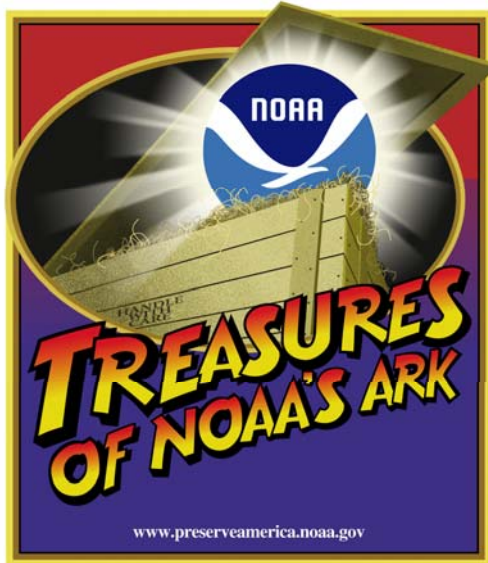


The National Climatic Data Center (NCDC) is the largest climate and information center in the world. NCDC benefits all sectors of the U.S. economy.

For more information go to [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)



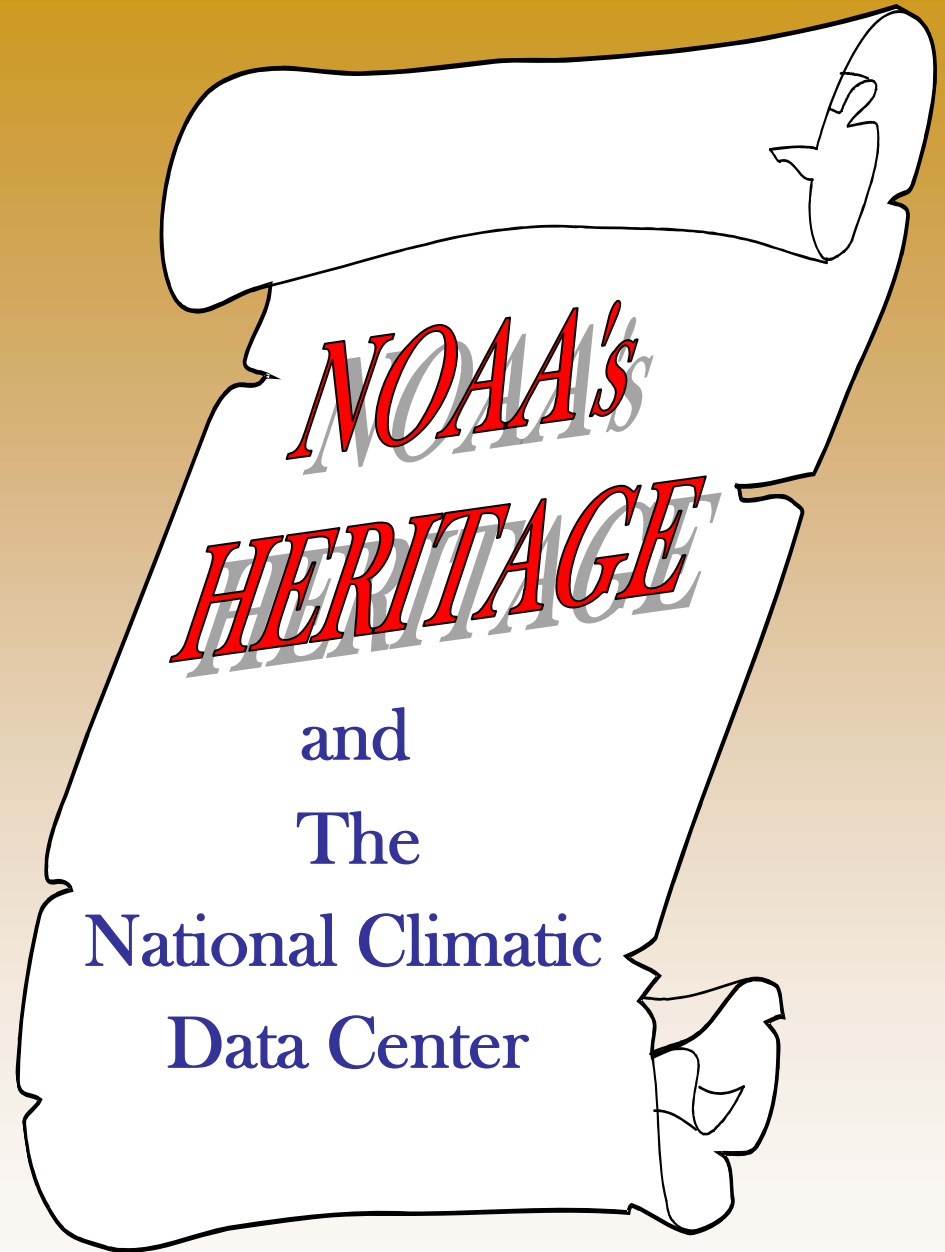
The Preserve America Initiative was created by executive order 13287. The goal of Preserve America is to:

- step up efforts to inventory, preserve, and showcase federally-managed historic and cultural “heritage” resources and
- foster heritage tourism in partnership with local communities and the private sector.



[www.preserveamerica.gov](http://www.preserveamerica.gov)

NOAA’s Heritage supports the Preserve America Initiative.





# Weather Science and the Founding Fathers



Benjamin Franklin and Thomas Jefferson loom almost as large in the history of American weather science as they do in the history of our country; the last entry in George Washington's weather diary was made the day before he died.

When a "nor'easter" hit Philadelphia in September 1743, obscuring an expected eclipse of the moon, Benjamin Franklin learned that the eclipse was seen by his brother in Boston (because the storm reached Boston later than Philadelphia) and rightfully concluded that the storm had moved from the southwest despite the northeast winds. In arriving at this conclusion, Franklin was years ahead of his time. It wasn't until a century later that it was generally recognized that storms are approximately circular wind systems that move from place to place.

Thomas Jefferson brought his first thermometer while writing the Declaration of Independence and his first barometer a few days after the document was signed. Jefferson made regular weather observations at Monticello from 1772-1778, and for much of the last two of these years he and the president of William and Mary College in Williamsburg took the first known simultaneous weather observations in America.

Like George Washington, Jefferson took weather observations well into his final illness. The last entry in his "Weather Memorandum Book" was made on June 29, 1826, six days before his death.



18960 842

NOV 22 1963

STATION DALLAS, TEXAS (Dallas Love Field) DATE NOV 22 1963

Time	Wind	Bar	Temp	Humid	Wind	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed
0000	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0100	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0200	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0300	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0400	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0500	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0600	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0700	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0800	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0900	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1000	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1100	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1200	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1300	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1400	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1500	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1600	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1700	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1800	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1900	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2000	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2100	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2200	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2300	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11

NOV 22 1963

STATION DALLAS, TEXAS (Dallas Love Field) DATE NOV 22 1963

Time	Wind	Bar	Temp	Humid	Wind	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed	Dir	Speed
0000	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0100	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0200	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0300	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0400	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0500	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0600	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0700	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0800	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0900	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1000	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1100	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1200	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1300	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1400	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1500	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1600	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1700	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1800	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1900	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2000	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2100	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2200	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2300	150	30.0	58	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11

Weather endures through national tragedies, triumphs and natural disasters. Weather records from Love Field on the day of President Kennedy's assassination in Dallas on November 22, 1963 are shown above.



MONTHLY AEROLOGICAL RECORD

DATE	WIND	TEMPERATURE	RELATIVE HUMIDITY	WIND VELOCITY	WIND DIRECTION	WIND FORCE	WIND STATE	WIND CHARACTER	WIND VELOCITY	WIND DIRECTION	WIND FORCE	WIND STATE	WIND CHARACTER
1-1													
1-2													
1-3													
1-4													
1-5													
1-6													
1-7													
1-8													
1-9													
1-10													
1-11													
1-12													
1-13													
1-14													
1-15													
1-16													
1-17													
1-18													
1-19													
1-20													
1-21													
1-22													
1-23													
1-24													
1-25													
1-26													
1-27													
1-28													
1-29													
1-30													
1-31													

MONTHLY AEROLOGICAL RECORD

DATE	WIND	TEMPERATURE	RELATIVE HUMIDITY	WIND VELOCITY	WIND DIRECTION	WIND FORCE	WIND STATE	WIND CHARACTER	WIND VELOCITY	WIND DIRECTION	WIND FORCE	WIND STATE	WIND CHARACTER
1-1													
1-2													
1-3													
1-4													
1-5													
1-6													
1-7													
1-8													
1-9													
1-10													
1-11													
1-12													
1-13													
1-14													
1-15													
1-16													
1-17													
1-18													
1-19													
1-20													
1-21													
1-22													
1-23													
1-24													
1-25													
1-26													
1-27													
1-28													
1-29													
1-30													
1-31													

MONTHLY AEROLOGICAL RECORD

DATE	WIND	TEMPERATURE	RELATIVE HUMIDITY	WIND VELOCITY	WIND DIRECTION	WIND FORCE	WIND STATE	WIND CHARACTER	WIND VELOCITY	WIND DIRECTION	WIND FORCE	WIND STATE	WIND CHARACTER
1-1													
1-2													
1-3													
1-4													
1-5													
1-6													
1-7													
1-8													
1-9													
1-10													
1-11													
1-12													
1-13													
1-14													
1-15													
1-16													
1-17													
1-18													
1-19													
1-20													
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1-24													
1-25													
1-26													
1-27													
1-28													
1-29													
1-30													
1-31													

Station: **Honolulu, T. H.** From: **DEC 7 - 1941** To: **DEC 8 - 1941**

COMPUTATION OF SEA-LEVEL PRESSURE				COMPUTATION OF LOW-LEVEL PRESSURE			
Observed	Station	Height	Reduction	Observed	Station	Height	Reduction
30.0	100	0.0	0.0	30.0	100	0.0	0.0
29.9	100	0.0	0.0	29.9	100	0.0	0.0
29.8	100	0.0	0.0	29.8	100	0.0	0.0
29.7	100	0.0	0.0	29.7	100	0.0	0.0
29.6	100	0.0	0.0	29.6	100	0.0	0.0
29.5	100	0.0	0.0	29.5	100	0.0	0.0
29.4	100	0.0	0.0	29.4	100	0.0	0.0
29.3	100	0.0	0.0	29.3	100	0.0	0.0
29.2	100	0.0	0.0	29.2	100	0.0	0.0
29.1	100	0.0	0.0	29.1	100	0.0	0.0
29.0	100	0.0	0.0	29.0	100	0.0	0.0
28.9	100	0.0	0.0	28.9	100	0.0	0.0
28.8	100	0.0	0.0	28.8	100	0.0	0.0
28.7	100	0.0	0.0	28.7	100	0.0	0.0
28.6	100	0.0	0.0	28.6	100	0.0	0.0
28.5	100	0.0	0.0	28.5	100	0.0	0.0
28.4	100	0.0	0.0	28.4	100	0.0	0.0
28.3	100	0.0	0.0	28.3	100	0.0	0.0
28.2	100	0.0	0.0	28.2	100	0.0	0.0
28.1	100	0.0	0.0	28.1	100	0.0	0.0
28.0	100	0.0	0.0	28.0	100	0.0	0.0
27.9	100	0.0	0.0	27.9	100	0.0	0.0
27.8	100	0.0	0.0	27.8	100	0.0	0.0
27.7	100	0.0	0.0	27.7	100	0.0	0.0
27.6	100	0.0	0.0	27.6	100	0.0	0.0
27.5	100	0.0	0.0	27.5	100	0.0	0.0
27.4	100	0.0	0.0	27.4	100	0.0	0.0
27.3	100	0.0	0.0	27.3	100	0.0	0.0
27.2	100	0.0	0.0	27.2	100	0.0	0.0
27.1	100	0.0	0.0	27.1	100	0.0	0.0
27.0	100	0.0	0.0	27.0	100	0.0	0.0
26.9	100	0.0	0.0	26.9	100	0.0	0.0
26.8	100	0.0	0.0	26.8	100	0.0	0.0
26.7	100	0.0	0.0	26.7	100	0.0	0.0
26.6	100	0.0	0.0	26.6	100	0.0	0.0
26.5	100	0.0	0.0	26.5	100	0.0	0.0
26.4	100	0.0	0.0	26.4	100	0.0	0.0
26.3	100	0.0	0.0	26.3	100	0.0	0.0
26.2	100	0.0	0.0	26.2	100	0.0	0.0
26.1	100	0.0	0.0	26.1	100	0.0	0.0
26.0	100	0.0	0.0	26.0	100	0.0	0.0
25.9	100	0.0	0.0	25.9	100	0.0	0.0
25.8	100	0.0	0.0	25.8	100	0.0	0.0
25.7	100	0.0	0.0	25.7	100	0.0	0.0
25.6	100	0.0	0.0	25.6	100	0.0	0.0
25.5	100	0.0	0.0	25.5	100	0.0	0.0
25.4	100	0.0	0.0	25.4	100	0.0	0.0
25.3	100	0.0	0.0	25.3	100	0.0	0.0
25.2	100	0.0	0.0	25.2	100	0.0	0.0
25.1	100	0.0	0.0	25.1	100	0.0	0.0
25.0	100	0.0	0.0	25.0	100	0.0	0.0
24.9	100	0.0	0.0	24.9	100	0.0	0.0
24.8	100	0.0	0.0	24.8	100	0.0	0.0
24.7	100	0.0	0.0	24.7	100	0.0	0.0
24.6	100	0.0	0.0	24.6	100	0.0	0.0
24.5	100	0.0	0.0	24.5	100	0.0	0.0
24.4	100	0.0	0.0	24.4	100	0.0	0.0
24.3	100	0.0	0.0	24.3	100	0.0	0.0
24.2	100	0.0	0.0	24.2	100	0.0	0.0
24.1	100	0.0	0.0	24.1	100	0.0	0.0
24.0	100	0.0	0.0	24.0	100	0.0	0.0
23.9	100	0.0	0.0	23.9	100	0.0	0.0
23.8	100	0.0	0.0	23.8	100	0.0	0.0
23.7	100	0.0	0.0	23.7	100	0.0	0.0
23.6	100	0.0	0.0	23.6	100	0.0	0.0
23.5	100	0.0	0.0	23.5	100	0.0	0.0
23.4	100	0.0	0.0	23.4	100	0.0	0.0
23.3	100	0.0	0.0	23.3	100	0.0	0.0
23.2	100	0.0	0.0	23.2	100	0.0	0.0
23.1	100	0.0	0.0	23.1	100	0.0	0.0
23.0	100	0.0	0.0	23.0	100	0.0	0.0
22.9	100	0.0	0.0	22.9	100	0.0	0.0
22.8	100	0.0	0.0	22.8	100	0.0	0.0
22.7	100	0.0	0.0	22.7	100	0.0	0.0
22.6	100	0.0	0.0	22.6	100	0.0	0.0
22.5	100	0.0	0.0	22.5	100	0.0	0.0
22.4	100	0.0	0.0	22.4	100	0.0</	

The following weather observations were taken by Thomas Jefferson at Independence Hall in Philadelphia, Pennsylvania, during a meeting of the Continental Congress at which the Declaration of Independence was signed. He took observations until his death on July 4, 1826 at Monticello.



Observations on the weather  
Philadelphia 1776

July	hour.	thermom.	day	h. m.	
1.	9-0 A.M.	81½	9	5-30	A.M. 75
	7- P.M.	82.		9	77½
2.	6. A.M.	78.		6-30	P.M. 81½
	9-40' A.M.	78		9-45	78.
	9. P.M.	74	10.	8.	A.M. 75.
3.	5-30 A.M.	71½		9-15.	76½
	1-30 P.M.	76		2-0.	P.M. 80.
	8-10	74.		4-45	82.
4.	6. A.M.	68.		6-30	81½
	9	72½		9-30.	78.
	1. P.M.	76	11.	5-30.	A.M. 74.
	9.	73½		8.	76½
5.	6. A.M.	71½		9-40.	P.M. 75.
	9.	72	12.	7.	a.m. 72.
	9. P.M.	74.		9.	72.
6.	5. A.M.	74.		8-50.	P.M. 72.
	9	75	13.	5-30.	a.m. 71½
	4 P.M.	77.		11	74
	10.	74.		2.	P.M. 76
7.	6. A.M.	71		6-45.	76
	10.	73.		7-25	76
	1. P.M.	74		9-	75
	3-20'	75		rain	
	9-30.	74	14.	6-50.	a.m. 73.
8.	5-35 A.M.	75		rain	
9.		77½		9-30.	72

Memorandum for April 1865

Day	Time	Weather
13	4.46 P.M.	Cloudy then W. 46 P.M. then W. 46 Clear
14	1.38 P.M.	Clear then S. 38 P.M. then S. 40 Clear
15	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
16	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
17	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
18	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
19	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
20	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
21	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
22	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
23	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
24	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
25	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
26	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
27	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
28	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
29	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear
30	4.46 P.M.	Clear then S. 46 P.M. then S. 46 Clear

President, Lincoln assassinated at 10.40, evening

Historical events are noted in weather journals such as the assassination and subsequent funeral of President Lincoln in 1865.





Microfilms of  
**The Adams Papers**

given by the Adams Manuscript Trust to the  
 Massachusetts Historical Society

PART III

250. John Quincy Adams, *Miscel-  
 lany*  
 Weather record, Washington, D. C.,  
 January 1818-May 1825

Boston  
 Massachusetts Historical Society  
 1956

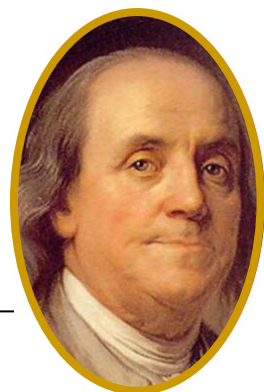
Washington February 1818				Washington March 1818					
	7 A.M.	5 P.M.	Weather		7 A.M.	5 P.M.	Weather		
1	16	27	18	Cloudy	1	40	52	Rain	
2	20	30	25	Clear	2	36	42	Clear	
3	30	34	33	Snow Storm	3	32	42	Clear	
4	28	26	30	Clear	4	31	32	Snow	
5	26	34	25	Dr	5	30	31	Clear	
6	16	28	25	Dr	6	26	28	Dr	
7	26	34	26	Dr	7	26	35	24	Dr
8	26	34	16	Dr	8	20	34	34	Dr
9	2	11	5	Dr	9	27	38	34	Dr
10	2	10	14	Dr	10	32	48	36	Dr
11	12	25	18	Dr	11	26	46	36	Dr
12	16	28	23	Dr	12	32	48	42	Dr
13	14	34	34	Cloudy	13	40	48	46	Dr
14	34	44	40	Rain	14	44	48	42	Rain
15	25	37	18	Clear	15	41	51	36	Clear
16	13	28	16	Dr	16	26	36	34	Cloudy
17	16	30	30	Cloudy	17	32	34	27	Clear
18	34	40	24	Snow	18	25	30	28	Dr
19	28	24	18	Clear	19	30	36	31	Dr
20	26	40	34	Dr	20	28	38	36	Dr
21	34	36	40	Dr	21	34	42	30	Rain Storm
22	42	48	34	Rain	22	37	46	36	Rain
23	26	32	26	Snow	23	37	44	40	Dr
24	34	36	26	Dr	24	41	42	42	Clear
25	27	36	34	Clear	25	50	62	48	Dr
26	26	28	20	Dr	26	46	50	36	Cloudy
27	22	40	34	Dr	27	32	35	34	Rain
28	32	52	40	Dr	28	32	36	50	Rain
					29	32	40	38	Clear
					30	24	38	38	Clear
					31	38	52	28	Clear

These weather observations were taken in February and March, 1818 by John Quincy Adams in Washington, D.C.

These weather observations recorded in Vicksburg, MS on July 4, 1863 when Vicksburg surrendered to General Grant.

1863 Memorandum for July  
 24. 2 m morning 51 to 52  
 1 Clear Wind S by E 60 m thin S E 60 Clear  
 High tides, Battle of Turkey Bend 1862  
 2 Clear Wind S by E 60 m thin S E 60 Cloudy  
 3 Cloudy Wind S by E 60 m thin S E 60 Cloudy  
 American Independence Declared 1776  
 4 Misty S 60 m thin S E 60 Rain  
 Very dry grass light (corn backward not sufficient)  
 5 Foggy Wind S by E 60 m thin S E 60 Clear  
 6 Hazy Wind S by E 60 m thin S E 60 Hazy  
 Low tides, many hanging grass light  
 7 Hazy Wind S by E 60 m thin S E 60 Cloudy  
 8 Rainy Wind S by E 60 m thin S E 60 Rainy  
 Very foggy top of the ground mist  
 9 Misty Wind S by E 60 m thin S E 60 Clear  
 10 Clear Wind S by E 60 m thin S E 60 Clear  
 11 Foggy Wind S by E 60 m thin S E 60 Rainy  
 12 Clear Wind S by E 60 m thin S E 60 Clear  
 13 Rainy Wind S by E 60 m thin S E 60 Rainy  
 14 Clear Wind S by E 60 m thin S E 60 Clear  
 15 Foggy Wind S by E 60 m thin S E 60 Clear  
 16 Clear Wind S by E 60 m thin S E 60 Clear  
 17 Rainy Wind S by E 60 m thin S E 60 Rainy  
 18 Clear Wind S by E 60 m thin S E 60 Clear  
 19 Foggy Wind S by E 60 m thin S E 60 Clear  
 20 Clear Wind S by E 60 m thin S E 60 Clear  
 21 Rainy Wind S by E 60 m thin S E 60 Rainy  
 22 Clear Wind S by E 60 m thin S E 60 Clear  
 23 Rainy Wind S by E 60 m thin S E 60 Cloudy  
 24 Foggy Wind S by E 60 m thin S E 60 Clear  
 25 Foggy Wind S by E 60 m thin S E 60 Clear  
 26 Cloudy Wind S by E 60 m thin S E 60 Clear  
 27 Rainy Wind S by E 60 m thin S E 60 Rainy  
 28 Foggy Wind S by E 60 m thin S E 60 Clear  
 29 Rainy Wind S by E 60 m thin S E 60 Rainy  
 30 Cloudy Wind S by E 60 m thin S E 60 Clear  
 31 Foggy Wind S by E 60 m thin S E 60 Clear

Great battle in Pennsylvania the 3<sup>rd</sup> & 4<sup>th</sup> 1863  
 Vicksburg surrendered to Gen Grant  
 4 Misty S 60 m thin S E 60 Rain  
 Very dry grass light (corn backward not sufficient)



The following entries were made in the weather diary of Benjamin Franklin in Philadelphia, Pennsylvania for August, 1748.

Diary of the Weather at Philad.  
 August. 1748.

day	Ho:	Th:	Wind	Weather in general
1	5a.m 66 $\frac{1}{2}$	74	E by S	Fair
	2p.m 74		E by S	F.
2	5a.m 70		E by S	
	2p.m 74		E by S	
3	5a.m 70		E by S	
	2p.m 75 $\frac{1}{2}$		SW	Cloudy with some Ra:
4	5a.m 70		S by E	alternately Fa: Cloudy & Rainy
	1p.m 68		S by E	all day.
5	5a.m 61 $\frac{1}{2}$		SW	Chiefly Rainy.
6	7a.m 61 $\frac{1}{2}$		S.	Cloudy.
	2p.m 65		S.	Somewhat Clou: but ch <sup>y</sup> fair
7	5a.m 59		SW	Altum: 7 Fa: & Cloudy.
8	5a.m 63		SW	Fair all day.
	3p.m 65		SW	
9	6a.m 62		WNW	
	4p.m 68		WNW	
10	6a.m 63 $\frac{1}{2}$		E.	Fair.
	3p.m 67		E.	
11	6a.m 61 $\frac{1}{2}$		ENE	Cloudy
	4p.m 70		SW	Fair.
12	6a.m 60		NW	Cloudy & drive:
	1p.m 64 $\frac{1}{2}$		NW	drive: at times & Fair
13	6a.m 61 $\frac{1}{2}$		WNW	Cloudy & some Ra:
	3p.m 64		WNW	Sometimes Fair.
14	5a.m 63		WSW	Cloudy.
	4p.m 66 $\frac{1}{2}$		WSW	d.
15	5a.m 63		WSW	Cloudy,
	2p.m 65 $\frac{1}{2}$		WE	Sometimes Fair
16	6a.m 63		WNW	Cloudy & Rainy at night
	2p.m 63 $\frac{1}{2}$			at times Fa: