

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### January 2003

Station: Westford

Latitude: 44° 37' 39" N Longitude: 73° 02' 29" W Elevation (Ground): 850 feet Time Zone: Eastern

Date	Temperature					Humidity	Deg. Days		Precip Ty 1 fog 2 hvy fog 3 thunder 4 ice plt 5 hail 6 glaze 7 duststm 8 smk, hz 9 blw snw	Snow Cvr	Precip			Pressure			Wind						Sun		
	Maximum	Minimum	Average	Mean	Dew Point		Mean	Heating			Cooling	Water Equivalent	Ice Pellets	Snow	Adj. to Sea Level			Avg	Res	Res	Peak			Minute	
															Maximum	Minimum	Mean				Speed	Dir		Speed	Dir
1	2	3	4A	4B	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
1	35*	18	26.5*	27.0	0	0	39	0	.....	0	0.00	0.0	29.92	29.92	29.920	0.0	0.0	0	0	N	0	0			
2	18	9	13.5	14.0	0	0	52	0	.....	0	0.00	0.0	29.92	29.92	29.920	0.0	0.0	0	0	N	0	0			
3	29	16	22.5	23.0	0	0	43	0	...4....	0	0.04	0.6	29.92	29.92	29.920	0.0	0.0	0	0	N	0	0			
4	26	15	20.5	21.0	0	0	45	0	...4....	0	0.64	9.6	29.92	29.92	29.920	0.0	0.0	0	0	N	0	0			
5	25	21	22.9	22.2	17	81	43	0	...4....	0	T	T	30.15	30.10	30.120	1.2	1.2	0	11	S	6	180			
6	26	19	22.6	21.7	17	84	43	0	...4....	0	0.00	0.0	30.09	30.01	30.044	0.8	0.8	0	7	S	4	180			
7	21	12	16.6	17.3	11	78	49	0	...4....	0	0.02	0.5	30.01	29.41	29.824	2.0	2.0	0	14	S	9	180			
8	29	18	23.1	22.3	16	79	42	0	...4....	0	0.20	2.8	29.38	29.16	29.286	5.3	5.3	0	19	S	12	180			
9	19	5	12.1	10.4	1	67	53	0	...4....	0	0.11	2.0	29.58	29.12	29.395	1.0	1.0	0	9	NW	5	315			
10	15	4	9.4	9.6	2	70	56	0	...4....	0	0.07	1.3	29.72	29.51	29.642	0.6	0.6	356	10	W	5	298			
11	15	3	9.1	8.1	1	74	56	0	...4....	0	0.04	0.7	29.94	29.64	29.838	1.2	0.8	275	21	WNW	14	257			
12	21	10	15.5	14.8	7	71	50	0	...4....	0	0.05	1.5	30.17	29.93	30.098	2.7	2.1	255	19	WNW	13	253			
13	22	7	14.5	18.5	11	73	51	0	...4....	0	0.03	0.7	30.11	29.73	29.895	8.0	6.6	210	28	SSW	18	182			
14	12	-8	2.4	3.0	-6	67	63	0	...4....	0	0.01	0.3	30.19	30.00	30.141	1.6	1.3	266	18	W	13	273			
15	12	-9	1.8	2.9	-5	69	64	0	...4....	0	T	T	30.19	30.08	30.147	0.8	0.8	178	11	SSW	9	196			
16	17	-3	7.1	8.8	-1	64	58	0	...4....	0	0.03	0.7	30.30	30.00	30.152	3.8	2.8	197	21	SSE	13	197			
17	18	-10	3.9	4.4	-5	66	62	0	...4....	0	0.07	1.4	30.13	29.91	30.016	2.7	1.0	260	17	SSW	11	186			
18	9	-14	-2.4	-1.1	-13	56	67	0	...4....	0	0.00	0.0	30.17	29.90	30.063	3.9	3.9	181	22	S	14	190			
19	16	8	12.0	11.8	-0	58	53	0	...4....	0	T	T	29.90	29.59	29.785	6.7	6.6	181	26	S	17	186			
20	18	-0	8.7	11.5	0	60	57	0	...4....	0	T	T	29.86	29.44	29.576	8.2	6.2	244	30	W	19	239			
21	-0	-11	-5.5*	-5.0	-19	49	70	0	.....	0	0.00	0.0	29.97	29.87	29.934	4.6	4.6	0	22	W	13	270			
22	1	-11	-4.9	-5.2	-20	48	69	0	.....	0	0.00	0.0	29.94	29.83	29.901	7.3	7.3	0	21	WSW	12	270			
23	-1	-7	-4.0	-3.7	-13	64	68	0	...4....	0	0.01	0.3	29.99	29.90	29.939	1.5	1.5	0	17	NW	7	315			
24	7	-4	1.1	0.4	-9	66	64	0	...4....	0	0.00	0.0	30.23	29.99	30.140	1.4	1.4	0	18	NW	9	315			
25	19	-2	8.5	11.9	2	64	57	0	...4....	0	T	T	30.19	30.02	30.104	6.6	3.4	193	21	S	14	181			
26	22	8	15.0	17.3	11	77	51	0	...4....	0	0.17	3.3	30.13	29.95	30.021	5.7	4.1	194	19	S	11	180			
27	7	-14	-3.7	-6.6	-17	59	68	0	...4....	0	T	T	30.45	30.13	30.346	2.0	1.8	320	12	NW	5	315			
28	8	-16*	-4.1	-2.1	-14	56	69	0	...4....	0	0.00	0.0	30.40	30.09	30.247	2.8	2.8	192	14	S	8	180			
29	21	8	14.4	13.9	8	77	51	0	...4....	0	0.03	0.6	30.34	30.05	30.138	4.2	4.1	184	16	S	9	180			
30	24	1	12.3	13.8	4	66	53	0	.....	0	0.00	0.0	30.48	30.37	30.423	2.5	2.4	184	16	S	7	180			
31	33	10	21.6	23.5	15	71	44	0	.....	0	0.00	0.0	30.41	30.09	30.282	1.6	1.6	182	13	S	8	180			
Sum	Sum	-----	-----	---	----	Ttl	Ttl		Number of Days				For the month:						---						
543	83					1710	0			1.52	26.3	30.48	29.12	29.973	2.9	0.9	229	30	W	19	239				
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl	Date	Date	-----	----	----	----	Date	Date	Avg						
17.5	2.7	10.1	10.6	0	58.5	----	----	>.01 inch	15	1.52	62.2	30	9	-----	----	----	----	----	20	20					
Number of Days						Season to Date	Snow, Ice >1.0 inch	7	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date										
Max Temperature			Min Temperature			4589	0	Thunder	0	Precipitation		Snow, Ice Plts													
> 90°F	< 32°F	< 32°F	< 0°F	----	----	Heavy Fog	0	0.64	4	9.6	4	0													
0	29	31	13	----	----	Clear	15	Partly Cloudy	8	Cloudy	8														

**NOTES:**

Units are: Temperature=°F, Wind=mph, Pressure=inches Hg, Precipitation=inches.  
 Data in column 4A are (MAX+MIN) ÷ 2, whereas columns 4B, 5, 6, 15, 16, 23 are means via continuous observations for 24 hours.  
 Column 5: Dew point is calculated from temperature and humidity and is continuously averaged for 24 hours.  
 Data in columns 9, 10, 12 are entered manually by the station observer.  
 Columns 17-18: Resultant wind is calculated by the vector sum of continuous wind observations.  
 Column 23: Sunshine index is measured in Watts/m<sup>2</sup> and is continuously averaged for 24 hours.  
 Data in columns 4B, 5, 6, 15, 16, 23 are updated continuously, there by achieving a "true" mean.



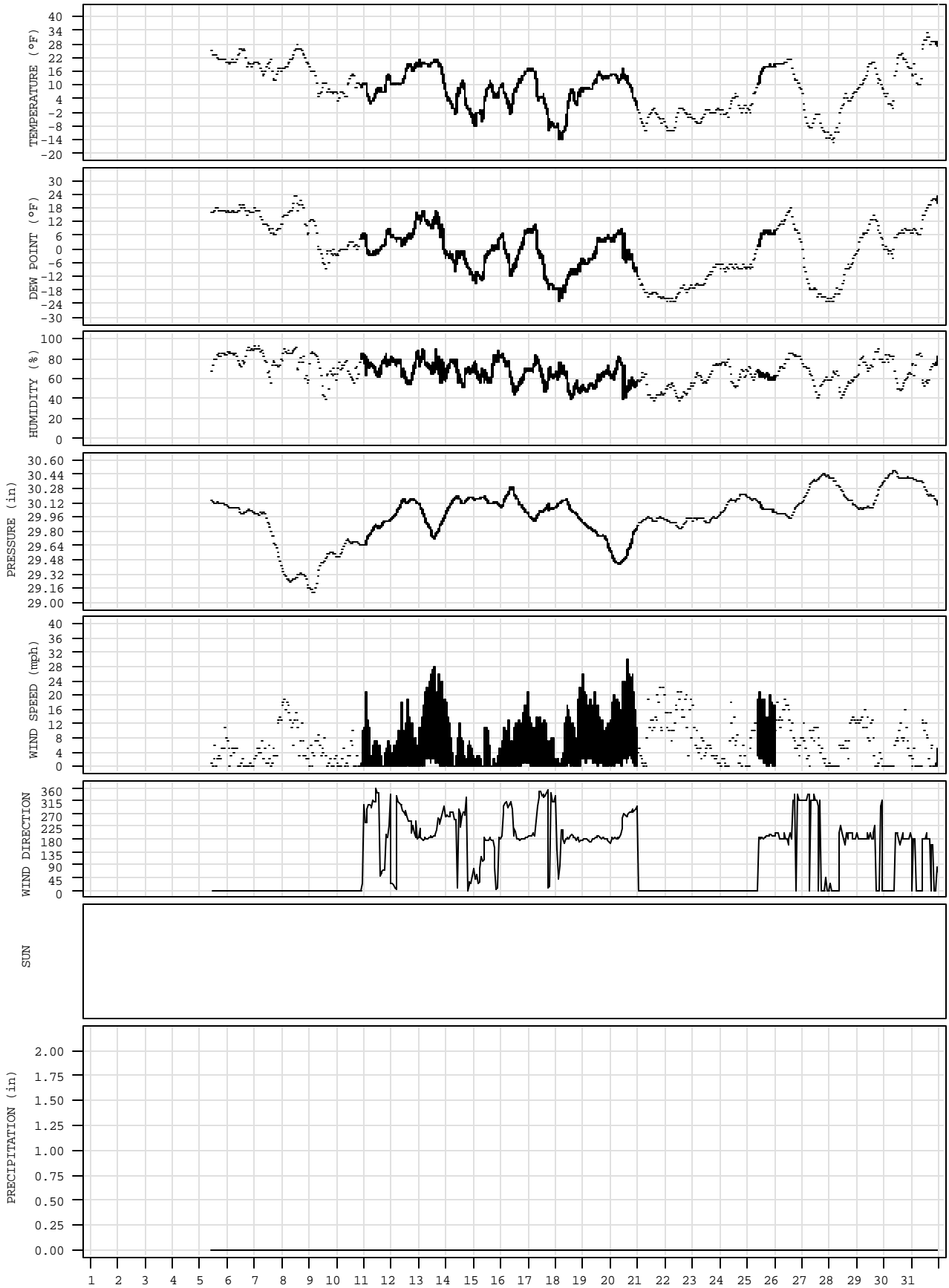


HOURLY PRECIPITATION (Water Equivalent)  
**January 2003: Westford**

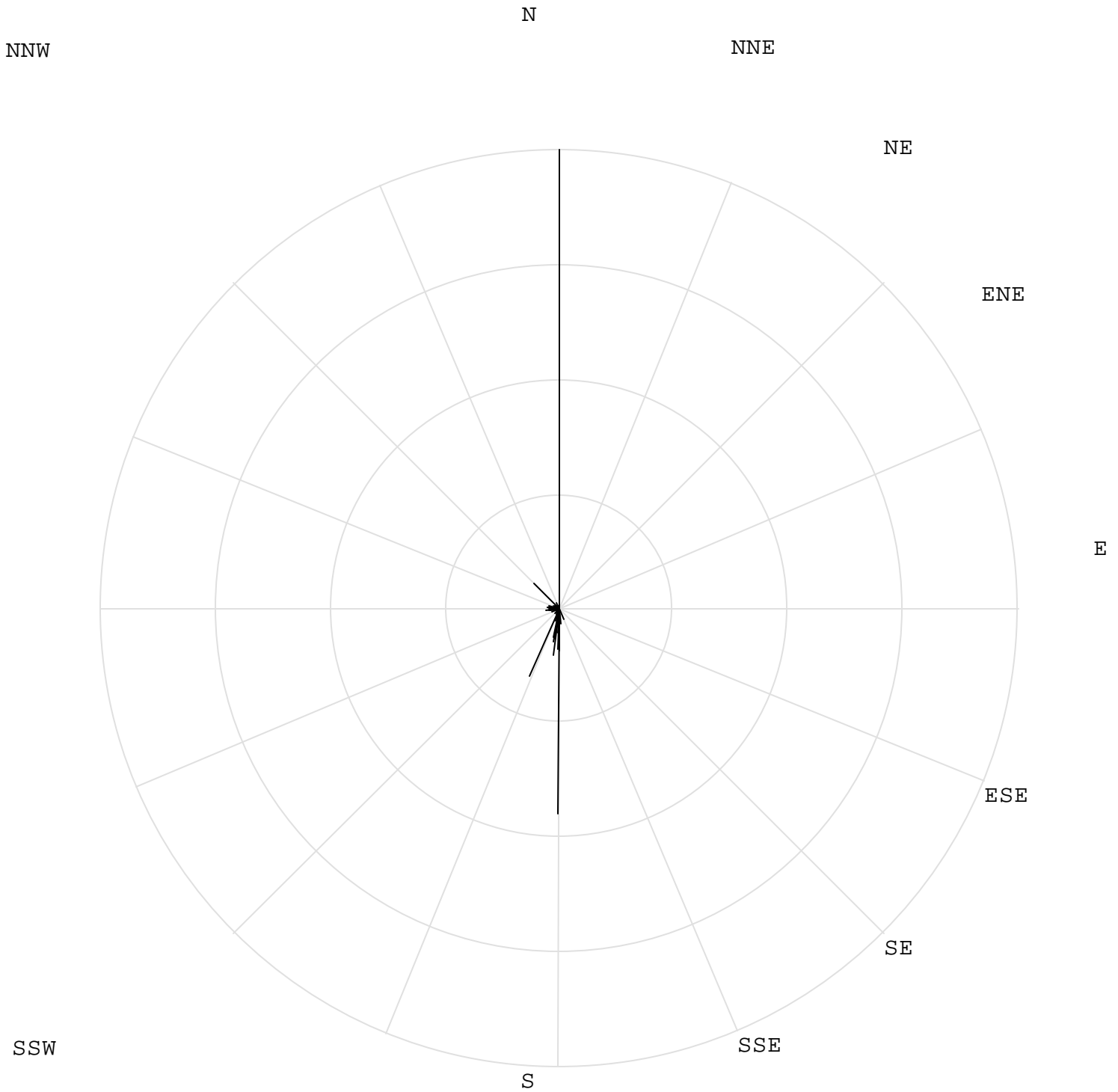
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01																								01	
02																									02
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30																									30
31																									31
Sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Sum

During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOURLY-BY-HOURLY DATA  
January 2003: Westford



Wind Rose: January 2003  
Westford



Maximum direction of wind: 646.0 miles from 0°.  
2157.9 total miles of wind.