1866phae..proj..379.

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378

Q 1

Harvard College Observatory,
Cambridge Massachusetts.

Meteorological Record
for the years
1866, 1867, & 1868. With tables & curves showing comparative amounts of rainfall since 1840, and others giving thermometer comparisons, etc.

The thermometer comparisons made about 1866 are pasted into the beginning and end of this volume.

Observations made at Nautical Almanac Office in Cambridge for first half of 1866, and some observations made at the Observatory in 1866 last half of 1866, are at the end of this volume. Others for 1866 are at the beginning. On the page for May 1868 are some rainfall comparisons, and there are others after the observations for 1868.

J. L. FAIRBANKS, Stationer, 136 Washington Street, Boston.

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KG 1136 5, 378

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THERMOMETER by Casella

Standard 3235

Corrections to be applied to the Scale Readings, determined by comparison with the Standard Instruments at the Kew Observatory.

At 32°	0·0
42	0·0
52	−0·2
62	−0·2
72	−0·1
82	−0·1
92	−0·1
212	+0·1

Note—When the sign of the Correction is +, the quantity is to be *added* to the observed scale reading, and when— to be *subtracted* from it.

B Stewart

KEW OBSERVATORY,

April 1862.

Verified unattached.

See end of this volume for more thermometer comparisons, and also for copies by Austin & Langley of meteorological observations at the Nautical Almanac Office in Cambridge for the first half of 1866 when no observations were made at the Observatory, except perhaps some rain gauge measurements. Near the end, besides the above, are some observations in the last half of 1866, apparently made for astronomical purposes. On the page for May 1868 are some rainfall and temperature comparisons and there is a table and some discussion of rainfalls at Cambridge on the pages following the observations for 1868.

The volume begins with the observations for July 1866.

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Formulas; Fahrenheit = (Fastre + 25°33) · 18045

Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.
−50°	−4°45	+50°	13°59	150°	31°64	250°	49°68	350°	67°73	450°	85°77	0°	0°·00		
−40°	−2°65	60°	15°40	160°	33°44	260°	51°49	360°	69°53	460°	87°58	1°	0°·18		
−30°	−0°84	70°	17°20	170°	35°25	270°	53°29	370°	71°34	470°	89°38	2°	0°·36		
−20°	+0°96	80°	19°01	180°	37°05	280°	55°10	380°	73°14	480°	91°19	3°	0°·54		
−10°	2°77	90°	20°81	190°	38°86	290°	56°90	390°	74°95	490°	92°99	4°	0°·72		
0°	4°57	100°	22°62	200°	40°66	300°	58°71	400°	76°75	500°	94°80	5°	0°·90		
+10°	6°38	110°	24°42	210°	42°46	310°	60°51	410°	78°55	510°	96°60	6°	1°·08		
20°	8°18	120°	26°22	220°	44°27	320°	62°31	420°	80°36	520°	98°40	7°	1°·26		
30°	9°98	130°	28°03	230°	46°07	330°	64°12	430°	82°16	530°	100°21	8°	1°·44		
40°	11°79	140°	29°83	240°	47°88	340°	65°92	440°	83°97	540°	102°01	9°	1°·62		
50°	13°59	150°	31°64	250°	49°68	350°	67°73	450°	85°77	550°	103°82	10°	1°·80		

Instruments at the Kew Observatory.

At 32°	0·0
42	0·0
52	−0·2
62	−0·2
72	−0·1
82	−0·1
92	−0·1
212	+0·1

Note—When the sign of the Correction is +, the quantity is to be *added* to the observed scale reading, and when— to be *subtracted* from it.

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TG11365.376

Weight of 1 cubic foot of water = 997.137 oz. Avoirdupois
" " " " inch " " = 0.577047 " "

Rainfall in inches = $\frac{\text{weight in avoirdupois oz.}}{0.577047 \text{ (no. of sq. in exposed)}}$

Assuming no. of sq. in. exposed = 103.98,
Rainfall in inches = $\frac{1}{60}$ of weight in avoirdupois oz.
This factor has been used in reducing the obsns.

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May, 1868

Rim of large rain gauge (gauge No. 2) found to be somewhat bent. It seems to average 15.97 inches in diameter

The area is therefore approximately equal to 200.31 square inches.

The arithmetical complement of the logarithm of 200.31 X .577 is 7.937 0864

(Copy of pencil note in memorandum book for 1868.)

Circuit formed in anemometer every 30 revolutions; there are 500 revolutions for every mile; hence circuit is formed for every .06 of a mile.

Wind blowing n miles per hour forms the circuit n times in .06 of an hour, which is 216^{s}.

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D - w.D.

−0·2	+0·5	−0·5	−1·0	−1·0	−0·5	0·0	−1·0
−0·2	0·0	−0·5	−0·5	−0·5	0·0	−0·5	−0·5
−0·2	+7·0	−0·5	−0·5	−0·5	−0·5	−1·0	−1·0
0·0	−0·5	−0·5	−0·5	−0·5	0·0	−0·5	−0·5
−0·5	+2·0	0·0	−0·5	−0·5	−1·0	−1·0	−1·0
−0·5	−0·2	+1·5	−0·5	−0·5	−1·0	+0·5	−4·0
0·0	+0·2	+0·5	−1·0	6·0	−1·0	+0·5	
−0·5	−0·5	+0·5	−1·0	+1·0	−1·0	−0·5	331 | −78·8 −0·24
+1·0	+0·2	−0·5	−0·5	−0·5	−0·5	−0·5	662
−0·5	−0·5	0·0	−0·5	+1·0	−0·5	0·0	126
+2·0	+1·5	0·0	−0·5	−0·5	0·0	+0·5	
+1·5	0·0	+2·0	−0·5	−0·5	0·0	0·0	Corr. to D − W
−0·5	−0·5	−0·5	0·0	−0·5	0·0	0·0	= +0·24
−0·5	−0·8	−0·5	+1·5	−0·5	−0·5	−0·5	
−0·5	−0·5	0·0	+1·0	−0·5	−0·5	0·0	
−0·5	−0·5	+2·0	−0·5	−0·5	−0·5	−0·5	
+1·5	−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
+0·5	+1·0	0·0	−0·5	−0·5	−0·5	−0·5	
−0·5	−0·5	+1·0	−0·5	+0·5	−1·5	0·0	
+2·0	+1·5	−0·5	−0·5	+0·5	−0·5	+0·5	
−0·5	+0·5	+1·0	−0·5	−1·0	−0·5	−0·5	
+0·5	−0·5	0·0	−1·0	+1·5	0·0	−0·5	
+0·5	−0·5	+1·0	−0·5	+0·5	+0·5	−0·5	
−0·5	+1·0	−0·5	−0·5	−1·0	−1·0	−0·5	
−0·5	−0·5	+0·5	−1·0	−0·5	−0·5	−0·5	
−0·5	−0·5	−0·5	0·0	−0·5	−0·5	−0·5	
−0·5	−0·5	−1·0	−0·5	−0·5	−0·5	−0·5	
0·0	+0·5	0·0	−0·5	−0·5	−0·5	−0·5	
−0·5	0·0	0·0	−0·5	−0·5	−0·5	−0·5	
−0·5	+0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	+0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	+1·0	+1·0	−0·5	−0·5	−0·5	−0·5	
−0·5	0·0	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
−1·0	+0·7	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	−0·5	−1·0	−0·5	−0·5	−0·5	−0·5	
−0·5	−0·5	−1·0	−0·5	−0·5	−0·5	−0·5	
−0·5	+1·0	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
+2·0	−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
−0·5	+0·5	0·0	−0·5	−0·5	−0·5	−0·5	
−0·5	+1·5	0·0	−0·5	−0·5	−0·5	−0·5	
−0·5	+0·5	−0·5	−0·5	−0·5	−0·5	−0·5	
	−0·3	−0·5	−0·5	−0·5	−0·5	−0·5	
−5·6	−0·5	−6·0	−21·5	−14·0	−17·0	−13·5	
	+4·8						

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These observations rearranged in book Q 5, pp. 142 – 162.

Date	Time	Bar.	Att.	No 4 Dry	Wet	Fastre	~~Ch.~~ No 5	Clouds	Wind	Rain	Rel. Hum. by Guyot
July 1	7 0 M	30.146		61.5							
	9 0 M	30.201		68.8	67.8	59.0		2	2		56
2	9 0 M	30.276		74.0	73.2	64.5		1	2		60
3	7 0 M			70.0							
	9 0 M	30.100			78.	67		3	2		54
4	7 0 M	29.956		70.5							
	9 0 M	30.000		79.5	78.2	70.2		7			65
5	7 0 M	30.000		70							
	9 0 M	30.034		78	77	71					73
	9 0 E	30.043	76.7	74.2	74.0	70.0		2	2		81
6	7 0 M	29.996		74.5							
	9 0 M	30.046	75	80.2	80	73	419 = 80.12	9			70
	9 30 E	29.936	79.5	79.9	79.9	73.9		6			74
7	7 0 M	29.810		79							
	9 0 M	29.988	79	845	83.8	76	440 = 84.0	10	0		68
	2 0 E	29.952	87.5	92.5	92.5	77	486 = 92.3	3			47
	2 30 E			92.8	92.2		488.5 = 92.7	92.5			
	3 20 E			93.0			490.5 = 92.1	92.8			
	7 25 E	29.927		84.3			443.0 = 84.5	84.3			
	10 0 E	29.944	82.9	79.0	78.2	72.0					73
8	7 0 M	29.998		79.5							
	9 0 M	29.950	81	87.8	87	77	457 = 87.0	86.5	9	2	62
	3 0 E	29.874	90	92.2	92	77	486 = 92.3	92			48
	9 0 E	29.927	81.0	72.9	71.9	71.5		72.5			98
9	7 0 M	29.954		75.5							
	9 45 M	30.000	79	78.	77	72		10	2	35	77
	2 30 E	30.030	81	79.5	78.5	71			6		68
	10 0 E	30.166	70.5	64.7	64.5	58.8		3			68
10	7 0 M	30.266		64							
	9 0 M	30.268	70	74.2	73.2	63		4			54
	9 0 E	30.249	71.7	65.0	65.0	59.3		0			69

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The parentheses about the wet-bulb reading shows that it was read, without wetting.

Date	Time	Barom.	Att.	No 4	Dry	Wet	Fastre	~~Ctk.~~ Navy	Clouds	wind	Rain	Rel. Hum. by Guyot
July 11	7 0 M	30·176		65·5								
	9 0 M	30·214	70	77	75·5	68		75·8	2	2		66
	9 20 E	30·110	70	69·5		69·5	364 =70·2	70	0	4		
12	7 0 M	30·034		68·5								
	10 0 M	30·084	72	76	76	69·5			10	0		71
	9 0 E	29·923	77·7	74·5	74·0	69·0			0	2		76
13	7 0 M	29·794		78								
	10 20 M	29·850	78	87·2	86·5	76		87·2	haze	2		60
	2 0 E	29·748	83	92	91	77	480 =91·2	93		1		51
	9 0 E	29·853	83	78·8	78·5	72·5			7	2		74
14	7 0 M	29·968		75								
	11 0 M		78	78	77·5	68		79	3	1		59
	3 0 E	30·020	79	80·5	79·5	66·5		81	0	2		47
	9 0 E	30·063	76	70·9	70·2	64·5			0	2		72
15	7 0 M	30·018		72								
	11 0 M			88	87·2	76		88	2	5		58
	9 15 E	29·999	82	80·9	80·3	75·2		81·5	0	5		79
16	3 0 M			78								
	7 0	30·088		81								
	9 0 M			91								
	0 0 E	30·088	85	94·3	94		497 =94·3	95·2	3	0		
	0 45			95·7			505 =95·7					
	1 30			95·9	95·8 (96)		506 =95·9	97				
	1 40			96·4	96	(96·2)	509 =96·14	97·5				
	2 0			97·2			513 =97·1					
	2 30	30·072	87	96·6	96·2	77·5						40
	9 40 E	30·086	77	69·3	69·0	66·5		69·8	0	0		87
17	7 0 M	30·012		74								
	11 0 M	30·038	84	94	93·8	(94)	495 =93·9	95	0	2		
	0 0 E						503 =95·3					
	1 0 E						507 =96·1					
	1 30						510 =96·6					
	2 0	29·992	89	97·2	97	(97) 76	513 =97·1	99	0			36
	2 15						510 =96·6		6	4		
Storm of rain from 3 23 to 3 35	3 5						503·5 =95·4					
	3 27						455 =86·7					
	3 29·5 E						445 =84·9					

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Date	Time	Barom.	Att.	No 4	Dry	Wet	Faster	Clk	Clouds Navy	Wind	Rain	Rel. Hum by Guyot
July 17	4 5 E						439 = 83.8					
	6 55 E			86.5			455 = 86.7				6.5	
18	7 0 M	29.884		78								
	9 0				81.							
	0 15 E	29.880		89	88					8 0		
	9 0 E	29.822	82	73.5	72	71.8	408 = 78.2		73		21	99
19	7 0 M			62								
	9 0 E			62.7	62.5	57.8						74
	10 0 E	30.102	68							1 0		
20	7 0 M	30.200		65								
	11 0 M	30.228		80	79	65				8 1		43
	10 30 E	30.155	70.5	67.5	66.9	61.0			68.3	10 0		69
21	7 0 M	30.060		66	65.5	(66)						
	9 30 M	30.111	69	70.5	70.5	61.8			71.2	10 1		58
	2 0 E	30.036	69	68.5	68	(68.5)						
	9 0 E	30.000	68	60.4	60.6	58.5			62.2	10 1		88
22	7 0 M		65	60.5	60	(60)						
	9 0 M	29.872	66	64.5	64	(64.5)						
	2 0 E	29.867	68.5	65.1	65.0	63.2			62.2	10 1	79	90
23	7 0 M	29.775	64	61	61	(60)						
	9 0 M		64.5	60.5	60	(60.5)						
	2 20 E	29.760	66	63.5	63.5	63.0			63.8	10 1	10.5	97
	9 50 E	29.835	66	60	60	60			60.5	10 6		100
24	7 0 M	29.930	64	63.5	63	(61)						
	9 0 M		66	70	69.5	(68)						
	9 0 E	29.974	71.5	68.0	67.8	64.8			68.5	0 1		84
25	7 0 M	30.022	67.5	62	61	(61.5)						
	9 0 M		69.5	78	77	(77.5)						
	9 0 E		77		66.5	64.5			66	5		89
26	7 0 M	30.091	67	64.5	64	(64.5)						
	2 30 E	30.124	77	79.1	79.0	70.0			80.0	1 1		62
	9 0 E	30.105	75	70.6	70.5	67.8		78.5	71.7	0 1	15	86

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Date	Time	Barom.	Att.	No 4	Dry	Wet	Fastre	Clk.	Clouds	Wind	Rain	Rel. Hum. by Guyot
								Navy				
July 27	7 0M	30.080	70	68	67.5	(68)						
	9 0M		71	74	73	(73.5)						
	3 35E	30.015	78	69.1	68.5	67.8		79.3	69.7	10	2	96
	9 0E	29.937	74	68.5	67.5	66.6		77.8	68.5	9	2	95
28	7 0M		69	69.5	69.5	(68)						
	9 0M	29.898										
	2 45E	29.816	71	66.0	66.3	65.0		74.5	66.7	10	5	93
	9 15E	29.795	69	63.7	63.5	63.2		72.8	64.1	7	0	98
29	7 0M	29.760	67	64	63.5	(63)						
	9 0M		75	78.5	78	(78.5)						
	9 0E	29.785	73	68.8	68.5	66.2		77.3	69.8	0	0	88
30	7 0M	29.817	68.5	66.5	66	(64)						
	9 0M		70.5	75.5	74.5	(75)						
	2 20E	29.825	77	78.3	78.3	68.2		78.5	79.5	8	1	57
	9 0E	29.867	71	65.2	65.4	64.0		76.2	65.5	10	0	92
31	7 0M	29.919	68	64.5	64	(63.5)						
	9 0M		69	70	69.5	(69)						
	9 0E	29.968	72	66	66	61	314 = 61.2		67			74

~~120 oz = 2.00 in~~

199 oz = 3.32 in

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Date	Time	Barom.	Att.	No 4	Dry	Wet	Fastre	Ale	Clouds	Winds	Rain	Rel. Hum. by Guyot
Aug 1	7 0 M	29.982	66	65	64.5	(65)						
	9 0 M		68	75.5	74.5	(75)						
	9 0 E	29.930	73	70.8	70.3	67.0		77.3	10	3		83
2	7 0 M	29.864	71.5	73	72	(72.5)						
	9 0 M		72	74	73	(73.5)						
	2 50 E	29.787	77	80.8	80.2	74.9		77.2	5	6		77
	9 10 E	29.780	76	72.3	72.0	70.9		79.2	0	2. variable		95
3	7 0 M	29.900	68	66.5	65.5	(66)						
	9 0 M	2	70	71	70.5	(70.5)						
	9 0 E	29.999	72	67.3	67.0	62.3		77.0	0	0		75
4	7 0 M	29.979	66	63.5	63	(63.5)						
	9 0 M		78.5	74.5	73.5	(74)						
	9 0 E	29.907	73	70.0	69.5	66.3		76.2	6	2		84
5	7 0 M	29.837	67	61	60	(60.5)						
	9 0 M											
	2 0 E	29.879	74	76	75	(75.5)						
	9 0 E	29.917	69	62.4	61.9	56.8		75.0	0	3		71
6	7 0 M	29.858	64	61	60.5	(61)						
	9 0 M		65.5	66	65.5	66						100
	9 0 E	29.916	71	65.3	65.0	59.5		74.0	0	3		71
7	7 0 M	29.899	66	64.5	64	(64.5)						
	9 0 M		67.5	70	69	(70)						
	2 40 E	29.880	74	75.3	75.1	62.4	391.1 = 75.14	75.0	4	4		45
	9 0 E	29.904	72	69.2	68.8	60.0		75.1	10	3		57
8	7 0 M	29.898	65	64	63	(63.5)						
	9 0 M		67	69	68	(68.5)						
	2 40 E	29.880	72	74.9	74.3	60.8	388.2 74.62	73.2	2	2		42
	9 0 E	29.883	70	65.8	65.5	59.8		74.8	2	1		70
9	7 0 M	29.739	66.5	62.5	61.5	(62)						
	9 0 M		67	63.5	63	(63.5)						
	2 50 E	29.684	68		60.4	60.0		70.3	10. rain	2		98
	9 0 E	29.736	66	57.8	57.5	57.3		68.2	10 light rain	0		99

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Date	Time	Barom.	Alt.	No 4	Dry	Wet	Fastre	Clk.	Clouds	Wind	Rain	Rel. Hum. by Guyot
Aug 10	7 0 M	29.783	63	60	59.5	(57.5)						
	9 0 M		64.5	64	63.5	(64)						
	2 30 E	29.880	68	66.8	66.6	63.5	340.5 = 66.0	68.7	7	2		83
	9 0 E	29.971	68	61.0	60.8	58.2		70.6	3	1		85
11	7 0 M	30.016	61	60	60	(60.5)						
	9 0 M		63.5	67.5	67	(67.5)						
	2 15 E	30.089	71	73.5	73.2	60.7	381.8 = 73.5	71.5	1	1		45
	9 0 E	30.149	69	63.6	63.2	59.2		72.8	0	0		78
12	7 0 M	30.150	62.5	59.5	59.5	(60)						
	2 0 E	30.194	73	77	76.5	(77)						
	9 0 E	30.197	69	62.3	61.5	58.6		75.0	3	1		83
13	7 0 M	30.128	63.5	58.5	57.5	(57)						
	9 0 M		65	68.5	68	(68)						
	2 0 E	30.128	73	76.0	75.5	64.7	394.5 = 75.7	73.2	10	3		53
	9 15 E	30.078	66	60.6	59.1	57.4	307 = 60.0	74		1		90
14	7 0 M	30.020	63.5	64	63	(61)						
	9 0 M		66	68.5	68	(68.5)						
	2 30 E	30.045	73	71.3	71.3	65.1	369.4 = 71.2	73.2	3	7		70
	9 10 E	30.026	67	64.0	64.0	61.6		73.5	0	1		86
15	7 0 M	29.955	65	66	65.5	(63.5)						
	9 0 M		67	68.2	68	(68.2)						
	2 30 E	29.998	70	69.6	69.5	67.8	361.2 = 69.8	72.0	10	1		91
	9 0 E	30.006	69	65.4	65.0	64.6		72.2	10	1		98
16	7 0 M	30.024	62	55	54.2	(54)						
	9 0 M		61	56	55.5	(56)						
	2 30 E	30.040	64	62.9	62.7	58.9	323.8 = 63.0	66.4	10	2		79
	9 5 E	30.077	63	56.2	55.8	54.4		68.2	0	2		72
17	7 0 M	30.030	62	55	54.2	(54)						
	9 0 M		61	56	55.5	(56)						
	2 30 E	29.983	65	70.6	70.4	55.5	365.2 = 70.5	66.4	0	7		33
	9 0 E	29.990	65	61.1	60.7	53.9		68.3	0	0		61
18	7 0 M	29.963	59	58	59	(57.5)						
	9 0 M			68	67.5	(67.5)						
	2 30 E	29.973	74	79.6	79.2	66.9	415.8 = 79.6	73.0	2	2		50
	9 0 M	29.950	72	69.8	69.4	64.0		76.7	9			73

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Date	Time	Barom.	Att.	No 4	Dry	Wet	Faehr	Clk	Clouds	Wind	Rain	Rel. Hum. by Guyot
Aug 19	7 0 M	29·879	64	62	61	(61·5)						
	9 0 M	29·900	66	69·2	68	(68·8)						
20	7 0 M	29·731	65	61·5	60·5	(61)						
	2 30 E	29·789	70	70·2	69·4	61·2	363·2 =70·1	71·2	4	4		60
	9 0 E	29·872	65	58·2	57·8	53·1		69·8	0	1		71
21	7 0 M	29·950	59·5	58·5	57·5	(58)						
	2 30 E	29·977	70	~~70·1~~ 70·7	70·0	61·5	366·0 =70·6	69·3	3	1		59
	9 0 E	29·983	67	62·8	62·6	60·0		70·4	9	2		85
22	7 0 M	29·831	64·5	63	62	(62·5)						
	9 0 M			70·5	70	(69)						
	2 30 E	29·774	75	75·0	74·8	65·9	389·0 =74·8	73·8	1	4		60
	9 0 E	29·858	69	62·6	62·2	57·0		72·6	0	1		71
23	7 0 M	29·895	62·5	56	55·5	(56)						
	2 30 E	29·852	63	53·0	52·8	52·0	270·2 =53·3	64·4	10 raining	1		94
	9 0 E	29·784	60	51·6	51·3	51·6		63·6	10 raining	1		100
24	7 0 M	29·778	58	52	51·5	(50)						
	9 0 M			59·5	59	(58·5)						
	2 30 E	29·873	67	66·1	65·6	55·4	339·3 =65·8	66·0	2	2		48
	9 0 E	29·949	63	55·7	55·5	52·3		66·2	0	3		79
25	7 0 M	29·986	57	51	50	(50·5)						
	9 0 M			61	59·5	(60)						
	2 30 E	30·000	68	67·3	65·8	55·4	346·0 =67·0	66·9	4	3		47
	9 0 E	30·015	65	57·0	56·3	53·5		68·6	0	1		82
26	7 0 M	29·976	58·5	52	51·5	(50·5)					104·02	
	2 0 E		67	70	68·5	(69)						
27	7 0 M		60	60	59·5	(60)						
	2 30 E	30·048	71	70·5	75·0	62·1	392·8 =75·4	72·0	1	3		44
	9 0 E	30·091	67	61·5	61·4	58·0		72·6	3	3		80
28	7 0 M	30·099	62	61	60·5	(61)						
	9 0 M			69·5	69	(69·5)						
	2 30 E	30·087	71									
	9 0 E	30·080	69									

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1866 August

Date	Time	Barom.	Att.	Dry	Wet	Faehre	Clk.	No 4	Navy	Clouds	Wind	Rain	Rel Hum by Guyot
Aug 29	7 0 m	30.004	63	60	(59.5)			60					
	9 0 m			65.5	(65.5)			66					
	2 30 e	29.970	69	67.9	61.4	351.8 = 68.0	70.2	67.8	69.0	10	1		67
	9 0 e	29.932	67	62.0	61.6	321 = 62.5	71.8	62.6	63.0	10	0		98
30	7 0 m	29.884	63.5	59.5	(59)			60					
	9 0 m			66.5	(66)			67					
	2 30 e	29.873	71	74.6	62.6	387.0 = 74.4	73.3	74.5	75.5	1	3		48
	9 0 e	29.956	64	60.4	57.0	304 = 59.4	72.0	60.0	60.8	1	1		80
31	7 0 m	30.016											
	2 30 e	30.006	71.0	74.6	65.2	390 = 74.9	72.0	74.9	70.8	8	1		58
	9 0 e	30.062	68	63.0	60.5	324 = 63.0	74.0	63.2	64.0	5	0		86

In month
104 oz
= 1.73 in

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1866 September

Date	Time	Barom	Att	Dry	Wet	Faotre	Clk.	No 4	Navy	Hudd.t	Cloud	Wind	Rain	Rel. Hum. by Guyot
Sept 1	7 0m	30·082												
	11 0m	30·108	69	73·2	67·0			78·8	79·1					71
	2 30e	30·043	72	76·2	70·8	400·6 = 76·8	73·8	77·0	77·2		7	0		75
	7 20e	30·043	71	68·7	67·5		75·5	68·9	69·8		1 haze	4		94
2	7 0m	29·960	68	70·5	(69·5)			70						
	9 0m			70·5	(70·5)			71						
	2 30e	29·918	77	81·0	74·1	429·5 = 82·1	78·2	81·9	82·8			7	3	71
	9 45e	29·972	73	70·7	70·0		78·8	71·1	72·0					96
3	7 0m	30·012	71	71	(71·5)			72						
	9 0m	30·050	71	80·0	72·2			80·5						67
	2 0?e	30·050	80	83·5				85			8	0		
	9 0e	30·053	74	67·6	66·0	355·5 = 68·7	82·4	68·6	69·6	68·6				92
4	7 0m	30·032	70	66·	(66)			66·5						D−W corrected by +0°24
	9 0m	30·044	70	66·7	(6.6)			67		67	10 light rain			
	2 30e	29·991	69	65·1	65·0	336 = 65·2	74	65·6		65·6	10	4		98
	9 0e	29·984	68	61·8	61·8	317 = 61·8	72	62·4	62·8	62·5	10	2		98
5	7 0m	29·950	64	60	(60·5)			61						
	9 0m	29·952	66	62·3		320 = 62·3		62·8	62·8	62·6			66	
	10 0e	29·950	66	61·8	61·5	320 = 62·3	70·0	62·5	63·0	62·4	9	1		97
6	7 0m	29·964	65	63·5	(64)			64						
	9 0m	30·012	66	65·8	(59)	339 = 65·7		65·9	66·8	66·0				
	2 20e	30·010	72	73·0	61·5	380 = 73·1	72·6	73·4	74·0	73·0	4	2		47
	9 0e	30·076	63	61·8	57·5	319 = 62·1	73·6	62·3	63·0	62·1	0	1		75
7	7 0m	30·120	60	58·	(57)			57·5	58·0					
	9 50m	30·154	65	68·2	60·0	356 = 68·8		69·4	69·2	68·9				58
	4 30e	30·362	72	69·8	68·6	360 = 69·5		69·9	70·0	69·8	8	4		92
	9 0e	29·938	68	67·4	62·0	350 = 67·7	73·0	69·8	68	67·2	10	5		71
8	7 0m	29·722	65·5	66	(66·5)									
	9 0m	29·730	72	75·5	70·5	402 = 77·1		77·0	78·5	76·6	8	1		75
	9 0e	29·872	68	62·6	56·1		76·0	62·6	63·4	62·6	0	5		63

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1866 September

Date	Time	Barom.	Att.	Dry	Wet	Fastie	Clk	No 4	Navy	Hudd. 1.	Clds.	Wind	Rain	Rel. Hum. by Guyot	Re by
Sept 9	7 0 m	29.972	61.5	54.5	(55)			55.5							
	2 30 e	30.002	67	66.6	54.8	345.1 = 66.8	69.0	66.8	67.5	66.6	2	5		40	
	9 0 e	30.140	64	54.0	48.5		68.7	54.2	55.0	54.3	0	3		63	5
10	7 0 m	30.151	58	50	(50.5)			51							8
	9 0 m			57	(57.5)			58							
	2 30 e	30.115	67	66.6	54.6	343.9 = 66.6	67.2	66.7	67.5	66.6	0	1		41	
	9 0 e	30.122	63	55.2	52.7		68.5	55.9	57.2	56.1	0	0		83	9
11	7 0 m	30.052	58	51.5	(51)			52							9
	9 0 m			60	(58.5)			60							
	4 45 e	29.983	71	69.9	65.0	363 = 70.1	72.8	70.0	70.8	70.0	10	3		75	
	9 0 e	29.933	67	62.8	62.0	321 = 62.5	72.0	62.9	63.3	62.8	10 rain	5		94	9
12	7 0 m	29.730	67	68.5	(68)			69							9
	9 0 m	29.733	68.5	70.4	(70.7)			70.9					50		
	3 15 e	29.722	76.5	77.9	68.0	409 = 78.4	77.0	78.6	79.3	78.0	4	3		57	
	9 20 e	29.824	72	64.7	60.0	334 = 64.8	76.0	65.5	65.6	65.0	0	1		73	9
13	7 0 m	29.858	65	61	(61.5)			62							9
	9 0 m			68	(68.5)			69							
	2 30 e	29.974	72	67.5	56.5	350 = 67.7	75.0	67.9	68.4	67.9	0	1		45	8
	9 0 e	30.020	68	58.7	54.0	301 = 58.9	73.0	58.8	60.0	59.1	0	1		70	9
14	7 0 m	30.088	61.5	56	(56.5)			57							
	3 30 e	29.958	67	62.7	62.7	322 = 62.7	68.0	62.2	63.5	62.0	10	0		99	
	9 0 e	29.891	67	64.5	64.8		69.5	65.0	65.5	64.8	10 raining	5	48	100	5
15	7 0 m	30.058	61	54.5	(55)			55							6
	2 0 e	30.129	64	60.5	51.0	310.0 = 61.5	66.5	60.6	61.1	60.4	0	2		46	
	9 0 e	30.276	59	49.6	44.9		67.0	50.0	51.0	50.1	0	2		65	5
16	7 0 m	30.400	54	41	(41.5)			42							9
	3 0 e	30.384	62	55.7	50.2			56.0		56.0	6	2		64	
	9 0 e	30.340	58	47.7	46.9		63.5	48.3	50.3	49.0	1	1		92	

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1866 September

Rel Hum by Guyot	Date	Time	Barom.	Att.	Dry	Wet	Faster	Clk.	No 4	Navy	Hudd.l.	Clds.	Wind	Rain
	Sepr 17	7 0 m	30·169	55·5	53	(53)			54					
		9 0 m			60·5	(59)			61					
55		2 30 e	30·020	66	73·6	62·0	381·6 =73·4	65·1	73·7	74·1	73·3	6	3	
84		9 15 e	30·016	65	65·3	62·7		70·2	65·3	66·2	65·5	8	1	
	18	7 0 m	29·906	63	63·5	(63)			64					
		9 0 m			67·5	(67)			68					
		~~2 30 e~~ 9 0 e												
93		~~2 30 e~~ 2 30	29·987	64	60·3	59·3		68·7	60·3	61·4	60·7	9	0	
91		~~9 0 e~~ 9 0 e	29·925	65	61·3	60·1	315·3 =61·5	68·6	61·6	62·2	61·5	10	2	
	19	7 0 m	29·916	61·5	68 ?	(68·5)?			69					
		9 0 m			59·5	(60)			60·5					
95		2 30 e	29·900	64	62·8	62·2	327·5 =63·7	66·1	63·7	64·0	63·7	10	1	
97		9 0 e	29·987	63	57·0	56·8		67·4	57·3	58·0	57·4	10	1	
	20	7 0 m	30·081	59	53	(53)			54					
		9 0 m			53	(53)			53·5					
96		2 30 e	30·098	59	54·5	54·1	278·8 =54·9	62·6	54·9	55·3	54·8	10	1	
98		9 0 e	30·082	59	54·0	54·0		63·0	54·3	55·0	54·5	10 light rain	1	58·5
	21	7 0 m	29·999	58	50·5	(50·5)			51					
82		2 45 e	29·904	66	77·5	74·0	406·8 =78·0	68·0	78·1	78·8	77·6	7	3	
93		9 0 e	29·879	68	72·1	71·1		73·5	72·2	73·1	72·2	10	3	
	22	7 0 m	29·902	62	55	(53)			55·5					
		9 0 m		62	55·5	(56)			56					
50		2 30 e	30·042	62	57·2	49			58			0	6 NW	
68		9 0 e	30·238	57	47·4	43·4		65·2	47·0	47·8	47·1	0	1	
	23	7 0 m	30·298	50·5	40	(40·5)			41					
57		2 0 e	30·325	60	54·3	47·8	278·1 =54·8	59·8	54·7	55·9	54·8	1	2	
95		9 0 e	30·348	55	43·0	42·7		62·7	44·3	45·1	44·1	0	0	

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1866 September

Date	Time	Baron.	Att	Dry	Wet	Faster	Clk	No 4	Navy	Hudd	Obs	Wind	Rain	Rel Hum by Guyot	Rel by
Sept 24	7 0 m	30·312	48	39	(39)			41							
	9 0 m			51	(49)			52							
	2 55 e	30·350	59	57·4	53·0	293·0 = 57·4	60·5	57·5	58·5	57·5	10	2	120 1/4	71	3
25	7 0 m	30·256	57	57	(57·5)			58							8
	9 0 m			59·5	(60·5)			61							
	2 45 e	30·173	62	64·4	63·8	332·7 = 64·6	64·5	64·5	65·3	64·5	10	0		95	
	9 20 e	30·124	62	62·3	62·3		66·0	62·7	63·3	62·7	10 fog	0		98	6
26	7 0 m	30·030	60	60·5	(60·5)			61							9
	9 0 m			65·5	(64·5)			66							
	2 30 e	29·967	64	67·6	67·0	352·3 = 68·1	67·3	67·9	69·0	67·9	10 light rain	0		95	
	9 1 e	29·967	64	60·2	60·1		67·8	59·7	60·4	60·0	40 light rain	0		98	44
27	7 0 m	29·983	53	51·5	(52)			52·5							61
	9 0 m			53	(52·5)			54·5							
	2 30 e	30·058	62	64·4	54·0	330·1 = 64·1	64·6	64·6	64·5	64·5	0	2		45	
	9 0 e	30·164	60	53·6	51·0		65·4	54·2	55·7	54·6	0	0		81	33
28	7 0 m	30·300	55	44·5	(45)			45·5							59
	9 0 m			54·5	(55·5)			55							
	2 30 e	30·317	65	66·2	55·1	339·1 = 65·7	66·1	66·2	66·9	66·0	1	1		44	
	9 0 e	30·315	61	53·1	51·9		66·9	53·7	54·4	53·9	1	2		90	19
29	7 0 m	30·278	55	47	(47)			48							74
	9 0 m			56	(56)			56·5							
	2 20 e	30·300	68	70·1	61·5	365·1 = 70·4	68·9	70·9	71·2	70·2	10 thin	1		58	
	9 0 e	30·250	62	58·2	57·0		68·6	58·2	59·3	58·4	10	0		91	20
30	7 0 m	30·101	58	56	(56)			57							65
	9 0 e	30·078	64	58·6	58·5		70·0	58·9	60·2	59·3	8 very thick Haze	0		98	
															30
													342 3/4 oz. = 5·71 in.		59

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1866 October

Rel Hum by Guyot	Date	Time	Barom.	Att	Dry	Wet	Fastre	Clk	No 4	Navy	Hull 1.	Clds	Wind	Rain
	Oct 1	7 0m	30.150	58	54	(54.5)			54.5					
		9 0m			59	(59.5)			59.5					
35		2 50e	30.256	66	62.0	50.0	317.9	67.5	62.0	63.0	61.9	1 hazy	2	
89		9 0e	30.246	59	50.2	49.0	=61.9	66.5	50.4	51.5	50.7	1 low haze	0	
	2	7 0m	30.141	53	42	(42.5)			43					
		9 0m			53	(52)			53.5					
60		2 30e	30.006	64	70.1	62.0	366.5	66.2	70.8	71.1	70.4	.5 thin	1	
91		9 0e	29.904	64	61.3	60.0	=70.7	69.3	61.7	62.5	61.8	5 thin	1	
	3	7 0m	29.738	61	58	(58.5)			59					
		9 0m			59	(59.5)			60					
44		2 30e	29.851	59	55.0	46.3	282.0	66.0	55.7	56.1	55.4	0	5	
61		9 0e	29.985	54	41.2	37.0	=55.5	63.3	41.5	42.6	41.6	0	4	
	4	7 0m	30.075	48	34	(34.5)			35					
		9 0m			42	(42.5)			42.5					
33		2 30e	30.112	56	47.1	38.2	238.3	58.9	47.6	48.4	47.6	1	5	
59		9 0e	30.256	49	35.7	31.4	=47.6	67.2	36.5	37.1	36.3	0	3	
	5	7 0m	30.435	43	31	(32)			32					
		9 0m			39	(40)			40					
19		2 30e	30.450	51	50.0	38.1	253.0	67.4	50.3	51.0	50.4	0	3	
74		9 0e	30.488	47	38.7	35.9	~~68.3~~ =50.2	66.6	39.2	40.2	39.3	0	0	
	6	7 0m	30.465	44	32	(32.5)			33					
		9 0m			43.5	(44)			43					
20		2 35e	30.372	56	58.1	44.0	296.8	68.3	58.2	59.2	58.2	0	2	
65		9 0e	30.339	52	45.3	41.0	=58.1	67.0	45.9	46.7	46.0	0	2	
	7	7 0m	30.250	43	40.5	(41.0)			41					
30		2 15e	30.120	58	68.8	53.8	348.7	69.1	67.7	69.1	68.0	3	2	
59		9 0e	30.071	58	58.9	52.1	=67.5	73.0	58.7	59.5	59.0	2 hazy	1	

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1866 October

Date	Time	Barom.	Alt	Dry	Wet	Fastr	Clk	No 4	Navy	Hadd 1	Clds	Wind	Rain	Rel. Hum by Guyot
Oct 8	7 0 m	30·025	54·5	53·5	(54)			54						
	2 30 e	29·987	64	74·1	64·7	383·5 =73·8	73·5	73·8	75·0	73·9	0	0 haze in horizon		57
	9 0 e	30·062	64	64·6	61·5		73·2	65·0	65·4	64·9	9	0		81
9	7 0 m	30·242	57	51·5	(52)			52						
	9 0 m	"		51	(51·5)			51·5						
	2 30 e	30·341	55	50·0	45·7	253·2 =50·3	64·8	50·2	51·2	50·3	8	3		68
	9 0 e	30·380	54	46·9	43·2		67·5	47·1	48·0	47·1	8	2		70
10	7 0 m	30·377	51	42·5	(43)			43						
	9 0 m			50	(50·5)			51						
	2 30 e	30·350	56	51·3	46·3	258·3 =51·2	72·0	51·3	52·1	51·5	2	2		64
	9 0 e	30·336	52·9	44·3	43·0		75·1	44·8	45·8	45·0	2	0		88
11	7 0 m	30·235	47·5	37·5	(38)			38						
	9 0 m			58·5	(59)			59						
	2 30 e	30·236	56·1	52·5	44·6	266·0 =52·6	69·8	52·4	Hadd 2 54·0	52·7	1	2		48
	9 0 e	30·190	52·7	43·8	43·2		70·7	44·0	45·0	44·2	3	1		93
12	7 0 m	30·081	49	43·5	(43·5)			44						
	9 0 m			48	(48)			49						
	2 30 e	30·040	53·2	51·5	48·8	262·6 =52·0	66·1	51·9	52·8	52·0	10	2		79
	9 0 e		52	49·5	49·5				49					98
13	7 0 m	29·958	50·5	44·5	(45)			45						
	2 30 e	29·977	54·0	52·5	47·7	268·0 =52·9	65·6	53·0	54·0	52·8	10	3		67
	9 0 e	30·000	53·0	50·0	47·5		66·0	50·6	50·0	50·2	10	6 N	1	80
14	7 0 m	29·990	50	42	(42·5)			42·5						
	2 30 e	29·986	49·0	45·6	453	229·0 =45·9	63·0	46·0	46·5	45·7	10	4 NE	1	96
	9 0 e	30·059	49·4	49·8	46·9		69·2	50·1	50·5	50·1	10	4		78

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Rel Hum by Guyot	Date	Time	Barom	Att	Dry	Wet	Fastre	Clk	No 4	Hadd 2	Hadd 1	Bond in mahog. cased.	Clds	Wind	Rain
	Oct 15	7 0 m	30·118	51·5	50	(51)			51						
		9 0 m			51·5	(52)			52						
52		2 30 e	30·203	55·0	54·4	47·0	277·9 =54·7	70·0	54·9	55·6	54·8		0	4 N	
81		9 0 e	30·260	52·5	44·3	42·3		73·2	45·1	45·9	45·0		0	1	
	16	7 0 m	30·262	48	41·5	(42)			42·5						
		9 0 m			48	(48·5)			49						
58		2 30 e	30·205	55·8	55·1	48·6	283·8 =55·8	71·0	55·2	57·0	55·7		0	2 E	
88		9 0 e	30·084	53·2	43·2	42·0		71·0	43·9	44·8	44·0		0	0	
	17	7 0 m	29·896	50	49	(49·5)			49						
		9 0 m			58	(58·5)			58·5						
45		2 30 e	29·910	64·0	66·0	55·2	341·9 =66·3	74·9	66·2	66·8	66·1		0	4	
66		9 0 e	30·032	57·4	49·2	44·8		71·0	49·5	50·5	49·7		0	0	
	18	7 0 m	30·132	50·5	36·5	(37·5)			38						
		9 0 m			45·5	(46·5)			46						
47		2 30 e	30·167	57·7	58·4	49·4	298·8 =58·5	64·1	58·5	59·6	58·5		1	1 N W	
91		9 0 e	30·198	53·3	46·1	45·1		64·1	46·7	47·4	46·7		0	0	
	19	7 0 m	30·233	49	41	(41·5)			41·5						
65		2 30 e	30·240	65·1	63·0	56·7	323·9 =63·0	66·8	63·1	63·8	63·1		1 low haze	1	
90		9 0 e	30·249	57·9	52·1	51·0		68·7	52·1	53·7	52·5		0	1	
	20	7 0 m	30·220	54	47·5	(48)			48						
		9 0 m			52	(52·5)			52·5						
59		2 30 e	30·217	63·7	69·6	61·4	361·8 =69·8	70·6	70·0	70·2	70·0	68·5	3	1	
91		9 0 e	30·225	61·0	56·3	55·2		70·0	57·0	58·2	57·3	57·6	0	0	
	21	7 0 m	30·184	55	49	(49)			49·5						
64		2 30 e	30·188	66·3	70·4	63·2	366·8 =70·8	69·0	70·8	71·0	70·6	69·8	0	2	
93		9 0 e	30·183	60·9	53·3	52·6		69·3	53·4	55·0	53·9	54·4	4 flying	3	

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Rec'd Hum by Sug't	Date	Time	Barom	Att	Dry	Wet	Fastre	Clk	No 4	Hadd 2	Hadd 1	Bond	Clds	Wind	Rain
	Oct 22	7 0m	30.061	57	54	(54)			54.5						
		9 0m			62.5	(61)			63						
68		2 30e	29.954	63.5	70.4	64.1	368.1 = 71.0	68.3	70.8	71.4	70.7	70.6	10	7	
89		9 0e	29.950	62.2	62.7	61.0		69.3	63.0	63.8	63.0	62.9	9	2	
	23	7 0m	29.880	61	57	(56)			58						
		9 0m			57.5	(58)			58.5						3
46		2 30e	29.830	61.1	61.9	52.0	317.5 = 61.9	66.6	62.2	62.9	61.8	61.5	7 thin	0	
89		9 0e	29.817	59.2	49.4	48.1		65.9	50.0	50.8	50.0	50.5	0	0	
	24	7 0m	29.792	52	41.5	(42)			42						
		9 0m			42	(42.5)			42.5						
35		2 30e	29.798	57.2	52.7	42.7	270.0 = 53.3	60.6	53.4	54.0	53.2	53.3	8	3	
68		9 0e	29.876	52.8	41.2	37.7		60.0	41.8	42.2	41.8		0	1	
	25	7 0m	30.050	47	35.5	(36)			36						
		9 0m			37	(38)			38						
36		2 30e	30.130	49.8	42.7	35.0	214.4 = 43.3	61.6	43.3	44.0	43.2		2	4	
59		9 0e	30.252	48.3	33.0	29.0		65.6	34.0	34.5	33.8	34.5	0	0	
	26	7 0m	30.288	42	31.5	(32)			32						
		9 0m			36	(37)			37						$2\frac{3}{4}$
49		2 30e	30.223	49.2	47.0	40.5	236.5 = 47.2	68.1	47.0	48.5	47.3	47.6	10	1	
85		9 0e	30.130	48	43.	41.5		65	43.7	44	43.7	43.5	10	2	
	27	7 0m	29.982	47	39	(39)			40						
		9 0m			40.5	(41)			41.5						
77		2 30e	30.017	50.5	47.2	44.5	239.9 47.9	67.7	47.7	48.5	47.7	47.7	10	1	
78		9 0e	30.148	49.7	39.4	37.3		65.1	40.3	41.0	40.3	41.1	0	1	

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R&L 1st obsn. at 7 A M; 2d at 7 A M; 3d at 2 30 P M; 4th at 9 P M unless otherwise stated.
(The 9 A M obsn. often omitted)

Rel Hum by Guyot	Date	Time	Barom	Att	Dry	Wet	Fastre	Clk	No 4	Hudd 2	Hadd 1	Bond	Clds	Wind	Rain
	Oct 28		30·300	45	34	(34·5)			35						
48			30·335	50·1	44·4	38·0	224·7 = 45·1	71·0	45·1	45·9	45·0	45·4	10	2	
79			30·398	48·0	35·0	33·1		66·9	36·1	36·5	35·8	36·8	3	0	
	29		30 346	44	34	(34·5)			35						
					39	(39·5)			39·5						
75			30·257	47·0	46·7	43·6	235·7 = 47·1	64·2	47·0	47·8	47·0	46·9	10	3	
89			30·184	48·0	48·6	47·3		66·9	49·1	49·8	49·1		10	1	49 1/4
	30		29·784	52	57	(57·5)			57·5						
					59	(59·5)			59·5						
		1 P M	29·435												
		1½ P M	29·4	minimum											
92		2 30 P M	29·481	56·0	64·8	63·5	341·0	65·4	66·0	66·0	65·4		10	6	variable
75		9 P M	29·646	55·7	50·2	47·0	= 66·1	70·7	50·9	51·0	50·8	51·2	10	1	
	31		29·772	50	40·5	(41)			41						
															1/2
54			29·887	54·6	50·0	43·5	254·5 = 50·5	64·6	50·5	51·2	50·4	50·5	5	1	
68			30·054	49·0	39·7	36·5		62·0	40·3	41·0	40·4	41·1	0	1	

pretty bright auroral arch with streamers

Rainfall of month
57 1/2 oz = 0·96 in

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1866 November

Date	Bar.	Att.	Dry	Wet	Faotre	Clk	No 4	H 2	H 1	Bond	Clds	Wind	Rain	Rel Hum by Guyot	Ra by
Nov 1	30·198	45	32	(32·5)			33								
2h 30m		50	44	(44·5)			44·5								
9 15	30·125	45·7	35·3	32·6		65·0	36·2	36·9	36·1	36·2	0	1		70	
2	30·001	45	41	(41·5)			41								
			48·5	(49)			48·5								
	30·001	52·8	57·3	48·0	290·1 = 56·9	64·2	56·8	58·2	57·2		0	1		44	
	30·088	51·4	46·0	42·0		70·3	46·2	47·1	46·3		0	1		67	
3	30·232	45	32·5	(33)			33·5								
	30·260	52·5	48·0	39·9	243·7 = 48·6	68·1	48·6	49·2	48·5	48·3	4	3		40	
	30·323	48·4	40·0	35·0		68·8	40·9	41·5	40·7	41·2	10	1		54	
4	30·372	44	30·5	(31)			31								
	30·380	50·7	43·4	36·8	218·0 = 43·9	67·8	44·0	44·7	43·7	44·2	4	9		46	
	30·498	46·2	29·8	27·3		69·0	30·3	31·2	30·2	31·2	1	1		70	
5	30·530	38	20·5	(21)			21·5								
	30·468	46·4	36·4	30·0	178·5 = 35·8		37·0	37·5	36·9	36·6	0	2 NW		41	
9 15	30·442	44·1	32·5	27·4		67·0	33·0	33·8	33·0	33·0	0	2		46	
6	30·428	38	26	(27)			27·5								
			32·5	(33)			33								
2 45	30·398	47·3	41·3	34·3	204·8 = 41·5	68·2	41·7	42·2	41·7	41·2	0	0		39	
	30·371	45·2	31·9	29·1		67·5	32·8	33·8	32·7	32·7	0	1		69	
7	30·214	39	30	(30·5)			30·5								
			36·5	(37)			37								
	30·129	53·0	55·5	41·7	280·9 = 55·3	66·6	55·2	56·5	55·5	54·1	0	1		19	
	30·062	48·8	43·5	36·2		70·2	43·7	44·6	43·9	43·6	0	1		40	

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1866 November

Rel Hum by Guyot	Date	Bar.	Alt:	Dry	Wet	Fastie	Clk	No 4	H 2	H 1	Bond	Cls	Wind	Rain
	Nov 8.	29·985	47	44	(44·5)			44·5						
				50	(50·5)			50						
16		29·977	53·9	62·8	46·3	318·8 = 62·1	71·3	62·2	63·2	62·4	60·5	8	1	
43		30·008	50·6	47·8	40·0		70·4	48·1	49·0	48·1	48·4	9	0	
	9	30·050	46	39·5	(40)			40						
				44	(44·5)			44·5						
50		29·991	51·5	61·0	52·2	311·2 = 60·7	66·1	60·8	62·0	60·9	59·5	8	1	
73		30·050	52·8	47·4	44·0		69·1	48·0	48·8	48·1	49·0	0	1	
	10	29·980	47	44	(45)			44·5						
				50·5	(51)			50						
27		29·985	54·0	57·6	45·1	295·0 = 57·8	70·0	57·8	58·8	57·7	57·4	1	4	
60		30·100	52·0	43·7	39·0		73·9	44·1	44·7	44·1	44·7	8	1	
	11	30·140	47	37·5	(38)			38						
72	$2^h 30^m$	30·120	49·0	49·0	45·4	248·1 = 49·4	69·5	49·2	50·2	49·2	49·3	9	3	
78	$9^h 20^m$	30·061	50·8	48·1	46·2		72·2	48·4	49·0	48·3	48·7	10	4	
	12	29·962	57	46	(46·5)			47						
55		30·024	53·0	51·4	45·0	261·5 = 51·8	71·5	51·8	52·5	51·8	51·2	9	3	
72	$9^h 45^m$	30·140	50·4	41·0	38·0		73·1	41·8	41·4	41·8	42·1	1	2	
	13	30·196	46	33·5	(34)			34						
				37	(37·5)			37						
43		30·243	50·3	46·2	38·8	232·8 = 46·6	73·1	46·7	47·3	46·7	46·1	0	2	
67		30·312	43·8	34·5	31·2		73·2	35·5	36·2	35·3	36·1	0	1	
	14	30·350	42	27·5	(28)			28·5						
61		30·342	51·1	45·2	40·5	227·0 = 45·5	74·9	45·7	46·2	45·6	45·1	1	0	
90		30·327	47·5	36·4	35·6		73·3	37·5	38·3	37·3	37·4	9	1	

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Date	Barom.	Att.	Dry	Wet	Taotre	Clk	No 4	H 2	H 1	Bond	Clds	wind	Rain	Rel Hum by Guyot
Nov 15	30.240	44	37	(37)			38						41	
			42	(41)			42.5							
	30.099	47.0	48.6	46.0	246.1 = 49.0	72.9	49.0	49.7	48.9	48.7	10	1		80
	29.897	49.2	49.5	48.7		71.0	50.0	50.5	49.7	49.8	10	1		93
16	29.332	55	56	(56.5)			57							
			59	(58)			59.5							
10½ AM	29.30													
12 M	29.360													
2½ PM	29.400	54.7	54.0	47.7	274.6 = 54.1	72.3	54.7	55.0	54.2	53.3	5	4		59
	29.550	50.9	44.3	41.1		70.9	44.9	46.0	44.8	44.9	9	3		72
17	29.611	45	31	(31.5)			31.5							
			41.5	(42)			42							
	29.716	50.5	47.8	41.7	242.2 = 48.3	68.1	48.3	48.9	48.1	48.1	8	5		55
9 15 PM	29.850	48.1	38.4	35.1		71.0	39.3	40.0	39.3	40.1	0	2		68
18	29.916	42	32.5	(33)			33.5							
			37.5	(38)			38						2	
	29.944	50.0	48.4	41.9	245.3 = 48.8	68.1	48.9	50.0	48.8	48.4	9	2		52
	30.026	46.0	41.2	38.5		72.9	41.8	42.2	41.8	42.1	7	thin 0		74
19	30.080	46	40	(40.5)			41							
			44	(44.5)			44.5							
	30.025	50.2	52.2	47.3	267.2 = 52.8	70.4	52.6	53.8	52.7	52.7	9	3		65
	29.980	51.0	48.0	47.0		72.6	48.4	49.1	48.2		10	1		91
20	29.748	57	55.5	(55)			56							
			56.5	(56)			57							
	29.624	55.0	59.5	57.8	306.0 = 59.8	68.5	59.8	60.8	59.7	59.1	10	1		88
	29.600	54.3	54.5 all wet	55.0		69.0	55.2	56.0	55.2	55.3	10	fine rain 0	18	100
21	29.556	50	40.5	(39)			41.5							
			43	(42.5)			43.5							
	29.656	52.3	44.0	38.5	222.7 = 44.8	67.4	44.6	45.3	44.5	44.7	4	6		54
	29.784	47.3	36.2	32.6		68.2	37.0	37.7	37.0	36.9	0	3		65

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1866 November

Rel Hum by Guyot	Date	Barom.	Att.	Dry	Wet	Faster	Clk	No 4	H 2	H 1	Bond	Clds	Wind	Rain
	Nov 22	29.901	43	31	(32)			32						
				36	(37)			37						
55		29.901	48.2	41.0	36.0	207.1 =42.0	67.2	42.1	42.2	41.7	41.9	9	1	
100		29.878	46.0	34.0	34.4		70.6	all the bulbs wet 34.5	35.2	34.5	35.1	10	0	
	23	29.807	43	32.5	(33)			33						
				31.5	(32)			32.5						
94		29.765	44.2	33.1	32.7	160.5 =33.5	66.2	33.7	34.1	33.5	32.6 snow near bulb	10 snowing	1	
79	9h10m	29.880	41.7	31.0	29.2		65.4	31.8	32.2	31.5	31.7	3	1	
	24	29.999	39	27.5	(28)			28.5						
				28.5	(29)			29.5						
99		29.940	43.7	31.7	31.8	152.8 =32.1	67.3	32.2	32.8	32.2	32.0	2	5	
100		29.950	40.8	30.4	30.1		68.6	31.5	32.0	31.2	31.0	10	2	
	25	29.962	39	25.5	(26)			26.5						
				25	(25.5)			26						
50		30.132	41.5	27.3	23.3	128.8 =27.8	68.3	28.0	28.7	27.8	27.4	1	7	
77	9h15m	30.263	36.2	21.3	19.9		70.2	22.5	22.8	22.5	23.0	0	0	
	26	30.332	34	16.5	(17)			18						
48	2h40m	30.251	43.8	38.5	33.0	189.7 =38.8	72.8	38.9	40.0	39.0	37.3	1	4	23
87		30.272	42.9	33.0	32.0			33.7	34.2	33.5	32.7	2	1	
	27	30.228	37	26.5	(27)			27.5						
				33	(32)			33						
47		30.224	49.2	49.0	41.6	243.2 =48.5	72.0	48.5	50.1	48.8	46.0	0	1	
91		30.212	45.0	38.3	37.5		70.2	38.8	40.1	39.0	38.7	0	1	
	28	30.140	42	39	(39.5)			40						2
				43.5	(44)			44						

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1866 November

Wet Hum by Sujot	Date	Barom.	Alt	Dry	Wet	Tastre	Clk	No 4	N 2	N 1	Bond	Clds	Wind	Rain
	Nov 29	29.62	53.	59	(59.5)			59.5						
				62	(62.5)			62.5						
	11h 20 AM	29.418												
	12 30 PM	29.388												56½
	12 40 PM	29.400												
70	2 45 PM	29.592	56.0	51.0	47.			52		52				

Rainfall of month
= 142.5 oz = 2.38 in

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1866 December

Date	Barom.	Alt.	Dry	Wet	Faehtr	Clk	No 4	H 2	H 1	Bond	Clds	Wind	Rain	Rel Hum by Guyot
Dec 1	29.842	44	34	(34.5)			34.5							
			37	(37.5)			37.5							
3 P.M.	29.900	49.3	35.4	29.1	173.7 = 35.9	68.4	36.0	36.8	35.9	36.0	0	5		41
9 15"	30.018	42.8	26.5	22.5		67.1		28.0	27.5	28.1	0	3		49
Dec 2	30.116	37	21	(22)			22.5							
	30.157	46.5	34.1	26.4	166.0 = 34.5	69.0	34.6	33.5	34.7	33.7	0	3		26
9 10"	30.238	39.2	26.8	23.8			27.6	28.5	27.7	27.7	0	0		62
3	30.352	36	21.5	(22.5)			23							
			25	26			26.5							
2 45	30.349	45.2	42.5	36.0	211.0 = 42.6	68.8	42.8	43.8	42.9	41.5	1	2		45
9 5	30.346	42.5	31.8	31.6		68.5	32.9	34.0	33.0	32.7	0	0		94
4	30.208	39	23	(23.5)			24							
		40	40	(40.5)										
1 45	29.973													
2 0	29.950													
3 0	29.894	45.2	47.9	46.4	243.0 = 48.4	68.3	48.2	49.2	48.1	48.3	10	6		86
9 15	29.749	46.2	49.8	47.0		71.3	50.0	50.3	49.3	48.8	9	5		85
5	30.051	45	40	(41)			40.5							
		43.5	43.5	(44)			43.5							16 1/2
2 0	30.159	49.2	50.9	42.7	256.7 = 50.9	77.4 75.0	50.9	52.2	51.0	50.0	0	3		42
4 30														
9 10	30.269	48.0	40.3	36.4		74.0	40.8	42.0	40.9	40.9	0	1		69
6	30.322	42	38	(38.5)			38.5							
			40.5	(41)			41							
2 0	30.248	46.2	48.4	41.0	245.0 = 48.8	65.7	48.9	50.0	48.7	48.0	10	1		46
9 25	30.098	45.0	42.3	40.2		72.0	42.9	43.8	42.8	42.4	10. rain	1		79
7	29.985	44	35	(35.5)			36							
			37.5	(37.5)			38							
2 0	29.960	50.3	51.8	45.2	261.0 = 51.7	69.9	51.7	52.9	51.8	50.4	1	2		54
9 10	30.068	49.5	40.7	39.0		71.3	41.2	42.3	41.4	41.4	0	0		82

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1866 December

The third reading of the thermometers &c is at 1h 30m P.M. on & after Dec 8, unless otherwise stated.

Date	Rel Hum by Sug of	Barom.	Att.	Dry	Wet	Tastie	Clk	No 4	H 2	H 1	Bond	Clds	Wind	Rain
Dec 8		30.036	42	31.5	(32)			32.						
				33	(33)			34						
	82	29.898	47.2	46.0	43.9	234.2 = 46.8	68.9	46.5	47.8	46.7	46.3	10	3	
	100	29.596	46.0	46.4	47.0		71.4	47.2	48.0	46.8	46.8	10	0	very light rain
9		29.667	47	41	(42)			42						
	55	29.703	51.0	46.5	40.8	234.7 = 46.9	73.2	46.9	47.9 Pastorelli	46.9	46.2	3	3	
	64	29.724	47.1	33.7	30.3		71.5	34.5	32.6	34.3	34.7	5	0	
10		29.770	40	25.5	(26.5)			27						
				28	(29)			29						
	41	29.772	46.2	33.5	27.5	162.0 = 33.8	69.6	34.0	31.5	33.9	33.2	2	3	
	51	29.928	38.8	23.3	20.2		71.0	24.2	22.0	24.2 Min.	24.8 24.5	6	2	
11		30.050	32	14	(15)			15.5	Min of last night		15.1			
				18.5	(19)			19						
	44	30.022	44	27.1	22.6	128.1 = 27.7	67.0	27.9	25.3	27.7	27.2	0	1	
	79	30.050	36.5	17.5	16.5		70.0	19.1	16.3	19.0	19.9	0	1	
12		30.05?	30	13	(13.5)			14	Min. of last night		13.7			
				16	(16)			17						
	47	30.010	39.3	27.4	23.0	129.3 = 27.9	61.6	28.2	26.0	28.0	27.7	0	1	
	71	30.049	36.2	20.3	18.5		67.2	21.8	18.8	21.6		0	1	
13		30.033	29	15	(15)			16						
				18	(18)			19						
	44	30.027	39.0	26.7	22.2	125.8 = 27.3	71.6	27.5	25.0	27.3		1	1	
	84	30.027	35.0	18.1	17.3		66.3	20.0	17.2	20.0		0	0	
14		30.001	29	13.5	(14)			15	Min of last night		13.4			
				14.5	(14.5)			15						
	48	30.027	32.8	19.4	16.2	86.1 = 20.1	65.8	20.3	17.9	20.4		0	7	
	71	30.169	29.0	12.5	11.2		69.7	13.5	10.8	13.5		0	5	

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1866 December

Date	Rel Hum by Gaylor	Barom;	Att.	Dry	Wet	Factrs	Clk	No 4	Pastor	H.I.	Clds	Wind	Rain	
								Min. of last night 9.8						
Dec 15		30.264		10	(10.5)			11						
				13	(13.5)			14						
	37	30.216	34.2	27.1	21.8	127.3 = 27.5	63.0	27.8	25.5	27.7	0.	2		
	72	30.268	30.0	14.8	13.4		73.3	15.8	13.2	16.0	0	5		
								Min of last night 9.7						
16		30.268		10	(10.5)			11.5						
	78	30.120	26.3	20.4	19.2	92.7 = 21.3	59.4	21.5	19.1	21.2	10		1	
	100	29.777	30.0	31.8	32.1		68.5	32.0	30.3	32.0	10 snow		6	
17		29.251	33	28.5	(30)			29						
				23.5	(24)			24						
	100	29.298	31.5	25.5	26.3	121.5 = 26.5	65.8	26.5	24.5	26.4	10 snow		3	Snow measured late after storm
	84	29.650		24.0	23.6			25.0		25.0				
18		30.018	29	18.5	(19)			20						64.5 oz.
				21	(21)			22						
	73	30.083	37.0	27.7	25.2	131.0 = 28.2	68.3	28.7	26.3	28.3	3		1	
	85	30.168	33.2	19.1	18.3		70.1	20.3	17.7	20.4	3		0	
19		30.079	30	22.5	(22)			23						
				26	(25.5)			27						
	94	29.976	33.2	32.0	31.7	154.3 = 32.4	68.5	32.9	30.7	32.4	10		3	
	72	29.925	34.0	29.3	27.1		70.0	30.1	28.0	30.0	10		0	
20		30.074	32	17.	(17.5)			18						
				12	(12.5)			13						
								11				min		
RH 81	11h 15m	30.226	27.9	8.4	7.8	26.6 = 9.4	67.9	9.4	6.5	9.8		10	0	6
	5h 45m							3.7						
		30.390	below 25	−2.0			65.1	−0.9	−4.0	0.1	0			6
								min. of last night −6.3						
21	3h 0m	30.571						−7						
								−6						
								−5						
RH 59		30.549	below 25	10.1	8.4	36.2 = 11.1	55.8	11.3	8.2	11.2	0		1	
RH 70	9h 15m	30.501	below 25	6.5	5.5		65.7	7.6	4.8	8.0	7 thin		0	

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1866 December

Date	Barom.	Att.	Dry	Wet	Fastre	Clk	No 4	Pastor	H 1.		Clds	Wind	Rain
Dec 22	30.416		8.5	(9)			9						
			15.5	(16)			17						
87			32	31			33						
97	30.178	29.3	33.0	33.0		74.5	33.8	32.0	33.7		10 mist	0	
23	29.918	32	41	(42)			42						
88	29.800	35.0	40.1	39.0	200.2 =40.7	73.9	40.7	39.5	40.7		10	2	
100	29.633	38	46.7	47.5		73.0	48.0	46.7	48.0		10 raining hard	8	
24	29.502	43	50	(50.5)			52						
			51	(51)			51.5						Up to 2 o'clock 6 oz.
		43	42	(42)			43						
25													
11 AM			36				36.5		36.5				
52 3h 27m PM	29.788	41.0	38.5	33.5			38.9	38.0	38.9	min. 39.0	2	1	
9 "		38	32				32.5		30				
26	30.1	34	24	(25)			25.5						
			21	(22)			22						
48	30.023	39.0	32.3	27.3	155.0 =32.5	72.0	32.8	30.7	32.7		0	2	
81	30.027	30.8	23.8	22.6		71.7	24.4	22.5	24.3		2 haze in horizon	0	
27	29.766	35	35	(34)			36						
			36	(36)			37				Rain fall from 4 PM 12 oz accident to rain gauge before that		
100	29.303	38.5	36.8	37.0	181.8 =37.4	73.2	37.4	35.6	37.0		10 raining furiously	8	
100	28.775	39.8	34.2	34.5		71.2	35.0	33.2	35.0		10 rain	4	
28 9h 0m	28.778	34	21	(21)			22				snow began about 11 PM wind very light or zero at midnight		
11h 10m	29.143	37.7	19	(19.5)			21						
1 30m	29.191	34.0	19.6	17.8	90.0 =20.8	63.8	21.1	18.5	20.9		10	7	
3h 10m	29.240	33.0											
63 9 0	29.395	29.0	17.1	15.1		66.7	17.9	15.3	18.0		1	7	

Barometer Dec 27

Time P M	B	A
3h 20m	29.136	
30	130	37.6
40	112	
4 15	29.065	37.8
5 45	28.972	
6 10	942	
6 45	873	39.3
7 5	855	
25	837	40.0

Time P M	B	A
7 48	28.832	
8 20	805	39.8
9 0	775	39.8
9 40	755	39.5
10 40	713	39.0
11 20	686	
11 40	662	
snowy point obs'd		
11 45	646	

Dec 28 AM

Time A M	B	No 4
0 5	28.626	
0 27	628	28.8
1 4	640	28.1
1. 20	650	

snowing.

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1866 December

Rel Hum by Gypt	Date	Barom	Att.	Dry	Wet	Fastre	Clk	No 4	Pastor.	H. I.		Clds	Wind	Rain
	Dec 29	29.658		12 (13)				13						
				13 (13)				14						
62		29.755	32.4	19.2	17.0	87.0 = 20.13	59.7	20.5	17.8	20.3		1	4	
82		29.929	28.5	15.1	14.4		63.6	16.2	13.3	16.2		3	1	
	30			15.5 (15.5)				17						
61	2h0m	30.140	37.0	22.6	20.0		67.0	23.8	21.5	23.6	min. 23.0 / max 23.0			
87		30.259	30.5	14.7	14.2		65.1	16.1	13.2	16.2		0	1	
	31	30.222		10 (10.5)				11						
				15.5 (16)				17						
84		30.117	25	18.1	17.3	79.3 = 18.9	58.9	18.9	16.3	19.0		10 snow	4	Snow measured at 2 P.M. Jan 1 10 3/4 oz.

Rain during month 34.5 oz = 0in.575 +
Snow " " 75.25 oz = 1in.254 +

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1867 January

Rel Hum by Guyot	Date	Barom.	Att.	Dry	Wet	Faster	Clk.	No 4 Vaselli	14 1.	Clds	wind	Rain	Rel Hum by Guyot
Jan	1	30.113		18 (18)				19					Ja
				19 (20)				21	2				
97		30.058	28.8	24.8	24.8	115.1 = 25.3	64.0	25.8	23.7 25.3	10	2		57
100		30.100	31.8	25.6	26.0		64.2	26.5	23.8 26.2	10 snowy	0		61
	2	30.148	31	21 (21)				22					
				21.5 (21.5)				21.5					
								Negretti & Zambra				Snow up to 2 P.M 2½ oz.	
53		30.102	34.8	26.5	22.8	125.0 = 27.1	66.9		28.0 27.3	9	2		56
74		30.066	30.0	21.1	19.5		65.1	22.0	22.0 22.0	10	0		63
	3	30.026		9 (9.5)				10					
				8.5 (9.5)				10.5					
72		30.085	34.1	21.5	19.8	99.2 = 22.5	65.2	22.7	22.3 22.5	0			61
100		30.076	29.1	9.0	10.0		67.0	11.2	11.2 11.3	2 haze	1		82
	4	30.015		3.5 (4)				5					
				5 (6)				6.5					
68		30.011	30.2	22.1	20.0	101.3 = 22.8	62.0	23.1	23.0 23.0	0			50
96		30.009	29.5	16.2	16.2		65.0	17.6	17.3 17.8	1 haze	0		73
	5	29.968		19 (18.5)				20					
				22 (21.5)				23					
69		29.860	30.1	31.4	28.7	151.0 = 31.8	63.8	32.2	31.8 31.7	9	1		50
85		29.650	33.0	35.0	33.8		69.0	35.5	35.2 35.3	10	1		77
	6	29.430	33	25.5 (26)				26.5				22 oz. rain and snow together with small gauge up to 10 A.M.	
				26 (26.5)				27					
93		29.446	31.3	23.4	23.1	105.2 = 23.6	66.4	23.9	23.5 23.7	9	3	19 oz. rain alone with large gauge.	63
90		29.490	30.0	21.5	21.0		67.2	22.3	22.4	10	0		
	7	29.490	29	19 (19)				20					
				20.5 (20)				21.5				Snow in large gauge at 10 A.M 8 oz.	
				Deep well in cellar 50° by Negretti & Zambra									
70		29.449	32.1	23.2	21.2	106.2 = 24.1	66.8	24.1	23.8	9	5		36
74		29.440	28.5	17.5	16.1		66.2	18.3	Adie 19.0 18.5	7	2		54

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1867 January

Rel Hum by Guyot	Date	Barom.	Att.	Dry	Wet	Fastre	Clk	No 4	Adie	H 1	Clds.	Wind	Rain
	Jan. 8	29.355		13	(13)			13.5					
				14	(14)			15					
51		29.301	31.2	21.3	18.1	96.5	63.8	22.2	21.3	22.1	1	5	
61		29.320	29.0	18.5	16.3		67.3	19.4	20.1	19.8	7	3	
	9	29.362		15.5	(16)			16.5					
				17	(17)			18					
56		29.323	33.3	25.2	21.8	118.2	62.9	26.1	26.3	25.9	1	2	
63		29.380	32.0	19.8	17.6		64.5	20.5	20.8	20.5	4 haze	2	
	10	29.422		13	(13.5)			14					
				15.5	(16)			16.5					
61		29.402	31.5	27.3	24.3	134.5	62.6	29.4	29.0	28.3	9	0	
82		29.426	31.0	22.2	21.2		65.2	23.1	23.6	23.1	10	1	
	11	29.530		12.5	(13)			14					
				11.5	(12)			13					
50		29.605	32.5	27.9	23.7	133.2	62.0	28.9	28.9	28.3	9	1	
73		29.757	31.3	22.4	20.6		67.6	23.2	23.9	23.2	10	1	
	12	29.848		13	(13)			14					
				14	(13.5)			14.5					
50		29.883	31.0	18.5	15.5	81.6	66.3	19.4	20.1	19.5	0	4	
77		29.968	27.5	12.9	11.9		69.6	13.9	14.8	14.1	0	5	
	13	29.930		8	(8.5)			9					
63		29.768	25	17.1	15.1	78.0	63.1	19.2	19.0	18.4	10	1	
		29.700	below 25	17.0			63.1	18.3	18.8	18.2	10	0	
	14	29.627		14	(14.5)			15.5					
				13	(13.5)			14.5					
36		29.648	28.5	21.2	16.8	96.3	61.1	22.0	22.8	22.0	1	3	
54		29.675	below 25	10.5	8.5		66.2	11.6	12.2	12.0	0	1	

Fine aurora with streamers on morning of 12th at 0½ h.
Fine auroral arch of remarkably perfect shape on morning of 13th at 0½ h.

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1867 January

Rel. Hum by Guyot	Date	Barom.	Att.	Dry	Wet	Fastre	Clke	No 4	Adie	14 1	Clds	Wind	Rain	Rel. Hum by Guyot
	Jan 15	29.697		3.5 [4]				4.5						
				5 (5.5)				6						
52	1h 15m	29.703	28.0	17.3	14.6	75.0	62.1	18.4	18.7	18.0	9	2		10
61		29.849	below 25	9.1	7.5		62.1	10.2	11.0	10.5	0	3		7
	16	30.010		0				1						
				2 (2.5)				3						
		30.018	28.3	14.0		61.8	56.3	16.3	16.1	15.5	7	0		62
78		29.940	below 25	10.0	9.1		59.1	11.3	12.7	11.9	0	0		70
	17	29.572		15.5 (16)				16.5						
				16.5 (17)				17.5						
100		29.120	below 25	18.0	18.8	77.7	60.0	18.5		18.9	10 snowing hard	8		58
		29.235	below 25	15.5				16.5		16.5	10	7		66
	18	29.234		9 (9.5)				9.5						
				9 (9)				9.5			Mean depth of snow estimated by sounding			
91		29.430	below 25	9.0	8.8	26.0	59.6	10.1	11.0	10.4	6	6		55
100	9 15	29.486	below 25	2.5	2.7		58.8	3.5		4.3	at about 18 inches 1	4		78
	19	29.497				*15 1.9 in melting snow.		−2	Min. of last night −2.5		Mean of 5 measures of depth of snow by fw 14.96 inches. Snow on. 123.2 sq.in = 124oz or 1in.74			
								1						
82		29.518	below 25	6.2	5.7		57.3	7.8	8.2	7.8	9	3		100
100		29.705	below 25	−0.8	+0.8		62.5	0.5		1.2	of rain. 1	0		76
	12 PM 20	29.886						Min −6.5 No 4 − 5.6 −4 Min of last night −7.0						
73		29.947	below 25	12.8	11.6		62.2	13.9	13.7	13.6	1	0		
	1 30													64
84		29.949	below 25	13.9	13.3		64.0	14.7	15.0	14.9	10	1		75
	21	29.602		30 (30.5)				31			Snow on 73.9 sq.in = 73 oz. at 10 AM = 1in.71 of rain.			
				31.5 (32)				32						
100		29.398	28.2	20.1	21.1		65.7	21.0	21.8	21.1	Scale −5.1 10	4		56
100		29.490	26.1	18.2	19.0		65.0	19.4		19.5	10	0		83

Barometer on the 17th

11 30 AM	29.181	Att. below 25
12 0	15	
30 PM	155	
1 0	134	
30	120	
3 30	12	
5 30	182	
7 0	206	

Thermometer (H 1) on the 20th

10h 15m PM	17.7
11h 15m	22.0

* Hence by the formula and table pasted at the beginning of this volume, we have 31.98 Fahrenheit for the freezing point of the scale of the Fastre thermometer, which therefore requires no correction.

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1867 January

Rel Hum by Guy's	Date	Barom.	Alt.	Dry	Wet		Clk	No 4	Adie	H	I	S	Clds	Wind	Rain
	Jan 22	29.536		18.5	(19)			19.5							Snow & rain up to 10 A M 12 oz.
				19	(20)			20.5							
100		29.513	31.8	30.5	32.0		62.4	32.0	32.0	31.7		1.0 = 33.8	5	2	
78		29.540	30.2	25.1	23.6		64.5	25.9	26.3	26.0			10	1	
	23	29.583		25	(25)			26							
				25.5	(26)			26.5							
62		29.593	31.2	29.6	26.3		67.5	30.3	30.5	30.2		-0.2 = 31.6	1	4	
70		29.736	32.7	26.2	24.2		69.0	27.2	27.8	27.2			0	4	
	24	29.880		23	(23)			24							
				25	(25)			26							
58		29.923	36.2	30.5	26.7		62.9	31.1	31.2	31.0		0.0 - 32.0	1	2	
66		30.000	33.2	24.7	22.2		66.8	25.4	26.0	25.3			3 haze	2	
	25	30.075		11	(12)			13							
				16	(16.5)			17							
55		29.933	34.8	26.9	23.4			27.8	28.0	27.5		-1.9 = 28.6	1 haze in S W	0	
78		29.842	33.0	22.2	20.8			23.3	24.0	23.1			10 thick haze in zenith	0	
	26	29.513		31	(31)			31.5							Snow & rain together (more the latter) up to 10 A M 12 oz.
				32	(32)			33							
100		29.200	32.2	35.2	35.8		60.1	36.0	36.0	35.8		3.0 = 37.6	10 light rain	1	
76		29.226	33.1	30.0	28.0		62.9	30.4	30.3	30.3			10	3	
	27	29.339		23	(23)			23.5							Rain & snow fall up to 10 A M 6 oz.
64		29.428	33.2	26.5	23.7		62.6	27.5	27.8	27.2		-1.8 = 28.8	2	4	
75		29.625	30.2	20.1	18.6		65.0	20.9	21.3	20.9			0	4	
	28	29.814		14	(14)			15.5							
				17	(17)			18							
56		29.798	35.2	23.0	20.0		67.2	23.9	24.2	23.8		-3.9 = 25.0	2	5	
83		29.884	28.8	16.4	15.6			17.2	17.9	17.2			0	3	

Jan 27 4h 15m PM. Parhelion about 21° N. of the sun at nearly the same altitude. Angle measured by a stick held at arm's length.

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1867 January

Rel Hum Date Hygr		Barom.	Att.	Dry	Wet	Clk	No 4	Adie	H 1	S	Clds	Wind	Rain
Jan 29		29.860		11	(12)		13						
				14	(145)		15.5						
54		29.798	32.3	17.4	14.8	69.2	18.8	19.3	18.7	−6.4 = 20.5	1	5	
80		29.923	27.0	10.3	9.6	65.1	11.6	12.2	11.6		0	2	
	30	30.143		0	(1)		2	Min. of last night −1°					
				0.5	(1)		2						
	10h 25m						3.0			−15.0 = 5.0			
68		30.251	26.0	6.1	5.0	64.7	7.0	8.0	7.4	−12.8 = 9.0	0	1	
100		30.302	below 25	−0.8	about 0.0	66.0	2.2	2.8	2.1		0 Aurora in evening, see equatorial book.	0	
	11h 20m						−1.8	Min. −2.5					
	31	30.240					−2						
				1	(2)		3	Min of last night −4°8					
75		30.117	below 25	25.3	23.5	58.4	26.7	26.5	25.9	−2.0 −28.4	10 thin	0	
97	9 10	29.980	25	27.0	27.0	65.3	27.5	27.8	27.3		10	0	

Rain & Melted Snow during month = 4 in. 36

From large gauge 78 oz =

Note June 21, 1882. The observations of July 1866 to January 1867 inclusive have been rearranged in book Q 5, pp. 142 – 162.

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1867 January

Day	Time 9 PM +	Barom.	Att.	Times.	Ext. Therm. No 4.
1		30.100	31.8	7 1½ 9	23.8
2		30.066	30.0	"	22.5
3		30.076	29.1	"	14.6
4		30.009	29.5	"	15.2
5		29.650	33.0	"	29.2
6		29.490	30.0	"	24.2
7		29.440	28.5	"	20.8
8		29.320	29.0	"	18.4
9		29.380	32.0	"	21.0
10		29.426	31.0	"	22.2
11		29.757	31.3	"	22.0
12		29.968	27.5	"	15.8
13		29.700	below 25	"	15.5
14		29.675	"	"	16.4
15		29.849	"	"	10.9
16		29.940	"	"	9.5
17		29.235	"	"	17.2
18	15	29.486	"	"	7.7
19		29.705	"	"	2.1
20		29.949	"	"	8.2
21		29.490	26.1	"	23.8
22		29.540	30.2	"	25.8
23		29.736	32.7	"	27.8
24		30.000	33.2	"	26.8
25		29.842	33.0	"	21.4
26		29.226	33.1	"	32.5
27		29.625	30.2	"	24.0
28		29.884	28.8	"	18.9
29		29.923	27.0	"	14.5
30		30.302	below 25	"	3.7
31	10	29.980	25	"	17.4
Att. Therm assumed at 20 when "below 25"	Sum	25	921.769	887.0		573.8
	Mean	9h 1m	29.734	28.6	7 1½ 9	18.5
	Red. to 32°		29.734			

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February 1867

	10 A M									4 P M							
Date	Error of time	Barom.	Att.	Wind	Clouds	Dry	Wet	Rel. Hum by Guyot's table	Error of time	Barom.	Att.	Wind	Clouds	Dry	Wet	Rel. Hum by Guyot's table.
1																
2		29.968	32.0			27.2	24.9	73		29.892	45	2	10	35	33.4	84
3		29.400	36.2	0	10 fog	36.0	36.8	100	+15	29.365	35.9	0	10 fog	37.2	37.8	100
4		29.727	38.0	4 NW	1 cu. st.	35.8	31.5	61	+25	29.845	40.6	0	2 cir. st.	38.0	34.2	65
5		29.450	38.2	0	10	36.2	36.7	100		29.548	43.1	3 SW	8 cir. st.	39.7	37.2	77
6		30.008	36.5	1 SW	0	34.3	30.8	67		30.041	41.3	1 SW	7 cir. cum	37.5	33.6	64
7		30.382	34.0	0	0	29.7	26.4	64		30.372	43.9	1 SW	0	40.5	35.2	54
8		30.358	35.8	1 SW	0	34.0	31.1	72		30.273	46.0	0	8 cir. cir. cum	40.9	38.7	81
9		29.702	45.2	3 SE	10 fog	47.5	48.2	100						45	43	84
10		29.578	41.5	5 W	1 cu. st.	26.2	22.8	59		29.964	39.0	6 W	1 cu. st.	18.1	15.2	54
11		30.871	26.2	1	0	14.5	12.1	57		30.816	37.0	2	7 cir. cir. st.	26.8	23.4	60
12		30.586	32.6	3 S	9 cu. st.	34.0	30.0	62	+60	30.524	38.2	0	9 cu. st.	38.5	35.5	72
13		30.412	37.0	2 SW	1 cir. st.	41.1	38.9	81		30.309	43.0	3 S.	10 cu. st.	46.5	44.4	84
14		30.093	44.5	2 S	10 st. haze thin in zen.	50.4	47.4	79		30.130	49.0	0	10	51.8	47.9	73
15	+120	30.424	41.8	1 NE	7 cir. cir. st. cir. cu.	32.2	28.4	62		30.437	42.6	1 NE	6 cir. cir. st.	30.7	27.3	64
16		30.316	33.5	1 S	10 light rain	31.7	29.7	79		30.02	36.0	2 E	10 raining	32.5	32.0	94
17		29.762	36.8	1 S	10 cu. st.	37.1	35.9	88		29.798	40.7	3 W	1 cir. cu.	39.2	33.8	52
18		30.044	34.5	2	8 cir. st.	30.5	26.0	52		29.986	40.2	1	6 cir. st.	37.2	32.0	51
19		29.973	37.0	3 N	6 cir. cu.	33.0	30.0	70		30.075	40.5	3 N	1 cir. cir. st.	30.5	25.5	47
20		30.167	28.2	3 N E	10 snowing	20.1	19.4	90		30.107	29.5	2	10 snowing	21.6	22.0	100
21		30.145	25	1	10	19.3	18.3	85		30.002	31.3	1	10 snowing	28.5	28.4	99
22		29.892	31.0	1	6 cir. cu	25.0	24.0	87		29.933	25.5	1	9 cir. cu	28.9	27.0	78
23		30.168	27.8	1	1 st.	16.9	15.4	75		30.082	38.7	1	10	27.7	25.2	71
24		29.500	34.8	1	8 thin	39.0	39.0	100		29.622	41.5	4	9	41.4	35.5	50
25		30.143	31.5	2	5 cir. st. thin	20.3	17.6	60		30.121	38.6	1	5 cir. thin	29.3	26.1	65
26		30.067	29.7	2	0	25.2	22.7	69		30.011	40.1	2	0	34.7	29.4	51
27		30.172	32.0	1	0	30.0	26.0	57		30.157	34.8	5	0	31.5	25.2	36
28		30.284	29.1	1 SW	8 cir. cu. cir. st.	27.1	23.7	60		30.099	38.5	2	10 cu. st.	38.3	33.8	58
Sum		811.592	930.4	43	141	834.3		2009		781.529	1020.5	47	169	947.5		1868
		30.059	34.5	1.7	5.4	30.90		74.4		30.059	39.2	1.9	6.8	35.09		69.2
Reduced to 32°		30.043								30.030						

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Readings in brackets are conjectural.

February 1867

Ext. Therm. No 4.

Date	7 AM	2 PM	9 PM	Mean	Rain or snow		large gauge
1	41	47·4	39·1	42·5			
2	22·5	+120 35·5	34·8	30·9			9·5
3	35	+135 38	37·1	36·7	up to 10 AM		62·5
4	37	−240 36·3	35·0	36·1	34·5 oz.	0.575 in.	
5	37	40·7	37·3	38·3	17·5	0.292 in.	31
6	29	+120 38	31·9	33·0			
7	24	+120 41	+30 33·1	32·7			
8	27	46	42·5	38·5			
9	48	49·2	42·9	46·7	37·5	0.625 in.	68·5
10	33·5	22	11·5	22·3	91	1.517 in.	168
11	7	25	24·1	18·7			
12	29	40·5	36·3	35·3			
13	34	52	48·0	44·7			
14	47	55·0	43·5	48·5			
15	33	32	26·6	30·5	1·5	0.025 in.	4·25
16	24	32·5	32·6	29·7	0·75	0.012 in.	1·5
17	34	[40]	35·1	36·4	29	0.483 in.	50
18	28	[39]	32·1	33·0			
19	29	[32]	20·9	27·3			
20	17	18	17·5	17·5			
21	13	30	29·3	24·1	snow 5·0	0.083 in.	
22	23	30	26·9	26·6	rain & snow 17·25	0.288 in.	
23	12	29·8	25 26·1	22·6			
24	36	45·5	35·1	38·9	rain & snow 12·0	0.200 in.	
25	21	30	24·1	25·0			
26	17	30·5	29·4	25·6			35·5
27	22	33·5	23·4	26·3			
28	19	40·5	37·1	32·2			
Sum	779·0	1029·9	893·3	900·6			
Mean	27·8	36·8	31·9	32·2			

245·0 oz = 4·10 in. — 4.100 in. — 430·75

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March 1867

	10 A M								4 P M							
Date	Error of time	Barom.	Alt.	Wind	Clouds	Dry	Wet	Rel. Hum by Guyot	Error of time	Barom.	Alt.	Wind	Clouds	Dry	Wet	Rel. Hum by Guyot
1		30·142	36·2	2	10 cu.	33·5	31·3	78		29·900	36·2	1	10 raining	32·7	32·2	95
2		29·296	36·1	3	10	38·7	39·0	100		29·316	42·0	2	9	47·8	41·9	57
3		30·118	28·0	3	6 cir. cirst	13·9	11·8	62	+30	30·142	36·0	1	9 cir. cu. cir. st.	20·7	17·8	58
4		29·855	32·2	1	10	30·6	32·0	100	+15	29·836	36·1	1	10	28·8	28·3	94
5		30·200	33·5	1	9	30·2	27·8	74	+30	30·203	38·2	0	9	32·6	30·9	83
6		30·482	31·0	3	10	27·2	24·4	68	+35	30·467	35·1	3	10	30·0	27·0	68
7		30·138	32·5	3 variable	10 snowing	29·8	31·8	100		29·890	34·7	3	10 raining	32·2	32·7	100
8		30·358	32·0	1	0	28·0	26·1	77		30·376	39·7	0	5 cir.	34·7	30·0	56
9		30·450	31·7	1	10	27·7	27·3	95								
10		30·384	36·6	2	10 snowing a little	33·9	33·2	93	+30	30·199	38·0	2 variable	10 raining	32·7	32·9	100
11		29·883	37·6	3	10	33·7	33·8	100		29·967	41·5	1	6 cir. cu.	39·1	37·0	81
12		29·982	36·2	1	10	33·5	33·3	98		29·882	38·3	1	10 raining	32·0	32·0	100
13		29·977	35·0	0	10	33·1	31·9	87		29·916	39·8	0	10	36·0	34·7	87
14		29·884	37·1	4	10	24·1	20·5	54		29·922	36·2	5	0	23·2	19·3	48
15		30·368	28·5	2	1	18·4	15·8	59		30·340	26·4	1	2 cir.	25·0	21·0	50
16		30·373	28·8	2	9	22·6	20·0	65		30·233	35·3	2	10	28·8	25·9	67
17		29·578	32·0	2	10 snowing	27·6	27·6	100		29·457	32·0	3	10 snowing	20·6	21·3	100
18		29·676	30·8	5	2 cir.	24·8	22·5	71		29·772	35	5	2 cir. cu.	22·9	20·8	72
19		30·016	29·0	2	0	23·7	20·7	61		30·069	37·0	2	0	32·1	26·1	40
20	+60	30·348	33·2	1	0	32·5	27·2	47		30·349	41·2	0	0			
						Green used after this										
21		30·398	34·7	2	6 cir. st.	39·9	35·6	62		30·341	41·8	3	10	37·3	35·5	83
22		30·131	35·0	4	10	33·3	30·9	76		30·115	37·0	6	10	33·9	31·4	76
23		30·317	36·1	4 variable	10	33·6	30·3	68		30·350	39·5	4	10	33·9	30·9	71
24		30·347	37·2	1	10	35·4	32·2	67		30·283	44·0	1	10	35·1	33·2	82
25		30·016	38·1	0	10 raining	36·0	36·0	100		29·968	38·5	0	10	36·8	36·6	98
26		30·019	38·8	4	0	34·9	29·7	52		29·958	41·7	5	0	35·3	29·4	46
27		29·821	36·0	0	6 cir. cu	34·5	29·2	50		29·723	42·1	1	5 cir cu	40·5	33·6	41
28		29·488	38·0	0	10	35·2	32·4	72		29·450	42·3	1	10	36·6	32·0	56
29		29·464	36·0	3	0	32·0	25·3	33		29·399	42·7	4	5 cir cu	35·0	27·5	32
30		29·440	36·5	2	5 cir. cir-cu	38·2	32·0	44		29·402	43·0	3	3	44·0	36·0	37
31		29·563	41·0	2	3 cir-cu	46·9	39·0	42	+40	29·618	48·5	1	0	52·2	43·0	40
		930·512	1064·8	64	217	967·4		2255		898·843	1159·8	62	205	973·5		2018
Mean	$10^h 2^m$	30·017	34·3	2·1	7·0	31.21		72·8	$4^h 6^m$	29·961	38·7	2·1	7·0	33.57		69·6
Red 32°		30·001								29·934						

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March 1867

Date	Ext. Therm. No 4. 7 AM	2 PM	9 PM	Mean		
						large gauge
1	33	34.0	35.0	34.0		
2	34	49	34.4	39.1	Rain 17.75	17.67
3	12	22.5	22.0	18.8		
4	27	[30]	28.0	28.3	Snow 29.00	
5	26	36.8	[30]	30.9	Rain 1.75	
6	20	[29]	29.8	26.3		
7	28	[34]	24.0	28.7		83
8	23	34.7	30.0	29.2	Snow, rain & hail 48.25	
9	20	36	[33]	29.7		
10	33	34.2	34.0	33.7		12
11	34	39.1	32.2	35.1	Snow rain & hail 56.67	90.5
12	31	34.1	30.1	31.7		
13	30	38.1	33.9	34.0		
14	33	25.0	18.9	25.6		
15	12	25.8	22.0	19.9		
16	18	29.6	27.5	25.0		
17	26.5	23.4	22.1	24.0		
18	24	27.2	19.2	23.5	Snow 52.00	
19	18	31.8	24.5	24.8		50
20	21	38.3	28.6	29.3		
21	27	40.2	34.1	33.8		1
22	33	33.8	34.1	33.6		
23	32	[4 PM 34]	30.8	32.3		
24	31	37.1	34.5	34.2		
25	34	36.7	36.1	35.6	Rain 2 PM 48.00	
26	35	35.2	28.6	32.9		
27	25.5	40.5	34.4	33.5		
28	32	38.5	32.0	34.2		74
29	28	34.3	30.0	30.8		
30	31	44.3	40.0	38.4		
31	38	51.3	43.9	44.4		
	849.0	1078.5	937.7	955.3	253 oz 42	328.17
	27.4	34.8	30.2	30.8	= 4 in 22	

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April 1867

	10 A M								4 P M							
Date	Error of time	Barom.	Att	Wind	Clouds	Dry	Wet	Rel. Hum by Guyot	Error of time	Barom.	Att.	Wind	Clouds	Dry	Wet	Rel. Hum by Guyot
1		29.566	41.3	2	10	43.7	39.1	63		29.388	43.0	2	10 raining	40.1	40.1	100
2		29.491	41.1	3	8 cir. cu cu. thin in zenith	46.1	40.6	58		29.560	48.2	5	3 cu. cir-cu	47.3	40.0	47
3		30.010	41.1	5	0	40.9	34.9	49		30.097	42.8	4	2 cir. cir-cu	47.0	36.1	21
4		30.080	41.0	1	0	50.5	43.0	49		29.850	50.0	5	1 cir-st.	59.0	47.5	36
5		29.663	46.2	1	10 raining	37.1	36.7	96		29.410	45.5	1	10 very fine rain	37.3	37.2	99
6		29.494	42.5	5	9 cu. nimb.	42.7	37.0	53								
7		29.931	42.5	6	0 (hazy)	51.3	41.1	33	+60	29.850	50.0	4	1 (hazy)	56.0	44.3	31
8		30.134	46.5	1	10 (thin)	53.8	44.2	40		29.899	51.5	1	3 cir. haze	60.7	58.4	43
9		30.208	46.4	5	0	47.0	38.1	35		30.165	50.7	1	0	53.5	41.7	27
10		29.990	44.1	4	6 cir-cu.	53.2	45.0	47		29.822	50.2	3 variable	10	51.4	44.7	55
11		29.531	46.0	5	10 cu.	43.0	40.5	79		29.633	51.1	4	1 cir-cu.	50.2	41.0	38
12										29.756	49.5	4	8 cir.	51.5	43.0	44
13		29.944	43.0	2	10	36.0	33.0	70		29.990	46			37.0	35.0	81
14		30.390	40.0	1	0	40.6	33.2	37	+30	30.330	50.1	2	1 cir.	44.6	38.0	48
15		30.156	44.6	3	9 cir-cu thin	56.8	51.7	69		30.000	64.0	6	10	66.8	56.0	46
16		29.878	55.8	4	10	62.0	55.9	66	+15	29.750	55.3	0	10 raining	56.1	56.2	100
17		29.631	48.4	7	10 fine rain	40.3	39.9	96		29.690	47.1	4	10	40.3	39.2	90
18		29.857	45.2	5	6 cu	48.5	41.0	47		29.909	47.6	8	0	47.3	38.3	34
19		30.116	42.2	2	0	46.5	35.6	22		30.100	50.9	1	2 cir	53.3	42.0	29
20		30.090	46.6	2	10 thin	55.4	44.2	32		29.976	48.5	6	8	52.2	44.7	51
21	+15	29.674	51.5	5	8	58.1	48.5	45		29.688	54.3	3	5 cir-cu.	58.9	49.0	44
22		29.667	48.5	3	10	52.3	45.3	54		29.435	51.5	3	9 nimb. cir. cu.	60.5	55.4	70
23		29.828	49.0	3	1 cir-cu	49.2	42.0	49		29.925	53.1	4	1 cir-cu	52.0	42.5	38
24		30.260	45.0	1	10	41.5	35.7	52		30.206	46.0	1	10	34.9	34.5	96
25		30.136	45.1	2	7 cir-cu cir	48.0	42.5	59		30.125	53.8	1	7 cu. cir. cir-cu.	55.5	45.0	37
26		30.208	47.8	1	2 thin haze	54.8	45.8	44		30.115	54.0	1	1 cir-cu	51.9	41.4	32
27		29.919	46.5	4	1 cir-st. cir.-cu.	55.0	44.3	35		29.866	49.0	3	10 raining	44.0	41.9	83
28		30.163	41.5	2	1 cir-st	37.3	30.3	39	+30	30.191	49.4	0	0	43.4	37.4	51
29		30.344	43.3	1	3 cir-st cir.	48.2	39.5	39		30.300	49.0	1	10	45.8	38.3	43
30		30.132	46.2	0	10	48.8	46.0	80		30.028	52.8	1	10	59.5	56.0	79
Sum		868.491	1308.9	86	171	1388.6		1537		867.054	1454.9	79	153	1458.0		1593
Mean		29.948	45.1	3.0	5.9	47.88		53.0		29.898	50.2	2.8	5.5	50.27		54.9
Red. to 32°		29.904								29.840						

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April 1867

Therm Guys	Date	Ext. Therm. No 4. 7 AM	2 PM	9 PM	Mean	Read at 10 AM Max.	Min.	Mean		
00	1	35	41.8	36.1	37.3	52.9	33.2			large gauge
47	2	37	48.7	40.9	42.2	46.2	33.8		Rain to 10 AM 20.12.00	40.5
21	3	36	46.5	39.7	40.7	48.8	34.2			
36	4	33	60.9	49.8	47.9	50.0	29.8			
99	5	39	37.5	36.0	37.5	61.3	36.8			
	6	35.5	42.0	36.4	38.0	43.0	32.4		7.00	
31	7	37	59.3	48.7	48.3		read at 2 31.2			
13	8	41.5	61.1	45.1	49.2	59.5 read at 10	40.7			17
27	9	49	51.5	42.0	47.5	61.3	37.4			
55	10	38	53.5	46.8	46.1	54.0	33.5			
38	11	40	51.0	40.9	44.0	55.7	39.7		11.00	21.5
44	12	34	53.8	41.5	43.1	57.8 4 PM	30.0			
81	13	37	38.3	31.3	35.5	53.5 4 PM	35.0			
18	14	29	45.3	[37]	37.1	40.6	24.7			
76	15	41	70.8	58.5	56.8	56.5	36.7			
10	16	58	58.7	54.2	57.0	71.3	53.7			
70	17	44	41.4	39.0	41.5	66.2	40.8		Rained all night of 16th 31.00	60
34	18	44.5	47.8	41.2	44.5	49.7	36.3		4.00	11
29	19	37.3	55.4	43.2	45.3	49.5	34.2			
71	20	44.5	55.9	46.3	48.9		37.9			
14	21	50	58.8	47.1	52.0	58.5	45.2		15.50	36
70	22	45.2	59.5	50.3	51.7	60.5	37.2			
38	23	43	53.2	40.2	45.5	61.2	40.0		19.50	39
76	24	39	35.3	35.7	36.7	54.7	34.3		Rain and snow during a considerable part of the day	
37	25	38.2	55.5	44.0	45.9	47.7	33.8		Snow & rain 8.00	18
32	26	37	54.3	44.8	45.4	56.2	33.9			
33	27	42	51.8	41.0	44.9	55.5	35.2			
51	28	32.5	43.8	36.8	37.7	58.0	29.2		3.50	13.5
43	29	35.5	44.5	41.9	40.6	48.5	29.7			
79	30	45	57.1	53.7	51.9	48.8	39.8		5.50	2
93		1197.7	1535.0	1290.1	1341.0	1527.4	1070.3		125.00 = 2.in 08	258.5
4.9		39.9	51.2	43.0	44.7	54.6	35.7			

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The species of cloud entered in the order of their prevalence.

May 1867

	10 AM								4 PM							
Date	Error of time	Barom.	Att.	Wind	Clouds	Dry	Wet	Rel. Hum by Guyot	Error of time	Barom.	Att.	Wind	Clouds	Dry	Wet	Rel Hum by Guyot
1		29.606	55.0	2	10 raining	61.8	61.0	95		29.443	54.5	1	10 fine rain	59.4	58.9	97
2		29.872	51.2	3	0	52.4	43.4	42		29.988	56.0	2	7 cir-cu cu.	56.2	43.7	27
3		30.406	46.5	1	8 cir-cu.	42.4	34.3	29		30.410	51.0	2	0	41.0	35.3	51
4		30.515	44.5	2	0	44.2	36.0	36		30.450	50.0	3	2	41.9	34.9	42
5		30.288	45.7	0	6 cir-cu	45.8	40.3	58	+30	30.158	50.2	3	1 cir-cu	52.8	43.5	40
6		30.082	48.5	1	7 cir-st. cir-cu. thin	57.2	50.2	58		30.014	52.9	1	9 various	60.0	47.5	32
7		29.900	50.5	1	10	50.9	49.0	86		29.850	53.7	1	10 mist	46.5	46.2	98
8		29.460	49.3	2	10 raining	48.6	48.6	100		29.300	51.2	3	10	55.4	54.5	94
9		29.306	48.5	4	10	46.9	45.5	89		29.407	51.3	4	9 cu. nimb cir-cu.	56.5	48.5	52
10		29.674	51.5	3	3 cir-cu cu cir-st cir	57.3	49.5	53		29.652	56.3	1	6 cir-cu cu	62.2	50.7	39
11		29.789	53.0	1	0	59.8	49.2	45		29.776	59.0	2	6	64.2	49.5	26
12		29.892	53.8	3	2 cu.	58.4	47.4	37	+45	29.913	56.5	3	3 cu cir-cu	56.0	45.0	35
13		30.050	51.8	1	0	55.5	46.0	42		29.893	58.5	1	4 cir-st cir cu. cir.	64.3	50.8	32
14		29.615	53.8	1	10	53.0	51.2	88		29.583	56.1	1	10	51.6	49.8	87
15		29.550	52.5	1	9 cu cir-cu	54.7	50.7	74		29.500	57.0	1	10 cu	54.2	50.7	77
16		29.638	54.0	2	4 cu-st cu cir-st	55.7	48.2	54		29.686	57.5	2	6 cu	59.0	49.8	47
17		29.833	55.0	2	9	58.0	49.0	48		29.782	59.3	1	10	58.0	51.7	62
18		29.858	54.7	3	7 cu cir-cu cu-st	57.5	49.5	52								
19		30.080	53.6	1	8 cu	51.6	44.6	53	+30	30.018	59.0	2	9 cu cir-cu	52.8	47.0	61
20		29.956	53.7	0	10 raining	54.2	52.2	87		29.887	55.0	0	10	52.8	50.3	83
21		29.894	53.0	1	9 haze cir-st cu	55.0	50.5	71		29.852	59.	2	10 haze	51.9	48.2	75
22		29.600	52.0	6	10 raining	45.7	45.1	95		29.533	51.3	3	10	46.9	46.1	93
23		29.660	51.8	2	5 cu	60.0	53.2	61		29.650	56.0	3	3 cu nimb	63.0	53.2	61
24		29.857	55.2	2	8 cu cir-cu	59.0	50.2	49		29.900	59.0	2	7 cu cir-cu	60.3	50.5	45
25		30.134	55.3	2	0	67.7	56.1.	44		30.680	62.	4	3	69.0	55.6	38
26		29.954	57.1	7	10 light rain	61.5	59.5	88	+30	29.878	61.3	3	10	67.2	62.7	76
27		30.025	59.7	0	2 cu	62.1	55.6	64		30.020	66.0	1	4 cir haze	70.0	59.5	50
28		30.120	62.8	0	6 cir-haze	67.1	55.9	45								
29		29.950	62.0	1	10	60.0	57.2	83		29.950	62.5	2	10	54.4	51.5	81
30		29.935	57.5	1	10	57.8	55.0	82		29.869	64.0	1	10	58.0	55.1	82
31		29.817	57.2	3	10 raining	53.2	53.2	100		29.878	60.5	4	1 cu.	63.8	55.2	83
		926.316	1650.7	59	203	1715.0		2008		865.920	1646.6	59	200	1749.3		1738
Mean		29.881	53.2	1.9	6.5	55.32		65		29.859	56.8	2.0	6.9	56.43		60
Red to 32°		29.815								29.783						

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May 1867

	External Therm. No. 4.				Read at 10 A M					
Date	7 AM	2 PM	9 PM	Mean	Max.	Min	Mean			
1	60	59.8	57.9	59.2	62.0	48.5				large gauge
2	46	56.6	45.5	49.4	62.1	43.2		Rain to 10 AM	4.5	13.5
3	36	42.0	37.5	38.5	57.8	34.9				
4	35.5	43.2	37.5	38.7	45.1	28.1				
5	40	57.1	44.3	47.3	53.2	30.8				
6	46	63.3	49.0	52.8	58.3	40.7				
7	49	49.6	45.0	47.9	64.8	44.4				
8	47	52.8	49	49.6	52.7	43.4			30.75	54
9	46	54.5	49.3	49.9	57.3 9½ PM	44.7			19.75	56
10	50	62.5	55.1	55.9	65.0 9 PM	42.5 10 A.M.	53.8			
11	50.5	64.6	52.5	55.9	65.7	42.1	53.9			
12	50	57.2	47.0	51.4	60.0	43.2	51.6			
13	46.5	63.8	52.5	54.3	[65]	39.2				
14	49.5	53.2	45.2	49.3	55.0	46.7	50.8		34	78
15	46	63.5	53.8	54.4	64.1	43.7	53.9		3.75	8.75
16	51	59.3	52	54.1	59.8	46.4	53.1		12	24
17	51.5	60.9	50.3	54.2	62.2	45.8	54.0			
18	51.5	57.9	50.2	53.2	59.0	43.8	51.4		4	8
19	46	54.9	50.2	50.4	58.0	40.2	49.1			
20	52	53.5	49.5	51.7	55.7	47.0	51.4			
21	46	55.0	47.0	49.3	57.8	43.1	50.4		6	12
22	49.5	46.2	45.7	47.1	49.3	43.1	46.2			
23	47.5	63.6	51.2	53.1	65.1	43.2	54.2		21.5	41
24	51.5	61.4	52.1	55.0	62.7	45.0	53.8			
25	51.	71.8	57.2	60.0	72.3	42.7	57.5			
26	57.5	70.7	63.0	63.7	71.2	55.4	63.3			
27	[57]	69.2	64.0	62.4	71.7	52.3	62.0		35.5	72.75
28	61	66.8	63.7	63.8	69.3	52.2	60.8			
29	59.0	59.7	50.1	56.3	63.9	57.2	60.6		1.5	3.25
30	53.0	63.1	55.0	57.0	66.3	48.2	57.2			
31	54.5	63.6	57.5	58.5					4.5	9.5
	1537.5	1821.3	1576.8	1645.3	1832.4	1321.7			177.75	380.75
	49.6	58.8	50.9	53.1	61.1	44.1			= 2.96	

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June 1867

	10 AM							4 PM						
Date	Barom	Att	Clouds	Wind Direction	Miles per hour	Dry	Wet	Rel Hum Guyot	Barom	Att	Clouds	Wind Direction	Miles per hour	Dry	Wet	R H Guyot
1	30·134	60·0	4 cir. haze			68·8	59·8	56	30·090	66·2	8 haze	S E by E	4	72·1	61·0	50
2	30·098	63·0	3 cir-st cir-cu	S S W	8	71·3	60·8	51	30·012	66·0	10	S S W	16	69·0	60·8	60
3	29·724	64·0	10 cir cu nim	S S W	12	69·2	66·0	84	29·670	69·1	10	S W		70·0	66·5	82
4	29·688	66·2	5 cu	W S W	12	70·2	61·0	56	29·740	67·2	3 cu	W	17	71·2	60·1	49
5	30·004	65·8	7 cu	N E	11	65·0	57·5	61	29·982	70·5	1 cu cir	E S E	5	66·1	58·1	59
6	30·028	66·1	6 cir	S	3	76·0	65·0	52	29·957	79·5	4 cu	W S W	3	83·6	69·6	47
7	29·960	73·5	1 cir-st	S W	8	79·8	70·8	62	30·047	73·5	10	N N E	11	61·0	57·0	77
8	30·180	62·5	10	N E	13	57·1	53·9	80	30·162	59·0		N E	11	52·0	48·2	74
9	30·125	55·5	9	N E by E	16	57·4	48·6	49	30·125	60·0	1 cir-st cir-cu	E by N	10	57·3	48·1	46
10	30·300	56·8	1 cu	E	12	59·2	48·2	47	30·300	62·0	0	S E by E	11	57·5	47·0	39
11	30·288	57·5	0	W S W	4	65·0	55·0	49	30·242	66·2	3 cu cir	W S W	3	74·5	62·0	46
12	30·148	61·7		S W	7	68·8	56·3	41	30·039	69·8	5 cir cir-cu	S by W	20	73·3	63·8	57
13	29·990	66·5	2 cir	W S W	3	76·8	69·3	67	29·935	72·2	2 cu	N W by W	9	82·5	67·2	41
14	30·231	66·7	0	N E	5	66·7	53·7	37	30·197	71·5	0	E	9	67·1	58·1	55
15	30·128	67·0	9 thin	S S W	7	74·9	65·9	60	30·062	76·5		S S E		77·0	69·0	65
16	30·073	72·2	10	S W by S	9	74·3	69·3	77								
17	30·220	71·0	10	N E	5	68·0	66·0	90	30·192	72·0	10 rain	E N E	3	66·2	65·8	98
18	30·106	69·3	10 rain	S	10	73·8	71·9	90	30·030	75	10		23	74·0	69·8	80
19	30·120	66·3	9	N W	12	64·5			30·108	69·8	4 cu	N N W	10	72·6		
20						73·2	64·5	60		64				72·5	62·3	53
21	30·308	67·2	10 raining	N N E	2	66·			30·232	71·5	6	E S E	11	67·8	60	61
22	30·250	69·0	0	S	7	76·0	66·9	60		71·4		S S W		78·0	62·0	36
23		68·0		S S W		72·3	62·5	54								
24	29·978	71	5 cir	S S W	2	79	73	74	29·998	78	2	E S E	7	74·8	68·5	71
25									30·094	64·0	10	E N E	12	58·0	57·0	94
26	30·208	61·0	0	E N E	7	62·0	54·0	56	30·226	64·0	0	E N E	11	60·5	60·9	
27	30·090	67				61·0	60·8	99		64·0		N		63·3	64·0	
28		69·0		W S W		89·0	72·0	41								
29	30·166	69·0	2	E N E	4	75·0	62·0	44		73·0				72·5	60·7	47
30		66·5							29·768	79	3	S W		81·6	71	57
Sum	752·545	1635·8	123		179	19603		1597/69	2·208	1602·5	102		206	18760		1424
Mean	30·102	65·4	5·3		7·8	70·01		61	30·096	69·7	4·9		1·0	69·48		60
Red to 32°	30·003								29·986							

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June 1867

	Ext. Therm. No 4								
Date	7 AM	2 PM	9 PM	Mean	Min Read at 10 AM	Max Read at 9PM			
1	55·5	71·5	62·8	63·3	46·5	74·2	6 oz.	large gauge	11·5
2	59·5	73·2	62·0	64·9	46·5	74·0			
3	63	75·1	64·0	67·4	60·0	76·0	9·5		56
4	66	72·1	60·9	66·3	59·7	73·1			
5	62·5	65·7	58·0	62·1	54·8	70·2			
6	61	83·7	73·1	72·6	52·7	84·8			
7	71·5	78·5	58·6	69·5	65·3	87·7			
8	53·0	55·5	51·7	53·4	55·2	59·5	17		31
9	54·0	60·1	50·7	54·9	50·0	60·5			
10	56	58·1	50·2	54·8	43·3	60·5			
11	55	74·3	62·2	63·8	44·1	75·0			
12	60	74·3	65·8	66·7	50·2	74·8			
13	66	82·0	69·5	72·5	50·2	84·2	less than could be measured		1·5
14	67	67·3	61·3	65·2	60·1	70·1	7		12·75
15	64	80·5	69·3	71·3	53·0	81·4			
16	72	82·0	70·0	74·7	53·0				
17	69·0	72·2	63·3	68·2	65·5 2 PM	82·3	9·5		19
18	70	77	68·5	71·8	60·5	77·5	11		18·5
19	64	73·5	65·0	67·5	61·5	77·2	17·5		50
20	62·0	78·3	66·0	68·8					
21	64	80?	65·5	69·8	53·1	75·5			
22	64·5	80·0	65·0	69·8	56·0	76·0	6·5		
23	72·5	85?	69·0	75·5		4 PM			
24	71	80·5	62·0	71·2	53·0	82·0			
25	59	62·0	52·3	57·8		82·5	Light rain		1·5
26	56·5	63·0	58·0	59·2					
27	60·5	63·9	63·0	62·5	57	63·5	16·5		36·5
28	70·5	83·5	73·5	75·8		10 AM	4·5		5
29	67·	74·0	65·0	68·7	56·5	83·5			
30	66·5	85·3	76·0	75·9					
	1904·0	2212·1	1902·2	2005·9	1307.7	1805.9	105 oz = 1·75 inches		243·25
	63·5	73·7	63·4	66·9	54.5	75.2			

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July 1867

	10 A M							4 P M						
Date	Barom.	Att.	Clouds	Wind.	Dry	Wet	Rel. Hum by Guyot	Barom	Att	Clouds	Wind	Dry	Wet	Rel. Hum by Guyot
1	29.790	73.9	6 cir.	NNW 10	78.0	67.0	54	29.838	70.9	2	NNW	71.0		
2				WSW	73.0	61.0	46				WSW	79.5	63.0	35
3				WSW	77.0	64.3	46	29.880	78.0		WSW			
4	29.820	76	5 cir	SSW 9	82.5	73.5	63	29.802	80	10 cu cir nim	NW 3	74.9	69.5	75
5				ENE	61.5	59.3	87				NNE	62.0	59.9	88
6	29.930	64.5	10	NNW 0	64.0	63.0	94	29.786	70	8	SE 0	73.0	67.5	74
7	29.804	72.0	1	NW 15	77.5	67.0	55	29.862	72.0					
8	29.982	73.0	10	NW 6	75.5	64.5	52				NW	79.6	63.0	35
9								30.000	74.5	4	E 2	69.8	61.3	59
10	30.102	68.3	2 cu str	NNW 2	70.8	63.8	66	30.100	74.0	4 cu cir-cu	ESE 3	70.0	62.3	63
11	30.073	70.3	4 cir cu	SW 9	76.5	66.5	57	29.982	76.0	4 cir	S 13	78.5	67.2	53
12	29.900	73.7	10	S 8	77.5	72.0	75	29.890	75.5	10	SSW 1	72.2	71.2	95
13	30.090	65.3	9	N 7	63.0	56.5	64	30.168	71.0	4	ENE 4	67.0	59.8	64
14	30.349	64.5	2 cu	NNE 4	70.8	60.0	50	30.330	72.0	0	SE 5	72.0	59.0	42
15	30.249	66.7	0	N 0	73.2	62.7	53	30.177	74.5	1 cu	E by S 6	76.9	60.9	35
16	30.062	69.0	1 cir	SW 5	73.9	62.8	51	29.996	76.0		SW 7	77.5	64.3	45
17	30.062	69.0	0	NW by W 14	73.5	58.0	45	30.049	72.5	5 cu cir	WNW 9	75.0	60.5	38
18	30.100	66.0	9	NNW 6	65.5	55.5	49	30.088	71.0	9	NNE 6	67.0	58.0	55
19	30.034	64.5	8 cu cir	N by E 6	65.5	58.8	64	30.000	66.5	5 cu cir	NNE 11	63.2	59.4	78
20	29.918	61.5	10	N by E 10	58.2	57.5	95	29.832	61	10 raining	NNW 7	58.0	58.0	100
21	29.671	57.3	10 raining	N 13	55.3	55.3	100	29.695	59.0	10 raining	NNE 10	57.1	56.8	98
22	29.700	61.5	8	WNW	67.5	67.0	97							
23	29.907	65.2	0	NW 1	72.5	64.7	63	29.947	73.0	0 very hazy	W 1	79.8	67.0	48
24	29.950	71.0	0	SSW 2 var	80.3	71.3	62	29.863	81.5	0	SW by S 10	86.4	74.0	53
25	29.848	75.7	5 cir cir-cu haze	NNW 1	84.2	73.9	59	29.835	78.8	10 raining	SW 0	67.2	67.0	99
26	29.823	72.5	10	SSE 0	75.2	71.7	84	29.878	69.0	10	NNE 0	64.2	61.5	85
27	30.110	68.0	1 st cir-st.	E 5	68.5	62.0	67	30.104	74.0	9 cu-st cu	S 3	74.0	66.0	63
28	29.987	71.2	9 cu	SSW 3 var	78.3	74.3	82	29.892	80.3	2 cir cu	SW 6 var	84.0	78.3	76
29	29.847	77.5	9	SSW 5	80.1	74.8	77	29.819	76.3	10	SSW 6	77.5	73.0	80
30	30.100	69.0	1 cu	NW 9	68.0	57.5	49	30.108	74	2 cu	WNW 3	73.5	61.0	45
31	30.350	67.5	1 cir-st	E 15	65.4	55.7	50	30.327	71.0	9 cir	E 5	65.3	59.0	66
Sum	809.558	1854.6	141	165	21527		1956	809.248	1972.3	138	121	20161		1747
Mean	29.984	68.7	5.2	6.3	71.76		65	29.972	73.0	5.8	5.0	72.00		62
Red to 32°	29.876							29.853						

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External Therm. No 4.

Date	7 AM	2 PM	9 PM	Mean	Min. 10 PM	Max. 9 PM			
									large gauge
1	78	81·0	64·5	74·5					
2	64	79·5	69·3	70·9					
3	70	86·5	71·5	76·0					
4	76	90·0	71·2	79·1			Thunderstorm about 3 PM wind N & NNW sometimes 40 miles an hour.		
5	62	62·5	60·2	61·6			17·5		31·5
6	60·5	71·0	67·0	66·2			9·5		18
7	74·5	84·5	75·0	78·0			0·25		1
8	72·5	80·5	71·5	74·8					
9	64·0	73·0	63·6	66·9					0·33
10	62·0	75·2	[65]	67·4			4·5		11
11	68·4	82·2	69·5	73·4	58·2	82·7			
12	72·6	73·3	72·7	72·9	66·2	80·8		No 3	
13	59·0	70·0	60·0	63·0	57·7	73·1	47·0	46	88
14	60·5	72·3	63·0	65·3	52·4	72·8			
15	61·0	79·2	67·5	69·2	52·3	79·2			
16	64·5	78·5	68·0	70·3	56·7	80·1			
17	[63]	76·0	67·0	68·7	59·7	77·0			
18	63	72·9	60·2	65·4	55·5	73·7			
19	58·5	61·5	58·1	59·4	55·0	67·0	2·5	1·75	
20	58	58·0	58·2	58·1	55·5	59·0	35·5	30	62
21	54·5	57·5	56·8	56·3	52·0		88·0	67	137
22	59·5						28·0	22·5	47·5
23	[75]	79·0	71·0	75·0	54·8	80·5	4·5	5	9·5
24	68·5	87·1	75·8	73·1	55·0	87·5			
25	73·5	82·1	68·0	74·5	67·9	86·8			
26	70·5	59·5	63·5	64·5	66·5	78·0	86·0	62	104
27	63·5	72·1	68·5	68·1	57·2	74·5	3·5	3·5	6·5
28	71·5	84·5	77·0	77·7	66·1	85·3		Auroral arch in north at 10½ PM brighter at 12, obscured by clouds at 1	
29	80	78·0	72·9	77·0	74·2	82·8		Aurora at 10½ PM	
30	62·5	72·3	66·2	67·0	57·7	74·3			
31	60·5	66·0	60·0	62·2	54·0	67·0			
	1989·0	2245·8	1997·7	2076·5	1174.6	1462.0	326 oz ·75		516·33
	66·3	74·9	66·6	69·2	58.7	77.0	= 5·45 in.		

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August 1867

	10 AM								4 PM							
Date	Barom	Att	Clouds	Wind	Dry	Wet	Rel. Hum Guyot	Barom	Att	Clouds	Wind	Dry	Wet	Rel. Hum Guyot	Date
1	30·223	64·2	9	NNE 4	66·7	60·7	69	30·158	68·0	10 sprinkle	S 3	65·5	61·5	79	1
2	29·973	67·2	10	SE 0	70·2	69·7	97	29·782	70·0	10 raining	S 7	66·8	66·8	100	2
3	30·032	68·0	10 raining	WSW 0	70·7	69·4	93	30·008	69·0	10 raining	NW 0	67·5	67·0	97	3
4	30·245	68·2	1 cu	NW 0	72·2	67·0	75	30·209	76·2	1 cir cu	ESE 5	74·5	69·0	74	4
5	30·242	72·8	1 cir	NNW 5	76·8	67·2	55	30·234	79·0	5 cir	ENE 1	78·0	68·5	59	5
6	30·273	73·2	10	0	76·0	72·0	82	30·250	79·1	7	ESE 2	74·7	74·3	98	6
7	30·264	75·0	7	SSE 0	77·7	73·2	80	30·210	79·0	4 cir-cu	E 3	74·7	71·2	83	7
8		~~75·0~~		ESE	79·0	72·5	72	30·166	81·0	3 cu	ESE 1	79·5	73·5	74	8
9	30·191	75·2	4 cu cu-st	SSE 0	79·0	74·0	78	30·140	80·0	1 cu cir-cu	E 5	77·0	71·0	73	9
10	30·088	76·7	4 cu	SSW 9	80·8	74·3	72	30·062	81·0	10 rainy hard	WSW 0	67·0	67·0	100	10
11	30·168	71·0	1 cir-st cir	NNW 5	72·0	64·0	62	30·135	75·3	0	0	75·5	62·0	43	11
12	30·150	69·2	0	0	71·8	61·0	50								12
13	29·890	72·0	7	SSW	74·5	68·0	70	29·884	76·7	8 cir	15	75·7	67·7	58	13
14	29·950	73·0	10	5	75·5	71·5	82	29·987	76·2	10	0	76·1	74·1	91	14
15	30·137	73·0	10	0	73·3	71·5	91	30·150	75·0	10 raining	0	69·8	69·0	95	15
16	30·026	69·0	10 fine rain	2	64·8	64·7	100	29·887	69·7	10 rain	3	70·0	70·0	100	16
17	29·800	73·7	5 cu	7	77·0	72·0	77	29·731	75·5	10	6	74·6	70·6	81	17
18	29·913	73·7	0	4	77·8	71·3	71	29·898	82·0	0	8	85·0	76·0	64	18
19	29·948	76·1	4 cir-cu	12	78·5	71·0	68	29·940	81·7	1 cu	10	82·0	72·2	60	19
20	30·035	73·8	5 cir-st	7	74·0	66·0	63	30·010	76·5	6 cir-cu	4	73·5	66·0	65	20
21	30·023	71·6	5 cir	0	73·9	66·7	67	29·981	77·0	1 cu	0	78·8	67·6	54	21
22	30·030	71·0	10	0	71·0	66·5	78	30·034	74·0	10 raining	0	69·0	67	90	22
23	29·930	68·0	10 rain	0	63·5	63·5	100	29·872	68·7	10 rain	7	62·9	62·9	100	23
24	29·905	68·0	10	0	68·8	65·6	82	29·858	75·5	0	0	76·7	70·7	73	24
25	30·050	69·0	0	12	68·3	60·3	60	30·067	72·0	0	6	73·0	62·0	50	25
26	30·232	68·8	0	3	74·2	66·2	63								26
27	30·174	71·2	3 cir	2	75·3	68·0	67	30·108	75·8	0	2	76·3	68·0	63	27
28	30·020	72·5	5 cu	10	76·3	71·3	77	29·904	78·0	2 cir cu	8	77·2	68·7	63	28
29	29·827	73·0	10	0	74·8	72·0	86	29·813	74·8	10	0	74·8	72·0	87	29
30	29·950	68·8	4 cir-cu cu	12	65·7	57·7	59	30·017	73·0	1 cu	13	66·7	54·9	41	30
31	30·328	62·3	6	0	61·8	53·8	56	30·200	69·2	4 thin cir.	4 var	65·2	55·2	49	31
Sum	902·017	2229·2	165	99	22619		2302	870·695	2188·9	154	113	21280		2164	
Mean	30·067	71·0	5·5	3·2	72·96		74	30·024	75·5	5·3	3·9	73·38		74	
Red to 32°	29·953							29·898							

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August 1867

		Ext. Therm. no 4				Min.	Max			
Th. Hygt.	Date	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.			
79	1	56	75·5	62·5	64·7	49·7			No 3	large gauge
00	2	65·5	72·3	65·7	67·8	60·5	74·0	27 oz.	27·5	52·5
77	3	69	[75]	66·2	70·1	60·5	71·2	121·5	91	212
74	4	65·0	79·0	69·5	71·2	60·5	79·2	37·5	38·5	68
59	5	71	80·0	72·5	74·5	60·4	80·5			
78	6	71·5	84·0	72·8	76·1	67·2	84·0			
33	7	72·0	78·6	73·0	74·5	67·2		2·	3·25	13
74	8	73·2	84·0	71·5	76·2		83·5			
73	9	72·0	79·8	71·5	74·4	66·3	83·0			
00	10	73·5	86·3	67·8	75·9	67·0	86·2			
43	11	66·0	76·1	67·2	69·8	62·3	75·8	38·5	36	68·5
	12	62	[70]	66·0	66·0	55·7				
58	13	66·5	77·5? Probably	66·3	70·1					
91	14	70·5	78·1	73·5	74·0	65·8	79·8			
95	15	71·6	74·3	67·1	71·0	68·2	76·0	40·5	80	41
00	16	64·7	66·0	70·2	67·0	67·8	71·9	33	32	67·5
81	17	70·5	75·3	69·3	71·7	62·2	79·2	58·5	56	128
64	18	70·2	85·0	76·1	77·1	66·0	85·8	·75	·25	2·5
60	19	73·5	82·8	74·2	76·8	66·2	85·8			
75	20	67·5	76·6	69·0	71·0	63·2	76·4			
54	21	65·5	79·8	67·1	70·8	61·0	79·8		Aurora this evening through clouds	
70	22	65·7	73·0	66·5	68·4					
10	23	62·5	65·5	61·3	63·1	60·9		69·5	70	136
73	24	64·5	76·4	70·5	70·5	60·3	77·0	11	7·5	14·5
50	25	65·0	72·2	65·2	67·5	62·5	73·2?			
	26	[65]	78·2	67·1	70·1	55·8	78·3		Aurora in evening	
53	27	62·0	79·3	66·0	69·1		79·2			
63	28	69·5	80·5	69·0	73·0	63·1	81·0			
37	29	73·0	75·2	62·3	70·2	67·7	75·7			
71	30	62·0	[67]	56·0	61·7	56·9	67·2	37·	36·5	78·5
19	31	50·2	64·6	55·0	56·6	45·7	67·0			
64		2076·6	2367·9	2097·9	2180·9	1664·6	1950·7	476 oz ·75 = 7 in 95	478 oz 5	872 oz 0
4		67·0	76·5	67·7	70·4	61·6	78·0			

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September 1867

	10 A M							4 P M						
Date	Barom	Att	Clouds	Wind	Dry	Wet	Rel. Hum Guyot	Barom	Att	Clouds	Wind	Dry	Wet	Rel Hum Guyot
1	29.940	63.5	10	0	62.0	61.0	94	29.780	65.0	10	4	61.3	60.3	94
2	30.117	63.8	5 cir cir-cu	6	66.0	59.3	65	30.168	70.5	10	0	68.8	62.3	67
3	30.250	67.2	3 cu	0	68.0	63.7	78	30.220	71.0	2 cu	1	65.0	61.7	82
4	30.100	67.0	9	0	69.0	65.5	82	30.064	72.2	2 cu	0	75.2	68.7	70
5	30.167	68.5	10 rain	0	63.8	62.8	94	30.133	69.0	10	0	64.0	63.8	99
6	30.096	[72]	5	0	72.5	68.0	78	30.052	[72]	3	2	74.0	67.0	68
7	30.195	70.0	10	7	67.0	62.0	74	30.263	71.0	10	4	67.0	60.0	64
8	30.460	65.0	1 cir	13	62.0	56.0	66	30.390	68.0	9 cu	8	62.0	58.0	77
9	30.247	63.0	10	0	61.2	59.4	89	30.140	66.5	10	0	63.3	61.3	89
10	29.922	65.5	10	1	66.2	63.4	85	29.878	70.2	8	12	70.5	64.0	68
11	30.169	61.0	0	6	58.0	48.5	45	30.158	66.0	0	0	60.5	52.0	52
12	30.132	60.5	2cu cir	4	63.0	55.5	59	30.050	68.5	0	0	67.8	59.8	60
13	29.930	64.0	0	10	69.8	64.8	75	29.798	73.5	3	9	74.6	67.5	68
14	30.169	62.0	0	12	54.0	44.5	40	30.220	65.0	1 cir	10	62.0	49.5	35
15	30.497	56.0	5 cu	2	56.5	50.0	60	30.450	64.5	1 cu	0	59.2	50.2	49
16	30.381	57.3	10	5	60.2	55.2	71	30.269	63.5	10	0	65.2	59.7	71
17	30.250	64.7	4 thin cir	2	73.2	67.7	74	30.333	68.5	10	2	63.0	60.5	86
18	30.281	64.0	10	5	67.5	64.5	84	30.111	69.8	0	9	76.8	70.8	73
19	30.212	68.2	10	7	64.2	58.2	68	30.200	69.0	0	3	64.0	58.0	68
20	30.173	62.0	3 cir cir-st	5	66.7	58.7	60	30.046	69.8	0	13	72.5	66.5	71
21	30.160	65.5	4 cir-cu cir-st	9	65.5	56.5	54	30.150	69.2	9 cir-cu	0	62.5	55.0	59
22	30.126	61.2	0	0	62.0	55.5	64	30.024	67.5	0	3 var	66.0	58.0	63
23	30.331	57.0	0	13	49.5	42.5	51	30.367	61.0	0	6	55.8	45.8	40
24	30.479	53.5	0	0	55.0	48.0	56	30.375	62.5	0	12	62.5	53.5	51
25	29.980	58.5	4 cir cir-cu	16	65.0	57.0	58	29.860	64.0	10 rain	0	62.3	59.8	86
26	29.940	60.0	3 cir	22	61.0	52.5	53	29.928	60.8	2	20	57.5	49.1	50
27	30.008	55.0	0	2	59	50	48	29.985	63.2	0	5 var	66.5	55.5	45
28	30.020	56.8	0	2	60.5	54.0	63	29.965	65.5	0	0	68.2	57.2	47
29	29.848	62.5	4 cu	12	68.5	63.0	72	29.718	69.8	0	6	71.8	62.8	58
30	29.748	55.0	10	16	40.8	39.8	91	29.782	51.0	10	5	42.6	40.5	83
Sums	904.328	1870.2	142	177	1877.6		2051	902.877	2008.0	130	134	1952.4		1993
Means	30.144	62.3	4.7	6.0	62.59		68	30.096	66.9	4.3	4.5	65.08		66
Reduced to 32°	30.053							29.993						

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1866phae.proj..379.

September 1867

Date	Excl. Therm. No 4 7 A M	2 P.M	9 P.M	Mean	Min. Read at 10 A M	Max. Read at 9 P M		No 3		
1	58·0	61·8	58·8	59·5	51·1	62·5				Aurora (faint) in evening large gauge 2
2	59	72·0	64·4	65·1	54·8	72·3		0·25	0·5	
3	63·5	67·0	60·7	63·7	61·5	69·1				
4	63·5	76·1	68·1	69·2	59·8	76·2				
5	66·0	65·2	66·1	65·8	62·8	69·8				
6	63	[65]	64·5	64·2	60·5	76·0		4·5	5	9
7	67·5	69·5	64·1	67·0	62·8	73·7				
8	60·5	64·0	57·9	60·8	57·0	64·3				
9	57·0	63·5	62·8	61·1	55·2	65·3				
10	64·0	76·0	61·3	67·1	60·7	76·0		2·5	2	5·5
11	51·0	62·5	50·4	54·6	47·8	62·0				
12	49·0	68·6	56·7	58·1	44·2	69·0				
13	[57·5] rejected in mean				52·2	78·0				
14	53·5	62·0	50·7	55·4	52·0	69·0				
15	42·5	62·2	50·0	51·6	39·2	62·5				
16	47·5	66·3	61·5	58·4	42·7	67·0				
17	62·5	68·5	60·5	63·8	59·8	74·0				
18	62·7	76·7	70·0	69·8	58·8	78·8				7·75
19	68·0	65·0	55·6	62·9	63·0	71·3		3	3·5	Aurora at 10 P M
20	55·0	74·4	69·0	66·1	49·7	74·5				
21	59·5	66·2	57·0	60·9	57·9	71·0				Aurora
22	49·7	66·9	58·0	58·2	47·2	68·2				Aurora
23	45·5	55·1	47·4	49·3	44·0	58·0				Aurora at midnight
24	38·0	64·2	51·5	51·2	35·3	65·0				
25	52·5	67·9	58·0	59·5	48·2	69·7				Aurora at 11 P.M. bright and flashing at 12
26	53·0	60·1	[57]	56·7	57·5	61·5		3·5	3	
27	54·0	66·0	53·5	57·8	41·5	67·2				
28	45·3	69·0	56·5	56·9	42·5	70·0				Aurora
29	57·5	73·3	60·3	63·7	53·0	74·0				Auroral arch at 8½ P M
30	45·0	38·2	40·3	41·2	40·5	[60·8 set last night]		16	15	A little snow about 1 P M.
	16 13·7	1913·2	1692·6	1739·6	1557·2	2076·7		29·75	in 0·50	25·5
	55·6	66·0	58·4	60·0	51·9	69·2	mean 60·5		29·0z·0	49·75

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	10 A M							4 P M						
Date	Barom	Att	Dry	Wet	Rel. Hum Guyot	Clouds	Wind	Barom	Att	Dry	Wet	Rel. Hum Guyot	Clouds	Wind
1	29·865	48·2	47·3	37·8	32	0	23	29·820	57·2	57·0	44·0	25	1 cir-cu	
2	29·770	55·0	60·0	50·5	47	0	5	29·640	63·0	68·2	56·2	42	4 cir cir-cu	4 var.
3	29·750	60·3	61·0	52·0	50	1 cu	18	29·835	61·7	59·0	49·0	43	5 cir cir-cu	9
4	30·266	51·2	49·0	42·0	50	8	4 var	30·274	58·0	50·5	44·5	59	6	10
5	30·062	54·5	51·5	51·0	43	10 rain	10	29·800	57·2	57·8	57·8	100	10 rain	0
6	29·952	56·1	51·3	44·8	56	2 cu cir	20	30·075	56·8	48·5	41·5	60	8 cu	20
7	30·235	50·3	46·0	38·0	40	0	18	30·262	54·5	49·5	40·5	38	0	18 est.
8	30·375	49·2	50·0	42·0	45	0	10 est	30·280	55·3	55·5	45·5	39	0	12 est
9	30·148	53·0	51·5	45·0	56	3 cir-st cir	0	30·017	59·2	54·5	48·5	62	6 cir-st cir	anemom. taken down for repairs
10	29·731	57·5	61·3	55·8	69	5 cir		29·680	62·7	63·0	54·5	54	2 cir-st	
11	29·800	58·2	53·5	52·0	90	10		29·800	57·5	51·5	51·0	96	10 rain	
12	29·772	51·5	44·5	44·5	100	10 raining	4 est	29·785	51·5	46·0	44·0	84	10	2 est
13	29·880	52·0	48·0	42·5	60	1 cu	8 est	29·879	54·7	50·8	44·3	55	9 cu	4 est
14	29·960	50·2	51·3	45·8	63	0	3 est	29·930	57·0	57·5	48·0	44	1 cu	4 est
15	29·988	51·0	54·8	49·8	68	8 cir-st	4 est	29·880	56·2	61·0	53·0	55	9 cu	2 est
16	30·206	51·2	51·5	47·5	73	10	5 est	30·236	56·0	53·7	50·2	77	1	1
17	30·175	53·0	57·0	53·0	75	0	8 est	30·048	61·2	66·2	59·2	64	3 cir	13
18	29·907	59·5	67·0	60·0	64	5 cir-cu	10	29·848	65·5	73·0	63·0	54	0	5
19	30·066	61·8	65·5	58·0	61	0	3	30·086	68·8	74·0	60·5	41	1 cir	4
20	30·368	63·5	61·0	55·5	69	6 haze	6	30·393	65·7	57·2	52·7	72	5 haze	11
21	30·382	59·8	52·5	51·5	93	10	1	30·312	60·0	54·5	53·0	90	10	2
22	30·137	60·2	62·0	60·5	91	10	5	29·992	64·5	68·5	64·5	80	7 cu	6
23	30·228	53·8	43·0	37·0	51	7	22	30·300	55·5	44·5	37·0	42	0	16
24	30·520	48·5	42·5	36·5	51	0	7	30·481	55·3	46·0	39·5	51	0	5
25	30·495	47·7	44·8	39·8	61	3 cir-cu	5	30·430	56·7	51·5	44·0	50	1	5
26	30·365	50·0	48·8	43·3	60	0	0	30·318	57·5	52·0	47·5	69	5 cir-cu	5
27	30·347	50·0	50·0	44·5	62	0	3	30·333	59·5	57·5	48·0	44	0	5
28	30·440	50·2	48·8	45·8	78	10 thin	0	30·393	58·0	53·2	48·7	70	10 haze in zen	6
29	30·154	51·2	50·5	49·5	93	10 rain	7	29·965	53·5	51·0	50·5	96	10 rain	12
30	29·630	51·7	49·5	49·0	96	10 fine rain	10	29·585	53·0	50·0	50·0	100	10	10
31	29·692	54·0	53·0	49·0	73	10	6	29·682	56·0	56·7	53·0	77	10	3
Sums	932·666	1664·3	16284		2020	149	225	931·359	1809·2	17398		1923	147	194
Means	30·086	53·7	52°53		65	4·8	7·8	30·044	58·4	56°12		62	4·7	7·2
Red. to 32°	30·018							29·964						

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	External Therm. No 4.				Min	Max			
Date	7 AM	2 PM	9 PM	Mean	Read at 10 AM	Read at 9 PM		No 3	large gauge
1	38·0	57·0	48·1	47·7	35·8	57·8	Rain 10·	9	13
2	46·0	69·3	60·2	58·5	43·2	70·8		Aurora	
3	59·0	60·7	49·8	56·5	56·0	61·7		Aurora through clouds	
4	38·0	57·8	50·0	46·6	36·8	53·0			
5	49·0	55·7	64·0	56·2	47·8	65·0	4·5	4·5	10
6	48·0	53·8	44·5	48·8	46·8	[55]	11·5	10·7	22·0
7	40·0	50·5	40·2	43·6	36·8	51·0			
8	37·6	56·1	47·5	47·0	34·8	56·7		Aurora in NE at 2 AM	
9	42·0	58·4	50·5	50·3	40·8	61·3			
10	55·3	66·8	55·5	59·2	48·3	67·0	0·5	0·5	2·5
11	54·0	52·9	51·2	52·7	50·8	55·7			1
12	46·0	45·6	45·5	45·7	43·3	46·3	16	12	28·5
13	46·0	51·5	46·7	48·1	43·8	52·2	4·5	4	8
14	38·0	58·0	47·2	47·7	36·3	58·0			
15	36·0	62·8	48·6	49·1	35·0	63·5			
16	43·5	55·5	44·5	47·8	40·3	55·9	3·5	3·5	7
17	45·0	68·0	54·7	55·9	39·1	68·8	·5	·5	1·5
18	51·3	74·1	64·3	63·2	53·8	75·0			
19	55·0	74·5	61·5	63·7	53·3	76·0			
20	51·5	61·8	51·6	55·0	49·8	63·0			
21	52·0	55·3	55·0	54·1	49·7	[56]			0·25
22	58·0	71·5	62·5	64·0	52·1	71·5			
23	43·6	48·0	37·3	43·0	41·8	48·7	9·5	8	16·25
24	30·2	47·5	38·0	38·6	28·8	51·0		Faint aurora all the evening	
25	30·6	53·0	42·1	41·9	29·0	55·1			
26	38·0	56·1	46·2	46·8	36·9	60·2			
27	38·0	59·5	47·0	48·2	37·0	60·2			
28	36·5	55·9	[45]	45·8	35·7	56·2			
29	45·5	51·8	48·0	48·4	40·0	[52]	2·25	2	4
30	50·0	49·7	51·0	50·2	46·8	[50]	13·4	13·9	22·3
31	48·0	57·1	52·0	52·4	46·2	58·2	11	7	16
	1389·6	1790·2	1550·2	1576·7	1316·6	1832·8	311 oz 25 =	5 in 0·2 | 297 oz 0	551 oz 0
	44·8	57·7	50·0	50·9	42·5	59·1	mean 50·8		

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Date	10 A M.							4 P M						
	Barom	Att.	Dry	Wet	Rel Hum Guyot	Clouds	Wind	Barom	Att	Dry	Wet	Rel Hum Guyot	Clouds	Wind
1	30.034	49.3	43.8	37.8	52	0	12	29.943	56.0	48.0	41.0	49	7 cir	2
2	29.531	52.0	56.7	49.2	55	5 cir	15	29.434	60.0	63.5	53.0	45	6 cu cir-cu st	6
3	30.002	49.5	45.0	38.5	50	2 cir-st cir-cu	5	29.922	54.2	49.0	42.0	50	3 cir-st cir-cu	5
4	29.602	58.0	62.5	58.5	77	4 cu cir cu haze	16	29.834	55.0	48.0	42.0	56	10	10
5	30.298	47.5	41.8	36.3	54	0	4	30.250	53.5	45.5	36.0	29	1 cu cir	10
6	30.104	46.2	42.7	36.2	47	8 cu	10	30.117	48.2	37.7	29.2	28	0	12
7	30.378	35.0	26.5	21.0	35	3 haze	7	30.320	43.0	30.8			9	2
8	30.220	41.8	41.8	38.3	70	10	7	30.081	45.5	48.0	46.0	85	10	10
9	30.067	44.7	43.0	43.0	100	10 fog	0	29.966	53.5	67.5	60.0	62	5 cu	16
10	30.100	53.5	58.0	58.0	100	10 rain	5	30.030	56.5	61.0	60.0	94	9	3
11	30.090	51.5	50.0	48.0	86	9	5	29.974	54.0	52.0	46.2	60	4	0
12	29.645	45.5	41.0	41.0	100	10 fog	9	29.470	46.0	40.0	39.0	91	10	13
13	29.460	39.0	30.8	27.8	68	8 cir-cu	22	29.490	39.1				7 cir-cu	18
14	29.646	36.0	29.5	26.0	62	9 cir-cu	10	29.473	40.5	39.5	37.0	77	8 thin cir-cu	0
15	30.100	37.0	30.0	25.0	46	4 cu cir-cu	14	30.200	39.0	29.5	24.5	45	0	12
16	29.737	36.8	41.0	39.5	87	10 raining		29.676	42.5	43.0	37.5	55	2 cu cir-cu	14
17	29.728	37.0	28.0	23.5	49	3 cir-cu cu	15	29.670	40.5				3 cu-st	7
18	29.786	33.5	19.2	16.2	54	0	22			22.5	18.2	41		
19	30.038	29.0	21.0	18.5	64	0	14	30.100	33.8	20.5	18.0	64	2 cu	15
20	30.220	30.5	32.0	28.0	59	10	7	30.031	35.3	37.3	33.3	62	10	6
21	30.182	38.5	33.5	29.5	61	0	20	30.272	43.0	33.2	29.2	61	2 cir	1
22	30.345	33.5	30.0	25.0	78	10	0	30.277	38.3	38.3	35.3	72	10	3
23	30.212	39.2	42.5	40.5	83	10	5	30.190	44.3	44.5	42.5	84	10	1
24	30.264	42.5	40.8	40.8	100	10 fog	3	30.235	42.2	42.0	42.0	100	10 fog	3
25	30.257	41.5	42.5	42.0	96	10 haze	3	30.168	44.3	45.5	44.0	88	5 cir haze	4
26	29.916	44.7	51.5	51.0	96	10 light rain	5	29.874	48.2	54.0	51.5	83	7 cir-cu	7
27	30.110	42.5	39.2	35.5	66	1 cir	4	30.070	48.0	44.0	38.3	64	3 cir	4
28	29.998	42.0	38.5	37.7	92	10 rain	0							
29	29.967	42.5	42.0	39.5	79									
30								29.623	45.2	24.5	20.0	43	3 cir-cu	
Sums	870.037	1220.2	1124.8		2066	176	239	808.690	1249.6	1108.3		1588	156	184
Means	30.001	42.1	38.79		71	6.3	8.9	29.951	46.3	42.63		64	5.8	7.1
Red to 32°	29.965							29.903						

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Date	Ext. Therm. No 4 7 2 9			Mean	Min Mercury Read at 10 PM	Max Mercury Read at 9 PM					
	7 AM	2 PM	9 PM	Mean						large gauge	No 3
1	41·0	48·7	40·2	43·3	39·2	49·3					
2	49·0	64·7	55·2	56·3	39·0	65·2					
3	38·5	51·0	47·4	45·6	37·3	55·3					
4	59·0	52·1	46·0	52·4	45·1	63·5	Rain	2·5		6	2
5	36·5	47·0	34·0	37·5	30·1	47·5					
6	34·6	43·0	28·5	35·4	32·0	45·2					
7	19·0	31·5	31·5	27·3	18·0	32·0					
8	38·0	48·1	45·0	43·7	30·8	48·7					
9	40·0	67·9	59·5	55·8	37·8	69·6				1	
10	58·0	63·1	59·5	60·2	42·2	63·2		3·6		59	28
11	48·0	53·2	42·1	47·8	47·0	55·0		2·0		40·5	18
12	41·5	42·1	34·5	39·4	33·5	43·0					
13	31·3	31·5	27·5	30·1	29·5	33·8		7		8·5	8
14	24·0	39·0	42·5	35·2	22·8	44·0	Snow	6		1·5	
15	28·0	31·0	23·0	27·3	26·8	31·0					
16	32·3	43·8	36·8	37·6	22·5	44·2					
17	28·7	32·2	28·2	29·7	26·8	37·0	Rain	7·5		16	8
18	18·0	23·3	17·2	19·5	16·0	28·2	Snow	6		8	4
19	14·0	24·0	14·5	17·5	11·6	26·8					
20	22·5	37·2	40·0	33·2	13·5	39·8					
21	34·5	34·1	26·7	31·8	31·1	39·5	S & R	1·5		5	3
22	25·0	37·1	36·7	32·9	20·2	38·7					
23	36·3	47·2	43·2	42·2	33·2	47·2					
24	41·4	43·2	41·5	42·0	40·0	43·2	Rain	2		5	2
25	38·0	49·9	42·0	43·3	36·3	50·2		·75		1·5	0·5
26	47·5	56·2	43·5	49·1	40·7	56·2			Faint aurora at midnight		
27	34·5	46·5	34·5	38·5	33·5	48·0					
28	32·3	40·0	38·6	37·0	31·2	43·9					
29	38·2	44·5	44·7	42·5	36·8			12·5		23·5	12·5
30	36·0	28·5	18·7	27·7				8·5		25·5	8·5
	1060·6	1301·6	1123·2	1161·8	904·5	1289·2		110·25 oz =	1·84 in	201·0 oz	94·5 oz
	35·4	43·4	37·4	38·7	31·2	46·0					

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Att. Therm. assumed as 20 when below 25.

Date	10 A M							4 P M						
	Barom	Att	Dry	Wet	Rel Hum Guyot	Clouds	Wind	Barom	Att	Dry	Wet	Rel Hum Guyot	Clouds	Wind
1	30·328	30·2	16·0	12·5	41	3 cir cir-cu	10	30·343	37·0	21·0	16·5	36	0	2
2	30·180	32·5	28·5	27·8	90	10 snow	3	29·949	35·8	28·5	28·0	94	10	0
3	29·970	33·5	33·0	32·0	89	9	8	29·874	37·8	35·0	30·5	58	1 cu	10
4	29·792	35·8	20·0	17·0	56	0	15	29·760	34·0	20·0	16·0	41	1 cir-st	10
5	29·728	27·5	18·0	16·5	77	8 cir cir-st	7		34·0	26·5	22·0	46		
6	30·052	34·0	34·0	28·5	48	9 cir cir-st	6	29·760	35·2	35·8	32·5	68	10	9
7	29·560	39·8	37·0	30·0	39	5 cu	22	29·652	41·3	32·2	25·2	31	1 cu	20
8	29·950	31·0	17·0	14·0	51	0	15	29·890	35·2	21·0	20·5	93	4 cu	20
9	30·058	below 25	1·0	1·0		0	24	30·050	below 25				0	13
10	29·748	below 25	17·5	17·5	100	10 snowing	4	29·720	28·5	18·0	17·5	92	0	5
11	29·932	29·0	16·0	15·0	83	0	7	29·870	30·0	22·0	19·0	58	2 cir-st	4
12	30·050	below 25	1·0	1·0		10	11	29·914	below 25	4·0	4·0	100	10 snowing	16
13	29·895	below 25				10 snowing	24	29·906	below 25	16·8	15·8	83	9 snowing	22
14	30·181	below 25	8·2	8·2	100	10 snowing	5	30·142	below 25	19·0	17·5	77	10 snowing a little	15
15	29·967	below 25	18·8	17·8	84	10	20	29·817	below 25	20·0	20·0	100	10 snowing	18
16	29·438	26·0	23·8	22·1	77	10	15	29·450	30·0	22·3	19·8	66	1	20
17	30·658	26·0	24·0	20·5	55	9	10	29·571	31·0	29·2	25·2	56	10	8
18	29·831	28·0	22·2	20·0	70	9 cu	13	29·910	32·2	23·5	19·8	52	0	14
19	30·382	below 25	6·8	4·3	42	0	8	30·455	26·0	12·8	10·5	56	0	12
20	30·417	below 25	10·5	10·0	90	10	0	30·099	below 25	24·0	24·0	100	10 snowing	1
21	30·388	29·3	29·8	26·3	62	3 cir cu-st	4	30·408	34·5	32·5	28·0	55	7 cir cir-cu	8
22	30·002	31·7	34·0	34·0	100	10 rain	6	29·630	33·8	35·0	35·0	100	10 fog	5
23	29·539	37·8	37·3	31·8	52	3 cu	20	29·684	38·5	24·3	20·5	51	2 cu	25
24	30·272	28·2	21·5	19·2	72	10	5	30·068	30·0	28·0	26·6	84		
25	30·224	31·8	33·9	32·0	80	10	0	30·150	33·0	36·0	34·0	80		
26	29·730	39·0	46·3	44·2	84	7 cir-cu cu		29·879	46·0	46·0	38·0	40	1	12
27	30·004	38·5	40·2	36·7	69	7 cir st	8	29·714	40·5	44·7	42·7	84	5 cir cirst	15
28	29·782	44·5	43·8	38·3	56	10	15	29·898	47·0	43·0	35·5	40	2 cir	13
29	29·996	36·2	33·5	30·5	71	0	12	30·057	40·2	30·3	26·8	62	1	18
30	30·350	31·7	22·3	19·0	54	9	8	30·332	33·2	22·0	18·0	45	3 cu	23
31	30·532	26·5	11·8	10·1	67	3 cir	1	30·456	31·5	22·5	19·0	52	9 thin	2
Sums	930·936	908·5	707		1959	204	306	898·408	995·2	795		2000	129	340
Means	30·030	29·3	23·59		70	6·6	10·2	29·947	32·1	26.53		67	4·6	12·1
Red. to 32°	30·028							29·938						

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Date	External Therm. No 4				Min	Max				
	7 AM	2 PM	9 PM	Mean	Read at 10 AM	Read at 9 PM				
1	11·5	20·8	16·4	16·2	10·4	27·0			large gauge	No 3
2	23·5	31·7	23·1	26·1	14·0	31·7				
3	25·5	36·1	31·3	31·0	21·2	36·7	6	snow	7·5 snow	5 snow
4	29·0	22·2	16·5	22·6	18·9	22·7				
5	12·3	25·7	24·2	20·7	11·0	26·7				
6	21·2	35·8	43·8	33·6	17·2	46·2				
7	38·0	35·0	26·0	33·0	33·0		2	rain	4	2
8	15·0	21·7	11·2	16·0	13·8	22·7				
9	−1·0	4·5	0·5	1·3	−2·5					
10	10·0	22·2	7·8	13·3	−0·2	21·7				
11	5·5	21·8	12·5	13·3	2·7	22·7	8	snow		7 snow
12	1·0	5·3	5·0	3·8	0·2	6·3				
13	5·2	14·5	12·5	10·7	0·9	16·9	"			8·5 snow (E PA.
14	6·0	18·0	15·5	13·2	5·7	19·2	9 A M snow measured at from 6 to 7 in by			
15	18·0	20·9	20·0	19·6	16·5	21·0				
16	20·6	24·8	21·5	23·0	18·2	27·5	8.	snow		4·5 snow
17	18·0	30·8	28·0	25·6	15·7	31·0				
18	20·0	24·3	13·0	19·1	18·5	27·3				
19	1·8	13·2	5·3	6·8	1·5	13·7				
20	2·7	21·6	27·7	17·3	−1·8	27·8				
21	25·0	35·1	28·5	29·5	−23·2	35·8	7	snow		7 snow
22	32·6	35·7	38·2	35·5	25·7	39·5				
23	35·0	29·2	19·8	28·0	33·8	38·2	35	snow & rain	87·5 s.r.	35 s.r.
24	17·6	28·5	33·0	26·4	16·2	35·0				
25	[32]	38·2	36·3	35·5	21·5					
26	46·0	46·8	38·5	42·8	33·6		17·5	rain	34 rain	16 rain
27	33·5	44·5	49·0	42·3	31·0	50·7				
28	47·8	45·1	33·2	42·0	43·6	45·2	5	rain	9·5 rain	4·5 rain
29	28·0	35·5	25·3	29·6	25·1	37·6				
30	22·5	21·4	18·1	20·7	21·2	22·8				
31	8·0	22·9	19·8	16·9	6·8	23·0				
	611·8	835·7	701·5	716·4	556·6	776·6	88·5 oz		142·5 oz	89·5 oz
	19·7	27·0	22·6	23·1	18·0	28·8	= 5·48 in			

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Date	10 AM							4 PM						
	Barom	Att	Dry	Wet	Rel Hum Guyot	Wind	Clouds	Barom	Att	Dry	Wet	Rel Hum Guyot	Wind	Clouds
1	29.920	30.5	32.9	32.7	98	15	10 rain	29.354	34.2	36.8	36.8	100	15	10 rain
2	29.458	37.0	37.0	34.8	80	10	9 cu	29.540	38.8	37.0	32.5	57	9	7 cu
3	29.710	34.3	36.0	32.0	61	11	8	29.765	40.5	37.8	32.8	54	4	1
4	29.684	35.3	32.3	32.0	96	0	10 snow	29.642	35.0	21.0	21.0	100		
5	30.020	25	13.5	12.2	76	12	0	30.006	28.5	19.8	16.8	55	18	0
6	29.995	25	19.2	16.1	53	16	0	29.960	31.5	26.8	21.3	35	15	1 cir
7	29.986	28.7	24.7	19.7	37	6	0	29.931	37.0	34.8	26.8	27	1	5 cir-cu
8	29.872	33.5	31.6	27.1	54	1	3 cir cir-st	29.770	37.2	35.2	31.4	64	0	10
9	29.566	34.0	29.9	25.9	57	10	10	29.488	34.5	25.7	22.0	55	16	10
10	29.796	below 25	9.8	8.8	79	15	0	29.804	29.5	12.7	10.7	62	16	0
11	29.799	"	15.7	14.0	70	9	0	29.738	32.0	22.2	19.2	59	6	1 cir-cu
12	29.984	"	9.3	8.3	78	14	0	30.016	27.8	12.2	10.2	61	20	0
13	30.160	"	10.0			16	0	30.156	26.5	13.9	11.8	62	11	4 cir cir-st
14	30.348	"	14.7	13.2	73	8	4 cir	30.322	29.2	21.2	18.4	60	1	9
15	30.068	25	16.5	16.3	97	4	10 snow	29.928	28.5	19.5	19.2	95	3	10
16	29.797	25	20.2	19.7	93	3	2 cir-cu	29.718	30.8	29.9	25.9	57	8 var	2. cu-st
17	29.769	below 25	13.0	12.0	90	6	0	29.730	31.2	22.2	19.2	59	4	0
18	29.982	"	15.4	14.5	83	5	0	30.000	29.3	23.5	20.3	58	6	2. cu
19	30.326	"	16.8	15.8	83	2	0	30.329	33.2	24.7	21.2	56	1	3 cir.
20	30.142	27.0	28.8	26.3	72	6	10	30.040	34.0	34.3	32.3	79	6	10
21	29.600	32.5	30.5	30.5	100	16	10 snow	29.434	33.0	25.0	25.0	100	18	10 snow
22	30.278	below 25	21.9	19.4	65	6	0	30.394	37.3	30.1	24.6	42	4	0
23	30.264	24.4	26.2	25.8	95	8	10	29.911	32.5	37.5	37.0	95	13	10 rain
24	29.798	35.7	33.5	28.7	54	20	1 cu	29.788	41.7	33.2	28.4	54	7	3 cu
25	30.000	31.0	23.2	20.8	68	7	5 cir, st	30.010	38.2	27.2	23.2	53	8	7 cir
26	30.074	29.5	26.3	24.7	81	3	10	30.020	31.7	17.5	17.5	100	8	10 snowing
27	29.922	25	15.0	15.0	100	7	10 snowing	29.830	28.0	21.2	21.0	96	3	10 snowing
28	30.026	27.8	18.5	17.5	84	7	10	30.067	30.0	21.5	20.1	80	2	8
29	30.060	28.0	22.3	21.8	93		10	29.856	29.8	23.9	23.9	100	12	10 snowing
30	29.908	29.0	24.3	22.7	79	18	10	29.970	30.0	23.0	20.0	60		
31	30.356	below 25	17	15	67	9	0	30.350	31.0	22.0	19.0	58	9	0
Sums	928.669	823.2	6860		2316	270	152	926.867	1012.4	7933		2093	244	153
Means	29.957	26.6	22.13		77	9.0	4.9	29.899	32.7	25.59		68	8.4	5.5
Red. to 32°	29.962							29.888						

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Date	External Therm. No 4				Min	Max.	Gauge			
	7 A M	2 P M	9 P M	Mean	Read at 10 A M	Read at 9 P M	No 1	No 2	No 3	
1	30·5	35·7	35·3	33·8	19·8	37·8				Snow at first, turning to rain at 9 P.M. Rain heavy, ceasing about 10 P.M.
2	36·2	38·1	[35]	36·4	32·0	38·8	44	95·5	53	
3	33·0	39·0	30·0	34·0	29·7	39·0				
4	30·0	33·0	12·5	25·2	26·8	33·3				Snow all day, moist at first, then dry.
5	10·4	21·2	13·3	15·0	8·5	21·3	20·5	20·5	15·5	
6	14·6	28·0	[23]	21·9	11·2	28·7				
7	18·0	35·0	30·5	27·8	16·7	36·3				
8	30·5	38·0	31·5	33·3	24·9	37·8				No 3 broken
9	28·0	31·3	9·8	23·0	27·3	32·2				a few flakes of snow at 4 P.M.
10	6·5	13·0	8·0	9·2	5·8	13·5				
11	8·6	23·8	14·7	15·7	6·0	23·9				
12	8·0	12·5	9·0	9·8	7·0	13·1				
13	5·0	14·8	10·1	10·0	4·8	15·5				
14	10·5	21·4	17·3	16·4	9·5	22·0				
15	15·0	19·8	15·4	16·7	14·3	20·0				Moderate but steady fall of snow, ceasing in the afternoon.
16	15·2	32·2	19·8	22·4	11·0	32·0	4·5			
17	16·5?	22·7	13·7	17·6	12·8	26·3				Faint aurora at midnight.
18	9·0	25·0	15·0	16·3	7·5	25·0				
19	12·0	25·2	[20]	19·1	10·2	[25]				
20	21·5	35·1	32·5	29·7	12·8	[35]				
21	31·0	27·1	24·0	27·4	28·7					heavy snow all day
22	18·0	29·2	17·2	21·5	17·0	31·2	16			
23	10·2	35·6	40·0	28·6	7·6	41·9				a little snow at noon. Afternoon rainy.
24	36·0	35·0	29·0	33·3	26·2	35·0	23·5	62·1		
25	19·0	28·8	23·0	23·6	18·2	29·0				
26	22·0	24·2	10·4	18·9	17·8	31·7				snow fall this afternoon till 8 P.M.
27	12·0	21·0	21·4	18·1	9·3					moderate snow all day.
28	17·3	21·7	20·2	19·7	14·3	22·2	24·5			Some snow about 1 P.M.
29	20·5	22·6	23·0	22·0	18·0					snow through the day after 10 A.M.
30	24·8	23·9	13·1	20·6	20·9	25·5	19			
31	8·0	23·1	13·7	14·9	7·5	23·2				
	577·8	837·0	631·4	681·9	484·1	796·2	152·02 = 2 in 53			
	18·6	27·0	20·4	22·0	15·6	28·4				

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~~ in column "Att" signifies below 25.
considered = 20 in taking the mean.

Date	10 A M							4 P M						
	Barom	Att	Dry	Wet	Rel. Hum Guyot	wind	Clouds	Barom	Att	Dry	Wet	Rel. Hum Guyot	wind	Clouds
1	30·590	~~	18	16·2	70	6	0	30·530	32·0	28·0	23·0	43	6	0
2	30·218	25	23·0	20·5	66	15	4 cir	30·072	31·8	30·7	26·0	51	4	10
3	30·324	~~				28	0	30·422	~~	6·8	4·6	47	12	0
4	30·218	~~	16·5	14	58	14	8 cir-cu	30·202	27·5	23·0	19·0	47	8	4 cir cir-st
5	30·340	~~	8	8		0	1	30·216	31·8	24·1	21·9	72	3	3 cir-st
6	29·380	31·9	28·2	27·2	88	15	10 thin	29·364	34·0	34·0	32·0	79	16	10
7	29·704	26·0	18·1	16·1	68	17	7 cir-cu	29·904	29·2	17·8	15·2	58	23	0
8	30·442	~~				0	0	30·416	27·5	18·0	14·0	37	6	0
9	29·878	25	34·8	33·8	90	15	10 rain	29·598	31·3	40·5	40·5	100	15	10 rain
10	30·047	28·8	12·0	10·5	72	25	0	30·174	25	13·2	11·2	63	14	0
11	30·236	~~	8·0	8·0		7	10	30·226	26·3	14·9	14·2	87	10	4 cu
12	30·340	~~	11·5	11	90	4	1	30·279	29·3	24·4	20·9	55	10	0
13	30·211	25	30·1	26·9	65	7	8 cir	29·932	32·5	36	32	61		10
14	30·206	25	13·8	11·7	62	25	0	30·230	27·0	17·0	14·0	51	16	0
15	30·090	26·3				11	8 cir	29·950	34·2	37·4	33·4	62	6	10
16	30·142	30·0	27·3	24·9	71	9	9	30·166	33·3	29·0	26·3	70	2	7 cu
17	30·040	26	27·8	25·8	77	4	10	29·850	33·2	32·2	29·2	70	6	10
18	29·824	29·5	22·0	20·0	72	30	0	29·850	31·2	23·3	19·5	51	15	0
19	29·730	25·5	23·2	22·5	89	7	8 cir-cu	29·750	35·2	37·9	33·8	62	9	1 cir-cu
20	29·927	33·0	33·8	30·0	63	7	2 cir-st	29·816	41·0	44·0	38·0	52		
21	29·720	39·0	41·7	38·9	75	1	5 cir-cu	29·780	42·0	43·8	37·8	52	12	1 cir-st
22	30·167	~~	11·5	10·5	80	17	3 cir	30·182	29·0	17·0	14·0	51		
23	30·498	~~				15	0	30·484	~~					
24	30·700	~~	13·0	11·0	62	4	4	30·627	28·0	23·3	18·8	41	4	10
25	30·561	~~	18·9	16·7	67	7	4 cir	30·490	32·0	24·3	21·0	58	3	6 cir
26	30·413	~~	21·3	18·9	66	6	7 cir-cu	30·350	32·0	28·9	26·1	69	6	5 cir-cu
27	30·037	28·3	29·2	26·4	70	1	10	29·824	34·0	31·0	29·0	79		10
28	29·406	31·5	29·0	28·0	89	3	10	29·361	34·5	32·2	27·8	55	20	8 cu
29	29·525	28·0	16·0	14·0	66	20	4 cir	29·550	33·0	18·2	16·3	70		0
Sums	872·914	723·8	536·7		1676	320	143	871·595	897·8	750·9		1693	226	119
Means	30·100	25·0	21·47		73	11·0	4·9	30·055	31·0	25·89		60	10·0	4·6
Red to 32	30·109							30·048						

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Date	External Therm. No 4.				Min.	Max.	Gauge		
	7 A M	2 P M	9 P M	Mean	Read at 10 A M	Read at 9 P M	No 1	No 2	
1	8·6	26·5	18·0	17·5	6·0				
2	17·0	32·1	24·5	24·5	13·3	32·0			
3	8·0	5·3	−2·7	3·5	1·9				
4	3·3	24·3	13·9	13·8	−8·8	24·3			
5	−0·1	25·5	23·5	16·3	−2·3	26·6			snowing fast at 9½ P.M.
6	23·5	34·1	30·0	29·2	21·8	34·3	snow 16·5		slight snow at 4 P.M.
7	14·0	18·8	7·0	13·3	13·2	20·2			
8	−5·3	16·3	8·2	6·4	−7·	18·2			
9	18·0	40·8	39·5	32·8		41·3			snow beginning at 7 A.M. turning to rain at 10 A.M. Rain throughout the day, heavy at noon
10	22·4	13·3	5·0	13·6	10·5		rain 16·5	snow & rain 112·0	
11	3·5	15·6	7·8	9·0	1·9	15·7			some snow in the afternoon the sun visible.
12	3·7	23·4	18·0	15·0	1·3	24·2			
13	15·5	37·7	34·0	29·1	15·0	37·9			
14	13·6	15·2	12·5	13·8	12·5				
15	22·0	38·4	34·7	31·7	12·2	38·9			
16	23·0	29·9	[25]	26·0	22·3				
17	10·2	33·5	29·8	24·5	9·0				some snow through the day after 3½ P.M.
18	26·0	23·4	15·3	21·6	21·2	24·0	snow 5·5	snow 35·0	
19	17·0	36·8	36·0	29·9	10·5	38·5	snow 2·0		some snow at 8 A.M.
20	24·0	44·3	38·2	35·5	23·5	45·1			
21	38·5	48·3	23·0	36·6	36·5	48·8		snow 3·5	
22	10·0	14·0	5·5	9·8	9·2	22·1			
23	−2·5	16·3	5·3	3·0	−3·0	8·8			
24	3·5	23·8	18·0	15·1	−2·5	23·2			
25	10·3	24·8	17·0	17·4	9·7	25·5			
26	9·5	30·3	27·2	22·3	8·6	31·5			
27	19·0	32·0	30·0	27·0	18·2	33·3			snow through the day after 2 P.M.
28	26·0	33·5	25·2	28·2	25·5	34·5	snow 16·5		snow in the morning ceasing before 1 P.M.
29	16·8	17·5	9·8	14·7	14·7	18·9		snow 21·0	
	399·0	765·7	579·2	582·1	294·9 718·5	667·8	57·0		
	13·7	26·4	20·0	20·1	10·4 5	29·0	= 0·95 in	probably a good deal lost by drifting.	

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m in column "Att." signifies below 25 considered = 20 in taking the means.

Date	10 A. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	4 P. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds
1	29.977	m	8.5			7 (var)	0	29.907	31.2	19.3	16.2	58	4	6 cir. st.
2	29.331	25.0	20.3	20.3	93	25	10 snowing	29.228	m	9.5			20	10 thin overhead
3	29.643	m				10	8 cir. cu.	29.700	29.5	12.7	11.5	77	14	4 cu. – cir. cu.
4	29.838	m	13.7	12.2	72	11	5 cir. cu. – cir. st.	29.950	28.0	22.3	19.6	63	24	2 cu.
5	30.388	25.0	24.2	20.2	49	10.	0	30.464	33.0	32.9	26.0	32	3	0
	(Observations for March 6 made at 10½ A. M.)													
6	30.606	26.8	34.0	29.9	61	8	8 cir. cu. – cir.	30.500	34.0	34.6	31.2	68	10	10
7	30.270	36.0	39.0	36.0	73	9	10	30.180	40.0	46.0	41.0	62		
8	30.082	37.0	47.0	42.0	62			30.032	39.0	48.5	43.5	63		
9	30.364	39.0	41.6	36.4	56	3	4 cir.	30.363	32.7	48.3	40.8	46	1	6 cir. cu.
10	30.197	40.2	43.7	38.9	62		8 cir. cu.	30.000	45.2	50.0	44.0	58	9	10
11	30.450	41.5	35.7	28.2	33	25	6 cir.	30.567	41.3	32.7	25.2	27	10	1
12	30.503	33.5	32.5	28.3	58	8	3 cir.	30.307	37.5	36.0	32.8	68	8	10
13	29.708	43.0	46.2	45.2	92	7	10	29.694	46.2	49.0	46.2	79	4	10
14	29.800	41.1	48.3	44.3	71	10		29.867	51.0	53.5	45.5	49	2	7 cir.
15	29.964	44.5	46.0	44.5	96	6	10	29.916	48.5	54.0	51.5	83		
16	30.109	41.3	39.0	39.0	100	3	10	30.054	44.5	38.0	38.0	100	5	10 fog
17	29.967	42.3	41.0	40.5	96	1	10 fog	29.838	45.2	54.7	53.1	89	5	10
18	29.898	47.3	46.5	43.0	73	9	10	29.914	47.2	49.8	39.3	29	24	1
19	30.226	38.5	35.8	29.8	45	11	3 cir	30.240	44.5	37.0	31.0	48	7	0
20	30.156	36.0	36.2	32.5	64	9	10	30.063	43.8	35.3	31.4	62	9	10
21	29.285	36.5	30.0	30.0	100	35	10 snowing	29.102	36.8	29.5	28.8	92	25	10
22	29.454	34.2	30.1	26.9	66	20	7 cir. cu.	29.590	41.0	34.8	29.5	50	27	0
23	29.808	34.0	30.9	26.4	53	4	10	29.730	41.3	41.8	33.8	34	6	3 cir. st.
24	29.784	37.8	41.0	35.0	49	12	7 cir. cu.	29.922	41.2	36.7	29.2	35	20	0
25	30.233	34.3	33.9	27.2	37	4	9 cir. cu.	{1 P.M. 30.326}	{1 P.M. 70.0}	{1 P.M. 41.5}				
26	30.254	35.1	31.0	25.5	43	9	0	30.184	41.3	35.8	29.8	46	4	0
27	29.910	37.5	42.0	35.0	42	7	0	29.800	45.2	53.3	40.3	20	11	5 cir.
28	30.957 (8h 38m A. M.)	67.0	38.0					29.963	48.2	39.5	35.0	59	11	0
29	30.270	38.0	37.5	34.0	67	5	0	30.274	44.0	38.5	35.0	68		
30	30.354	38.0	37.0	32.0	53	7	4 cir. st.	30.222	42.0	37.5	34.0	67		
	(Observations for March 31 made at 11 A. M.)													
31	29.935	39.0	43.5	40.0	71	6	10 cir. cu.	29.351	45.0	47.5	42.0	59	8	2 n.
Sums	900.764	1062.4	1074.1		1837	281	182	898.922	1208.3	1200.5		1691	271	127
Means	30.025	35.4	35.80		66	10.0	6.5	29.964	40.3	38.73		58	10.8	5.1
Red. to 32°	30.006							29.932						

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1866phae.proj..379.

March 1868

Date	Externab Therm. No. 4				Min.	Max.	Gauge		
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1	No. 2	
1	2.0	19.4	18.3	13.2	1.5	20.2			
2	19.4	6.5	6.3	10.7	11.0	20.7			heavy snow beginning before 8 A.M. Moderate towards night.
3	10.0	13.9	0.2	8.0	5.7	15.7	snow 1.		snow this morning on ground clearing up at 10 A.M.
4	2.8	21.2	18.0	14.0	−0.2	23.2			
5	13.5	32.1	22.0	22.5	12.2	33.5		snow 8.	
6	7.0	36.2	35.5	26.2	5.8	37.8			
7	39.5	48.4	38.0	42.0	35.1				
8	40.5	51.6	42.0	44.7	36.0	51.0			
9	31.5	49.0	40.5	40.3	30.8	48.8			
10	36.0	49.1	43.5	42.9	34.2	50.8			rain at 11 A.M.
11	39.0	33.0	25.0	32.3	35.3			snow 1.5	
12	20.0	37.3	34.0	30.4	18.7	39.0			
13	44.0	51.9	44.0	46.6	33.2		rain 20.0	rain 43.0	
14	39.5	59.0	41.1		37.5	54.3			
15	40.4	56.3	40.5	45.4	37.7	58.8	rain 2.0	rain 4.0	dense fog at 11 P.M.
16	35.5	41.4	38.0	38.3	34.8		rain 14.5	rain 27.5	rainy
17	36.3	49.1	50.5	45.3	35.2	54.8	rain 17.0	rain 34.5	rain at 10 P.M.
18		53.3	34.9		45.3	54.1	rain 10.5	rain 20.0	rainy at 9 A.M.
19	36.0	37.8	28.8	33.9	28.0	41.4			Aurora
20	26.0	36.2	33.0	31.7	23.9	38.7			
21	33.4	29.6	29.1	30.7	29.0				heavy snow all day.
22	29.0	33.2	28.0	30.1	28.0	35.0	snow 46.5	snow 32.0	Aurora
23	27.0	41.3	32.0	33.4	24.5	42.8			
24	29.0	38.5	29.1	32.2	25.7	41.3			
25	24.0	37.7	28.0	29.9	20.7	39.7			
26	24.0	34.3	31.0	29.8	23.2				
27	31.0	52.0	41.5	41.5	26.5				
28	33.0	43.2	33.5	36.6					
29	27.5	41.0	33.0	33.8	25.2	42.0			
30	25.0	37.8	33.0	31.9	22.9	43.5			
31	29.0	49.5	36.0	38.2	26.3				
	829.8	1160.8	988.3	936.5	753.7	887.1	111.0		
	27.7	38.7	31.9	32.3	25.1	40.3	1.85		

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April 1868.

(The figures and general remarks in

Date	10 h. M.							4 P. M.							Da
	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds.	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	
1	29.828 (8h 20m A.M.)	65.0	38.5				clear (8 20 A.M.)	29.719 (2 P.M.)	73.0	67.5				clear (2 P.M.)	
2	29.714 (8½ A.M.)	66.0	51.0				dull (8½ A.M.)	29.620 (1 15 P.M.)	70.5	54.0				cloudy (1 15 P.M.)	
3	29.864	42.0	38.8	32.8	46	9	4 cum.	29.916 (1 45 P.M.)	65.0	45.5				clear (1 45 P.M.)	
4	29.655 (8 45 A.M.)	39.8	43.8	37.2	47	8	6 cir. circu.	29.648 (2 P.M.)	63.5	45.0					
5	29.614	58.5	36.5				snow clouds 8¾ A.M.	29.760 (1 P.M.)	67.0	32.5				wind clouds (1 P.M.)	
6	30.024	33.5	29.0	25.0	56	18	4 cum.	30.030	39.0	35.5	31.5	67			
7	29.950 (10h 41m A.M.)	35.5	30.8	32.0	100	18	10 snow	29.422	36.0	33.2	33.0	98		10 rain	
8	29.433	60.0	41.0					29.490	41.2	39.0	32.0	38		10	
9	30.178	35.0	28.8	24.6	53	16	0	30.150	39.5	32.5	36.0	100		0	
10	30.296	33.8	27.8	26.8	88	0	10 snow	30.040	34.5	29.0	28.5	94		10 snow	
11	29.858 (10 10h A.M.)	34.5	31.3	29.3	79	5	1	29.720	39.0	39.5	34.5	55		0	
12	29.722	64.0	44.8					29.866	38.0	30.5	25.0	42		10	
13	30.190	31.0	27.8	25.0	67	18	0	30.170	35.5	34.0	26.5	62			
14	30.370	35.0	41.5	33.8	36	7	1	30.214	41.0	45.0	38.0	46			
15	29.974	45.2	55.0	51.5	77	9	4 cir. cu.	29.828	51.0	58.0	54.0	76			
16	29.862	55.0	63.8	59.5	76	14	10	29.740	54.0	58.0	58.0	100		10 rain	
17	29.808	53.0	64.2	60.5	80	11	8	29.650	56.0	61.5	51.0	43	7	10	
18	29.910 (10½ A.M.)	50.3	51.0	43.6	49	15	8 cu.	30.030	51.3	46.9	38.0	35	{alternated 12 verres down}	6 cu.	
19	30.440	59.0	51.0					30.250	53.0	58.0	45.0	27		10	
20	30.250	46.5	44.0	42.5	88	0	10 rain	30.005	47.0	40.0	39.9	99	8	10 rain	
21	30.055	46.8	51.0	48.5	82	4	9	30.066	51.0	49.1	47.0	85	6	10	
22	30.110	49.0	59.8	51.5	53	9	0	30.084	55.0	66.0	47.9	15	13	0 cir.	
23	29.960	51.0	67.5	54.0	35	21	3 cir. cu.	30.062	55.5	43.0	40.9	83	24	10 rain	
24	30.450	43.0	42.2	35.0	41	2	3 cir. cu	30.350	50.4	52.1	42.4	37	15	4 cir.	
25	30.296 (8 A.M.)	44.0	35.7	34.8	90	0	10 snow	30.206	44.9	47.8	47.0	94	0	10	
26	30.300	65.0	39.0					30.050	51.0	52.5	41.5	30			
27	30.248	41.0	39.2	33.0	45	1	10	30.119	46.1	39.8	34.4	52	7	10	
28	30.268	44.0	46.0	36.0	26	8	0	30.253	50.0	46.8	37.3	31	7	0	
29	30.338	46.8	48.2	41.5	53	8	9	30.228	49.9	41.0	39.2	84	8	10	
30	29.718	44.8	45.1	43.8	90	4	10	29.592	53.6	67.5	58.2	54	11	0 cir. cu.	
Sums	691.632	980.5	1315.3		1457	205	130	749.615	1163.4	1393.7		1547	118	140	
Means	30.071	42.6	43.84		63	8.9	5.7	29.985	46.5	46.46		62	9.8	7.0	
Red. to 32°	30.033							29.938							

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April 1868.

(marks in red ink are from Prof. Lane's record.)

Date	External Thermometer No. 4				Min.	Max.	Gauge			
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1		No. 2	
1		67.5	48.8		29.5	64.5				
2		54.0	40.0							heavy showers after 2 P.M.
3		48.5	35.2			54.3	16.5	rain	40.0	
4	31.3	45.0	36.5		28.0					slight showers at noon & 3 P.M.
5	-	32.5	23.0					snowing		snow in the night. snow-gale from 6 to 10 A.M.
6		35.0	30.0		19.2	35.5	10.0	snow	15.0	snow squall 10¾ A.M.
7	32.6	34.3	35.0		27.6					barometer falling to 28.992 at 9.35 P.M. — snow till 2 P.M. clear 6 to 8½, then rain.
8	34.0	37.0	34.0	35.0		38.5	90.0	snow & rain	211.5	snow squall at 5 P.M.
9	18.0	33.0	(Obs. at 9½) 25.8	25.6	21.0	(Obs. at 9½) 36.8				
10	25.0	29.0	28.5	27.5	21.5			snow		7 inches {snow all day
11	24.0	39.0	37.5	33.5	22.8		33.0	snow	44.0	rain beginning 10¾ P.M.
12	41.5	35.0	29.0	35.2		(max. of 12 hrs 47.0)				
13	23.0	33.0	28.3	28.1	19.2	35.0				Aurora 9 P.M.
14	23.5	50.0	37.0	36.8	21.0	49.0				slight showers in the evening
15	46.0	64.5	56.5	55.7	36.0	65.0	2.0	rain	5.5	
16	60.4	64.8	58.0	61.1	53.8	64.0				Thunder in the afternoon showers beginning at 8½ A.M. Snow has disappeared,
17	57.5	64.2	51.2	57.6	56.2	68.5	28.0	rain	51.5	
18	46.5	47.3	38.8	44.2	42.1	53.5				Aurora
19	35.0	59.0	48.5	47.5	32.5	59.0				
20	44.0	41.7	41.6	42.1		49.0				rain began 8½ A.M. lasts steadily through the P.M.
21	43.0	47.0	46.8	45.6	39.8	53.0	40.0	rain	99.0	
22	45.5	66.8	55.0	55.4	42.0	67.7				
23	46.3	(Obs. at 2½) 69.4	33.6	49.8	39.5	71.5				rain squall at 2¼ P.M. Barometer equal 1 inch suddenly rain & hail till 6 P.M.
24	33.2	53.2	41.0	42.5	27.8	55.0	7.0	rain	17.0	
25	41.0	(Obs. at 2½) 38.3	37.5	38.9	34.5	45.0				
26	36.2	55.0	38.0	43.1	33.5	57.0	23.5	snow	47.5	
27	35.8	(Obs. at 2½) 42.1	37.5	38.5	31.5	47.5				rain in the evening
28	36.3	46.7	40.0	41.0	33.0	50.3	19.5	rain	40.0	slight snow during the morning night. Aurora faint rain in the evening
29	38.0	49.0	41.0	42.7	33.2	53.5				
30	40.0	64.1	56.5	53.5	38.5	68.8	14.5	rain	27.5	showers from 6 to 7½ P.M.
	937.6	1164.1	1058.6	925.5	783.7	1288. 1304.9	284.0		598.5	
	37.5	48.5	39.2	42.1	32.6	54.4 3.7	4.73 in.			

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May 1868

Date	10 A. M.								4 P. M.							
	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind		Clouds	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind		Clouds
1	29.978	49.0	40.8	36.8	65				30.031	52.0	44.9	33.2	13	10	1	cir. cu.
2	30.127	45.5	42.4	39.4	75	2	10	raining	30.072	47.0	40.3	40.0	98	6	10	raining
3	29.950	46.0	49.0	45.0	71				29.980	49.5	51.4	44.5	53		0	
4	30.009	47.5	60.9	50.0	40	9	6	cir.	29.900	55.4	67.1	58.6	57	8	7	all kinds
5	29.871	51.0	59.6	51.9	56	4	4	cir. cu.	29.817	57.0	55.9	50.1	63	8	10	
6	29.788	49.1	48.2	45.0	76	11	10		29.731	54.1	48.1	45.2	78	7	10	
7	29.698	48.0	44.7	41.0	71	7	10	raining	29.650	49.5	41.9	40.0	83	9	10	
8	29.450	42.5	37.4	37.0	94	16	10		29.550	47.0	48.3	41.0	48	15	10	cu. ni.
9	Observation made at 11½ A. M. 29.762	49.8	55.7	45.0	36	17	3	cu.	29.774	53.8	59.9	47.8	33	11	5	cu.
10									30.000	58.0	54.0	46.5	52			
11	30.274	48.0	48.0	42.2	57	9	10		30.280	52.3	50.1	42.5	47	8	7	cir-cu.
12	30.302	49.8	58.0	49.0	55	4	0	haze on horizon	30.272	55.3	56.0	46.9	41	7	0	cir. cu.
13	30.215	50.2	48.4	43.6	65	15	10		30.099	52.0	47.1	46.9	98	8	10	raining
14	29.812	52.9	52.3	52.0	97	3	10	raining	29.844	60.0	68.8	64.2	76	8	1	cu.
15	30.080	52.5	48.0	48.0	100	5	10	raining	30.072	54.6	50.9	50.7	99	3	10	raining
16	30.010	54.5	60.7	57.8	83	1	10		29.978	58.5	58.0	55.0	82	6	10	
17																
18	29.724	55.0	(bulb wet) 47.8	47.8	100	5	10	raining	29.662	54.0	49.3	48.7	95	8	10	
19	29.967	50.5	48.7	45.2	74	7	10		30.034	53.7	49.9	46.8	78	11	10	
20	30.184	50.2	48.8	46.7	85	9	10		30.160	53.6	48.0	47.0	92	6	10	raining
21	29.638	49.7	47.2	47.0	97	18	10	raining	29.498	51.0	50.9	50.6	98	9	10	
22	29.808	54.0	61.5	56.0	69	11	10		29.859	57.0	67.4	59.2	59	7	7	cir. ni. cu.
23	30.054	52.0	48.0	47.8	98	9	10		30.009	54.8	54.0	54.3	82	9	10	raining
24	29.730	50.0	46.0	46.0	100		10	raining	29.750	51.0	51.0	49.0	86		10	
25	29.850	52.0	56.5	55.0	90	0	10		29.865	55.8	63.0	58.5	75	1	10	
26	Observation made at 11½ A. M. 30.024	54.0	55.4	53.5	87	1	10		30.000	55.5	55.9	52.9	81	9	10	
27	29.986	53.5	57.8	55.0	82	3	10		29.919	58.5	54.3	52.0	85	8	9	haze
28	29.882	55.2	66.0	61.8	77	4	0		29.862	60.8	70.9	61.6	57	12	0	
29									29.957	64.0	57.7	55.7	88	3	10	raining
30	29.872	57.8	56.0	55.5	97	7	10	mist	29.876	60.1	60.2	57.8	85	6	10	
31																
Sums	808.045	1370.2	1393.8		2097	177	213		867.501	1585.8	1575.2		2082	203	217	
Means	29.928	50.7	51.62		80	7.4	8.5		29.914	54.7	54.32		72	5.9	7.75	
Red. to 32°	29.868								29.844							

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Table of the mean temperature and amount of rain recorded at the Observatory of Harvard College for the month of May, from 1841 to 1868.

Year	Mean temperature	Amount of rain in inches	Amount of rain in ounces
1841	53.15	1.979	104 1/2
1842	51.68	2.526	133
1843	54.50	2.166	114
1844	57.37	3.078	162
1845	56.57	2.631	138 1/2
1846	55.82	3.591	189
1847	53.35	1.938	102
1848	57.77	7.714	406
1849	52.50	2.755	145
1850	51.37	7.220	380
1851	55.03	4.142	218
1852	56.75	2.299	121
1853	56.35	6.455	339 3/4
1854	58.56	5.453	287
1855	53.40	1.501	79
1856	52.55	6.732	354 3/10
1857	54.92	5.168	272
1858	52.90	3.714	195 1/2
1859	58.08	2.983	157
1860	56.4	0.931	49
1861	54.5	3.192	168
1862	58.3	2.318	122
1863		1.672	88
1864		2.907	153
1865	58.1	6.237	328 1/4
1866	53.4	3.925	235 1/2
1867	53.10	2.962	177 3/4
1868	50.80	7.316	445 1/2

The ounces are those collected in gauge No.1. They were at first supposed to be Troy ounces, which makes the number of inches of rain too large previous to 1866. The average of two gauges is used in 1868.

May 1868.

in.	Max. Read at 9 P.M.	Gauge No.1		Gauge No.2	
7.8	58.5	0.5	rain	1.0	
5.8	43.0				
7.0	51.2	24.0	rain	59.0	
.5	68.2				
2	62.0				
8	54.0	1.0		2.5	
8	48.2				snow storm
0	50.0	43.5	rain and snow	72.0	
8	60.8	1.5	rain and snow	3.0	
	60.0				
0 days	53.5				
3	59.8				
7	50.0				
.5	71.0				
2	55.0	1.0	rain	2.0	
5	65.5	21.0	rain	40.5	
	68.0	0.5	rain	1.0	
8 days wet	56.0	26.0	rain	52.5	
0	51.0	15.0	rain	28.0	
.5	53.0				
.3	51.5	132.5	rain	241.0	
0	69.0	19.0	rain	32.5	
.2	56.0				
0	51.0	91.0	rain	167.0	
2		10.5	rain	19.5	
5	2 days 58.0	1.5	rain	2.5	
6	61.3				
8	72.0				
	66.5				Season very backward. Furnace fire at the Observatory continued through the month. Apple blossoms only beginning to appear.
8	62.5	54.5		105.0	
0	76.0	2.5		4.0	
6	1762.5	445.5		833.0	
3	58.8	7.425 inches.		7.207 inches.	

Average of two gauges 7.316 inches.

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May 1868.

Date	External Thermometer No. 4				Min.	Max.	Gauge			
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1		No. 2	
1	46.8	47.3	38.8	44.3	39.8	58.5	0.5	rain	1.0	
2	41.4	41.9	39.5	40.7	36.8	43.0				
3	41.8	50.0	39.6	42.8	37.0	51.2	24.0	rain	59.0	
4	42.3	68.0	53.0	54.4	36.5	68.2				
5	47.5	56.7	48.4	50.9	41.2	62.0				
6	44.2	54.2	43.5	47.3	42.8	54.0	1.0		2.5	
7	44.0	43.9	41.0	43.0	41.8	48.2				snow storm
8	33.5	47.9	42.3	41.2	33.0	50.0	43.5	rain and snow	72.0	
9	41.5	58.8	49.1	49.8	36.8	60.8	1.5	rain and snow	3.0	
10	46.2	53.0	44.0	47.7		60.0				
11	43.4	52.2	42.5	46.0	{2 days 40.0}	53.5				
12	42.3	56.8	48.2	49.1	35.3	59.8				
13	46.5	47.8	50.0	48.1	38.7	50.0				
14	54.0	68.2	54.5	58.9	45.5	71.0				
15	49.0	53.0	52.2	51.4	45.2	55.0	1.0	rain	2.0	
16	55.0	64.9	57.5	59.1	48.5	65.5	21.0	rain	40.5	
17	51.0	63.8	58.0	57.6		68.0	0.5	rain	1.0	
18	50.5	50.5	47.5	49.5	{2 days 47.8 bulb wet}	56.0	26.0	rain	52.5	
19	46.2	51.0	47.0	48.1	45.0	51.0	15.0	rain	28.0	
20	47.5	51.0	40.5	46.3	44.5	53.0				
21	47.0	50.0	50.5	49.2	44.3	51.5	132.5	rain	241.0	
22	53.8	66.8	56.0	58.9	47.0	69.0	19.0	rain	32.5	
23	47.5	53.0	45.0	48.5	44.2	56.0				
24	45.0	48.2	49.0	47.4	43.0	51.0	91.0	rain	167.0	
25	52.3	63.8			45.2		10.5	rain	19.5	
26	54.0	54.5	50.0	52.8	51.5	{2 days 58.0}	1.5	rain	2.5	
27	51.6	59.9	50.5	54.0	48.6	61.3				
28	52.3	72.0	55.5	59.9	48.8	72.0				
29	56.2	57.4	54.0	55.9		66.5				Season very backward. Furnace fire at this Observatory continued through the month. Apple blossoms only beginning to appear.
30	55.4	62.1	54.0	57.2	{2 days 50.8}	62.5	54.5		105.0	
31	55.0	75.0	63.0	64.3	52.0	76.0	2.5		4.0	
	1484.7	1743.6	1464.6	1524.3	1211.6	1762.5	445.5		833.0	
	47.9	56.2	48.8	50.8	43.3	58.8	7.425 inches		7.207 inches	

Average of two gauges 7.316 inches.

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1866phae.proj..379.

June 1868

Date	10 A. M.							4 P. M.							Da
	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	
1								29.964	65.0	68.9	56.6	42	5	9 cir. cu.	
2								30.012	64.0	56.8	50.9	64	9	9	
3	30.170	57.5	60.0	51.5	52			30.274	62.3	57.0	48.3	48	6	1 cir.	
4	30.400	58.0	62.5	51.5	40		0	30.420	63.0	59.3	49.9	47	11	0	
5	30.320	56.5	62.0	56.0	66			30.300	62.0	62.9	59.8	83	4	10 with light rain	
6	30.036	64.5	74.5	68.0	70			29.969	67.2	77.4	69.0	63	16	2 cis. cir-cu.	
7															
8								30.168	63.0	67.4	61.8	71	7	4 very thin cirri cum. on horizon haze	
9								30.040	71.3	69.9	64.2	72	est. 2 gusts 8	10 raining	
10	30.200	60.0	66.2	53.5	38		0	30.240	65.0	65.2	52.7	37	est. 5	6 thin cirrus and haze	
11	30.250	59.0	57.0	51.2	65		10	30.194	57.3	50.7	49.1	89	7	10 rainy	
12	29.330	55.0	53.5	53.0	97		10 raining	29.779	57.0	54.9	53.9	93	6	10	
13	29.950	61.0	74.0	64.5	57			30.067	67.4	76.2	68.9	67	7	9 haze	
14								30.150	69.0	69.0	62.5	68		0	
15								30.084	69.2	81.3	67.5	46	9	4 thin cirrus and haze	
16								29.972	70.2	77.3	7[illegible]6	74	6	9 cirrus above nimbus below	
17	30.000	66.0	70.3	68.0	88			29.980	70.7	70.0	65.6	77	11	2 cir. heavy bank in the E.	
18								29.960	71.0	70.4	67.3	84	3	10	
19	29.792	68.0	74.2	70.5	82			29.740	78.8	84.2	76.5	69	5	1 cir. haze	
20								29.660	80.9	88.7	73.1	44	est. 6	0 haze faint cirrus	
21	29.790	74.0	73.0	66.5	82		10 raining								
22								29.950	62.5	53.8	52.8	93	6	10	
23								29.931	66.0	71.1	60.9	52	10	4 cum.	
24	30.080	64.0	67.0	59.2	61			30.171	67.4	62.1	55.3	62	6	7 various	
25	30.224	64.0	71.5	62.0	56		0	30.202	70.8	77.9	65.1	47	6	1 cum.	
26	30.040	66.5	75.0	66.3	61			29.984	72.8	79.8	67.3	49	6	8 various	
27	29.816	70.5	77.0	67.5	59			29.732	79.0	85.0	69.7	75	8	9 haze some cum.	
28	29.884	67.5	66.0	59.5	66										
29								30.220	69.9	64.9	60.0	74	6	0 but sky very hazy	
30	30.288	66.3	74.8	65.2	57	6	5 cir.	30.250	72.0	76.2	63.2	45	11	2 haze. cir. cum	
Sums	510.570	1078.3	1158.5		1097		35	811.413	1834.7	1878.3		1735	184	147	
Means	30.034	63.4	68.°15		65		5.0	30.052	67.9	69.°57		64	7.0	5.4	
Red. to 32°	29.940							29.946							

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1966phae..proj...379.

June 1868

Date	External Thermometer No. 4				Min.	Max.	Gauge			
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1		No. 2	
1	58.2	69.2	60.8	62.7		70.5				
2	56.3	60.1	52.0	56.1		66.5				
3	51.5	57.2	52.5	53.7	45.5	61.0				
4	54.0	60.8	52.6	55.8	41.0	62.5				
5	53.0	67.7	61.5	60.7	44.5	70.0				
6	66.0	78.8	68.5	71.1	59.6	79.0	1.0	rain	1.5	
7	66.0	57.0	58.6	60.5		69.0				
8	54.3	67.0	59.8	60.4		68.5	5.0	rain	9.5	
9	62.4	76.9	62.0	67.1		77.0				Thunder at 2½ P.M. A shower to the northward.
10	54.3	65.8	57.5	59.2	47.5	67.5	0.5	rain	0.75	
11	53.0	52.1	50.0	52.4	49.0	57.5				
12	51.2	50.8	57.0	53.0	48.5	57.0	86.0	rain	154.0	
13	62.0	76.6	63.6	67.4	52.0	78.5	5.5	rain	6.5	
14	60.8	61.5	61.3	61.2		69.0	38.0	rain	60.0	
15	64.0	82.3	68.5	71.6		72.5				
16	68.4	76.8	69.0	71.4		79.0				
17	65.5	71.4	64.8	67.2	54.0	76.0	0.5	rain	1.0	
18	62.3	71.0	65.0	66.1		74.0				
19	67.6	83.4	71.4	74.1	60.0	84.8				
20	732	89.0	80.0	80.7	67.0	89.0				
21	72.5	64.5	58.0	65.0	68.5	70.0				
22	54.5	54.4	53.5	54.1		57.5	21.5	rain	40.0	
23	52.5	70.2	60.0	60.9		71.5				
24	64.2	62.6	57.0	61.3	52.0	67.0				
25	61.3	78.3	68.0	69.2	51.0	79.0				
26	64.2	84.0	71.5	73.2	55.5	83.5				
27	68.0	86.7	76.5	77.1	60.5	87.5				
28	57.6	69.5	62.5	63.2	58.0	76.0				
29	62.0	65.9	59.7	62.5		70.2				
30	60.3	80.5	62.5	67.8	54.4	79.8				
	1823.1	2092.0	1865.6	1926.7	968.5	2170.8	158.0	ounces	273.25	
	60.8	69.7	62.2	64.2	53.8	72.4	2.63	inches	2.36	

Average of two gauges 2.50 inches

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1866phae.proj..379.

July 1868

Date	10 A. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	4 P. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds
1	30.265	67.7	74.8	67.0	65	7	7 cir-cu. cum.	30.225	73.0	76.6	69.0	66	8	10
2	30.254	71.0	77.5	72.0	75	7	9 cir. cum.	30.200	81.0	84.3	77.0	70	10	1 {some cum. sky hazy, in the north especially
3	30.183	76.0	84.3	77.7	73	4	0	30.131	85.0	89.9	81.2	67	10	3 cum.
4	30.086	78.5	87.3	77.5	62			30.034	84.0	92.5	77.0	47		0
5	29.990	81.5	89.0	79.0	63			29.950	87.0	86.3	78.3	69		10
6	{30.244 Read at 12 M.	74.0	68.5	58.5	51	5	9 haze	30.221	73.0	66.2	55.1	45	9	1 thin haze over all the sky
7								29.980	75.7	80.8	72.7	66	6	7
8	{29.990 Read at 10¾	72.2	70.2	68.3	90	5	10 nim.	30.018	72.5	69.6	66.9	86	4	10 nim. some fog
9	{30.090 Read at 10¾	67.5	64.2	62.3	89	9	10 mist	30.111	69.2	64.7	61.1	80	4	10
10	30.134	66.5	69.3	63.9	73	2	8 cir.	30.078	73.0	74.7	65.8	59	6	0 some haze
11	30.050	72.5	82.8	72.8	60	3	8 cir.	30.015	79.3	84.6	72.9	55	4	4 cir. haze
12	29.950	79.0	87.2	76.0	58									
13	30.072	79.0	81.8	74.5	69	4	3 cir. haze	30.050	80.0	78.7	71.4	68	6	0 but sky hazy
14	30.094	77.8	85.0	77.2	69	1	7 cir-cu.	30.054	86.3	89.2	78.4	60	7	5 {uniform haze half obscuring the suns
15	29.968	80.8	87.2	79.2	69	4	8 cir-cu.	29.816	88.3	92.6	83.0	65	10	4 haze cir.
16	29.922	76.0	73.0	66.5	69	10	10	29.971	79.0	76.1	64.9	52	8	0 {a little haze in the south
17	30.090	71.5	72.9	64.3	60	5	3 cum.	30.060	75.7	71.0	63.0	62	7	0
18	29.982	72.0	80.7	71.5	62		0	29.998	79.0	79.3	70.6	63	7	0 {a little haze and small cumuli
19	29.944	74.0	83.0	76.2	72			29.916	81.0	82.5	77.0	77		10 raining
20								30.150	71.8	64.6	62.2	87	7	10
21								30.041	74.6				6	9 thin
22	29.834	72.5	79.5	73.0	72			29.842	79.7	83.4	73.9	62	4	10
23								29.991	73.0	67.1	59.7	62	6	9 {sky wholly overcast with rather thin haze
24	29.920	69.0	66.2	64.3	89		10	29.938	70.0	68.4	66.0	87	5	10
25	29.778	69.0	70.3	69.0	93			29.836	73.6	72.0	68.5	83	7	10 cum. nim.
26	29.850	70.5	76.2	65.0	52		0							
27								30.100	75.8	79.3	67.8	52	5	5 uniform haze
28								30.100	74.3	72.3	66.7	73	3	10 thick haze
29	30.120	70.0	75.8	65.0	53			30.130	74.1	77.1	65.4	50	7	7 uniform haze
30	30.086	69.0	75.0	69.5	75			30.070	72.1	73.9	71.2	87	6	10 thin in places. cir-cu. nim.
31	30.040	72.0	77.5	73.8	83	3	10	29.948	79.5	83.2	75.9	70	2	6 haze. cum.
Sums	750.936	1829.5	1939.2		1746	69	112	870.974	2240.5	2180.9		1870	164	171
Means	30.037	73.2	77.57		70	4.9	6.6	30.034	77.3	77.89		67	6.38	5.9
Red. to 32°	29.918							29.903						

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1866phae.proj..379.

July 1868

Date	External Thermometer No. 4				Min.	Max.	Gauge			
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1		No. 2	
1	66.0	79.4	69.5	71.6	54.8	79.8				
2	71.0	87.2	73.6	77.3	63.9	86.5				
3	75.3	92.0	81.5	82.9	67.6	93.0				shower of rain before 7 P.M.
4	76.4	94.5	83.5	84.8	70.4	94.5				5h 30m P.M. - Standard Gaelle 92.0 6h 15m P.M. Mean of two thermometers 90.45
5	81.0	94.0	80.0	85.0	72.3	96.0				sprinkle of rain 6h 40m - P.M.
6	69.0	68.3	60.0	65.8	67.5	79.3 (Error last night reading)				One thermometer 9h 25m - P.M. 88.0 Mean of two " 12h 0m noon 92.6 Mean of four " 1h 35m P.M. 94.44 One (Gaelle) " 1h 54m P.M. 93.53
7	60.0	79.0	71.0	70.0		81.5				
8	71.0	69.2	63.5	67.9	two days 52.5	72.5	2.0	rain	3.5	
9	64.0	64.8	61.2	63.3	61.9	66.3				
10	59.0	76.0	68.5	67.8	55.8	78.5				
11	71.2	87.0	80.0	79.4	63.7	88.2				
12	78.0	94.0	82.0	84.7	70.5	93.2				
13	74.8	81.5	71.2	75.8	71.0	85.0				
14	75.0	93.9	78.0	82.3	67.7	93.0				
15	77.4	95.3	83.0	85.2	72.8	95.0				
16	76.3	80.5	at 9 3/4 64.5	73.8	71.8	82.0	0.5	rain	1.0	
17	66.5	72.3	65.2	68.0	61.5	75.0				
18	65.3	at 2 1/2 79.1	71.8	72.1	58.0	84.7				
19	70.5	90.0	72.5	77.7	59.5	90.0				
20	69.0	69.2	62.3	66.8		71.5				
21	63.7	at 2 1/2 72.5	70.0	68.7		78.5				
22	70.0	86.8	70.0	75.6	60.5	77.5				
23	66.2	70.4	66.0	67.5		72.5				
24	65.0	69.1	70.0	68.0	62.5	72.5				
25	66.5	72.9	67.0	68.8	63.8	72.5	36.5	rain	65.5	
26	69.0	78.0	68.5	71.8	64.0	78.0				
27	63.8	80.2	70.0	71.3		81.0				
28	66.0	75.5	67.5	69.7		77.5				
29	63.2	80.6	66.5	70.1	55.5	80.0				
30	66.7	72.1	71.0	69.9	60.5	79.0				Thunder showers at 1 P.M.
31	70.3	at 2 3/4 85.7	75.0	77.0	67.5	85.7	9.0	rain	17.5	
	2147.1	2491.0	2204.3	2280.6	1597.5	2469.9	48.0		87.5	
	69.2	80.4	71.1	73.6	63.9	82.0	0.80 in.		0.76 in.	

Mean of two gauges 0.78 in.

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1866phae.proj..379.

August 1868

Date	10 A. M. Barom.	Att.	Dry	Wet	Bal. Cum Guyot	Wind	Clouds	4 P. M. Barom.	Att.	Dry	Wet	Bal. Cum Guyot	Wind	Clouds
1	29.790	75.8	82.1	73.8	66	7	9 cir. cum.	29.728	81.2	82.7	75.0	68	5	10 a little rain
2	(?) 29.670	77.5	82.0	75.2	71									
3	29.867	76.3	80.0	74.1	74	4	10	29.911	82.0	86.0	73.6	89	3	7 {cirrus cum. haze
4	30.109	75.0	both bulbs 66.0	wet 66.0	100	5	10 raining hard	30.122	71.8	64.9	64.1	95	7	10 raining
5	30.264	70.0	64.6	64.0	97	7	10 nim. raining	30.258	69.8	67.6	64.8	85	8	10 nim.
6	30.266	68.0	68.7	63.0	71	7	10 cum.	30.241	70.7	65.6	61.3	77	10	10 various
7	30.120	66.8	64.0	61.0	83	10	10 nim.	30.056	68.2	66.8	62.5	77	6	9 ragged cumulus
8	29.940	67.2	72.0	69.0	85	5	10 nim.	29.898	71.6	73.7	70.0	82	10	10 nim. a little rain
9	29.820	69.0	72.0	71.5	97		10 raining							
10	30.017	72.0	74.6	64.6	56	7	3 cum. and cir.	30.030	74.7	76.9	64.3	50	8	1 cum.
11	30.080	70.0	76.0	67.8	64	6	7 cir.-cu.	30.030	73.0	71.5	68.4	85	4	10 raining
12	29.886	69.0	69.2	63.0	69			29.925	72.0	71.5	61.1	52	12	8 cum. cir-cu. nim
13	30.085	66.1	67.0	55.0	42	3	0	30.030	71.4	72.2	60.0	45	9	2 cum.
14	30.110	66.9	72.2	63.2	58	3	1 cir.	30.090	75.1	77.9	65.8	49	5	0 {small cumuli and haze
15	30.089	72.2	75.8	68.3	66	6	1 cir.	30.010	76.7	79.5	68.8	57	9	5 {cirri cumuli haze
16	29.968	70.5	67.0	61.8	73			30.050	71.4	68.2	62.5	90	7	6 cum. cir-cu.
17	30.280	64.5	64.2	57.8	66	1	4 cir.	30.071	71.3	71.6	60.8	50	6	4 cum,
18	30.350	67.4	71.1	63.8	65	11	9 cum.	30.302	70.2	73.0	63.5	57	11	2 cir.
19	30.135	70.0	76.7	71.6	77	12	9 cum.	30.053	78.0	80.8	74.0	71	12	7 cir. cum.
20	30.014	75.0	79.5	73.9	76	11	10 cum.	29.973	76.0	70.1	70.0	99	2	10 heavy rain
21	{Observations made at 10½ 30.110	73.5	75.8	67.4	62	6	9 cum.}	30.130	75.7	72.1	66.0	71	6	7 {cir. cum. haze
22	30.231	69.5	70.0	64.0	70	7	4 cir.	30.176	72.5	70.0	63.0	66	7	1 {horizon hazy a little cum. in the east and north
23														
24	30.058	68.2	72.8	66.6	71	3	9 {cir. 3 cir-cu. 6}	30.036	71.5	79.2	68.4	55	2	9 {haze cirki small cumuli
25	30.122	70.5	75.3	67.6	65	5	3 cir-cu.	30.130	72.4	79.2	67.7	53	6	1 {haze cirrus in the East
26	30.144	71.6	76.0	70.0	72	5	10	30.115	78.6	81.4	73.3	66	4	8 cir. thin haze
27	30.315	69.3	64.2	56.7	60	11	10	30.322	67.9	65.2	54.1	44	6	2 cir.
28	30.390	63.0	64.9	56.3	55	5	1	30.300	70.7	69.9	63.2	67	4	2 {uniform haze a little cirrus
29	30.135	67.0	69.0	65.8	83	6	10	30.037	72.6	78.1	69.8	64	13	2 cum,
30	29.962	72.6	81.0	76.0	78		0	29.950	72.0	83.2	71.8	54		10 raining
31	30.175	71.5	71.3	61.0	52	9	2	30.111	75.0	70.2	61.6	59	9	1 haze Cir.
Sums	902.502	2104.9	2165.0		2124	162	181	842.085	2054.0	2068.0		1877	191	164
Means	30.083	70.2	72.17		71	6.5	6.7	30.074	73.4	73.86		67	7.1	5.9
Red. to 32°	29.971							29.954						

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1866phae.proj...379.

August 1868

Date	External Thermometer No. 4				Min.	Max.	Gauge		
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1		No. 2
1	75.0	85.0	75.0	78.3	71.5	85.0			
2	75.0	85.0	77.2	82.4	(?) 57.2	85.5	35.0	rain	68.0
3	75.0	(At 2½) 86.8	78.0	79.9	71.2	87.0			
4	71.2	64.7	67.0	67.6	{bulb wet temp. of air} 66.5	77.0	40.0	rain	76.0
5	66.0	65.9	66.5	66.1	63.1	68.5	82.0	rain	151.0
6	64.7	(At 2½) 68.8	63.0	65.5	61.5	71.0	2.0	rain	3.5
7	60.8	(At 2½) 66.0	64.0	63.6	58.3	67.8	13.5	rain	24.5
8	63.4	77.1	71.0	70.5	(?) 58.3	77.8	{a few drops}	rain	0.5
9	69.0	79.8	69.8	72.9	61.5	79.2	21.0	rain	38.5
10	67.0	77.8	67.9	70.9	62.8	78.2			
11	65.3	(At 2½) 75.7	69.5	70.2	62.7	80.0			
12	62.0	72.0	63.0	65.7	60.5	73.0	38.0	rain	66.0
13	57.5	71.9	60.1	63.2	51.8	73.3			
14	61.2	78.5	67.9	69.2	53.1	79.0	1.5	rain	2.5
15	64.5	(At 2½) 80.8			60.3	80.8	a few drops of rain at night		
16	69.0	69.5	59.5	66.0	65.5	70.0			
17	56.2	71.8	61.2	63.1	51.1	72.8			
18	60.5	(At 2½) 75.7	67.5	67.9	55.8	76.0	morning rain		0.25
19	71.5	(At 2½) 83.6	75.0	76.7	63.8	83.8			
20	73.0	(At 2½) 79.0	71.0	74.3	70.2	82.0			
21	69.0	(At 2½) 72.3	65.5	68.9	67.3	77.8	69.0	rain	110.0
22	62.3	73.8	62.5	66.2	58.3	74.5		rain	0.5
23	60.6	75.5	64.0	66.7	{minimum reached on Aug. 23} 53.0	75.5			
24	61.5	80.8	69.3	70.5		81.0			
25	65.0	(At 2½) 80.0	70.0	71.7	62.5	80.0			
26	67.0	82.6	73.0	74.2	64.3	83.0			
27	68.2	(At 2½) 66.9	57.0	64.0	62.7	73.5			
28	51.0	(At 2½) 69.7	59.5	60.1	46.5	71.5			
29	62.7	78.9	70.2	70.6	{same as temp. of air at 5 P.M. on Aug. 28} 56.0	79.3			
30	71.2	87.5	72.5	77.1	67.0	87.5			
31	66.4	(At 2½) 72.4	66.5	68.4	63.8	73.5	4.5	rain	8.0
	2032.7	2355.8	2024.1	2092.4	1833.1	2404.8	306.5		549.25
	65.6	76.0	67.5	69.7	61.1	77.6	5.11 in.		4.75 in.

Means of two gauges 4.93 inches.

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1866phae.proj..379.

September, 1868

Date	10 A. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	4 P. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds
1	29.876	73.4	80.0	75.3	79	7	7 cir.	29.876	78.0	79.0	69.8	61	12	8 cir.-cu. cir.
	Observations made at 10½													
2	30.158	67.2	65.3	58.3	63	7	3 cir. cum.	30.203	70.5	62.8	56.8	67	7	7 cir.
3	30.390	65.0	63.0	57.5	70	5	10	30.380	67.3	61.6	55.1	64	9	10 cir. cir.-cu. nim.
4	30.196	64.2	65.1	61.2	78	12	10	30.080	70.0	74.8	71.9	86	11	9 cum. nim.
5	29.950	66.0	{wet with rain 64.4}	64.4	100	3	10	29.892	71.0	73.2	62.2	50	13	1 {streaks of cirrus in the W. small bank of cloud in the E.
6	30.000	65.0	68.2	61.0	64			29.964	69.5	71.5	62.0	56		0
7	29.876	68.5	69.0	68.0	95	apparatus out of order	10 raining	29.779	69.9	72.5	68.5	81	estimate apparatus out of order 5	6 {shower to the north cum. nim.
	Observations made at 11					estimate								
8	30.098	64.5	66.1	55.8	52	4	0	30.090	68.8	64.4	56.0	56	5	0 streaks of cirrus and a little haze
	Observations made at 10½					estimate								
9	30.036	63.5	67.2	61.8	72	5	10 cum.	29.974	66.1	66.7	63.1	81	4	10 nim.
10	30.058	66.5	66.4	65.8	97	estimate 3	10 raining	30.020	67.3	67.6	66.7	95	3	9 uniform fog sun visible through it
11	30.080	66.0	71.8	70.8	95	0	10 nim. misty	30.151	75.7	79.9	76.1	83	3	9 cum. cir.-cu. mist
	Observations made at 10¾													
12	30.218	69.8	68.3	67.0	93	5	10	30.194	70.9	67.5	65.2	88	5	10 nim. mist
13														
	Observations made at 10½													
14	30.250	65.0	64.8	55.4	51	9	9 cir.-cu.	30.232	67.2	65.0	55.0	49	3	8 cir.-cu. cirr.
15	30.332	62.2	64.0	56.5	60	estimate 9	1 cir.-cu.	30.377	64¼	64.2	61.6	59.0	11	5 cir.-cu.
	Observations made at 11½													
16	29.916	64.5	65.8	62.2	81	7	10	29.870	67.4	65.4	62.2	83	6	10 rain falling at 5 minutes past 4
17	30.185	55.3	47.9	41.1	50	15	3 cir.	30.156	57.6	54.5	44.3	37	10	4 cum.
18	30.404	53.9	54.0	45.0	43	0	0 slight patches of cum.	30.385	60.1	58.1	47.2	38	estimate apparatus out of order 2	1 faint cirrus: small cumuli
19	30.500	54.0	56.8	50.7	63	0	1 cum. near horizon	30.432	63.2	60.8	52.0	51	6	8 cir. cir.-cu. haze
20								29.982	60.5	64.0	57.5	65		
21	30.060	56.0	51.7	44.6	53	10	1 strat.	30.065	60.4	54.6	48.1	59	6	0 some cum.
22	30.133	53.0	52.2	47.0	65	4	6 cum.	30.083	58.4	56.1	49.7	61	5	9 various
	Observations made at 10½													
23	30.008	56.2	57.0	56.2	95	2	10 raining	29.958	58.3	60.2	59.8	97	5	10 fine rain
24	30.271	56.0	53.2	47.3	61	10	10	30.247	59.0	55.9	49.4	60	4	10
25	29.982	55.1	{bulb wet 51.0}	51.0	100	5	10 raining	29.920	56.7	54.0	53.3	95	2	10 fine rain
26	30.024	57.7	63.1	59.7	81	11	9 cum.	30.076	62.6	64.9	55.0	61	6	9 various tending to cir.-cum.
27	30.076	58.5	53.0	53.0	100	5	10	30.010	57.0	52.5	52.0	97	5	10 raining
28	29.890	56.7	61.0	58.4	85	5	8 cir.-cu. and cum.	29.752	63.7	68.0	62.1	70	6	1 cum. haze
	Observations made at 10½													
29	29.963	56.8	57.0	50.8	62	11	5 cum.	29.955	59.2	57.0	46.3	37	19	1 cum. {sky clear between the clouds}
	Observations made at 10½													
30	30.150	54.0	55.8	46.8	45	7	6 cir.-cu.	30.066	58.5	58.7	50.0	50	9	10
Sums	843.080	1714.5	1722.1		2053	163	189	872.169	1879.0	1849.8		1963	182	185
Means	30.110	61.2	61.50		73.	6.3	7.0	30.075	64.8	63.79		68	6.7	6.6
Red. to 32°	30.022							29.977						

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1866phae.proj..379.

September, 1868.

Date	External Thermometer No. 4				Min.	Max.	Gauge			
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1		No. 2	
1	73.2	(At 2¼) 82.0	69.0	74.7	63.8	85.5				
2	60.5	(At 2⅙) 64.7	59.0	61.4	(At 10⅓) 57.5	69.0				
3	55.0	(At 2¼) 62.7	60.0	59.2	50.1	67.0				
4	61.2	(At 2⅙) 68.9	65.8	65.3	58.3	75.3	1.0	rain	1.5	
5	62.5	75.2	63.2	67.0	60.1	75.8	112.5	rain	211.0	
6	58.2	71.3	64.5	64.7	54.5	72.0				
7	68.0	73.4	62.8	68.1	62.3	74.3	12.5	rain	24.0	
8	57.5	(At 2½) 67.2	55.5	60.1	(At 11) 53.0	68.0	31.5	rain	62.0	
9	56.8	(At 2⅓) 66.3	66.0	63.0	(At 10⅔) 51.9	69.0				
10	67.3	(At 2¼) 66.1	65.0	66.1	64.5	67.5	6.5	rain	12.0	
11	63.0	80.2	75.0	72.7	60.2	80.5	16.5	rain	31.0	
12	67.0	(At 2¼) 70.8	66.5	68.1	(At 10¾) 65.0	74.6				
13	64.0	79.8	68.5	70.8		80.0	20.0	rain	38.0	
14		65.0	58.5		(At 10⅓) 61.2	68.0	22.0	rain	40.0	
15	54.0		59.0		51.3	64.5				
16	60.0	66.2	54.8	60.3	(At 11½) 57.0	68.3	0.5	rain	1.0	
17	42.0	(At 2⅓) 54.6	44.5	47.0	40.8	56.0	1.5	rain	2.5	
18	42.5	58.3	45.2	48.7	36.2	59.2				
19	42.3	62.2	49.3	51.3	39.2	63.4				
20	53.5	65.2	60.0	59.6	49.5	65.5				
21	47.5	56.9	45.2	49.9	48.2	60.5	28.0	rain	56.0	
22	39.5	56.2	49.0	48.2	37.5	57.5				
23	53.0	61.3	57.5	57.3	48.3	66.5				
24	53.6	56.6	52.0	54.1	51.0	58.0	6.5	rain	12.5	
25	52.5	53.7	53.5	53.2	49.8	53.7	8.5	rain	15.0	
26	55.5	63.1	58.0	58.9	51.0	64.5	75.0	rain	144.0	
27	53.0		51.0		50.5	57.5	68.0	rain	123.5	continual rain from 9 P.M. on the 26 to 10 A.M. on the 27
28	59.0	67.7	62.0	60.9	49.5	68.8	18.0	rain	34.5	
29	48.0	58.9	48.0	51.6	46.8	62.8				
30	42.3	62.5	58.0	54.3	39.3	62.5				
	1606.4	1837.0	1746.3	1616.5	1508.3	2015.7	428.5		808.5	
	55.4	65.6	58.2	59.9	52.0	67.2	7.14 in.		7.00 in.	

Mean of two gauges 7.07 in.

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1866phae.proj..379.

October, 1868.

Date	10 A. M.							4 P. M.						
	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds
1	30.332	59.7	47.8	44.0	72	8	10 nim.	30.340	54.4	48.4	41.9	53	2	10
2	30.348	53.0	51.7	46.5	65	7	10 cum.	30.287	57.1	52.7	46.6	59	6	4 cir.-cu.
3	30.186	53.0	48.0	47.0	92	5	10 nim.	30.171	56.5	55.1	49.6	65	6	4 cum.
4	30.240	51.0	53.5	48.5	67		0	30.219	57.7	52.8	48.3	70	5	5 {thin cirrus in long bands cum. near horizon}
5	29.873	51.2	50.6	49.0	89	4	10 nim.	29.688	57.1	58.0	54.5	79	{estimate} 4	5 cir. haze: a little cum.
6	29.833	55.0	59.2	52.0	59	10	3 cum. haze	29.983	58.8	62.3	52.3	46	8	0 some haze: a little cum.
7	30.218	52.0	54.0	51.0	80	2	7 cir. haze	30.128	58.3	62.4	56.6	68	11	9 much haze cir. cir.-cu.
8	29.884	59.8	71.8	62.5	57	12	10 nim.	29.802	66.0	72.0	66.3	69	6	8 nim. ragged cum. a little cir.
9	30.300	52.5	43.0	36.5	47	10	4 cir.	30.278	54.6	47.7	41.0	51	6	1 cir. haze in the East.
10	30.270	49.0	48.0	43.0	63	4	9 cir. cum.	30.201	55.4	50.5	45.8	67	5	0 {a little cir.-cu. and haze on the horizon}
11								29.901	58.5	65.1	59.8	72	7	5 mostly haze: some cum.
12	30.011	54.5	56.0	49.0	57	9	2 cum. haze	30.028	57.3	57.0	46.0	36	17	1 faint cir. small cumuli: haze
13	30.232	50.0	51.5	45.0	56	7	0	30.171	57.1	56.5	48.3	51	3	10 {a little sky visible clouds mostly cir.-cu.}
14	30.266	54.0	48.3	45.0	76	1	10 nim.	30.221	54.9	51.6	47.1	69	1	10 {clouds thin cir.-cu. nim.}
15	30.250	53.0	52.5	51.0	90	4	10 nim.	30.037	54.8	50.8	49.9	94	6	10 nim.
16								29.870	58.4	59.9	53.0	60	4	2 cir.
17	29.920	50.0	33.0	27.5	46	19	10 nim.	30.106	46.8	35.6	31.9	64	13	1 cum. near horizon.
18	30.360	42.0	37.2	32.0	51					44.4	37.7	47	10	0 cir. near west horizon
19	30.102	46.5	50.5	45.5	65	7	6 cir. cum.	29.952	51.0	50.3	49.3	93	8	10 raining gently
20	30.126	47.5	46.0	40.5	58	12	5 cum.	30.132	52.6	50.4	42.7	47	1	7 cir. cir.-cu.
21	29.982	46.1	46.2	42.0	68	9	10 mixed cum. and nim.	30.134	47.6	43.2	42.2	92	6	10 raining
22	29.938	44.0	36.5	34.7	82	13	{quantity not given nim. and cum.}	29.949	46.4	39.3	37.0	79	6	10
23	30.348	45.5	36.5	33.5	71	8½	9 cum.	30.380	45.6	38.6	32.7	47	11	6 {compact cumulus breaking up}
24	30.462	41.0	33.5	30.5	71	3	1 stratus	30.090	46.5	43.0	36.8	50	7	0 {a little cirrus horizon somewhat hazy}
25								30.092	48.7	51.5	46.0	63	1	8 {fibrous cum. loose cum. haze}
26	30.016	47.0	49.0	47.7	90	3	10 cir. cum.	30.050	51.1	52.4	46.2	59	12	1 {banks of cloud round the horizon}
27	30.318	45.5	44.5	40.0	64	3½	0 a slight haze in N.E.			49.1	44.7	68	7	9 cum.
28	29.848	52.5	58.0	57.5	97	10	9 cum. nim.	29.850	54.5	56.4	51.0	67	7	8 cir. cir.-cu.
29	30.298	44.5	36.0	28.5	40	13½	7 cir.	30.317	45.9	39.8	31.6	30	10	0 cir.
30	30.580	40.5	35.0	28.5	40	4¼	0	30.630	44.8	37.4	32.5	55	5	0 somewhat hazy
31	30.546	41.0	38.5	36.0	77	0	9 dense cum.	30.379	45.4	49.3	45.7	74	7	10
Sums	845.087	1381.3	1315.3		1890	188¾	171	873.386	1543.8	1583.5		1944	208	164
Means	30.182	49.3	46.98		67½	7.3	6.6	30.117	53.2	57.08		63	6.7	5.3
Red. to 32°	30.126							30.051						

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1866phae.proj..379.

October, 1868.

Date	External Thermometer No. 4				Min.	Max.				
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1	Gauge	No. 2	
1	48.0	48.5	48.0	48.2	46.8	58.5	0.5	rain	1.0	
2	46.5	54.4	50.5	50.5	45.3	55.0				
3	46.2	56.2	46.3	49.6	45.5	57.0	6.5	rain	12.0	
4	39.0	55.5	49.0	47.8	36.5	55.5	0.5	rain	1.0	
5	45.0	60.4	52.0	52.5	42.5	60.4				
6	54.2	63.3	49.0	55.5	47.0	65.0				
7	39.2	64.8	56.0	53.3	37.5	65.5				
8	63.5	73.5	53.5	63.5	53.5	73.5				a short shower at 11½ A.M.
9	38.3	48.7	39.0	42.0	37.5	54.5	2.0	rain	3.5	
10	37.0	52.1	44.0	44.4	36.0	52.3				
11	43.8	66.5	57.5	55.9		66.5				
12	49.0	59.5	48.5	52.3	36.0	60.5				
13	39.8	56.3	48.0	48.0	38.5	56.6				
14	45.5	52.8	49.0	49.1	45.0	52.8	3.0	rain	5.5	
15	48.5	52.3	50.0	50.3	47.0	53.5	5.0	rain	9.5	
16	48.2	62.0	58.0	56.1		62.5	0.25	rain	0.5	
17	44.0	34.6	28.5	35.7	33.0					Oct. 17, 1868. — Snowing violently at 10 A.M. Measurements on level ground gave 17 ounces of melted snow to 29.2247 square inches. Little snow melted on the ground for 24 hours after it fell, and some was left Oct. 19.
18	26.0	43.0	38.5	35.8	23.5	44.5	19.5	snow	25.0	
19	38.5	53.3	47.5	46.4	50.5	54.5				
20	40.0	50.5	40.5	43.7	38.0	50.5	2.5	rain and snow	6.0	
21	39.2	44.8	43.0	42.3	36.4	46.5				
22	35.0	38.1	36.0	36.4	33.5	43.0	23.0	rain	41.0	
23	33.5	38.2	29.5	33.7	32.0	39.0	5.5	rain	11.0	
24	23.5	43.1			21.3					
25	32.0	53.0	44.5	43.2		53.0				
26	46.0	55.0	44.0	48.3	31.0	56.0				
27	32.3	51.2	49.0	44.2	31.5	53.5				
28	56.5	61.7	45.0	54.4	44.5	63.5	2.5	rain	4.5	
29	32.0	41.2	33.0	35.4	31.5	48.5	0.5	rain	1.0	
30	26.0	39.9	31.0	32.3	25.0	44.0				
31	24.0	51.0	49.0	41.3	22.0	51.5	3.5	rain	7.0	
	1260.2	1625.4	1357.3	1392.1	1048.5	1597.6	74.75	ounces	128.5	
	40.7	52.4	45.2	46.4	37.4	55.1	1.25	inches	1.11	

Mean of two gauges 1.18 inches

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1866phae.proj..379.

November, 1868

Date	10 A. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	4 P. M. Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds
1								29.633	52.6	52.2	51.9	98	0	10 raining gently
2								29.833	44.3	35.1	34.8	97	14	10 raining
3								29.826	42.3	38.0	34.3	65	12	5 light cumulus breaking up
4								29.890	47.8	49.0	42.0	51	8	0 somewhat hazy
5	29.762	44.0	42.0	41.5	96	4	10 dense fog	29.652	45.2	42.1	41.6	96	9	10 raining
6	30.030	44.0	43.0	37.0	51	15.5	2.5 cir.-cu.	30.087	50.5	44.0	36.7	43	15	4 cum.
7	30.412	41.0	33.0	28.5	56	10.	0	30.432	43.0	37.7	30.9	43	4	5 thin cirrus.
8								30.181	43.7	46.1	44.4	87	5 var.	10 thick
9	30.030	42.5	39.0	39.0	100	1.5	10 nim.	30.001	44.3	42.9	42.6	97	0	10 misty
10	30.190	43.5	40.0	39.5	95	10.5	10 nim.	30.174	44.6	41.4	41.1	97	9	10 misty raining
11	29.810	45.0	40.5	40.5	100	5.0	10 nim.	29.776	44.5	42.3	41.9	96	4	10 raining
12	30.140	40.0	37.5	33.0	58	15.5	0 cum. in the N.	30.232	44.2	37.2	30.2	39	13	0 small cum. in horizon
13	30.388	38.0	35.0	31.5	66	4.	0 light cirrus round horizon	30.256	44.5	43.5	37.5	52	7	3 cir.-strat.
14	30.238	40.5	45.5	39.5	54	10.5	6 cir.	30.199	46.7	48.5	40.1	40	3	4 cir. and cir.-cu. in long bands
15								30.300	42.3	36.7	33.1	65	0	4 thin cir.-cu.
16	30.404	37.0	29.5	27.0	72	8.5	1 strat.	30.367	42.0	36.7	31.0	50	3	1 thin cir.
17	30.362	35.0	27.5	25.5	76	5.5	10 cum.	30.260	39.3	32.4	28.9	65	4	10 thin cir. and cir.-cu.
18	29.940	38.5	38.5	37.5	91	12.	10 raining hard	29.750	40.4	40.7	40.3	96	16	10 raining
19	29.850	38.5	34.0	33.5	95	4	10 nim.	29.806	40.7	39.6	38.0	85	0	9 loose cum. dispersing
20	29.822	37.0	33.5	32.0	84	5	7 cir.-strat.	29.782	41.1	38.0	34.5	67	4	8 cir.-cu.
21	29.622	38.0	35.5	32.0	65	15.5	8 cir.-cu.	29.620	40.4	37.3	32.3	53	16	10 loose cumulus small patches of clear sky
22								29.749	41.5	37.4	33.1	59	9	10
23	29.990	36.5	33.0	30.0	70	10.5	0	29.985	41.7	39.3	33.8	51	6	0
24	29.924	38.0	39.0	35.0	64	8.	2 cir.-strat.	29.931	42.1	43.6	37.9	55	17	2 cum.
25								30.163	42.1	36.5	36.0	95	5	10 thin and uniform some clear sky in the east
26								29.252	43.0	46.3	46.2	99	3	10 fine rain; misty
27								29.973	43.7	36.0	32.0	61	16	0 small cum. in north horizon and cir. in west.
28								29.826	42.0	37.9	33.4	58	3	6 thin cir. and cir.-cu.
29								29.477	40.8	40.0	34.7	53	18	9 loose cum.
30								29.354	40.6	37.8	35.0	74	4	10
Sums	510.874	677.0	6260		1293	145.5	96.5	897.767	1301.9	12162		2087	227	200
Means	30.051	39.8	36.82		76	8.6	5.7	29.925	43.4	4054		70	7.6	6.7
Red. to 32°	30.020							29.885						

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November, 1868.

Date	External Thermometer No. 4				Min.	Max.				
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1	Gauge	No. 2	
1		57.0	52.0			62.0				
2		36.3	34.0			51.5	66.0	rain	111.0	
3	33.0	38.7					8.0	rain and snow	13.5	
4	31.5	50.4								
5	38.5	44.7	41.5	41.6	28.0	51.0				
6	36.3	45.5			36.0		8.5	rain	14.5	
7	28.0	38.3	29.2	31.8	26.0	47.1				
8	30.5	44.0	41.0	38.5		46.5				
9	39.0	(At 2½) 43.0	42.8	41.6	27.0	43.5	25.5	rain	46.0	
10	40.2	41.4	42.5	41.4	38.5	42.5	8.0	rain	14.5	
11	44.5	40.9	38.0	41.1	39.5	45.0	21.5	rain	38.0	
12	30.0	40.5			29.5		16.5	rain	30.0	
13	24.3	44.3			23.5					
14	29.8	50.8			28.5					
15	29.0	37.0								
16		36.4	28.6		24.0	51.3				
17	21.5	33.9	31.5	29.0	21.0	34.0				
18	36.5	39.8	34.0	36.8	27.0	41.5	14.5	snow and rain	26.0	a little snow previous night.
19	33.0	39.3	33.0	35.1	31.5	39.5	53.0	rain	106.0	Aurora at 9 P.M. with steady streamers and upward waves of white light.
20	28.5	39.7	32.0	33.4	28.0	39.8	0.25	snow	0.5	
21	33.0	(At 2½) 38.5	34.6	35.4	30.0	38.9				
22	33.5		32.5			39.3				
23	29.0	40.4			28.0					
24	33.0	45.7	38.0	38.9	27.5	46.0				Wind 21 miles an hour at 2 P.M.
25	26.7	37.9	34.0	32.9		38.0				
26	38.0	43.5					8.5	rain	13.5	Wind 45 miles an hour at 8 35/60 P.M.
27	33.5	37.6	29.7	33.6		47.3	35.5	rain	65.0	
28	23.5		34.0			40.0				
29	31.5	40.5	36.0	36.0		41.0				
30		39.8	32.2			39.8				
	835.8	1165.8	751.1	547.1	493.5	925.5	267.75		478.5	
	32.1	41.6	35.8	36.5	29.0	44.1	4.49 inches		4.14 inches	

Mean of two gauges 4.31 inches.

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December 1868

Date	10 A. M.							4 P. M.						
	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds	Barom.	Att.	Dry	Wet	Rel. Hum. Guyot	Wind	Clouds
1								29.575	37.0	23.0	20.2	62	8	10 {clear streak to windward (S.W.)}
2	29.824	30.5	23.5	20.5	60	16.5	4 cum.	29.848	32.3	26.9	22.9	53	10	6 loose cum.
3	30.538	30.0	23.5	21.5	73	10.	0 slight cum. in Nath.	30.134	38.8	30.8	26.6	56	8	0 {streaks of cum. in horizon}
4	30.212	32.0	27.0	24.5	70	11.5	5 cir. cum.	30.161	35.3	27.4	25.1	72	2	5 cir.
5	29.990	32.5	28.0	26.5	83	6.5	10 nim.	29.852	35.5	29.1	29.0	99	10	10 snowing
6								30.152	36.5	27.2	25.2	76	5	10
7	29.990	32.0	26.0			2.	10 nim.	29.500	35.1	36.3	35.8	95	18	10 raining
8	29.148	38.0	39.0	34.5	59	13.	7 cum.	29.219	38.8	34.0	28.8	51	18	5 cir. cum.
9	29.582	31.5	23.0	19.5	53	20.	9 cir-strat.	29.690	34.3	24.5	21.3	59	18	3 cum.
10	29.000	30.0	21.0	19.5	78	9.	3 cir-cu.	29.884	32.3	21.9	18.8	57	8	1 cum. on horizon
11	29.906	25.5	18.5	16.5	69	5.	5 cir-cu.	29.714	27.0	22.7	19.0	50	9	10
12	29.790	27.0	21.5	19.0	65	13.5	9 cum.	29.910	32.3	24.8	20.5	45	{variable 8 estimated}	0 streaks in the North
13								30.150	34.3	28.0	24.0	54	11	0 {flakes of cloud in the horizon}
14								29.980	31.5	25.8	22.4	59	5	10
15								30.101	35.2	29.2	25.0	54	9	1 {cir. in Southwest some haze}
16								29.798	32.0	29.7	27.4	75	0	10
17								29.200	34.6	34.7	32.0	72	5	2 cir.
18								29.591	38.0	28.9	24.5	52	{10 estimated}	1 loose cum.
19								30.366	33.0	19.8	15.6	38	7	0
20								29.914	31.2	33.0	33.0	100	1	10 fine rain
21								29.702	39.0	40.2	36.0	63	7	9 nim.
22								30.020	36.2	33.7	29.0	55	6	1 cum.
23														
24														
25	29.790		14.5	13.0	73									
26	30.058	26.5	16.0	14.0	66			30.180	30.0	21.5	18.0	51		
27														
28	30.166	29.5	29.5	28.5	89	3.	8 cum.	30.208	33.0	32.5			6	4 cir-cu.
29	30.176	28.5	23.0	22.0	86	0.	10 nim.	29.906	32.5	38.7	37.4	88	{variable 9}	10
30	30.286	32.0	25.0	22.5	68	10.	10 cir-strat.	30.188	33.3	27.2	24.0	62	0	10
31	30.246	30.5	30.5	29.0	84	3.	9.5 cum.	30.210	35.7	33.0	29.6	66	6	8 cir., part in very fine streaks covering most of sky
Sums	478.702	456.0	389.5		1076	123	99.5	807.093	924.7	784.5		1664	204	146
Means	29.919	30.4	24.34		72	8.8	7.1	29.892	34.2	29.06		64	7.8	5.6
Red. to 32°	29.914							29.877						

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December 1868

Date	External Thermometer No. 4				Min.	Max.				
	7 A.M.	2 P.M.	9 P.M.	Mean	Read at 10 A.M.	Read at 9 P.M.	No. 1	Gauge	No. 2	
1	33.2	23.5	21.0	22.6		31.5				
2	17.0	26.4	17.7	20.4	14.0	27.4	2.0	snow		
3	19.0	32.0	25.6	25.5	16.5	32.0				
4	21.3	(At 2½) 29.8			20.5					
5	26.5	33.6	26.0	28.7	22.5	33.6				Began snowing Dec. 5 about 11 A.M. Ceased during night. Depth of snow 6 inches (mean of 10 measurements) in. Snow reduced to rain 0.485
6		30.0	26.0			30.0		snow	20.0	
7	24.0	36.4	42.5	34.3	20.5	42.5				Snow fell at intervals in the forenoon of Dec. 7 P.M. Rain began about 3 P.M.
8	36.5	36.2			25.5		44.5	rain	100.0	Sudden snow squall at 11 P.M. of Dec. 8. Sky richly covered.
9	22.0	26.9	20.0	23.0	21.5	42.0	1.5	snow	0.0	
10	14.0	22.3	17.0	17.8	13.5	Set but not read				
11	12.5	23.9	21.0	19.1	12.0	24.0				
12	14.3	25.8	23.0	21.0	14.5	26.0				
13	20.0		21.0		Minimum thermometer not set during this interval. The reading 6.5 belongs to the night of Dec. 18–19	24.0				
14	14.0	27.3	23.5	21.6		27.3				
15	16.5	31.0	22.0	23.2		31.5				
16	15.3	29.9								
17	29.0	36.3	36.5	33.9		36.5				
18	36.5	(At 2½) 32.6	19.3	29.5		40.4				
19	8.0	(At 2½) 20.2								
20	18.5	33.5	39.5	30.5	(Read at 9 P.M.) 6.5	39.5				
21	34.0	46.0	37.5	39.2	(Read at 2 P.M.) 28.4	46.5	16.0	snow and rain	23.5	
22	30.0	35.7	28.6	31.4	(Read at 4 P.M.) 30.0	37.9				
23	29.3		22.0			35.5				
24	13.5		10.0		(Read at (?) P.M.) 12.5	22.0				
25	7.0	23.5	20.2	16.9	3.5	23.5				
26	16.8		13.0		12.5	21.5				
27	4.0	25.0	29.0	19.3	3.5	29.0				
28	23.5		25.4		23.0	36.7	9.5	snow		During the night of Dec. 27–28 snow fell to the depth of 2¾ inches from a mean of 7 measures. Snow reduced to water from 7 measures 0.155 inches.
29	16.0	38.1	35.0	29.7	15.5	39.0				
30	24.0	27.9	25.0	25.6	22.5	35.5	9.5 (rain)	snow & rain	25.5	
31	26.3	33.8			18.0	34.0				
	612.5	787.6	647.3	513.2	356.9	849.3	83.0		169.0	
	20.4	30.3	24.9	25.6	17.0	32.7				

Probable amount of snow & rain 1.74 inches { larger amount noted when the gauges differed

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Notes on Rainfall at Harvard College Observatory.

The table pasted opposite has been copied without verification and should be revised if any very accurate investigation is wanted. Below are some sums taken from it which have not been checked. The year is divided into thirds so as to bring the summer months and September together, because in comparing dry and wet seasons those months are of the most obvious importance.

There is not much doubt that determinations of rainfall made previous to the year 1866 are too large from the assumption that the measuring glasses gave troy ounces instead of avoirdupois ounces as was probably the case in fact. But there seems to be no means of discovering the truth with certainty. The figures are accordingly given below as they were taken from the opposite table as far as 1866, and then their products by 0.9114 entered in another list.

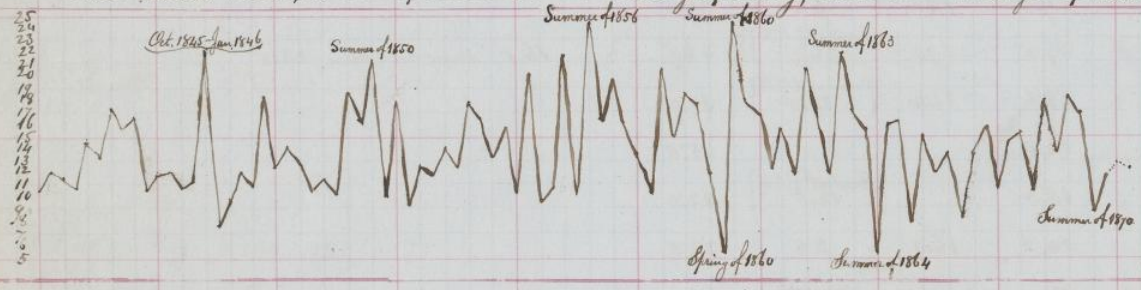
	Feb. to May	June to Sept.	Oct. to Jan.		Feb. to May	June to Sept.	Oct. to Jan.		Feb. to May	June to Sept.	Oct. to Jan.
1841-2	11.24	13.11	12.40	1851-2	19.48	10.01	13.85	1861-2	18.57	13.49	16.99
2-3	11.83	16.20	14.30	2-3	12.96	15.40	13.79	2-3	13.05	22.29	18.60
3-4	18.68	17.12	17.90	3-4	19.15	18.11	14.55	3-4	13.15	23.45	18.73
4-5	11.30	12.52	12.91	4-5	17.21	11.54	21.82	4-5	17.20	6.20	17.58
5-6	11.93	12.33	23.96	5-6	10.39	11.91	23.33	1865	17.67	8.61	[12.41 Oct. Nov. Dec.]
6-7	8.15	10.26	13.03	6-7	11.71	26.76	17.89				
7-8	11.99	19.95	13.64	7-8	21.34	17.64	14.52				
8-9	15.45	14.07	11.42	8-9	11.15	22.59	16.51				
9-0	12.29	10.98	20.63	9-0	20.25	10.07	12.79				
1850-1	17.79	23.05	10.51	1866-1	6.19	27.17	19.66				

	Feb.-May	June-Sept.	Oct.-Jan.		Feb.-May	June-Sept.	Oct.-Jan.		Feb.-May	June-Sept.	Oct.-Jan.
1841-2	10.03	11.95	11.30	1851-2	17.76	9.12	12.62	1861-2	16.93	12.30	15.49
2-3	10.78	14.77	13.03	2-3	11.81	14.04	12.57	2-3	11.89	20.32	16.95
3-4	17.03	15.60	16.82	3-4	17.45	16.51	13.26	3-4	11.99	21.37	17.07
4-5	10.30	11.41	11.77	4-5	15.69	10.52	19.89	4-5	15.68	5.65	16.02
5-6	10.87	11.24	21.84	5-6	9.47	10.86	21.26	5-6	16.11	7.85	[15.08 allowing ⅓ more for January; no record]
6-7	7.43	9.35	11.88	6-7	10.67	24.39	16.31	6-7	[12.24 allowing ⅓ more for February]	13.50	8.28
7-8	10.93	18.18	12.43	7-8	19.45	16.08	13.24	7-8	13.36	15.65	10.87
8-9	14.08	12.82	10.41	8-9	10.16	20.59	15.05	8-9	14.85	15.28	10.66
9-0	11.20	10.01	18.80	9-0	18.46	17.38	11.66	9-0	18.10	13.76	18.30
1850-1	16.22	21.01	9.58	1866-1	5.64	24.76	17.92	1870-1	16.98	8.87	11.44
Sums	118.87	136.34	137.36		136.56	164.25	153.78		148.13	134.55	140.16
Means	11.887	13.634	13.736		13.656	16.425	15.378		14.813	13.455	14.016

Total amount for 30 years Feb. 1841 to Jan. 1871 inclusive 1270.00 inches.
Mean for 1 year 42.33 "
Mean for 4 months 14.11 "
" " 4 summer months 14.50 "

It is not unlikely that the rain was correctly measured or weighed in troy ounces at first and that afterwards when the glass graduated to avoirdupois ounces, which was found in use when Prof. Winlock took charge of the Observatory, was bought, the erroneous figures began. But it is not known when measurements were first made with that glass.

The sketch below, which represents the above table graphically, shows that the drought of 1864 has not been made up since.



Remarks on maxima & minima noted on chart.
1st max. due to Nov. 1845
2d " " " Sept. 1850
3d " " " Aug. 1856
4th " " " Sept. 1860 but all the summer wet
5th " " " July 1863
1st min. " " May 1860 but all the spring dry
2d " summer dry the year next
3d " " " "

Total rainfall for years 1864 – 1870 inclusive, (reducing years 1864 & 1865 to avoirdupois standard, and adding ⅕ of sum in 1866 to allow for January & February) 278.62 inches.
" " " " 1857–63 " (reduced to avoirdupois standard) 338.82 "
" " " " 1850–56 " not reduced 337.23 "
" " " " 1843–49 " not reduced 299.91 "
Sum 1254.58 "
Mean 313.65 "

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Extract from Meteorological Record of Harvard College Observatory

A rain-gauge seems to have been first set up at the Old Observatory in the College yard in March 1840. The monthly totals are given in inches and fractions of an inch. The figures are copied as they stand in the records, but it is doubtful if the measurement of the water from the gauge was actually made in troy ounces, as stated in the older records.* The measuring glass found in use in 1866 was graduated to avoirdupois ounces. Surface of rain gauge 100 square inches.

	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	1850	1851	1852	1853	1854	1855
January		4.902	0.784	2.211	4.454	3.930	2.603	3.667	2.888	0.722	3.857	1.044	2.223	3.871	1.812	7.258
February		1.811	3.182	6.555	2.033	3.785	1.500	3.354	4.800	1.463	2.508	4.218	0.618	5.765	3.971	3.743
March		2.745	2.755	5.833	5.844	3.667	1.558	2.876	2.500	6.597	3.277	2.014	2.104	3.306	2.969	1.159
April	3.680	4.766	3.363	4.129	0.342	1.482	1.501	2.834	1.235	1.178	4.788	9.101	7.942	3.695	4.582	3.990
May	2.290	1.979	2.526	2.166	3.478	2.631	3.581	1.988	7.714	2.755	7.220	4.142	2.299	6.454	5.453	1.501
June	2.508	0.665	5.843	5.377	1.767	3.154	2.674	5.494	2.812	1.368	2.772	1.615	4.025	0.555	3.585	3.581
July	4.389	3.020	1.415	2.470	2.877	4.066	3.192	2.597	2.584	0.969	2.422	3.211	1.862	3.021	3.239	4.845
August	2.059	6.131	5.599	8.749	3.354	2.527	2.375	5.395	3.496	6.517	7.638	1.266	7.505	8.588	0.351	2.270
September	2.580	3.272	3.344	1.520	4.503	2.584	2.014	6.586	5.177	2.128	9.823	3.980	2.009	5.947	4.360	1.216
October	{record missing}	3.725	1.259	5.814	3.248	4.218	1.634	1.444	6.308	7.562	2.508	4.674	2.916	3.956	2.109	5.510
November	9.304	2.755	4.142	4.256	4.501	10.431	2.546	4.940	1.159	5.434	3.591	4.959	3.528	4.911	7.980	3.329
December	1.910	5.140	6.642	3.344	1.215	6.707	5.187	4.370	3.230	3.751	3.344	1.995	3.173	4.294	4.474	7.191
		40.870	40.854	52.474	37.286	49.182	30.380	46.359	43.103	40.774	54.148	42.179	40.507	53.833	45.175	47.593

	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871
January	5.301	7.816	3.439	8.227	1.00	8.930	7.695	4.427	3.344	4.873	{no record}	4.36	2.53	3.03	5.69	1.45
February	0.570	3.724	1.862	6.479	2.213	2.793	2.793	1.634	6.893	4.313		4.10	0.95	5.81	4.22	2.63
March	0.970	3.491	1.767	8.436	1.73	6.565	6.213	2.457	5.566	4.247	3.60	4.22	1.85	5.33	4.66	3.10
April	3.439	8.949	3.809	2.356	1.32	6.023	1.729	7.391	7.809	2.578	1.66	2.08	4.73	2.83	6.13	3.63
May	6.132	5.118	3.714	2.983	2.26	3.192	2.318	1.672	2.907	6.237	3.62	2.96	7.316	4.99	1.97	3.60
June	2.869	1.710	7.552	6.814	7.410	2.565	6.259	2.470	1.779	2.269	2.74	1.75	2.50	3.64	3.53	5.35
July	4.243	6.327	4.366	4.500	5.187	3.591	6.054	12.426	1.147	3.667	3.32	5.45	0.78	2.45	1.20	2.96
August	14.981	6.669	5.567	5.390	5.244	5.587	6.289	5.567	2.546	1.757	1.73	7.95	4.93	1.55	2.03	3.10
September	4.664	2.935	5.111	5.366	7.329	1.767	4.655	2.983	1.681	0.997	5.71	6.50	7.07	5.92	1.81	1.08
October	3.238	3.668	2.869	3.117	1.862	2.679	5.244	3.401	4.598	5.710	0.96	5.62	1.18	5.18	3.76	5.70
November	2.893	2.565	2.375	3.683	4.123	3.306	6.726	6.536	3.529	3.677	2.38	1.54	4.31	2.43	3.52	4.74
December	3.895	4.821	3.440	4.987	4.750	3.306	2.220	5.453	4.588	3.121	0.375	1.48	1.74	5.68	2.71	3.48
	53.795	59.921	45.465	59.338	46.428	50.284	57.205	56.417	39.452	43.581	26.595 / 5.379 / 31.91	41.71	39.89	47.98	41.53	40.56

*If the observations previous to 1866 require a correction for error occasioned in reduction by assuming the water to have been measured in ounces troy, the results must be multiplied by 0.91146 (logarithm 9.95974), which leaves for August 1856 for example 13.655 inches instead of 14.981. There is no apparent error in the original record of this remarkable rainfall.

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1866

July

Day	Time 9 PM +	Barom.	Att.	Times	Ext. Therm No 4
1				9	68·8
2				9	74·0
3				9	[79]
4				9	79·5
5		30·043	76·7	9 9	76·1
6	+30m	29·936	79·5	9 9½	80·0
7	+60	29·944	82·9	7 2 10	83·5
8		29·927	81·0	7 3 9	81·5
9	+60	30·166	70·5	7 2½ 10	73·2
10		30·249	71·7	9 9	69·6
11	+20	30·110	70	9 9⅓	73·2
12		29·923	77·7	10 9	75·2
13		29·853	83	7 2 9	82·9
14		30·063	76	7 3 9	75·5
15	+15	29·999	82	11 9¼	84·4
16	+40	30·086	77	7 2 9⅔	82·5
17				7 6″/12	80·2
18		29·822	82	7 0¼ 9	80·2
19	+60	30·102	68	9	62·7
20	+90	30·155	70·5	11 10½	73·8
21		30·000	68	7 2 9	65·0
22				9	64·5
23	+50	29·835	66	7 2⅓ 9⅚	61·5
24		29·974	71·5	9	70
25				9	78
26		30·105	75	7 2½ 9	71·4
27		29·937	74	7 3⅞ 9	68·5
28	+15	29·795	69	7 2¾ 9¼	66·4
29		29·785	73	9	78·5
30		29·867	71	7 2⅓ 9	70·0
31		29·968	72	9	70
Sums	+440m	719·644	1788·0		2299·6
Means	9h 18m	29·985	74·5		74·2
Red to 32°		29·861			

August

Day	Time 9 PM +	Barom.	Att.	Times	Ext. Therm No 4
1		29·930	73	9 9	73·2
2	+10	29·780	76	7 2⅝ 9⅙	75·4
3		29·999	72	9 9	69·2
4		29·907	73	9 9	72·2
5		29·917	69	7 2 9	66·5
6		29·916	71	9	65·6
7		29·904	72	7 2⅔ 9	69·7
8		29·883	70	7 2⅔ 9	68·2
9		29·736	66	9 9	60·6
10		29·971	68	7 2½ 9	62·6
11		30·149	69	7 2¼ 9	65·7
12		30·197	69	7 2 9	66·5
13	+15	30·078	66	7 2 9¼	65·0
14	+10	30·026	67	7 2½ 9⅕	66·4
15		30·006	69	7 2½ 9	67·0
16	+5	30·077	63	7 2½ 9½	58·0
17		29·990	65	7 2½ 9	62·2
18		29·950	72	7 2½ 9	69·1
19		29·900	66	9	69·2
20		29·872	65	7 2½ 9	63·3
21		29·983	67	7 2½ 9	63·8
22		29·858	69	7 2½ 9	66·9
23		29·784	60	7 2½ 9	53·5
24		29·949	63	7 2½ 9	57·9
25		30·015	65	7 2½ 9	58·4
26				7 2	61
27		30·091	67	7 2½ 9	64·0
28		30·080	69	9	69·5
29		29·932	67	7 2½ 9	63·5
30		29·956	64	7 2½ 9	64·8
31		30·062	68	9	63·2
Sums	+40m	898·898	2040		2022·1
Means	9h 1m	29·963	68·0		65·2
Red to 32°		29·857			

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1866

September

Day	Time 9 PM +	Barom.	Att.	Times	Ext. Therm No 4
1	20	30·043	71	11 9⅓	73·8
2	45	29·972	73	7 2½ 9¾	74·3
3		30·053	74	7 2 9	75·2
4		29·984	68	7 2½ 9	64·8
5	60	29·950	66	9 10	62·6
6		30·076	63	7 2⅓ 9	66·6
7		29·938	68	9⅚ 9	69·6
8		29·872	68	9 9	69·8
9		30·140	64	7 2½ 9	68·8
10		30·122	63	7 2½ 9	54·5
11		29·933	67	9 9	61·4
12	20	29·824	72	9 9⅓	68·2
13		30·020	68	7 2½ 9	63·2
14		29·891	67	7 3½ 9	61·4
15		30·276	59	7 2 9	55·2
16		30·340	58	7 3 9	48·8
17	15	30·016	65	7 2½ 9¼	64·3
18		29·987	64	7 2½ 9	62·0
19		29·987	63	7 2½ 9	63·3
20		30·082	59	7 2½ 9	54·4
21		29·879	68	7 2¾ 9	67·1
22		30·238	57	7 2½ 9	53·5
23		30·348	55	7 2 9	46·7
24				9	52
25	20	30·124	62	7 2¾ 9⅓	61·7
26		29·967	64	7 2½ 9	62·9
27		30·164	60	7 2½ 9	57·1
28		30·315	61	7 2½ 9	55·1
29		30·250	62	7 2⅓ 9	59·0
30		30·078	64	9	58·9
	180	871·869	1873		1856·2
	9h 6m	30·064	64·6		61·9
	Red to 32°	29·967			

October

Day	Time 9 PM +	Barom.	Att.	Times	Ext. Therm No 4
1		30·246	59	7 2⅚ 9	55·6
2		29·904	64	7 2½ 9	58·5
3		29·985	54	7 2½ 9	52·1
4		30·256	49	7 2½ 9	39·7
5		30·488	47	7 2½ 9	40·5
6		30·339	52	7 2½ 9	45·7
7		30·071	58	7 2¼ 9	55·8
8		30·062	64	7 2½ 9	64·3
9		30·380	54	7 2½ 9	49·8
10		30·336	52·9	7 2½ 9	46·4
11		30·190	52·7	7 2½ 9	44·8
12				9	49
13		30·000	53·0	7 2½ 9	49·5
14		30·059	49·4	7 2½ 9	46·2
15		30·260	52·5	7 2½ 9	50·3
16		30·084	53·2	7 2½ 9	47·2
17		30·032	57·4	7 2½ 9	54·9
18		30·198	53·3	7 2½ 9	47·7
19		30·249	57·9	7 2½ 9	52·2
20		30·225	61·0	7 2½ 9	58·3
21		30·183	60·9	7 2½ 9	57·9
22		29·950	62·2	7 2½ 9	62·8
23		29·817	59·2	7 2½ 9	56·7
24		29·876	52·8	7 2½ 9	45·7
25		30·252	48·3	7 2½ 9	37·8
26		30·130	48	7 2½ 9	40·9
27		30·148	49·7	7 2½ 9	42·7
28		30·398	48·0	7 2½ 9	38·7
29		30·184	48·1	7 2½ 9	43·7
30		29·646	55·7	7 2½ 9	58·1
31		30·054	49·0	7 2½ 9	43·9
		904·002	1626·1		1537·4
	9h 0m	30·133	54·2		49·6
	Red to 32°	30·064			

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November

Day	Time 9 P.M.+	Barom.	Att.	Times	Ext. Therm. No 4.
1	15m	30.125	45.7	7 2½ 9¼	37.9
2		30.088	51.4	7 2½ 9	47.7
3		30.323	48.4	7 2½ 9	41.0
4		30.498	46.2	7 2½ 9	34.8
5	15	30.442	44.1	7 2½ 9¼	30.5
6		30.371	45.2	7 2¾ 9	34.0
7		30.062	48.8	7 2½ 9	43.1
8		30.008	50.6	7 2½ 9	51.6
9		30.050	52.8	7 2½ 9	49.6
10		30.100	52.0	7 2½ 9	48.8
11	20	30.061	50.8	7 2½ 9⅓	45.2
12	45	30.140	50.4	7 2½ 9¾	46.9
13		30.312	43.8	7 2½ 9	38.7
14		30.327	47.5	7 2½ 9	37.2
15		29.897	49.2	7 2½ 9	45.7
16		29.550	50.9	7 2½ 9	52.0
17	15	29.850	48.1	7 2½ 9¼	39.7
18		30.026	46.0	7 2½ 9	41.4
19		29.980	51.0	7 2½ 9	47.3
20		29.600	54.3	7 2½ 9	57.0
21		29.784	47.3	7 2½ 9	41.0
22		29.878	46.0	7 2½ 9	36.2
23	10	29.880	41.7	7 2½ 9⅕	32.8
24		29.950	40.8	7 2½ 9	30.7
25	15	30.263	36.2	7 2½ 9¼	25.7
26		30.272	42.9	7 2½ 9	30.2
27		30.212	45.0	7 2½ 9	38.3
28				9	44
29					62.5
30					
Sums	135	812.049	1277.1		1211.5
Means	9h 5m	30.076	47.3		41.8
Red to 32°		30.026			

December

Day	Time 9 P.M.+	Barom.	Att.	Times	Ext. Therm. No 4
1	15	30.018	42.8	9	37.5
2	10	30.238	39.2	7 2½ 9⅕	28.2
3	5	30.346	42.5	7 2¾ 9½	32.9
4	15	29.749	46.2	7 3 9¼	40.7
5	10	30.269	48.0	7 2 9⅕	44.1
6	25	30.098	45.0	7 2 9⅝	43.4
7	10	30.068	49.5	7 2 9⅕	43.0
8		29.596	46.0	7 1½ 9	41.9
9		29.724	47.1	7 1½ 9	41.1
10		29.928	38.8	7 1½ 9	28.4
11		30.050	36.5	7 1½ 9	20.8
12		30.049	36.2	7 1½ 9	21.3
13		30.027	35.0	7 1½ 9	21.2
14		30.169	29.0	7 1½ 9	16.3
15		30.268	30.0	7 1½ 9	18.2
16		29.777	30.0	7 1½ 9	21.7
17		[29.650]		7 1½ 9	26.8
18		30.168	33.2	7 1½ 9	23.0
19		29.925	34.0	7 1½ 9	28.7
20		[30.390]	below 25	7 1½ 9	8.8
21	15	[30.501]	"	7 1½ 9¼	4.0
22		30.178	29.3	7 1½ 9	25.3
23		29.633	38	7 1½ 9	43.6
24				9	51.5
25				11 9	34.5
26		30.027	30.8	7 1½ 9	27.6
27		29.775	39.8	7 1½ 9	36.1
28		29.395	29.0	7 1½ 9	20.3
29		29.929	28.5	7 1½ 9	16.2
30		30.259	30.5	7 2 9	19.0
31				9	17
Sums	105	748.663	934.9		883.1
Means	9h 4m	29.947	37.4		28.5
Red to 32°		29.923			

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Meteorological Observations made at Harvard College Observatory

1866 — 1866

January

Date	Time A.M.	A. Barometer	Att. Ther	Open Air Therm	Oz rain on 100 sq in
1	8 15	30.184	57.5	+39.5	
2	8 45	30.350	58.8	31.0	
3	8 35	30.188	63.	36.3	
4	8 30	29.940	61.5	36.8	
5	8 45	30.240	60.3	2.0	
6	8 30	30.378	48.1	15.8	
7					
8	8 50	30.974	54.3	-12.2	
9	8	30.596	46.5	+ 7.0	
10		30.286	51.5	21.2	
11	8 20	29.932	58.5	33.0	
12	8 30	30.166	60.0	27.6	
13	8 10	29.812	63.5	35.2	
14					
15	8 15	30.406	38.0	3.2	
16	8 20	30.054	47.2	18.3	
17	8 10	30.020	54.0	24.7	
18	8 10	29.998	65.5	36.7	
19	8 05	30.126	73.0	34.3	
20	8 30	30.140	66.0	36.7	
21					
22	8 30	30.120	54.5	16.2	
23	8 15	30.350	47.0	18.8	
24	8 00	30.442	52.0	17.3	
25	8 20	30.220	58.5	30.5	
26	9 50	29.848	59.5	+22.0	
27	8 45	30.137	53.5	20.0	
28					
29	8 35	30.120	47.5	21.7	
30	8 30	30.089	61.5	13.0	
31	8 30	29.738	58.5	29.8	

* Bulb in Snow.

Sums — 814.848 — 1508.7 — 604.4

Means — 8h 26m — 30.180 — 55.7 — 22.4

Open air — Red. to 32° — 30.107

February

Date	Time A.M.	Barometer	Att. Ther	Open Air Therm	Oz rain on 100 sq in	
1	10.45	29.550	62.5	32.8		
2	9.00	29.616	51.0	17.8		
3	8.35	29.721	48.0	14.1		
4	8.00					
5	8.30	30.418	51.0	28.1		
6	8.35	30.403	53.0	18.6		
7	8.20	30.784	51.5	2.8		
8	8.40	30.259	62.5	26.3		
9	8.30	30.116	59.5	29.5		
10	8.20	30.213	54.5	23.3		
11						
12	8.35	30.180	68.5	47.8		
13	8.30	30.003	70.0	37.5		
14	8.35	30.262	64.0	38.9		
15	8.40	29.603	60.0	33.5		
16	8.10	30.431	42.0	6.2		
17	8.25	30.776	48.5	15.0		
18						
19	8.25	29.658	58.0	49.1		
20	8.20	30.460	74.0	39.1		
21	8.30	30.359	56.0	29.5		
22	8.50	30.714	66.5	39.8		
23	8.35	30.464	64.0	43.9		
24	9.25	30.112	67.0	54.5	1	There was a warm spell in February which greatly affected the trees measured.
25						
26	8.30	30.693	50.5	12.2	23	
27	8.10	30.720	50.0	21.9		
28	8.15	30.816	32.5	28.0	28	

726.531 / 30.272 / 30.194

Red. to 32° — 726.531 — 1385.0 — 670.2

8h 36m — 30.261 — 57.7 — 27.9 — 30.189

At 0° Fahr. Faster = Navy − 0°.95 / 32 " " " − 0.33

March

Date	Time A.M.	Barometer	At. Ther	Open Air Therm	Oz rain on 100 sq in	
1	8 30	30.570	65.0	31.8		
2	8 10	30.340	66.0	32.9		
3	8 05	30.192	56.0	36.6		
4						
5	9 15	29.960	65.5	24.0		
6	8 20	29.916	47.5	21.0		
7	8 30	29.807	53.5	26.1		
8	8 20	29.827	48.0	16.9		
9	8 00	29.928	44.0	21.0		
10	8 35	30.127	52.0	17.2		
11						
12	8 45	30.224	61.5	47.2		
13	8 10	30.350	64.0	49.5		
14	9 20	30.566	67.0	41.0		
15	8 20	30.141	61.0	47.8		
16	8 00	29.763	67.0	57.0		
17	8 00	29.666	62.0	33.6	.48	
18						
19	8 50	30.062	52.0	25.1		
20	8 20	30.250	50.5	27.1		
21	8 40	29.850	64.5	36.4	.27	
22	8 25	30.081	54.0	30.2		
23	8 20	30.324	55.0	27.8		
24	8 20	29.840	64.0	35.7	.42	
25						
26	8 00	29.455	45.5	20.8	3/4	
27	8 00	30.100	56.5	30.8	2/4	
28	8 30	30.457	59.0	31.9		
29	8 10	30.056	60.0	39.9	2/4	
30	8 45	29.658	69.5	38.7	.90/4	
31	8 00	30.081	57.5	35.6		

Sums — 811.651 — 1568.0 — 886.8 — 216 oz = 3 in 60

Means — 8h 24m — 30.061 — 58.1 — 32.8

Red to 32° — 29.982

The thermometer used was the one called "Navy" in this book.
The following comparisons with Faster were made

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Meteorological Observations made at Harvard College Observatory.

1866.

April

Date	Time	Barometer	Att. Ther.	Open air Ther.	Ozone on 100
1	AM				
2	8 20	30.142	64	43.8	10
3	8 10	30.320	63.5	41.3	
4	8 10	30.300	60.	44.6	
5	8 15	30.175	58.5	47.6	
6	8 05	30.105	71.	61.8	
7	9 20	30.234	70.	45.5	3
8					
9	8 00	30.253	61.	36.3	29
10	8 30	30.462	66.	42.	
11	8 35	30.356	52.5	38.7	
12	8 20	30.260	59.	45.8	
13	8 45	30.128	63.	51.5	
14	8 15	30.370	62.	47.8	
15					11½
16	8 20	30.365	57.	43.7	
17	8 20	30.668	63.	44.8	
18	8 25	30.588	61.5	43.3	
19	8 00	30.260	70.	64.5	
20	8 20	30.278	65.5	51.0	20½
21	8 15	29.868	68.5	64.	
22					
23	8 38	29.754	67.5	59.2	
24	8 00	29.037	64.5	53.7	22½
25	8 05	29.380	58.	45.2	
26	8 35	29.558	58.	41.9	
27	8 40	29.733	58.	45.	
28	8 05	29.905	58.5	51.6	
29					
30	8 30	29.786	59.	43.6	3
31					

May

Date	Time	Barometer	Att. Ther.	Open air Ther.	Ozone on 100
1	AM 8 10	29.858	63.5	46.	
2	8 50 / 8 25	29.430 / 29.723	65.5 / 71.5	39.5 / 47.8	18½
3	8 20	29.720	67	50.0	2½
4	8 15	29.685	65	51.3	
5		29.	65		
6	8 15	29. *		47.8	
7	8 0	30.166 / 30.288	60.5	52.5	
8	8 20	30.	64	52.3	
9	8 0	29.714 / 29.935	70.5	58.5	2
10	8 30	29. / 30.021	71.0	59.8	
11	8 20	29.	60.0	65	
12		29. 30.384	64.5	56	
13	8 5	29. 30.392		48.7	
14	8 10	29.	66	50.5	
15		30. 30.130	66.		
16	8.30	29.863	65.	63.5	
17	8.05	30.024	64.	45.0	
18	8.00	30.046	56.5	46.5	
19	8.40	29.875	61.	54.2	½
20					
21	8.45	29.688	64.	56.8	
22	8.15	29.600	60.	47.5	52½
23	8.25	29.988	62.	50.5	½
24	8.30	30.100	61	54.6	
25	8.15	29.932	66	57.	
26	8.15	29.860	64.	52.3	11
27					
28	8.20	29.350	61.5	62.5	96
29	8.30	29.620	59.5	58.5	7
30	8.15	29.566	59	56	29
31	8.30	29.820	59.5	63.8	16

June

Date	Time	Barometer	Att. Ther.	Open air Ther.	Ozone on 100
1	AM 8.30	30.288	58	57.5	
2	8.30	30.170	59	58.5	
3					
4	8.25	29.980	60.5	55.8	20
5	8.10	30.043	58.5	56.8	47½
6	8.00	29.975	59.0	57.1	
7	8.05	29.724	62.0	67.	1½
8	8.15	29.825	64.5	65.	11
9	8.00	30.260	59.0	55.	½
10					
11	8.20	30.100	58.5	61.2	
12	8.20	30.202	61.5	60.8	
13	8.15	30.115	62.	63.5	
14	8.00	30.000	59.5	58.8	11½
15	8.20	29.830	62.	66.5	
16	8.10	29.900	66	68.8	1
17					
18	8.40	29.715	70	70.6	33
19	8.45	29.916	67	68.	5½
20	8.20	30.053	65.5	66.6	
21	8.15	30.152	70	73.5	
22	8.05	30.008	72.	74.7	
23	8.15	29.975	73.5	75.	
24					
25	8.30	30.174	74	76.2	
26	9.30			84.	
27	9.00			83.	
28	9.00			69.	
29	9.15			64.4	76½
30	8.10			62.8	

Open air thermometer is the "Davy". See last page.

Sums		752.285	1589.5	1196.2	99 oz.5 = 1 lb.66
Means	8h 22m	30.091	62.4	47.8	
Red to 32°		30.000			

* This reading evidently rejected. (May. 1867)

		805 / 864	740 / 873	1650	1441.3	235 oz.5 = 3 lb.92
	8h 20m	29.842	61.1 (1710)	53.4	
Red to 32°		29.785	63.3		

		630.408	1342.0	1719.1	164 oz.5 = 2 lb.74
	8h 18m	30.019	63.9	68.1	
	8h 26m				
Red to 32°		29.924			

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Comparison of Almanac Thermometers with a Standard Fastre.

Smedley & Co. by Large of N.J. dentue & N
Huddleston large size " A
Huddleston smaller size B

Fastre = N − 0°.95 at 0° Fahrenheit
= A + 0.65 at −13° "
= B + 0.55 at −13° "

Fastre = N − 0°.33 at 32° Fahr.

32.00
1.67
.33

50 = 1360

36

15.2

1872 Dec. 29 1872

Correction to N at 32° = 0

300	54 13	67.69
49	13 42	70
.8	13	68.39
349.8	67.69	

Note Nov. 16, 1882. The thermometer called N in the above memorandum seems to be the same with that called "Navy" elsewhere in this volume. It appears to have been used as the standard of external temperature for the first half of 1866, part of the time, probably, at the Nautical Almanac Office on Waterhouse Street, Cambridge.

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The table below gives the corresponding Fahrenheit to every degree of Fastre between 0° & 100°. For the other hundreds of Fastre add as follows

100°	18°·04
200°	36°·09
300°	54°·13
400°	72°·18
500°	90°·22

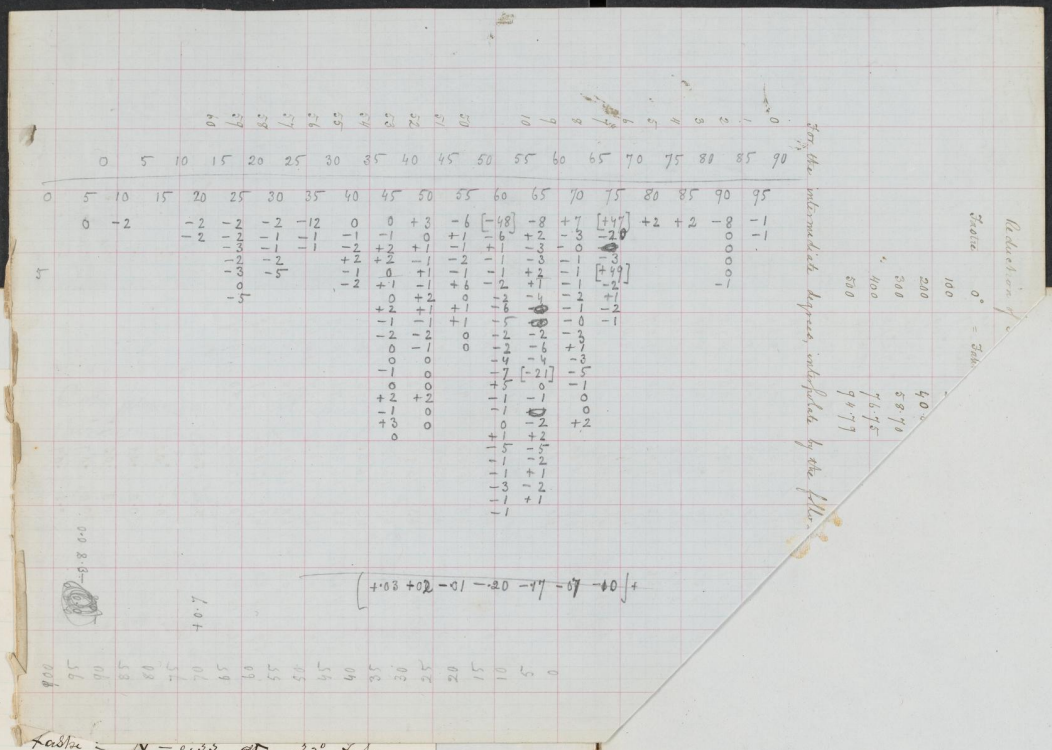
Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.
0°	4°·57	10°	6°·38	20°	8°·18	30°	9°·99	40°	11°·79
1	4·75	11	6·56	21	8·36	31	10·17	41	11·97
2	4·93	12	6·74	22	8·54	32	10 35	42	12·15
3	5·11	13	6·92	23	8·72	33	10·53	43	12·33
4	5·30	14	7·10	24	8·90	34	10·71	44	12·51
5	5·48	15	7·28	25	9·09	35	10·89	45	12·69
6	5·66	16	7·46	26	9·27	36	11·07	46	12·87
7	5·84	17	7·64	27	9·45	37	11·25	47	13·05
8	6·02	18	7·82	28	9·63	38	11·43	48	13·24
9	6·20	19	8·00	29	9·81	39	11·61	49	13·42
10	6·38	20	8·18	30	9·99	40	11·79	50	13·60

Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.	Fastre	Fahr.
50°	13°·60	60°	15°·40	70°	17°·20	80°	19°·01	90°	20°·81
51	13·78	61	15·58	71	17·38	81	19·19	91	20·99
52	13·96	62	15·76	72	17·57	82	19·37	92	21·17
53	14·14	63	15·94	73	17·75	83	19·55	93	21·35
54	14·32	64	16·12	74	17·93	84	19·73	94	21·54
55	14·50	65	16·30	75	18·11	85	19·91	95	21·72
56	14·68	66	16·48	76	18·29	86	20·09	96	21·90
57	14·86	67	16·66	77	18·47	87	20·27	97	22·08
58	15·04	68	16·84	78	18·65	88	20·45	98	22·26
59	15·22	69	17·02	79	18·83	89	20·63	99	22·44
60	15·40	70	17·20	80	19·01	90	20·81	100	22·62

Fastre	Fahr.
0°·1	°·02
0·2	·04
0·3	·05
0·4	·07
0·5	·09

Fastre	Fahr.
0°·6	°·11
0·7	·13
0·8	·14
0·9	·16
1·0	·18

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For the intermediate degrees, calculate by the following

Reduction of

Factor 0° = 32°

100 200

200 392.0

300 588.0

400 784.5

500 980.7

Factor = N − 0.32 at 32° Fahr.

32.00
18.04
.1398

50 = 1560

36

1872 Dec. 29 1872

Correction to N at 32° = 0

300	54	13	67.69
49	13	42	70
8	14		68.39
349.6	57.4	9	

Note Nov. 16, 1882. The thermometer called N in the above memorandum seems to be the same with that called "Navy" elsewhere in this volume. It appears to have been used as the standard of external temperature for the first half of 1866, part of the time probably at the Nautical Almanac Office on Waterhouse Street, Cambridge.

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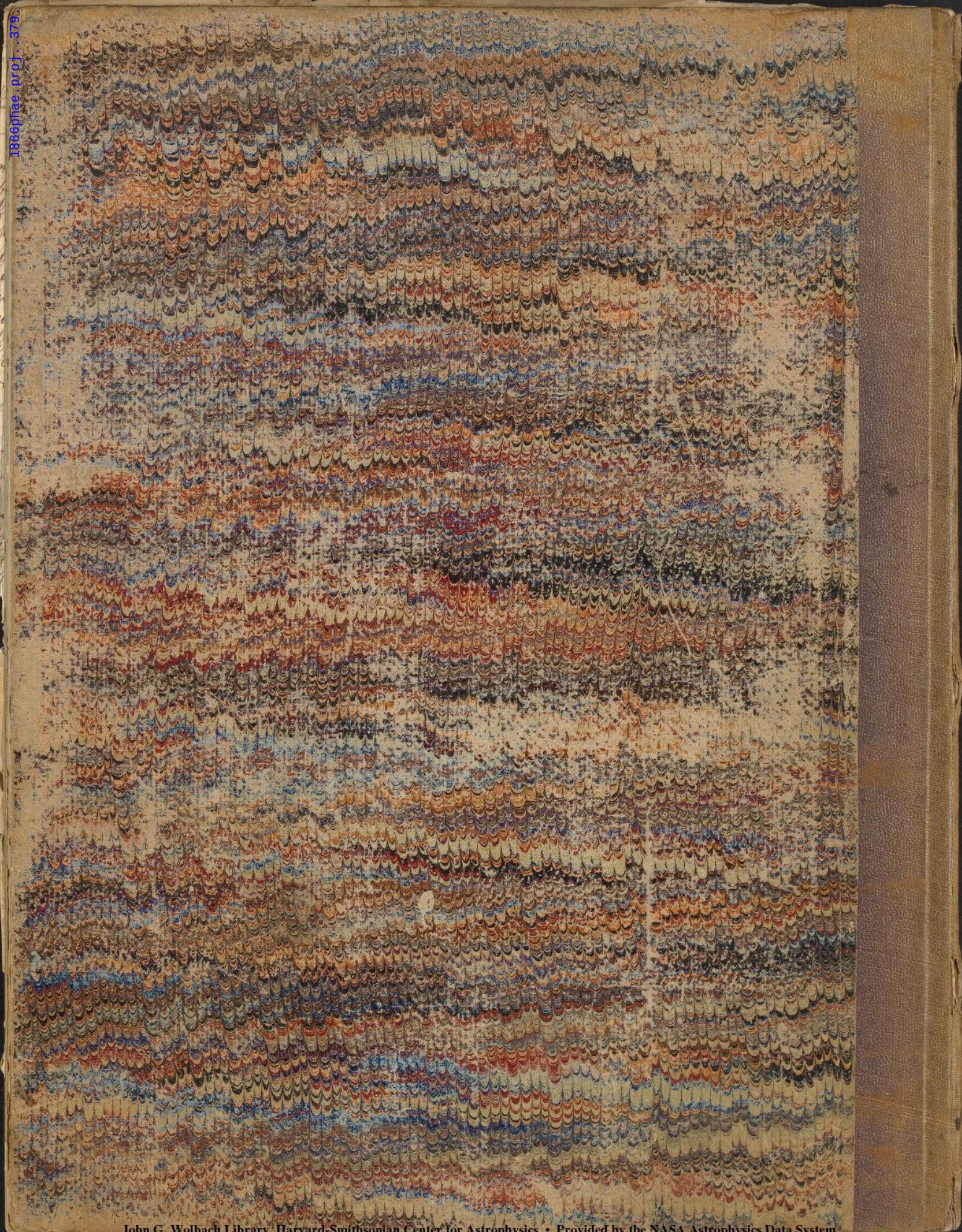
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