27	32.6	38.1	29.764	32.9	SEW	1 1/2	—	—	b. h. KS, S.
28	30.3	36.5	29.782	31.9	SW	1	—	—	b. h.
29	33.9	36.2	29.677	33.3	SEW	3	—	—	b. v. K: KS, some snow on ground
30	42.1	40.1	29.276	41.9	SW S	3	0.102	0.343	o. m. rain
31	37.3	38.1	29.894	37.3	SEW	3	0.048	0.010	b. m. S at horizon
mean	39.07	40.85	29.339				2.245	4.679	

4.516 after throwing back

1853	9 PM				Wind		Max	Min		
Jan	E	A	Bar	Hyz	Dir	Force	T	T		
1 st	44.5	45.2	29.335	44.3	SSW	1 1/2	52.1	44.3	0. g.	K
2	44.3	44.4	29.103	43.6	S	6	45.2	38.9	0. g. rain	g.
3	42.5	42.4	29.010	43.2	S 1/2 E	12+	45,	33,	0. g. yg.	heavy rain -
4	38.6	44.9	29.087	41.1	SWbW	6	52.2	38.7	b. v.	8 in SW
5	36,	41.1	29.263	38.6	SW	5 1/2	49.8	35.5	9. v.	
6	35.5	38.8	29.180	35.5	SSTV	5	41,	32,	sky covered with a thin stratus through which high stars were visible.	
7	37.1	41.6	29.004	36.6	SWbS	8	46.6	32.9	6. W. VV.	S. dispersed: slight Aurora in SW
8	36,	40.2	29.145	35.2	SW	6	45,	35.2	6. v. 2	S on leaving the observatory the
9	39,	42,	29.357	38.2	SWbS	3 1/2	47.1	35.2	6. v. S	Evening (7) at 9 1/2 P.M. - I was
10	45.4	43.1	28.730	45.2	SSTV	6	46.4	38.3	0. g. K	struck with the brightness of
11	37.	40.4	29.185	36.6	SSTV	6	45.6	35.1	6. v. KS in N	the sky & the visibility of
12	40	40.8	28.950	35.2	SSW	7	44.2	35,	6. v. KS in N	the surrounding country
13	37,	42.1	29.322	36.7	WbN	2 1/2	44.5	36.5	6. v.	It appeared as if generally
14	41,	40.6	29.384	40.4	SEbE	6	42.9	31.4	0. g. KS.	does about an hour after
15	36.6	42,	29.080	39.4	STVbS	2 3/4	46,	36.2	6. v. KS in S	sunset - M.W.N.
16	39.8	40.9	29.022	39.2	SEbE	3	40.7	30.4	9. v. rain	
17	33.9	40.9	29.547	33.2	WSW	2	40.2	31.	b. L	
18	42.1	41.2	29.540	41.9	SSWbW	3 1/2	43,	30.9	6. v. b. v. K.	
19	52,	48,	28.993	51.2	SSW	9	52.5	41.1	6. v. rain	
20	42.6	44.5	29.294	42.1	S	5	52.7	40.6	0. v. rain	Bar: heaving
21	35.6	42,	29.235	34.2	WbN	3 1/2	44.9	32.9	b. v. K.	
22	36.2	42,	29.895	35.8	SWbN	1	42.7	31.	b. v. K.	
23	36.5	40,	30.125	36.5	WbN	1	39.3	35.6	5. v.	one uniform grey cloud.
24	38,	38.5	29.680	37.6	SEbS	7	38.5	31.9	0. v. KS: S	strong halo round D: Bar: heaving
25	39.2	40,	29.468	35.1	E	3	42.5	37.6	0. v. KS: K.	
26	34.9	40.2	29.765	34.3	SWbW	1	40.8	32.5	6. v. KS: K	
27	36.7	40.6	29.745	36.2	SWbW	0	40.6	30,	0. v. KS: K.	
28	32,	37.5	29.780	31.5	SSW	2 1/2	38.5	28.5	b. v. { a narrow strip of white cloud extending from SSW across the zenith to NW -	
29	37.8	38.1	29.452	37.3	sbW	7	37.8	30,	0. g. K: on light rain	
30	36,	39.6	29.695	36.4	SW	3 1/2	45.4	35.5	6. g. W in NW -	
31	41.5	41.1	29.882	41.1	S	4	43.3	32.4	0. v. KS.	
mean	38.56	41.43	29.363				44.04	34.10		
							44.42	34.45		

1853	9 am			Wind		Rain			
Feb ⁵	E	A	Bar.	Hygr.	Dir Force	Globe Square	Square		
1	42.3	41.2	29.754	42.13	SEBS	6 $\frac{1}{2}$	0.038	0.067	0.9m rain
2	44.	42.9	29.804	44.53	SSW	3	0.012	0.015	0.9m KS.
3	37.6	41.4	29.452	36.83	WNW	1 $\frac{1}{2}$	0.446	0.560	0.9m KS. S. K
4	36.9	39.5	29.594	36.33	N	1	0.010	0.008	0.9mm. KS
5	35.8	38.2	29.858	35.73	NbW	1 $\frac{1}{2}$	—	—	6. V. KS. K
6	36.	38.	29.524	35.53	SW	5	—	—	6. V. KS. light rain
7	33.1	37.	29.266	34.33	SSWBS	2 $\frac{1}{2}$	frozen	frozen	6. V. KS. CS
8	28.	35.	29.053	26.63	WSWS	0 $\frac{1}{2}$	frozen	frozen	6. fog. thick white frost on ground
9	35.4	36.	28.981	36.63	NNE	2	frozen	frozen	0.9m. snow on ground - KS
10	35.6	36.	29.319	35.63	NbE	2 $\frac{3}{4}$	0.505	0.473	0. V. Do KS. S
11	31.	33.5	29.343	35.73	WbN	2	frozen	frozen	0. snowing - {Hygr = 30.5}
12	25.	31.	29.505	23.53	NbW	0	Do	Do	6. 10 m
13	27.1	31.5	29.675	26.13	NbW	0	Do	Do	6. V. S. CS
14	32.1	33.6	29.796	31.93	N	2 $\frac{1}{4}$	Do	Do	6. V. snowing a little & clear in N horizon
15	26.	33.9	29.734	24.83	WbS	2	Do	Do	6. 10 m. K in S } covered bulbs quite dry
16	30.2	33.7	29.918	29.73	NWbN	1 $\frac{3}{4}$	Do	Do	6. 10 m. } should have been wet
17	32.8	33.	29.820	32.53	NWbN	2	Do	Do	6. V. K. CK
18	34.8	34.9	29.611	34.63	NWbN	1 $\frac{1}{2}$	Do	Do	6. V. KS. CS
19	34.2	35.	29.622	33.83	NbE	3	0.142	0.038	6. V. K in N. & SW
20	31.1	33.5	29.868	30.73	NbW	2	frozen	frozen	9. (at 04 Pm: Hygr = 32.3) wet bulb encased with ice
21	32.3	34.8	30.065	31.43	NWbN	1 $\frac{1}{2}$	Do	Do	6. V. CK: K: S
22	39.3	37.1	29.880	39.33	WbS	3	0.050	0.024	6. V. S: KS
23	42.2	39.8	29.871	42.23	WNW	3	0.012	0.009	6. V. K: KS
24	36.8	36.1	29.702	35.83	WSWBS	2 $\frac{1}{2}$	—	—	0.9m K: KS (wet bulb frozen)
25	38.3	38.	29.708	35.13	NW $\frac{1}{2}$ N	2 $\frac{1}{4}$	0.008	0.040	0. V. K: KS: S
26	39.7	38.3	29.242	39.73	NW $\frac{1}{2}$ N	8	0.027	0.050	6. V. 9 K: C: CK
27	32.5	36.8	29.506	31.93	NWbN	2 $\frac{1}{2}$	frozen	frozen	4. 6. V. KS. snow on ground -
28	32.5	35.1	29.806	32.73	WbS	3	Do	Do	6. V. K: KS. (wet bulb frozen) snow on ground (wet bulb frozen)
mean	34.37	36.24	29.607			sum	1.250	1.284	

1853	9 PM			Wind		Max	Min		
Feb	E	A	Bar.	Hg.	Dir	Force	T	T	
12					20				
1	44.8	43,	29.778	44.43	SE	3	45.9	40.8	0. g. light rain
2	43.3	46.4	29.535	43.33	S	4	46.6	42.4	0. g. light rain
3	34.8	41.1	29.437	34.63	NW	1	44,	33,	b. h.
4	38,	40,	29.792	37.53	SE	2	41.7	31.6	0. g. K:KS
5	33.3	39,	29.791	32.43	SW	1 1/4	41,	30.3	0. m. larger stars visible
6	35.7	39,	29.386	35.13	W	2	39.3	30.9	b. v. KS.
7	30.2	37,	29.164	34.93	SW	1	39,	30,	0. h.
8	32.6	35.5	28.902	32.23	SE	3 1/2	32.6	27.1	snowing rapidly (snow commenced at 3 PM)
9	35.9	36.1	29.140	34.63	SE	3	37,	30,	b. v. KS at hor -
10	34.2	37,	29.519	33.73	NE	3	40.5	31.6	0. g. K.
11	27.3	33.6	29.562	26.33	NW	4	32.3	26.8	b. vv. min NE
12	24.7	32.5	29.543	23.23	SE	1	31.9	21.5	b. v.
13	32.8	34.8	29.671	32.13	SE	5	32.8	23.8	b. vv. K. CK.
14	30.5	36.1	29.737	30.13	NW	1 1/2	37.6	29.9	0. v. K.
15	34.7	36.6	29.871	34.33	NW	3	38.6	25,	0. vv. K. (at 11 AM. Hg = 32.6)
16	30.3	36,	29.932	29.23	NW	1	38.7	27,	b. vv. K
17	32.3	35.3	29.687	32.13	NW	3	38.1	23.9	0. vv. white fluffy cumuli
18	32.4	35.3	29.472	31.83	NW	1 1/4	37.2	30.7	b. v. KS. CS. KS.
19	34.2	36.2	29.777	31.33	NW	1	38.3	29.6	b. vv. CS. (Hug frozen)
20	33.1	36,	30.037	32.53	N	3	38.4	27,	b. vv. K:CK.
21	36.5	37.2	29.924	36.13	WSW	3	40.6	30.4	0. m. KS (at 9 M. 25.3)
22	41,	40,	29.825	40.73	WNW	2 1/2	46.5	32,	0. v. KS
23	33.3	37.5	29.705	32.53	N	4	44.1	32.4	0. v. thin stratus through which the larger stars were visible
24	43.3	39.6	29.337	42.23	WNW	3 1/2	44.1	30,	0. v. K: N. light rain
25	39.2	39,	29.435	38.93	SW	7	44.5	35	0. v. d. g.
26	33.1	38,	29.402	32.33	NW	1 1/4	42.5	30,	b. g. KS: S. wet bulb frozen (snow at 4 PM)
27	30.9	37.1	29.754	30.33	WNW	1 1/2	40.2	28.4	b. vv. K: aurora in NW
28	35,	37.3	29.634	34.53	WSW	3	36.8	27.8	0. g. K
mean	34.39	37.57	29.598				39.29	29.64	
							39.67	29.96	

1853	9 th Am			Wind			Rain		
Feb	E	A	Bar:	Hyg	Dir	Force	Sq. mi	Sq. mi	
March									
1	40.6	38.1	29.555	40.33	SE	3	0.050	0.030	O.V. HS
2	40.4	40.1	29.485	40.3	NSE	4	—	—	b.vv
3	33.4	37.1	29.860	33.43	WbW	1 1/2	—	—	b. m. K.S.
4	37.7	38.1	29.808	37.23	SW	3	0.003	0.002	O.V. HS
5	45.1	41.8	29.538	44.83	WbN	2 1/4	0.095	0.283	O.V. KS
6	49.1	44.4	29.411	49.23	SSW	6	0.028	0.072	O.V. HS
7	41.9	42.6	29.790	41.23	SW	3 1/2	0.010	0.010	b.v. c.c.s.
8	44.1	42.1	29.606	43.43	SWbS	4	0.075	0.158	b.v. (at 9 th 10)
9	47.4	45.3	29.700	47.43	S	8	0.105	0.182	O.V. g. KS
10	45.8	45.6	29.831	45.33	SWbS	5	0.034	0.144	b.v. CK
11	48.1	47.6	29.915	47.53	SSe	4 1/2	—	—	b.vv. CS.C.S
12	42.2	44.5	29.823	42.23	SEbE	4	—	—	O.m. KS.S
13	46.4	46.1	29.543	46.13	SE	3	—	—	O.V. S: KS
14	39.4	44.5	29.384	38.43	NNW	2 1/2	0.444	0.504	O. rain
15	40.4	43.4	29.411	39.53	SE	1	0.331	0.340	O.V. light rain. K (Therm: at 9 th 22 ^m)
16	36.5	41.1	29.521	36.53	NNE	1	0.072	0.060	O.V. light rain
17	34.1	39.1	29.765	34.13	NE	4	0.068	0.054	O.m. snowing
18	30.2	37.5	29.912	30.23	NE	3 1/4	frozen	frozen	b.v. c.ck (3 inches deep of snow on ground)
19	31.8	34.3	30.152	31.83	WSW	3	do	do	b.m. snow lying on ground
20	37.6	38.1	29.972	37.23	SW	3	0.263	0.054	O.m. K: HS
21	34.3	37.7	29.795	34.33	NbE	5	some melted snow	—	b.vv. K: C. CK
22	36.3	36.1	30.000	36.33	N ^{1/2} E	1	do	—	b.vv. water frozen on Hyg
23	36.2	36.1	29.922	36.23	SWbW	1	0.002	0.001	O.V. KS
24	34.7	37.1	29.686	34.73	NE	4 1/2	0.002	0.001	b.v. KS.K.S
25	33.4	35.1	29.824	33.43	NNW	1	frozen	—	b.v. (some snow on ground) frozen on Hyg
26	34.1	36.7	29.828	34.13	SWbW	2 1/2	—	—	foz
27	45.8	40.1	29.870	45.83	WbN	4	0.006	0.000	b.v. K.S. KS
28	41.1	39.4	29.952	41.13	N	3	—	—	b.v. K.
29	37.1	39.1	29.950	37.13	NW	1	drops	—	b.m. K: KS.S
30	44.1	41.1	29.546	44.13	SSe	4	—	—	b.v. K.
31	44.2	43.5	29.308	44.23	SSe	6 1/2	—	—	O.V. KS
mean	39.78	40.40	29.732			sum	1.688	1.895	

a similar auroral appearance as described on October 17th Nov^r. 1849 (at 8th PM)

Bar: heaving

1853	9 th Pm				Wind		Max	Min		
March	E	A	Bar	Hyg ²¹	Dir	Force	T	T		
18										
1	41.4	39.3	29.549	41.42	WNW	2	41.6	31.8	0.8.	K
2	34.4	38.8	29.624	40.3	NW	2½	43.1	33.5	b ₁₀ vr.	
3	35.4	40.	29.887	33.3	WNW	3	41.7	30.4	b ₉ r.	S at hor:
4	43.4	41.7	29.619	32.2	SSW	3¾	48.	32.7	0.8.	K:KS
5	43.	42.8	29.622	43.4	SW	3½	52.	41.	b ₃ m.	KS.S.
6	44.4	45.9	29.623	42.6	SWW	1	55.	41.6	b ₀ 88.	rain
7	42.1	44.8	29.621	44.1	S	5	50.	35.1	0. v.	KS: S
8	42.7	46.8	29.757	43.1	WbS	2	52.2	40.1	b	C. aurora. (46.5 = A: at 11 th when Bar: was read)
9	50.	48.2	29.600	40.8	S	7	52.4	42.8	8 (at 5 P.M.: a halo round @)	0. v. 9. KS.
10	42.4	47.1	29.921	42.9	SSW	1½	54.6	40.6	0. v. 9.	KS: S. (at 5 P.M.: a halo round @)
11	40.	45.6	29.883	42.4	SEbS	2	51.3	40.	b ₁₀ v.	KS: S. (at 5 P.M.: a halo round @)
12	41.6	46.6	29.671	40.6	SEbS	2½	48.1	36.4	b ₁₀ v.	Aurora with streamers -
13	45.6	46.6	29.420	39.7	SSW	2½	51.6	40.6	b ₁ r.	N. KS.
14	42.2	44.1	29.276	45.3	SE½E	3¾	46.4	38.6	0.8.	rain
15	38.	42.4	29.488	44.6	NbE	3	42.5	37.6	0.8.	rain
16	37.9	42.3	29.636	41.7	SE	3	44.	35.5	0. v.	K-
17	28.5	39.2	29.797	37.4	NbE	1	38.5	28.5	0. v.	K-
18	27.	37.8	30.101	36.1	NbE	2	32.5	26.6	0. v.	(a heavy fall of snow lying on ground)
19	32.5	39.2	30.068	35.4	SW	3	38.2	22.9	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
20	35.	39.8	29.815	32.9	NW	2½	42.7	32.	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
21	32.0	38.7	29.954	32.7	WNW	¾	40.2	31.2	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
22	32.7	39.	29.968	32.2	NbE	½	42.3	27.9	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
23	34.	39.7	29.754	32.1	WbS	½	42.3	27.3	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
24	31.3	38.	29.760	32.5	NbE	½	39.5	29.	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
25	32.9	39.	29.802	32.2	SSW	1	42.5	25.3	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
26	39.4	41.8	29.843	31.7	SSW½W	2½	45.	29.4	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
27	39.1	42.6	29.962	32.7	KS	1½	50.2	35.4	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
28	40.9	44.1	29.977	32.2	SEbS	3	52.	32.7	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
29	37.5	43.6	29.778	40.4	SbE	4	50.8	29.	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
30	41.5	44.2	29.421	38.1	SEbS	4½	46.6	33.	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
31	42.9	42.0	28.820	36.9	E	6	52.	38.7	b ₁₀ vr.	KS: S. (at 5 P.M.: a halo round @)
mean	38.44	42.31	29.710	41.1			45.83	33.36	0.8. 7.	raining in torrents -

1853 Term observations March 21 st							Rain		
March	E	A	Bar.	Wind Dir	Force	Hyg ³	Square	Round	
21 st 6 ^{am}	33.1	37.5	29.756	N.W	124	32.5	a little snow melted snow	—	a little snow lying on ground which had fallen during night
7 ^{am}	33.4	37.1	.767	N.W	64	30.7	80	—	6. VV. K. K.S. a clear patch in N. Hyg ³ frozen
8 ^{am}	33.7	37.2	.775	N.W	89	30.8	80	—	0: snowing rapidly; the flakes very small + 80
9 ^{am}	34.3	37.7	.795	N.W	49	33.3	80	—	6. VV. K. K.S.
10 ^{am}	36.3	39.4	.808	N.W	68	32.1	80	—	6. VV. K. C. C.K.
11 ^{am}	37.	41.	.825	N.W	54	36.9	0.016	0.005	6. VV. sharply defined K. + strong blue sky
Noon	39.3	42.4	.821	N.W	58	32.1	0.006	0.001	6. VV. 80 80
1 ^{pm}	38.4	43.1	.852	N.W	49	32.3	—	—	6. VV. 80 80
2 —	39.	42.3	.861	N.W	57	32.3	—	—	6. VV. 80 80
3 —	38.6	43.	.865	N.W	58	33.3	—	—	6. VV. 80 80
4 —	38.1	42.5	.872	N.W	59	33.3	—	—	6. VV. 80 80
5 —	35.1	41.1	.892	N.W	47	32.2	—	—	6. VV. 80 80
6 —	34.2	40.	.904	N.W	110	34.6	snow not thawed	—	6. VV. K. in SW + NE: (a few flakes falling)
7 —	34.1	39.5	.928	N.W	82	32.1	80	—	5. VV. a snow shower at 4 1/2 M
8 —	32.	39.	.953	N.W	201	31.8	80	—	6. VV. K. over NE. (another snow shower at 5 1/2 M)
9 —	32.	38.8	.954	N.W	496	29.7	80	—	6. VV. K. in E. {not bulb frozen}
10 —	30.8	38.1	.962	N.W	∞	29.6	80	—	6. VV. K. in E + S Red Sea horizon
11	31.1	38.	.975	N.W	∞	30.2	80	—	6. VV. 80
22 nd 4	30.2	38.	.983	N.W	∞	29.4	80	—	6. VV. 80
1 ^{am}	29.6	37.6	.984	N.W	244	28.6	80	—	6. VV. 80
2 ^{am}	29.4	37.1	.978	N	164	28.4	80	—	6. VV. 80
3 ^{am}	30.3	36.6	.972	N.W	201	29.5	80	—	6. VV. a small loose looking cloud in SSW
4 ^{am}	30.	36.2	.975	N.W	264	28.9	80	—	6. VV. 80
5 ^{am}	28.6	37.	.980	N.W	∞	27.6	80	—	6. VV. 80
6 ^{am}	28.7	36.	.990	N.W	∞	27.5	80	—	6. VV. K along E horizon NS in S

1853	9 th Am				Wind		Rain		
april	E	A	Bar	Hyg	Dir	Force	Square	Round	
14									
1	42.	46.2	28.600	41.4	WbS	5 $\frac{1}{2}$	0.500	1.118	0. v. g. rain (Therm & Bar & Hyg at 9 th 25 th)
2	47.	43.9	29.318	40.1	WbS	7	0.042	0.120	b. vv. g. K
3	50.2	46.	29.165	43.6	S	4	—	—	b. v. S: KS
4	57.5	47.6	29.434	48.1	SWbS	4 $\frac{1}{2}$	0.012	0.015	o. v. S. KS
5	50.4	48.4	29.569	48.9	WSW	4 $\frac{1}{2}$	0.040	0.131	b. v. CK: K.
6	50.	51.8	29.450	47.4	W	5 $\frac{1}{2}$	0.006	0.165	o. rain. storm during night
7	49.	48.3	29.415	48.8	W	4	0.046	0.150	o. v. K.
8	44.4	45.9	29.871	45.6	NWbW	4	0.047	0.080	b. vv. K: S.
9	46.4	44.8	30.153	46.6	SW	3 $\frac{1}{2}$	0.001	0.006	o. v. KS
10	49.9	43.7	30.037	43.2	WbN	4	0.046	0.160	b. v. K.
11	49.2	47.6	30.079	45.2	WSW	2 $\frac{1}{2}$	—	—	o. vv. KS
12	47.6	47.5	29.984	47.6	NW	2	0.006	0.016	o. v. KS
13	45.1	43.8	30.072	44.7	NbE	5	0.001	0.002	b. vv. K: CK
14	45.	45.8	30.044	44.7	NWbN	3	—	—	o. v. K: KS
15	48.3	46.1	30.065	48.2	NWbW	5	—	—	b. v. K.
16	49.	47.	29.935	48.8	SWbS	5	0.003	0.006	o. v. light rain.
17	50.5	48.5	29.825	47.6	NWbW	2	0.020	0.060	o. v. K: S. KS
18	53.	49.4	29.848	52.3	SW	5	—	—	o. v. KS
19	49.4	49.1	29.577	49.3	SWbS	5	0.002	0.017	o. v. KS light rain
20	45.5	46.1	29.704	45.2	WbS	2 $\frac{1}{2}$	0.001	0.009	b. vv. K well defined against strong blue sky
21	42.8	45.9	29.205	42.0	E $\frac{1}{2}$ S	4	0.166	0.250	o. m. rain Halo round @ at 11 $\frac{3}{4}$ A.M.
22	42.	45.	29.312	42.5	ENE	6	0.050	0.068	o. v. KS - Halo round @ at 2 P.M.
23	46.7	45.6	29.619	46.4	W	4	0.020	0.022	b. vv. S. CS.
24	44.7	44.4	29.486	44.1	SWbW	6	0.009	0.015	o. v. K. KS
25	45.	43.5	29.433	44.5	N $\frac{1}{2}$ W	3	0.057	0.077	b. vv. K well defined against strong blue sky
26	41.9	42.4	29.625	40.4	SWbW	3	0.453	0.377	fog. snow lying on ground.
27	45.9	43.2	29.653	45.1	WbS	3	0.006	0.005	b. vv. K: (a very heavy shower at 2 $\frac{1}{2}$ PM)
28	45.9	43.1	29.645	45.2	NWbW	1	0.160	0.145	b. v. K
29	49.	44.	29.507	45.2	SbS	3 $\frac{1}{2}$	0.098	0.111	b. h. K: KS
30	49.8	46.3	29.382	45.5	SbS	5	0.004	—	b. v. K
mean	47.21	46.03	29.633				1.796	3.126	

1863	9 th PM				Wind		Max:	Min:		
April	E	A	Bar:	Therm:	Dir	Force	T	T		
1	43.	44.	29.036	42.6	WSW	7	46.1	38.	b. v. q.	K:KS - Bar. heaving -
2	45.1	46.3	29.407	44.4	SW ² S	3	52.5	40.	b. v.	KS:
3	45.3	47.8	29.233	45.3	SW	2 $\frac{1}{2}$	56.6	44.	b. v.	KS:
4	46.	48.	29.410	46.3	WSW	3 $\frac{1}{4}$	53.	42.7	o. g.	K:KS - a few zenith stars visible -
5	49.7	50.	29.571	47.6	SW	4	59.	41.6	o. v.	K:KS -
6	47.	50.1	29.465	47.3	SW ² S	5	58.4	47.	b. v. q.	K -
7	42.1	48.1	29.685	46.6	SW	2 $\frac{1}{2}$	52.3	41.8	b. v.	K
8	37.6	41.6	30.122	41.4	NNW	2	47.4	37.2	b. vv.	Aurora with faint streamers -
9	47.	46.7	29.987	37.9	WbS	3	50.2	35.8	o. g. q.	drizzle -
10	49.	48.8	30.075	48.9	WbN	2 $\frac{1}{2}$	55.	45.6	o. g.	K
11	48.	39.	30.070	47.9	WNW	3 $\frac{1}{2}$	54.1	45.9	o. v.	KS.
12	41.	46.	29.963	46.2	N	2 $\frac{3}{4}$	52.	41.	b. vv.	K. round horizon
13	41.	47.	30.081	40.3	NbW	1 $\frac{3}{4}$	51.6	35.1	b. vv.	K:KS.
14	42.9	47.	30.071	37.2	SW	3	50.6	40.	b. vv.	K:CK. s in E -
15	44.	48.2	30.032	42.3	WbS	3	53.3	39.8	o. v.	K.
16	48.5	48.9	29.818	46.1	SW ² W	5	55.2	41.4	o. v. q.	KS
17	51.	51.	29.865	47.3	WbS	2 $\frac{1}{2}$	57.6	47.4	b. v.	K:CK
18	49.	50.9	29.781	49.	SWbS	3	57.6	48.3	b. vv.	K:C:CK.
19	45.5	49.1	29.672	46.8	WN ² W	2	53.1	43.4	o. v.	K. n. light rain
20	40.8	46.6	29.361	40.5	SEbS	7	54.2	36.	o. v. q.	Light rain
21	42.9	47.	29.275	38.7	E	3	48.7	39.2	o. h.	KS. large halo round D
22	41.7	47.5	29.530	40.8	NbW	0	50.4	39.5	o. h.	CS - D ^o by faint
23	38.1	46.8	29.670	41.4	WbS	4	51.1	38.1	o. h.	CS - D ^o
24	37.5	45.	29.347	39.6	SW	4	51.1	38.1	b. vv.	S:KS -
25	39.3	45.	29.583	32.2	SW	3	48.7	36.5	o. v.	Rain -
26	39.2	46.1	29.723	35.7	NNW	1 $\frac{1}{2}$	50.	35.	b. v.	K. round horizon
27	40.	45.9	29.643	37.	N	1	50.6	33.8	b. vv.	heavy showers during day
28	44.1	46.1	29.619	38.3	WNW	0	52.5	34.3	b. v.	a trace of very black cloud in N. horizon -
29	44.9	47.0	29.380	36.1	SEbS	2 $\frac{1}{2}$	53.5	34.8	b. v.	CK:K:C.
30	46.6	50.	29.470	40.7	SEbS	5 $\frac{1}{2}$	51.3	34.7	b. v.	S:KS at horizon
				41.3	SEbS	5	55.	41.3	o. v.	KS
mean	43.77	47.05	29.664	43.9			52.43	39.63		

1853	In 9 th Am				Wind		Rain			
May	E	A	Bar:	Thyg	Dir	Force	Square	Round		
20										
1	53,	48.1	29.544	52.3	SE	4	—	—	b. v.	K.
2	53.6	50,	29.552	53.8	EbS	5 $\frac{1}{2}$	0.002	0.009	o. h.	KS
3	49.7	50.2	29.721	49.9	EbN	2	0.017	0.024	o. h.	KS
4	51.2	50.5	30.038	51.2	EbN	3	—	—	o. v.	KS
5	54.3	50.1	30.153	53.5	EbN	2 $\frac{1}{2}$	—	—	b. v.	
6	53.5	52.5	29.962	54.7	NbN	4 $\frac{1}{2}$	—	—	10 h.	CS - KS
7	44,	49,	29.656	43.5	NbE	5	0.032	0.047	b. v.	K strongly defined against deep blue
8	44.2	46.5	29.576	44.1	NNbW	3	—	—	o. v.	K (at 1 PM: a very heavy hail-shower)
9	46,	44.7	29.532	46,	NbE	4	0.074	0.083	b. v.	K dispersed & strongly marked -
10	44.6	45,	29.800	44.4	NbW	2 $\frac{1}{2}$	—	—	b. v.	Do
11	50,	46,	29.907	49.5	WSW	4 $\frac{1}{2}$	0.053	0.021	b. haze.	K. KS -
12	51.9	46,	29.963	50.9	E	3	—	—	b. v.	K. dispersed & strongly defined -
13	47.5	47.6	30.050	47.6	EbN	4 $\frac{1}{2}$	—	—	b. v.	K: CK
14	49,	49,	29.955	48.9	EiN	2 $\frac{1}{2}$	—	—	o. m	KS -
15	57.5	50.6	29.856	51.2	EbN	3	—	—	b. v.	KS dispersed -
16	48,	50.6	29.615	45.8	NbE	8	—	—	o. v.	KS
17	52.9	52,	29.668	52.9	EbN	5	0.062	0.080	b. m	K: CK: KS
18	55.3	53.1	29.797	55.4	EbS	1 $\frac{1}{2}$	—	—	b. h.	CS: S.
19	58.6	54.4	29.826	58.6	SWbS	2	—	—	b. v.	
20	58.3	56.1	29.870	58.1	SWW	3	—	—	b. v.	K dispersed -
21	58,	58,	29.885	58.4	SE	8	—	—	b. v.	K. Do
22	57.5	55.6	30.134	57.3	EbN	3 $\frac{1}{2}$	—	—	b. v.	H
23	58.1	55.5	30.085	57.5	EbN	1	—	—	10 b. v.	at 12 $\frac{1}{2}$. Sun's light like a dimly
24	61,	56.8	29.988	60.9	EbN	3	—	—	b. h.	burning candle, from dense haze
25	59.3	57.3	29.659	59.4	E	3 $\frac{1}{2}$	—	—	10 b. h.	Haze = 66.53 Bar heating
26	61.2	59,	29.505	60.8	NNbW	2	—	—	o. h.	KS
27	55.3	55.1	29.615	54.9	WbN	1 $\frac{1}{2}$	—	—	b. v.	K dispersed
28	54.5	56,	29.461	54.6	WbS	2 $\frac{1}{2}$	0.090	0.218	b. v.	Do & strongly defined -
29	54.8	55.2	29.753	55,	NNbW	3	0.001	0.005	b. v.	K -
30	56.6	55,	29.968	56.4	NbW	3	—	—	b. v.	K
31	59.7	55.6	30.028	59.5	N. W	0 $\frac{1}{4}$	—	—	8 b. v.	
Mean	53.33	51.97	29.804			Sum	0.531	0.487		

1853	9 th PM			Wind		Max	min.	* 14, 12 1/2 P.M., 0	
May	E	A	Bar:	Hyg:	Dir	Force	T	T	
1	51.	51,	29.627	51.13	EbS	4	57,	42.4	o.v. rain-
2	52.8	52,	29.635	52.73	ESEAE	6	57.3	49.9	o.v. 9. K:KS
3	48.4	52.2	29.856	48.13	EbN	5	55.2	49.5	b.v. S-
4	50.8	52.6	30.134	50.73	EbN	3	60.3	46.	b.v. S in W
5	51.7	55,	30.061	51.73	NNW	2	64.7	43.4	b.v. S in NW
6	48,	54,	29.804	47.63	NbE	3	60.5	44.8	b.v. KS:K.
7	39.9	48.2	29.690	39.13	N	3 1/2	49.3	38.7	b.vv.
8	35.5	47,	29.461	34.83	NNbN	1	48,	35.4	b.v. K. (at 5.45 PM. a very heavy hail-shower which soon changed to snow with very large flakes this continued for half an hour)
9	40.5	46.8	29.672	40.43	N 1/2 E	3	50.6	32.5	b.v. K.
10	40.8	48,	29.937	40.13	NNW	1 1/2	51.9	35.	b.v. S in NW horizon
11	43.2	49,	29.920	43.33	W	2	56.6	36,	b.v. KS. in NW horizon -
12	48.9	51.6	30.021	48.53	E 1/2 N	3	58.2	37.9	b.v. K.
13	47.4	50,	30.005	47.23	NbE	3 1/2	53.7	37.9	o.v. rain-
14	51.2	51.1	29.900	51.13	EbS	1 1/2	57.3	44.4	o.v. K:KS.
15	51.6	56.4	29.737	51.63	EbN	2 1/2	60,	46.6	o.v. K.
16	50.6	53,	29.621	50.53	E	5	57.1	44,	b.v. K:KS-
17	53.9	54.9	29.706	53.93	E	3 1/2	62.1	45,	b.v. KS: S:CK (at 9.20 ^m)
18	51.6	56.2	29.803	51.43	S	0	66.8	44.6	b.R.
19	53.7	59.	29.848	53.73	SW	1 1/2	68.8	46,	b.v. CS in N
20	52.1	56.8	29.813	52.13	SE	5 1/2	66.5	47.	b.v. 9.
21	53.2	57.9	29.920	53.43	EbS	3 1/2	63.6	49.4	b.v. K in NW
22	53.4	59.6	29.955	53.43	EbN	1	66.6	46.6	b.v. Set 1 P.M. 0.42 Hyg 50.3 49.8
23	54.2	58.9	30.035	54.23	EbN	1	66.6	45.9	b.v. CS: S 3%
24	57,	60.5	29.845	57.13	EbN	2	68.4	47.	b.v.
25	57.6	61.7	29.540	57.63	S	2	69.6	49.7	b.R. KS: S.
26	51,	58.1	29.577	51.13	NNW	1	65.6	51.6	b.v. CS:KS:K.
27	55.6	58.4	29.573	55.63	SbE	2 3/4	64.9	43.8	b.v. K.
28	50.	67.6	29.640	50.03	W.SW	3	61.2	49.1	b.vv. K:KS.
29	51.1	58.3	29.865	51.13	NNW	1 3/4	65.3	48.	b.vv. S.
30	53.7	59.5	30.050	53.73	SSE	0 1/2	66.6	43.6	b.v.
31	57.6	61.2	29.970	57.63	N	1	72.2	59.4	b.v. low bank of Rock lake.
mean	50.26	54.73	29.818				60.43	44.10	

1853	9 th AM			Wind			Rain		
June	E	A	Bar.	Hygr.	Dir.	Force	Square	Round	
1	63.4	57.7	29.972	69.5	N.N.E	3	—	—	6.v.
2	58.4	53.9	30.093	56.7	N	4	—	—	6.v.
3	58.2	58.4	30.120	52.4	N.E	3	—	—	6.✓
4	57.3	56.8	29.951	57.7	N.	1	—	—	6.✓ 2 h. due S.
5	54.1	59.1	29.638	52.4	SW6W	2	—	—	6.✓ 2 h. due S.
6	56.6	57.3	29.710	56.7	SW6W	3	0.426	0.434	6.✓
7	58.	55.8	29.880	57.7	SSW	4	—	—	6.✓
8	58.3	59.	29.785	58.5	SE	5	0.187	0.185	6.✓ raining heavily
9	56.9	57.4	29.837	56.7	N6E	1	0.118	0.136	6.✓
10	59.1	57.8	29.797	53.8	SW	2	0.228	0.222	6.✓
11	58.4	58.3	29.605	54.7	SW	2	—	—	6.✓
12	56.7	56.5	29.635	56.3	W6S	3	0.004	0.009	6.✓
13	56.6	55.5	29.729	49.9	N6W	0.4	0.004	0.009	6.✓
14	62.3	58.	29.842	50.2	NW	0.2	—	—	6.✓
15	55.5	58.8	29.871	55.7	NW6N	1	a few drops	—	6.v. KS
16	59	58	29.866	59.1	SE	3	—	—	6.v. KS. CS
17	60.8	60.2	29.819	53.8	SW6W	4.5	0.003	0.006	6.v. q. K. C. CS.
18	60.6	61.	29.600	61.0	SW	2	0.027	0.046	6.v. KS.
19	55.1	58.1	29.436	57.5	WSW	3	0.004	0.011	6.v. K. KS. N in SE.
20	53.5	57.5	29.539	54.8	NNW	2	0.345	0.340	6.v. K S
21	64.3	60.5	29.675	53.5	NNE	5	0.034	0.036	6.v. h. q. K. KS
22	64.4	62.2	29.806	64.6	NE	2	—	—	6.v. h. C. S.
23	66.8	62.8	29.777	59.6	NW	1	—	—	6.v. CK
24	59.2	64.	29.683	67.2	SSW	4	—	—	6.v. q.
25	59	61.8	29.584	59.1	N	1	0.032	0.036	6.v. h. KS. K
26	57.5	61.2	29.467	53.8	WSW	3	0.411	0.421	6.v. d. light rain
27	61.	61.	29.250	57.3	W6S	5	0.036	0.076	6.v. K strongly defined.
28	58.5	57.3	29.314	61.1	SW	5	0.002	0.007	6.v. K Do
29	57.	59.	29.155	56.1	WSW	6	0.296	0.240	6.v. K: KS: C.
30	58.4	59.	29.388	55.2	SW6W	5	0.048	0.059	6.v. K
Mean	58.82	58.71	29.700	53.3		Sum	2.066	2.264	

1853

9th Pm

Wind

max	min
Bar	Bar

June

E

A

Bar:

Hyg

Dir

Force

max

min

-16

1 53.9 62. 30.034

53.9 } 23
52.7 } N6E 3

70. 54.5

2 52.3 60.6 30.140

52.3 } N 5

63. 57.5

3 49.9 61. 30.079

49.7 } N6E 2

67. 49.4

4 56.3 62. 29.844

56.2 } S 0 1/4

69. 48.4

NB (4.) 56.3

5 58.3 57.9 29.711

58.3 } S6E 0 1/2

64. 48.6

+ { A.M. This has been entered at ^{trough} tide

6 52. 60.2 29.856

52. 60.2 } NW6W 1

64. 50.8

✓ 1 at 1/2 11 saw a luminous mist between this & Grange

7 55.3 60.9 29.851

55.2 } S6W 7

65. 44.5

✓ { Hyg. changed to 56.5 } then to 55.2 } after 48.6 } register

8 54.6 59.6 29.803

54.4 } W6S 2

61. 53.5

while I looked at it.

9 52.7 58.8 29.787

52.3 } NNE 3

62. 50.1

heavily raining

10 55.4 60.7 29.706

55.4 } S6E 5

67. 53.2

✓ very slight rain

12 52.6 59.8 29.704

52.6 } SSW 7

64. 47.8

✓ distant thunder at 1/4 before 3

13 55. 59.5 29.828

55. 59.5 } N6W 0 1/4

62. 45.5

Anem. stopped as I looked.

14 54.3 60.1 29.785

54.2 } SW6W 7

69. 51.5

15 52.8 60. 29.921

52.8 } NNE 1

61. 52.5

6. v. KS

16 60 61.8 29.793

60.2 } SSE 3

67 49

0. v. KS

17 61.2 62.8 29.670

61.4 } S6S 6.5

67 52.5

0. v. q. KS. CS spots on ①

18 55 62. 29.557

55.1 } SSW 5

66.5 55

✓ KS

19 50.2 61. 29.470

49.2 } NW 1

63.2 50.5

6. v. KS

20 54.5 58. 29.600

47.8 } N 1 -

56 49

0. v. d. KS

21 62.2 64.7 29.726

62.7 } N 1

74.5 53.5

6. v. S

22 61.9 65.9 29.829

62.1 } NNE 163 1 3/4

76.7 56.2

6. v. KS. C. S.

23 65. 67.5 29.737

65.3 } W 1

79.8 57.5

6. v. S

24 57.9 62.2 29.689

62.2 } NE6N 2

67. 57.8

raining

25 54.6 63.7 29.495

54.3 } S6W 2

67. 57.3

0. raining heavily

26 59.3 61.1 29.164

59.3 } SW 5

62. 53.7

0. m. q. K.

27 56.4 62.4 29.265

56.4 } SW6S 3 +

66.4 57.9

b. m. KS.

28 56.4 62.3 29.077

56.4 } WSW 6

67. 52.7

b. v. q. K.

29 56.6 60.1 29.407

56.6 } W6S 3

65.7 53.

b. v. q. KS. C

30 52.7 59. 29.419

52.7 } WSW 3

62.2 52.6

b. rain m. c. KS.

mean

55.44 61.32 29.683

65.66 57.21

June	E	A	Bar	Wind		Rain		Round	
				Dir	Vel	Hgt	hr		
21.6 Am	57.5	57.8	29.650	NNW	57.7	57.7	0.034	0.036	6. V. K. q
7 AM	59.5	58.2	29.656	NNE	58	57.6			6. V. K. KC in SE, q
8 Am	62	59	29.662	Nb E	56	57.1			6. V. KS. CK. CS. bar slightly heavy
9 Am	64.3	60.5	29.675	NNE	48	57.7			6. V. h. q. K. KS.
10. Am	66.7	61.8	29.683	NNE	51	57.8			6. V. h. q. K. KS. q
11. Am	68.5	63.2	29.695	NNE	43	57.8			6. V. h. q. K
Noon	69.9	64.2	29.699	Nb E	48	57.8			6. V. h. q. CS. K
1. Pm	71.2	66.5	29.701	NNE	46	57.8			6. V. h. q. CS. K Barometer heavy
2 Pm	72.5	68.8	29.709	NEb N	42	57.8			6. V. h. q. CS. K they all streaked with CS
3 Pm	73.6	70.3	29.706	NE	41	57.8			6. V. h. q. KS. CS do
4 Pm	73.6	69.5	29.703	NE	41	57.8			6. V. h. q. KS. CS
5 Pm	72.3	67.6	29.700	NEb N	67	57.8			6. V. K. KS. C. CS
6. Pm	72.2	67.4	29.708	NNE	67	57.8			6. V. K. KS. C. CS
7. Pm	69	65.5	29.712	N	98	57.8			6. V. CS. CK. KS. K. S
8 Pm	65.2	65.5	29.720	N	238	57.8			6. V. C. CS. KS. S. K
9 Pm	62.2	64.7	29.726	N	228	57.8			6. V. S.
10. Pm	61.1	64.1	29.740	NEb N	125	57.8			6. V. S. C.
11 Pm	59.4	64	29.752	N	315	57.8			6. V. S. C.
12 Pm	58	63.7	29.748	N	100	57.8			6. V. KS. CS
22.1 Am	56.5	63.5	29.750	Nb. E	120	57.8			6. V. a little KS and C
2 Am	56.1	63	29.750	Nb E	120	57.8			6. V. K. S
3 Am	55.5	62.2	29.753	NWb N	0	57.8			6. m. C
4 Am	56.2	62.	29.775	NEb N	104	57.8	0.0005		6. m. C. CK. CS
5 Am	56.4	62.5	29.779	NNE	0	57.8			6. m. C. CS. CK
6 Am	57.9	62.2	29.787	NNE	98	57.8	0.0007		6. m. CS. CK. C

1853		9 th AM				Wind		Rain			
July	E	A	Bar:	Hyg	Dir:	Force	Square	Round			
7											
♀ 1	57.	57.	29.485	56.6	14 NWbN	3	0.093	0.096	b. vv.	K: CS	
2	56.4	57.2	29.929	56.4	NWbW	2	0.002	0.005	b. vv.	KS	
⊙ 3	60.	58.	29.965	57.2	WSW	4	—	—	o. v.	KS	
4	61.	60.	29.748	60.5	SWbW	6	0.154	0.213	o. raining	N	
5	61.	60.	29.539	59.2	SW	5	0.437	0.556	o. raining	KS	
6	61.3	59.1	29.654	61.3	SWbW	4	0.013	0.024	b. v.	K: C: KS	
7	60.1	59.	29.777	60.2	WbS	5	—	—	b. vv.	KS	
8	58.2	58.4	29.916	57.6	NbE	3	—	—	b. vv.	KC.	
9	58.5	61.1	29.916	58.4	NbE	2+	—	—	b. v. h.	C. CS. K	
⊙ 10	59.6	59.1	29.813	54.4	WbS	2+	—	—	b. v. h.	C. CS. K K	
11	60.	61.3	29.741	59.4	SWbS	4	0.009	0.009	b. v.	K. KS	
12	60.	60.	29.841	57.8	WSW	3	0.001	0.001	b. v.	K: KS	
13	59.1	60.0	29.645	56.7	S	3	0.122	0.123	o. v. h.	KS	
14	59.8	60.	29.354	56.8	NbE	5	0.064	0.068	b. v.	CS	
15	56.6	58.1	29.043	56.3	WbN	4	0.092	0.088	b. raining	N	
16	57.	58.9	29.126	55.9	NW	1+	0.355	0.425	o. rain.	N. KS.	
⊙ 17	57.6	57.8	29.491	55.2	WSW	4	0.682	0.540	b. vv.	K. KS	
18	56.	58.3	29.595	55.5	WbN	2	0.300	0.350	o. v.	K: KS	
19	60.4	59.4	29.871	55.6	NWbN	1+	0.020	0.020	o. v.	KS	
20	59.	59.	29.653	55.6	SW	3½	0.001	0.002	o. v.	KS	
21	59.6	60.	29.512	54.2	WSW	2½	0.087	0.095	b. vv.	K: CK	
22	60.	60.5	29.480	54.7	WbS	3	0.068	0.090	b. vv.	K	
23	60.2	58.6	29.675	60.3	SWbS	4	—	—	b. v.	KS	
⊙ 24	62.2	61.	29.153	55.3	SW½S	7+	0.220	0.340	b. vv. 27.	K	
25	57.4	57.6	29.367	57.6	SWbW	4½	0.009	0.032	o. v. 2.	K: KS	
26	59.2	57.4	29.382	57.2	WSW	5	0.080	0.130	b. vv. 2.	K	
27	59.6	57.8	29.595	58.3	WSW½S	4	0.039	0.060	b. vv.	K	
28	59.	58.2	29.672	55.4	SWbW	2½	0.010	0.023	b. v.	K: KS	
29	54.	56.3	29.484	54.7	SWbS	6	0.156	0.172	o. rain		
30	57.4	56.	29.422	57.4	WSW	5	0.026	0.066	b. v. h.	K	
⊙ 31	54.9	56.5	29.660	55.5	SW	3½	0.030	0.059	o. rain		
mean	58.84	58.76	29.597			SWm	3.068	3.577			

x WbS

Bar: Raining -

1853	9 th PM						max	min		
July	E	A	Bar:	Wgt	Dir	Force	Therm ²	Therm ³		
22										
1	52.4	59.	29.730	52.13	NWbN	2	61.8	50.	b. v.	KS
2	55.	59.2	30.040	53.7	NWbW	2	62.7	49.1	o. v.	CS: KS-
3	58.1	60.	29.891	55.2	WSW	4	63.3	51.3	o. v.	KS
4	59.3	60.8	29.726	57.3	WbS	1½	64.6	57.9	b. v.	K: KS.
5	57.3	61.2	29.648	58.2	NW	0	66.6	57.6	b. v.	KS. C.
6	56.3	61.1	29.683	58.4	WSW	3	64.6	56.2	b. vv.	KS: K.
7	57.	62.1	29.843	58.7	N	1	70.5	54.4	b ³ v. R	K. C. CK.
8	56.2	62.3	29.975	58.7	NEbN	2+	66.7	50.6	b. v.	KS. C. CS
9	58.8	61.9	29.874	55.7	NW	1	64.5	52.7	b. v. R.	C. CS
10	61.1	63.2	29.715	61.3	SWbW	3	70.	49.4	b. v. R	e. CS
11	57.	62.1	29.813	60.	W	3	65.3	55.2	b. v. R.	KS
12	56.2	61.	29.722	58.2	SbE	3	65.4	53.4	b. v.	KS. C
13	56.6	61.2	29.495	58.5	EbN	2	63.4	56.4	o. v.	m
14	51.4	60.	29.183	58.6	NbW	3+	64.6	50.3	o. R. g. rain	m
15	55.5	59.1	29.088	58.2	WbS	2	60.4	51.4	o. v.	m. C. S
16	56.3	59.7	29.332	58.2	W	1+	62.6	55.	b. v. KS. C	very heavy showers during the day
17	56.	60.	29.534	58.6	WbS	3	66.6	53.8	o. heavy rain -	
18	56.	60.9	29.776	58.6	NWbN	2	66.8	54.	b. v.	K: KS.
19	56.7	59.5	29.825	58.7	SWbS	2½	66.6	54.2	b. v.	K: CK
20	60.	62.	29.526	58.7	SWbW	2	66.	54.	b. v.	K: KS. m. in NW
21	59.3	62.1	29.430	59.7	SbW	2	66.7	55.9	o. v.	KS
22	55.1	62.	29.633	58.4	SWbW	3	67.4	55.5	b. vv.	S
23	55.4	60.	29.383	58.7	SbE	7	63.9	52.6	o. g. rain -	Bar: leaving -
24	54.7	59.7	29.287	58.5	SWbS	5	65.9	55.1	b. vv. g.	K
25	55.	58.4	29.334	58.8	SW	4	64.3	52.4	o. v. g.	K: KS-
26	54.9	59.	29.528	58.2	WSW	3¾	62.5	51.5	b. v.	K: KS-
27	55.8	59.6	29.667	58.9	WSW	4	62.6	53.5	o. rain -	
28	54.	60.2	29.708	58.1	WbS	2	64.3	53.6	b. vv.	K: KS at horizon -
29	53.	58.2	29.445	58.7	WSW	2¾	63.8	51.2	b. v.	K. m. in S-
30	54.5	58.3	29.628	58.7	W	4	62.1	49.9	b. v.	K
31	55.4	59.	29.621	58.3	WbS	1¾	66.1	52.9	b. vv.	K: C: KC.
mean	56.04	60.43	29.564				64.47	52.55		

1853	9 th AM				Wind		Rain			
August	E	A	Bar.	Hg.	Dir	Force	Square	Round		
12					20					
1	58.6	56.7	29.607	58.5	WbS	3 $\frac{3}{4}$	0.063	0.070	O.V.	K:KS
2	56.3	57.	29.825	56.6	N	1 $\frac{3}{4}$	0.004	0.010	O.VV.	H:S:KS
3	60.	57.3	29.932	57.7	WbS	2	0.001	0.001	O.VV.	K:KS
4	58.1	56.9	29.943	58.1	W	4	—	—	O.V.	KS
5	58.1	57.8	30.055	58.1	WSW	2	0.005	0.004	O.V. h.	KS
6	59.2	58.3	30.165	59.5	WbN	2	0.001	0.001	O.V.	KS
7	60.4	58.2	30.148	60.7	WbN	1 $\frac{1}{4}$	—	—	O.V.	KS.
8	62.1	59.	30.091	62.3	WSW	2	—	—	b.V.	K:KS:S
9	63.3	60.9	30.127	63.4	WSW	4 $\frac{1}{2}$	—	—	b.V.	KS.S
10	63.4	61.3	30.247	63.2	ENE	1	—	—	O.V.	KS
11	62.2	62.	30.225	62.4	NbE	2	—	—	O.V.	KS
12	59.	60.4	30.165	59.7	NE	2 $\frac{3}{4}$	—	—	b.V.	KS.S
13	62.	61.9	30.122	61.8	ENE	2 $\frac{1}{4}$	—	—	O.V.	KS.
14	60.5	61.1	30.025	60.5	EbN	2	—	—	b.V.	KS.S
15	60.6	61.1	29.915	60.2	EbN	2	—	—	O.V. h.	KS.K
16	59.6	59.	29.531	59.4	EbN	3 $\frac{1}{2}$	—	—	O.V.	KS
17	58.1	58.8	29.532	58.6	ENE	3	—	—	b.V.	K
18	59.9	58.	29.629	59.6	SEbS	2	—	—	b.V.	KS. CS.
19	60.	58.9	29.585	60.4	SSW	3	0.015	0.020	O.V.	KS.
20	61.7	59.	29.475	61.4	SW	5	0.093	0.095	b.V. g.	K dispersed strongly marked
21	60.1	59.	29.628	60.5	WSW	6	0.022	0.030	b.V. g.	K do
22	58.	58.4	29.713	57.4	WSW $\frac{1}{2}$ W	3	0.538	0.584	b.V.	K:CK
23	56.	58.4	29.712	55.1	N	1 $\frac{3}{4}$	0.080	0.070	b.V.	K
24	57.	54.1	29.647	56.9	EbN	2	0.102	0.100	O.V.	K (at 1.40 AM. a bright halo round)
25	54.3	57.7	29.293	54.9	E $\frac{1}{2}$ S	3 $\frac{1}{2}$	0.240	0.237	O.M	drizzle
26	60.5	58.3	28.895	60.1	SbE	2	0.343	0.403	b.V.	K.
27	59.4	58.2	29.031	59.3	WbS	3	0.548	0.590	b.V.	KS
28	55.5	57.5	29.306	55.6	WSW $\frac{1}{2}$ W	6	0.082	0.123	O. h. g.	KS
29	56.6	56.1	29.585	56.7	W	1	0.014	0.004	b.V.	KS.S
30	52.6	55.1	29.657	52.2	SbW	3 $\frac{1}{2}$	0.020	0.019	O.V.	KS. light rain
31	53.5	53.	29.626	53.5	WbN	2	0.081	0.083	b.V.	K.
Mean	58.87	58.37	29.757			Sum	2.252	2.474		

1853

9th PM.

August

E

A

Bar:

H_g:

Wind

Dir

Force

max.
Tmin.
T

3

1	54.5	59.1	29.648	54.93	WbN	1 $\frac{1}{4}$	63.1	52.9	b. v.	KS
2	55.	59.2	29.939	55.1	N $\frac{1}{2}$ E	0	64.	51.1	o. v.	KS: S: K
3	53.9	60.9	29.936	55.24	WNW	2	66.2	52.8	b. v.	S
4	54.8	59.4	30.028	55.23	NW	1	65.	50.2	o. v.	
5	56.6	59.2	30.120	55.53	WbN	1 $\frac{1}{2}$	65.	53.9	b. v.	KS
6	56.1	60.	30.175	56.63	WbN	1 $\frac{1}{2}$	64.4	54.2	b. v.	KS: S
7	60.1	62.	30.106	56.83	WSW	1 $\frac{1}{2}$	69.7	54.4	o. h.	KS.
8	58.7	61.7	30.088	57.1	SW $\frac{1}{2}$ W	1	67.	53.5	o. h.	KS.
9	59.7	63.	30.208	57.2	NNE	2	69.9	58.8	b. v. h.	KS.
10	61.	63.8	30.233	57.3	SWbS	2 $\frac{1}{4}$	70.7	56.7	b. v.	KS: K
11	56.6	64.	30.195	57.5	NbS	3	70.	56.9	o. v.	KS.
12	59.7	64.5	30.141	57.7	NbS	1	68.	52.7	o. v.	K: KS
13	53.3	63.	30.077	57.8	NbS	1 $\frac{3}{4}$	67.	55.2	b. h.	S.
14	57.5	63.6	29.985	57.9	SWbW	1 $\frac{3}{4}$	65.1	54.9	o. v.	K.
15	53.9	61.4	29.776	57.9	SW	2	65.	54.3	b. v.	
16	56.4	61.8	29.403	57.4	EbN	3	65.2	47.8	o. m.	KS.
17	54.3	61.2	29.684	57.4	SW	3	65.5	51.4	b. v.	CK: K: CS: KS.
18	57.4	61.5	29.563	57.3	SW $\frac{1}{2}$ W	4 $\frac{1}{4}$	66.	48.8	b. v.	K: KS: S.
19	59.4	61.2	29.527	57.3	SWbS	3	66.	54.	o. v.	K: KS.
20	56.6	62.	29.545	57.4	SW	3	68.	55.	b. v.	S round horizon
21	56.4	61.1	29.669	57.4	WSW	2	64.7	53.8	o. v.	K: m. (Heavy showers during the day with distant thunder.)
22	53.5	61.	29.778	57.3	NbS	0	64.5	52.8	b. v.	K: KS: CK.
23	51.4	59.3	29.689	57.3	SW	0	62.6	51.5	b. v.	K
24	53.7	60.	29.525	57.6	E $\frac{1}{2}$ S	2 $\frac{1}{2}$	63.	46.3	o. v.	K
25	57.1	60.5	29.709	57.4	EbS	3 $\frac{1}{4}$	65.4	52.3	raming in torrents.	
26	53.4	61.	28.921	57.2	W $\frac{1}{2}$ S	2	63.1	52.9	b. v.	K: KS m. in NW horizon.
27	54.	59.4	29.205	57.6	W	3	63.4	52.6	o. v.	K.
28	54.	58.5	29.515	57.9	WbS	4 $\frac{3}{4}$	62.2	53.	o. v.	K.
29	52.9	58.1	29.712	57.8	WbS	2 $\frac{1}{2}$	61.1	49.9	b. v.	KS: S.
30	47.7	56.	29.613	57.6	WSW	2 $\frac{1}{4}$	58.8	48.4	b. v.	KS.
31	53.3	57.4	29.554	57.2	SbS	4 $\frac{1}{2}$	62.6	44.8	o. v.	KS.

mean

55.61 60.80 29.763 64.99 52.02

1853		9 th Mornings			Hygr	Wind		Rain		
a	Sept ^r	E	A	Bar.		Dir	Force	Time	Round	
18										
4	1	54.2	55.7	29.545	52.73	ENE	5	0.340	0.377	o.m. q. KS-
	2	53.	54.5	29.845	53.1	NbW	1½	0.040	0.073	b. vv. K: KS
	3	53.5	53.	30.153	53.53	NNW	1¼	0.025	0.031	o. vv. KS
⊙	4	50.5	51.9	30.312	49.63	NNW	0	0.001	0.001	fog -
	5	53.1	51.2	30.307	50.33	NbW	1	—	—	b. m. K - S-
	6	54.9	53.	30.295	54.73	NNW	0½	—	—	b. fl. C. S. CS.
	7	52.	52.6	30.160	51.3	NbW	2	—	—	b. h. CK
	8	56.9	56.1	29.895	56.73	NNbE	3	—	—	b. v. KS
	9	57.9	57.	29.700	57.53	SE	2	—	—	o. m. KS.
	10	58.7	57.8	29.519	59.33	SEbE	6	—	—	o. m. KS-
⊙	11	57.2	57.1	29.567	57.23	S	8	—	—	o. v. q. KS.
	12	55.5	55.	29.730	55.53	SSW	5	0.092	0.122	b. v. q. K: C. ck. CS.
	13	54.5	55.3	29.863	54.3	WSW	1	0.001	0.002	b. v. KS, CS
	14	53.3	54.9	29.681	53.33	SE	7	0.065	0.094	o. rain -
	15	57.1	56.	29.900	57.13	EbS	4	0.095	0.129	b. v. K: sky very deep blue
	16	50.5	52.5	29.940	50.3	NE	1½	—	—	b. m.
	17	57.2	56.1	29.915	57.33	SW	1½	—	—	o. v. KS-
⊙	18	55.	56	30.031	54.43	WSW	2½	0.004	0.007	o. v. KS
	19	55.6	55.8	30.020	55.63	WSW	5	—	—	o. v. S. KS.
	20	58.	57.2	29.832	55.33	SWbW	3½	—	—	o. v. KS-
	21	56.1	56.8	29.697	56.13	SW	3	—	—	o. v. S. KS
	22	54.8	56.9	29.403	54.83	SW½S	6	0.001	0.010	o. v. KS
	23	50.4	52.	29.387	50.3	WSW	5	0.064	0.076	b. vv. CK: K
	24	50.	52.5	29.553	52.63	W	3	0.004	0.006	b. v. K: CK
⊙	25	54.	53.	28.738	54.3	SWbW	8	0.135	0.193	o. v. q. K. { Barometer slowly but with
	26	48.3	49.8	29.601	48.33	NNbW	4	0.006	0.028	b. vv. S. CS: K. { long oscillations
	27	51.4	51.4	29.644	51.43	SWbW	3	—	—	o. v. KS
	28	59.1	55.	29.381	59.23	WSW	8	—	—	o. vv. K: KS-
	29	51.3	52.	29.671	51.33	WbS	3	0.047	0.163	o. v. KS-
	30	50.4	50.6	29.770	50.43	W	5	0.026	0.031	b. vv. S-
Mean		54.15	54.29	29.768				0.956	1.343	

1853	9 th Evening			Hyg	Wind		Max	Min		
Sep ^r	E	A	Bar.	—	Dir:	Force	T	T		
9										
1	52,	56.4	29.687	51.69	NbE	2½	57.6	51.4	b. v.	K.
2	47.4	54.2	30.028	50.43	NWbN	1	58.7	47.8	b. v.	magnificent aurora (see note) fine Aurora, dullish green color, with faint streamers, it reached from W to NE -
3	46.1	55.2	30.243	46.93	NbW	1	59.6	44.7	b. v.	
4	49.	56.2	30.330	46.69	SW	0	62.5	43.	b. v.	
5	48.8	55.	30.332	46.65	W	1	62.7	41.1	b. v.	S. dispersed. (at 9.15)
6	50.8	56.3	30.233	47.33	NNbE	1.	63.2	44.6	b. h.	S in NE
7	51.4	57.6	30.047	47.13	NNbE	1	62.5	44.	b. v	
8	55.5	58.8	29.770	50.33	NbN	1½	64.3	57.3	b. v	K.
1853	At 8:30 P.M. A fine Aurora of a greenish color,				E b S	3	63.7	53.1	0.3.	KS.
Sep ^r 29	appeared, extending from E. to SSW about 20° greatest				SSbE	4	63.2	54.2	b. v.	
altitude, & sending up streamers as high as the pole-star,				SWbS	2	60.6	52.5	b. v.	KS: K: S.	
simultaneously there appeared on the South, a serpentine strip				SWbW	3½	57.8	49.6	0. v.	KS: S.	
of auroral light, of intense brilliancy stretching from E. to SSW				sbW	2½	62.1	48.7	b. v.	CS. S at southern horizon	
and fading away at about 10° of the horizon on either side. Under				SEbS	4	58.5	49.3	b. v	K: CK	
the western extremity was a large patch of auroral light				NbW	1	61.6	57.6	b. m.		
but not of so great brilliancy. When first observed the long				SSW	3	63.7	43.	0. v.	K: KS.	
brilliant strip was nearly mid-way between α Lyra & α Aquila				SW	0	54.9	52.7	0. v.	K: KS.	
(then on the meridian) but nearer the latter star; in a few min				WbS	3	61.4	50.	0. v.	K.	
utes it began to diminish both in brightness & altitude,				SWbW	4	61.8	51.3	b. vv. γ.	K in South.	
at 9 P.M. it had disappeared but the aurora in N. still continued				SWbS	2	62.6	53.	0. v.	K: KS.	
18	55.4	58.5	30.111	55.43	SW	4½	62.6	52.4	b. vv.	K. an opening in SE horizon
19	52.5	58.1	29.880	52.33	WbW	3½	58.8	48.6	b. vv.	C: CS.
20	56.5	58.7	29.744	50.23	SWbS	5½	53.5	45.1	b. vv. γ.	KS: K. S.
21	67.3	58.6	29.567	55.63	SW	3½	53.4	45.7	0. v.	KS.
22	48.3	55.	29.472	52.63	NNbW	3½	55.4	45.	b. g.	K.
23	46.	52.	29.381	47.63	SWbS	2½	54.5	41.5	b. v.	KS.
24	48.	53.2	29.404	45.13	SWbW	3	56.1	45.6	0. g.	K: KS.
25	45.3	51.2	29.243	42.53	SW	8	60.3	49.0	b. v. γ.	KS
26	46.4	51.4	29.663	47.73	WbS	2	55.	48.	0. g.	light rain.
27	54.6	53.4	29.589	47.23	WbS	2½	56.5	44.5	0. g.	light rain.
28	49.9	53.	29.488	47.63						
29	48.	52.3	29.655							
30	49.	53.	29.640							
mean	51.37	55.86	29.786				58.98	47.76		

1853	9 th Evening			Hyg	Wind		Max	Min		
Sep ^r	E	A	Bar.	—	Dir:	Force	T	T		
9										
1	52,	56.4	29.687	51.69	NbE	2½	57.6	51.4	b. v.	K.
2	47.4	54.2	30.028	50.43	NWbN	1	58.7	47.8	b. v.	magnificent aurora. (see note)
3	46.1	55.2	30.243	46.93	NbW	1	59.6	44.7	b. v.	
4	49.	56.2	30.330	46.63	SW	0	62.5	43.1	b. v.	fine Aurora, dullish green color, with faint streamers, it reached from W to NE—
5	48.8	55.	30.332	47.13	W	1	62.7	41.1	b. v.	S. dispersed. (at 9.15)
6	50.8	56.3	30.233	47.33	NNbE	1.	63.2	44.6	b. h.	S in NE
7	51.4	57.6	30.047	50.23	NNbE	1	62.5	44.	b. v.	
8	55.5	58.8	29.779	53.33	EbN	1½	64.3	51.3	o. g.	K.
9	55.	60.	29.565	53.13	EbS	3	63.7	53.1	o. g.	KS.
10	53.7	58.	29.640	53.63	SSbE	4	63.2	54.2	b. v.	
11	55.	58.7	29.637	52.23	SWbS	2	60.6	52.5	b. v.	KS: K: S.
12	53.5	57.3	29.775	53.63	SWbW	3½	57.8	49.6	o. v.	KS: S.
13	50.5	55.1	29.870	50.33	SBW	2½	62.1	48.7	b. v.	CS. S at Southern horizon
14	54.8	56.3	29.633	54.83	SEbS	4	58.5	49.3	b. v.	K: CK
15	50.6	56.	30.005	50.53	NbW	1	61.6	51.6	b. m.	
16	54.5	57.8	29.893	54.53	SSW	3	63.7	43.	o. v.	K: KS.
17	53.4	58.8	30.028	53.23	SW	0	54.9	52.7	o. v.	K: KS.
18	55.4	58.3	30.111	55.43	WbS	3	61.4	50.	o. v.	K.
19	52.5	58.1	29.880	52.53	SWbW	4	61.8	51.3	b. v.	K in South.
20	56.5	58.7	29.744	56.53	SWbS	2	62.6	53.	o. v.	K: KS.
21	57.3	58.6	29.567	57.33	SW	4½	62.6	52.4	b. v.	K. an opening in SE horizon
22	48.3	55.	29.472	47.63	WSW	3½	58.8	48.6	b. v.	C: CS.
23	46.	52.	29.381	46.13	SW	5½	53.5	45.1	b. v.	KS: K. S.
24	48.	53.2	29.404	47.73	SBW	3½	53.4	45.7	o. v.	KS.
25	45.3	51.2	29.243	45.33	NNbW	3½	55.4	45.	b. g.	K.
26	46.4	51.4	29.663	46.43	SWbS	2½	54.5	41.5	b. v.	KS.
27	54.6	53.4	29.589	54.63	SWbW	3	56.1	45.6	o. g.	K: KS.
28	49.9	53.	29.488	49.93	SW	8	60.3	49.0	b. v.	KS
29	48.	52.3	29.655	47.73	WbS	2	55.	48.	o. g.	light rain.
30	49.	53.	29.640	49.23	WbS	2½	56.5	44.5	o. g.	light rain.
mean	51.37	55.86	29.786				58.98	47.76		

1853	Term observations				Wind		Rain			
Sept 21	E	A	Bar.	Thyr	Dir	Force	Square	Round		
20										
2 6 Am	53.0	56,	29.689	53.39	WSW	141.	drops	—	o. vr.	S
4 Am	54.	56,	.692	52.63	SW6W	58	—	—	o. vv.	S
8 Am	55.3	56.3	.642	55.83	SW	65	—	—	o. v.	S. KS.
9 Am	56.1	56.8	.697	56.43	SW	70	—	—	o. v.	S. KS. (What a sudden fall & rise in Bar)
10 Am	56.2	57.	.689	56.23	SW & S	71	—	—	o. y.	S. KS.
11 Am	57.2	57.2	.693	57.13	WSW	65	—	—	o. vv.	S. KS.
Noon	57.6	57.5	.689	57.63	WSW & S	75	—	—	o. v.	S. KS.
1 Pm	59.7	58.1	.661	59.23	SW & S	95	—	—	6. v.	KS. K.
2 Pm	60.	59,	.651	60.23	SW & S	76	—	—	6. vv.	KS. K.
3 Pm	61.4	59.6	.641	61.23	SW	58	—	—	6. vv.	S. K. KS
4 Pm	62,	59.9	.625	62.23	SW	70	—	—	6. vv.	KS.
5 Pm	60.3	59.5	.609	60.83	SW & S	81	—	—	6. vv.	KS.
6 Pm	59.4	59.6	.591	59.53	SW & S	64	—	—	6. v.	CK: KS. S.
7 Pm	57.7	59,	.581	57.83	SW & S	74	—	—	6. v.	K: KS. CK.
8 Pm	57.7	58.3	.572	57.83	SW & S	64	—	—	6. v.	S round horizon
9 Pm	57.3	58.6	.567	57.43	SW	56	—	—	6. vv.	K: an opening in S.E. horizon
10 Pm	56.6	58.5	.547	56.63	SW	54	—	—	6. vv. q	CS. KS.
11 Pm	57.	58.1	.529	57.73	SW	56	drops	—	6. vv.	CS. CK. S
22 4 0	56.7	58.2	.511	56.93	SW	53	—	—	o. v.	KS.
1 Am	56.2	58.1	.484	56.33	SW & S	44	—	—	o. y.	KS. Bar. heaving gently -
2 Am	55.3	58,	.451	55.33	SSW	58	drops	—	o. v. q.	KS. clouds moving very rapidly
3 Am	55.7	57.9	.439	55.83	SW & S	54	—	—	o. v. q.	KS. K. drizzle
4 Am	56,	57.8	.423	56.23	SW	48	—	—	o. v. q.	KS. K. light drizzle -
5 Am	55.6	57.7	.430	55.83	WSW & S	54	—	—	o. v.	K.
6 Am	54.5	57.6	29.442	54.53	WSW	77	—	—	o. vv.	K. S.

1853	Morning 9 th			Wggt	Wind		Rain			
Oct ^r	E	A	Bar:		Dir.	Force	Square	Round		
1	46.6	49.8	29.866	46.27 46.53	WbS	4	0.321	0.336	o. v.	K: KS
2	46.5	47.7	29.660	45.73 47.1	WNbW	3	0.121	0.136	b. v.	C: K: KS
3	44	45.4	29.813	43.43 44.2	WSW	2	0.003	0.003	b. v.	S
4	54.1	53.9	29.249	52.7 53.5	WSW	7	0.060	0.079	b. v.	K: CK.
5	51.	52.	29.029	50.5 50.5	NNE	2	0.023	0.029	o. m.	rain
6	53.3	52.2	29.475	53.63 52.	NNE	2½	0.260	0.270	o. v.	KS
7	48.	50.	29.215	47.67 46.3	NbE	2	0.007	0.008	o. v.	light rain
8	50.5	51.	29.351	50.5 49.7	NW	0	0.032	0.030	o. m. m.	KS-
9	47.9	50.1	29.516	47.2 47.2	WNbW	0	0.065	0.022	b. m.	KS: K.
10	51.3	51.4	29.720	51.3 50.7	N	1	0.007	0.008	Fog.	
11	50.6	52.	29.651	50.6 49.7	NbE	3	0.172	0.193	o. m.	KS-
12	50.5	51.	29.677	50.3 48.3	NbE	4	0.035	0.037	o. v.	KS-
13	48.7	60.2	29.745	48.7 48.	NbE	1	0.007	0.008	b. v.	KS: CS. CK
14	46.9	48.1	29.668	46.43 45.5	WSW	1½	—	—	o. v.	KS-S-
15	49.7	50.3	29.177	49.5 48.7	W	2	0.198	0.327	b. v.	KS. K-
16	44	46.	29.195	43.5 41.9	SWbW	3	—	—	b. v. v.	S. dispersed.
17	35.4	43.8	29.003	35.3 32.	NbW	0	—	—	dense fog.	
18	42.1	44.6	29.280	41.6 40.7	WbS	1	0.048	0.063	b. v.	K
19	46.4	41.6	29.075	46.2 44.2	NbE	3½	—	—	o. m.	K
20	43.4	44	29.415	42.7 41.6	WSW	4	0.025	0.026	b. v.	KS. S. CK
21	56.8	51.1	29.025	56.8 56.4	SbW	8	0.283	0.511	o. m. q.	light rain N. Bar: heaving
22	54.	50.9	29.175	53.7 53.2	SWbW	10	0.163	0.416	o. v. q.	KS. N in SW
23	53.3	51.6	29.432	53.2 50.2	SWbS	6	0.348	0.543	b. v. q.	K: CK
24	56.1	53.1	29.520	56.1 55.2	S	5	0.200	0.245	o. v. q.	KS
25	50.2	53.2	29.449	49.2 49.1	NNE	3	0.102	0.139	o. m.	rain
26	50.2	50.2	29.392	50.3 49.1	ESE	7	1.058	0.985	o. v. q.	light rain. {the lower figures show the quantity of rain from 9 AM. to 2 PM. yesterday}
27	52.5	51.	29.437	52.3 50.6	S	3½	0.128	0.220	b. v.	C: S. CS
28	49.9	50.5	29.323	49.2 49.	N	0	0.014	0.013	fog.	
29	46.	48.	29.641	45.5 44.1	SWbW	3½	0.008	0.010	b. v.	S
30	42.	44.5	29.785	41.4 40.1	SbW	3	—	—	b. v.	S. CS
31	51.7	50.2	29.258	50.7 50.7	SbW	7	0.019	0.100	o. v.	light rain Bar: heaving
Mean	49.02	49.21	29.410				3.717	4.978		

1853	Thermometers 9th			Wind		Max	Min		
Date	F	A	Bar	Height	Dir	Force	F	F	
20									
1	40.	49.	29.537	37.33	WbS	3	50.5	40.	b. vv. K in SW
2	39.7	46.3	29.782	39.3	WSW	2	50.3	38.9	b. v.
3	47.1	50.4	29.700	37.33	SSW	4	53.6	37.4	o. g. q. KS.
4	52.5	53.	29.157	44.4	SSW	5	58.8	46.5	b. v. q. KS
5	53.	52.6	29.301	51.2	N	2 1/2	55.3	50.3	o. g. K:
6	49.	52.2	29.445	52.6	NNE	2	55.1	48.7	o. g. KS-
7	49.6	51.6	29.230	48.7	NW	0	52.2	44.3	o. g. light rain
8	47.8	52.	29.415	47.3	NbE	1	55.3	47.6	h. fog, through which the zenith stars were visible
9	47.4	52.6	29.680	47.3	NNE	0	57.9	45.	h. fog. larger stars visible -
10	57.6	52.5	29.668	47.3	NE	2	56.9	45.3	o. v. KS-
11	50.	52.5	29.661	47.3	NbE	3	54.2	48.6	o. v. K: KS.
12	48.4	51.5	29.686	47.3	NE	1 3/4	56.5	42.1	o. v. KS-
13	45.3	51.8	29.766	47.3	NbE	0.	54.3	46.	b. v. heavy CK through which visible & some of the larger stars -
14	48.	50.	29.348	47.3	SWbS	5	52.5	40.5	o. v. q. light rain -
15	42.	47.9	29.236	47.3	WSW	2	54.3	42.2	b. vv. S. in W
16	40.	48.1	29.161	47.3	SWbW	1 1/2	51.5	38.4	b. v. CK in S.
17	39.6	47.1	29.131	47.3	NWbN	1 1/2	49.2	32.4	b. vv. CK & KS-
18	41.5	47.8	29.167	47.3	EbN	2	49.5	36.9	o. v. CK: S. CS-
19	43.4	47.	29.243	47.3	NbW	2	48.5	40.8	b. v. CK: K.
20	46.5	47.6	29.437	47.3	SbW	4 1/2	51.3	37.4	o. v. q. KS-
21	58.3	50.1	29.148	47.3	SW	7	58.4	46.	b. v. q.
22	50.5	51.9	29.435	47.3	SbW	6	58.	42.8	o. v. q. rain
23	52.4	52.4	29.684	47.3	SSW	4	56.3	49.6	o. v. KS. K.
24	55.	53.8	29.365	47.3	S	4 1/2	52.	40.2	o. g. drizzle - (max = 58.2: min = 52.2)
25	46.	50.7	29.582	47.3	SbE	1	57.8	44.5	b. v. K: S. KS.
26	52.6	51.3	29.241	47.3	ESb	8	54.7	43.9	b. v. q. KS. in S.
27	50.2	52.4	29.376	47.3	SW	1 1/2	57.	49.7	o. g. rain
28	43.1	50.7	29.433	47.3	NWbW	2	55.4	43.5	b. v. S. KS-
29	40.7	47.8	29.732	47.3	SW	2 1/2	50.1	41.	b. v. stars very brilliant
30	48.2	48.5	29.461	47.3	S	8	49.8	26.6	o. g. q. K. Bar: heavy
31	55.5	53.1	29.231	47.3	SSW	7	56.6	47.9	o. g. K: in
mean	47.54	50.52	29.433				53.62	42.59	

1853	9 th Morning			1853	Wind		Bar. & Rain		
Hour	E	A	Bar.	Th. 53.	Dir	Force	S. & Rain	Wind	
1	49.	62.	29.369	48.73	SSW	3½	0.700	1.25	o. rain
2	48.	51.	29.350	47.83	WSW	5	0.603	0.645	o. v. KS - K.
3	41.1	46.2	29.920	40.53	NW	½	0.003	0.006	o. m. KS
4	51.1	49.	29.756	51.23	E4N	2	0.00	—	o. m.
5	50	50	29.546	49.83	SE	2	0.018	0.014	o. m. N. KS. N
6	50.6	50.5	29.865	50.53	NW	4	0.024	0.094	o. g. h. v
7	44.1	46.	30.095	43.83	SW	3	0.082	—	o. v. h. KS. CS
8	48.	50.	30.077	42.53	SW	2	0.094	0.220	o. v. h. KS. S. CK.
9	40.	44.	30.367	38.23	SW	2	0.142	—	o. m. thin stratus -
10	46.7	45.4	30.076	46.43	SW	5	—	—	o. v. KS. S
11	40.1	45.	30.203	40.33	SWNW	2	—	—	o. m.
12	38.1	42.9	30.189	39.53	SW	2	—	—	o. m.
13	35.	40.5	29.760	37.73	SW	2	—	—	o. m.
14	41.	43.9	29.628	40.23	WNW	1	0.186	0.196	o. m. light rain
15	35.1	41.6	29.500	40.33	SSW	2	0.210	0.008	o. v. CS. S
16	37.2	40.8	29.579	36.83	WbS	2	0.010	0.011	o. m. KS.
17	32.4	38.	29.679	36.13	SW	3	0.008	—	o. m.
18	42.5	41.	29.634	42.23	SW	4½	0.005	0.009	o. m. KS -
19	48.	45.	29.500	41.83	SSW	7	0.017	—	o. v. KS - K.
20	38.3	41.3	29.766	37.23	SW	4	0.086	0.240	o. v. S. in N.
21	38.	40.6	30.131	37.23	SW	2	0.170	0.010	o. m. CS in N
22	43.	43.	29.990	42.53	SW	4	0.010	—	o. v. KS
23	46.1	44.4	29.820	46.13	SbE	4	0.027	0.048	o. v. KS
24	43.	45.	29.620	43.63	SW	4	0.303	0.603	o. v. KS -
25	45.	43.	29.551	43.43	SbW	8½	0.550	0.255	o. v. g. Rain Bar: heaving
26	40.	42.2	29.781	39.73	SbW	4	0.118	0.235	o. v. KS -
27	43.	41.6	29.825	38.53	S	4	0.214	—	o. v. KS -
28	40.	43.4	29.838	42.73	SW	2	0.230	0.020	o. v. KS -
29	49.	49.	29.453	49.33	SWNW	6	0.006	0.117	o. m.
30	38.9	43.	29.813	38.33	SWS	2	0.032	—	o. v. KS -
				37.4			0.065	—	o. v.
mean	42.74	44.64	29.769	40.96			2.339	3.992	

1853	Ewing 7 th			Hyg.	Wind		Max	Min.		
Hour	E	A	Bar.		Dir	Force	T	T		
1	53.3	52,	29.325	52.63 51.23	SS E	7	56.9	49.	0. g. g.	K. (at 9 ^h 15 ^m)
2	43.2	48.8	29.790	42.73 41.33	SSW	2	53.7	43	6. v. h.	faint Aurora from E L W
3	43.7	48.	29.831	43.27 42.93	N	1	50	39	0. g. m	some star faint in Zenith
4	50.7	56.	29.616	50.23 51.33	E N	4	53.5	43.5	0. g.	
5	52	51.	29.620	51.73 51.33	S	4	53.	49	0. g.	
6	43.5	49.8	30.030	42.23 42.23	WNW	1	54.	43.5	6. h. K S	
7	47.4	49.1	30.138	42.23 42.23	SW S	2	52.	38.4	6. h. v. K S. K. S.	
8	40.	47.	30.330	32.23 32.63	W	2 -	52.5	40.1	6. v.	slight Aurora from W to N E
9	42.1	45.1	30.191	41.23 40.43	SW	5 1/2	45.5	36.3	6. v.	C S. K S -
10	46.	47.5	30.012	40.53 44.53	SW S	4	55.6	40.9	6. v.	S
11	38.4	45.1	30.285	38.23 36.23	SW	2	47.6	38.3	6. v. h.	this stratus
12	37.4	43.6	29.926	37.23 35.43	SW	1 1/2	46.5	34.3	6. v.	
13	40.6	43.7	29.709	40.23 39.43	W S	0	43.3	31.6	0. m m.	light rain
14	40.	43.9	29.540	39.43 38.93	SW S	1	44.1	40.	0. v.	K.
15	35.2	43.1	29.515	38.73 35.73	SW S	1	42.5	34.3	6. v.	C K: C
16	32.3	39.	29.597	31.43 31.43	SW	2 1/2	42.2	32.	6. v.	
17	36.	39.3	29.637	35.73 34.43	SW S	4	40.3	29.8	6. v.	K. white & fleecy -
18	45.3	43.6	29.630	45.23 43.23	SW S	5	47.7	35.5	0. v.	K: K S.
19	43.6	45.6	29.615	43.63 44.93	W S	1	52,	42.6	0. v.	K S.
20	37.5	44.2	30.004	36.73 36.33	SW	2	44.9	35.3	6. v.	
21	41.3	43.7	30.111	40.63 40.23	SW	4 1/2	42.9	34.9	6. m	
22	44.6	44.	29.806	44.53 41.43	S	9	47.6	40.5	0. g. g.	K: K S. Bar: heaving
23	46.5	45.6	29.593	46.23 45.23	S E	8	48.1	42.7	0. g. g.	K
24	37.7	41.4	29.760	36.23 36.93	SW	4	47.1	36.6	6. v.	one of the cups of anem. blown off -
25	39.	43.6	29.556	38.33 37.33	SW	3	50.	36.6	6. v.	K S in W
26	36.4	43.4	29.916	35.23 35.33	SW	3	46.4	35.9	6. v.	
27	47.	44.7	29.741	46.63 46.63	SW S	4	47.6	35.5	6. v.	K S.
28	48.	49.	29.640	47.73 46.93	S E	4	47.8	38.7	0. g.	n. drizzle -
29	43.4	46.2	29.619	43.13 42.13	SW	3	52.7	43.4	0. g.	K S. a few stars faintly visible
30	44.7	45.	29.815	44.33 42.33	S	6	46.4	37.3	0. v.	K S. Dr.
mean	42.56	45.73	29.800				48.10	38.24		

1853	9 th	Morning			Wind		Rain				
Decl ^r	E	A	Barom ^r	Therm ^r	Dir.	Force	Square	Round			
4	1	51.1	47.6	29.659	51.1	SSW	6	0.023	0.034	0. m.	K.
	2	46.3	47.1	29.775	46.1	SE	3	0.033	0.005	0. v.	CK. K
	3	44.9	45.1	29.788	44.4	WSW	2	0.002	—	0. fog.	
5	4	43.1	45.1	29.731	44.2	SSW	3½	0.013	—	0. v.	KS.
	5	41.9	44.1	29.756	41.1	WSW	2	0.035	0.060	0. m.	K: S. KS-
	6	38.6	41.1	29.995	40.9	SWW	2½	0.037	—	0. m.	S in W
	7	38.3	39.5	29.921	38.4	SSW	3	0.006	0.011	0. v.	KS: S.
	8	39.	42.1	30.057	37.4	WSW	1	0.025	0.077	0. v.	KS, S.
	9	33.1	38.4	30.351	38.3	SWW	2	0.023	—	0. m.	white frost thickly on ground
	10	30.5	36.3	30.257	32.2	WSW	1	0.033	—	10 fog.	
6	11	38.4	38.	29.951	29.9	ENE	5	0.029	0.024	0. v.	KS: K
	12	34.	37.5	29.641	37.5	ESE	2	0.046	—	0. v.	KS.
	13	32.5	37.5	29.497	31.1	NESE	3	—	—	0. m.	K. EK
	14	42.2	39.9	29.277	31.4	NESE	2½	0.534	0.743	0. m.	rain
	15	36.3	39.	29.465	42.1	NESE	2	0.577	—	0. v.	K.
	16	35.4	38.6	29.439	35.8	SE	1	0.053	0.057	0. v.	K. CK
	17	32.	38.	29.571	34.3	SW	2	0.047	—	0. m.	
7	18	39.1	37.3	29.229	35.5	ESE	4	0.005	0.014	0. v.	KS- K
	19	37.2	38.1	29.260	38.6	E	4	0.042	0.247	0. m.	KS- (at 9 th 15 ^m)
	20	40.3	39.3	29.715	37.6	ENE	6	0.190	0.005	0. v.	KS
	21	39.6	39.1	29.985	40.3	ESE	5	0.300	0.205	0. v.	K: CK
	22	38.3	39.	30.208	38	ENE	4	0.007	—	0. v.	KS. K
	23	39.6	38.4	30.002	34.2	SW	1	0.063	—	0. m.	towards S. v. towards N - S. KS (at 9 th 30 ^m)
	24	35.4	37.3	30.171	39.6	ENE	2½	0.009	0.009	0. v.	KS, CS.
8	25	36.	37.5	30.193	35.4	SW	0	0.022	—	0. fog.	
	26	36.9	38.6	30.112	35.4	WSW	2	0.010	0.020	0. v.	KS. S
	27	31.	35.4	29.956	35.4	WSW	2	0.033	0.047	0. v.	KS. N in SW
	28	28.1	32.8	30.170	35.4	SE	2	0.054	—	0. v.	snow lying on ground
	29	25.3	30.	30.175	30	SWW	3	0.003	—	0. m.	KS
	30	36.2	35.	29.693	24.7	WSW	0	0.065	0.062	0. v.	KS-
	31	30.1	33.2	29.585	35.9	WS	2	0.122	—	0. v.	S. KS. Much snow during the night
mean							Sum	1.2217	1.620		
								1.5403			

1853	9 th Evening			Hyg.	Wind		Max	Min		
Rel.	E.	A.	Barom.		Air	Force	T	T		
1	49.4	48.2	29.690	49.2	S	6	52.5	43.9	o. g.	K
2	39.	44.4	29.765	47.3	SW	2	50.1	38.8	b. m.	
3	45.5	46.1	29.767	45.3	SW	3	47.9	38.7	o. m.	KS.
4	41.7	44.4	29.695	48.3	SSTW	4	46.3	41.4	o. g.	KS. K.
5	36.1	42.1	29.861	35.3	W	2	44.1	38.8	b. r.	S in E
6	34.4	41.5	29.971	33.5	WbS	0	40.4	33.8	fog.	a few large stars faintly visible
7	41.3	41.3	29.877	40.9	SW $\frac{1}{2}$ S	3 $\frac{1}{2}$	41.6	31.5	o. m.	rain. K.
8	34.	39.5	30.250	33.7	WbSW	2	42.3	34.5	b. m.	heavy frost lying on ground.
9	29.5	37.	30.338	32.8	WbS	1	38.9	29.5	fog.	Do
10	32.1	36.8	30.105	31.5	WbW	0	32.3	27.4	thick fog.	Do
11	37.	38.1	29.779	34.0	EbN	1	39.	31	o. r.	KS
12	35.	38.	29.525	34.2	NbE	2	37.6	33.4	o. m.	K
13	38.5	38.1	29.259	37.8	NbE	5 $\frac{1}{2}$	38.5	33.2	o. m.	rain
14	41.	40.5	29.365	40.5	EbE	2 $\frac{1}{2}$	44.4	37.3	o. r.	
15	35.4	38.7	29.439	34.5	NbE	2	41.	34.4	b. r.	
16	36.5	39.7	29.500	36.3	W	1	40.6	34.0	o. r.	OK
17	28.	35.7	29.435	27.	EbE	0	37.1	27.	fog.	larger stars visible. {at 11 PM, E. rose to 34° and the fog thickened}
18	38.	38.3	29.120	37.9	EbE	6	40.2	27.7	o. m.	KS
19	38.6	38.7	29.547	36.2	E	5	40.	35.5	o. r.	K:KS.
20	39.9	39.8	29.831	37.5	NbE	4	41.6	38.	o. g.	K:KS.
21	39.	39.4	30.126	37.9	NbE	3 $\frac{1}{2}$	41.5	36.8	o. g.	K
22	36.6	38.9	30.201	35.7	N $\frac{1}{2}$ E	1	40.4	36.2	o. r.	K:KS.
23	36.8	39.5	30.025	36.6	EbN	2	45.1	34.4	b. r.	S
24	34.3	38.	30.229	33.2	W	1 $\frac{1}{2}$	40.7	33.5	b. r.	S
25	36.6	38.4	30.131	36.2	SW	1 $\frac{1}{2}$	40.	32.2	b. g.	drizzle
26	32.5	37.	30.134	32.5	NbW	1	38.	32.5	b. r.	KS.
27	28.4	34.7	30.108	22.5	N	3	31.5	26.9	o. g.	snow falling {The min. T. was so between 7 & 8 PM.}
28	24.1	33.	30.214	22.5	N	0	35.6	23.4	b. r.	snow on ground
29	35.	33.2	29.835	24.5	SWbW	4	35.0	19.0	0	Do
30	29.9	34.1	29.705	29.1	NW	2 $\frac{1}{2}$	38.3	28.9	b. r.	n in NW. Fresh snow lying on ground
31	27.5	33.	29.413	26.5	NbW	1	32.6	27.	b. r.	S. round horizon: much snow on ground which fell during the day
	35.86	38.93	29.813				40.00	32.36		
							40.49	32.76		

1853	Term Observations				Wind		Rain			
Dec. 21	E	A	Bar:	Hyg:	Dir:	Force	Square	Round		
2 nd 6 AM	38.	39.	29.919	37.43	E b N	3 1/2	0.170	0.203	b. yr.	K.
7 AM	38.6	39.	29.935	36.65	E N E 1/2 E	4	0.003	0.002	b. v.	K
8 AM	39.1	39.	29.960	37.23	E 1/2 N	6	0.003	0.000	b. yr.	K: CK
9 AM	39.6	39.1	29.985	36.93	E b N	5	0.001	0.000	b. yr.	K: CK
10 AM	39.5	39.2	30.013	36.93	E b N	5	—	—	o. yr.	K: KS-
11 AM	39.	39.3	30.025	37.3	E N E	5	—	—	o. v.	K: KS
Noon	38.4	39.5	30.031	38.43	E N E	5	—	—	o. v.	K: KS
1 PM	38.6	39.3	30.040	36.65	E	3 1/2	0.013	0.017	o. yr.	K: KS-
2 PM	38.6	39.4	30.057	38.23	E N E	3 1/4	0.001	0.001	b. v.	K.
3 PM	39.5	39.1	30.061	36.83	N E b E	68 3 1/2	—	—	b. yr.	KS-
4 PM	39.	39.8	30.023	36.63	N E b E	76 3 1/4	—	—	b. v.	KS-
5 PM	39.2	39.5	30.070	37.73	N E b E	64 4	—	—	o. v.	KS-
6 PM	39.	39.6	30.100	38.23	N E b E	50 5	—	—	o. v.	K. slight drizzle
7 PM	39.	39.6	30.107	36.1	N E b E	65 4	—	—	o. g.	K.
8 PM	38.6	39.5	30.117	38.53	E N E 1/2 N	61 4	—	—	o. g.	K.
9 PM	39.	39.4	30.126	35.8	N E	76 3 1/4	—	—	o. g.	K
10 PM	39.	39.4	30.134	38.63	N E 1/2 E	78 3	—	—	o. g.	K
11 PM	39.	39.6	30.131	35.63	E N E 1/2 E	46 5	—	—	o. g.	K
12 th 0 AM	38.6	39.5	30.137	35.43	E N E b E	50 5	—	—	o. v.	K: KS-
1 AM	38.5	39.4	30.138	38.33	N E b E	59 4	—	—	o. v.	K. KS-
2 AM	38.6	39.5	30.147	35.13	N E b E	64 4	—	—	o. v.	K
3 AM	38.	39.5	30.169	38.33	N E b E	77 3	—	—	o. v.	KS-
4 AM	38.4	39.5	30.167	37.63	N E b E	60 4	—	—	o. yr.	KS-
5 AM	38.3	39.3	30.161	38.3	N E b E	70 3 1/2	—	—	b. yr.	KS
6 AM	38.	39.4	30.167	34.7	N E b E	62 4	—	—	o. v.	KS-

Summers 9 th Am				9 Pm			Rain		Deposure	Wind		Thermometer	
1853	E	A	Bar:	E	A	Bar:	Square	Round	Inches	Force	Direct ^h	Max ^h	Min ⁻
			as read										
Jan ⁸	39.07	40.85	29.339	38.56	41.43	29.363	2.245	4.679				20 th 52.9	28 th 28.5
Feb ⁸	34.37	36.24	29.607	34.39	37.97	29.598	1.250	1.284				20 th 46.6	12 th 21.5
March	39.78	40.40	29.732	38.44	42.31	29.710	1.688	1.895				6 th 55.0	19 th 22.9
April	47.21	46.03	29.633	43.77	47.05	29.664	1.796	3.126				5 th 59.0	26 th 33.8
May	53.33	51.97	29.804	50.26	54.73	29.818	0.531	4.487				31 st 72.2	9 th 32.5
June	58.82	58.78	29.797	56.44	60.32	29.684	2.068	3.977				23 rd 79.8	7 th 44.5
July	58.84	58.76	29.597	56.04	60.43	29.564	3.068	3.577				7 th 70.5	2 nd 49.1
Aug ⁸	58.93	58.37	29.757	55.61	60.80	29.763	2.252	2.474				10 th 70.7	31 st 44.8
Sept ⁸	54.15	54.29	29.768	51.37	55.86	29.786	0.956	1.343				8 th 64.3	5 th 41.1
Oct ⁸	49.02	49.21	29.410	47.54	50.52	29.433	3.717	4.978				1 st 58.8	17 th 32.4
Nov ⁸	42.74	44.64	29.757	42.56	45.73	29.800	2.339	3.992				1 st 56.9	17 th 29.8
Dec ⁸	37.03	38.89	29.841	35.86	38.93	29.813	1.221	1.620				1 st 52.5	29 th 19.0
Summer	55.48	55.17	29.657	52.68	52.77	29.659	11.590	15.123					
Winter	40.07	41.11	29.650	38.96	42.19	29.657	10.539	16.596					
Year	47.85	48.28	29.656	45.97	47.53	29.660	23.129	31.719					
							Inches	Inches					31.489*
	Rain days	mean Ther.	mean Bar.										
Jan ⁸	19	38.82	29.357										
Feb ⁴	10	34.38	29.602										
March	16	39.11	29.721										
April	25	45.52	29.649										
May	8	51.80	29.811										
June	16	56.07	29.692										
July	25	57.44	29.580										
Aug ⁸	18	57.27	29.760										
Sept ⁸	16	52.76	29.777										
Oct:	26	48.28	29.422										
Nov ⁸	18	42.65	29.779										
Dec ⁸	16	36.45	29.827										
Total	223												
Mean Temperature of year - 46.91													
Maximum June. 23 79.8													
Minimum Dec. 29 th 19.0													
Mean Barometer 29.658													
Maximum do Dec 9 th 30.351													
Minimum do Ap. 1 st 28.600													

Mean Temperature of year - 46.91
 Maximum June. 23 79.8
 Minimum Dec. 29th 19.0

Mean Barometer 29.658
 Maximum do Dec 9th 30.351
 Minimum do Apr. 1st 28.600