

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### February 2008

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

Date	Temperature					Humidity Mean	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 Adj. to Sea Level			Wind						Sun Mean Index		
	Maximum	Minimum	Average	Mean	Dew Point		Heating Base 65°F	Cooling Base 65°F			Water Equivalent	Ice Pellets Snow	Maximum	Minimum	Mean	Avg Speed	Res Speed	Res Dir	Peak		Minute			
																			Speed	Dir	Speed		Dir	Speed
1	2	3	4A	4B	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
1	32.8	12.8	22.8	24.3	18	78	42	0	...	4.6	...	2	0.34	0.3	30.63	29.63	30.257	3.1	2.6	155	30	S	17	168
2	32.5	20.6	26.6	26.8	23	87	38	0	.....	6....	...	4	0.31	1.0	30.12	29.58	29.922	0.1	0.1	277	6	W	4	277
3	32.6	24.3	28.4	28.5	26	90	36	0	.....	6....	...	4	0.02	0.2	30.27	30.11	30.170	1.0	0.9	210	10	S	6	219
4	36.2	24.4	30.3	29.6	25	84	35	0	.....	6....	...	4	T	T	30.36	30.16	30.295	0.6	0.3	44	9	S	4	169
5	40.9	30.2	35.6	35.6	33	91	29	0	.....	6....	...	3	0.24	1.5	30.16	29.67	29.832	5.4	4.4	183	26	S	16	193
6	31.9	22.5	27.2	26.9	24	91	37	0	.....	6....	...	10	0.60	6.9	29.82	29.63	29.731	1.9	1.8	350	14	NW	7	312
7	23.1	14.6	18.9	18.8	16	88	46	0	.....	6....	...	16	0.67	8.2	29.98	29.56	29.763	1.1	0.8	339	11	NNE	7	287
8	28.2	15.0	21.6	20.7	16	83	43	0	.....	6....	...	15	T	T	30.03	29.94	29.990	2.0	1.9	188	13	S	7	193
9	32.8	23.2	28.0	28.0	24	86	37	0	.....	6....	...	15	0.12	1.5	30.03	29.66	29.910	2.7	2.6	184	14	S	8	197
10	33.1	7.7	20.4	25.9	20	79	44	0	.....	6....	...	17	0.15	2.9	29.77	29.41	29.556	7.0	5.9	240	31	W	19	281
11	14.1	2.5	8.3	6.5	-3	64	56	0	.....	6....	...	17	0.00	0.0	30.33	29.76	30.056	4.4	4.2	268	20	WSW	13	270
12	15.5	-6.8	4.3	6.7	-3	66	60	0	.....	6....	...	17	T	T	30.45	30.12	30.355	0.5	0.1	22	7	NW	4	269
13	32.5	12.2	22.3	25.0	22	88	42	0	.....	6....	...	18	0.54	4.4	30.12	29.63	29.770	3.7	2.1	183	25	S	16	164
14	27.5	9.7	18.6	20.3	14	75	46	0	.....	6....	...	17	0.00	0.0	30.05	29.76	29.973	3.2	1.8	229	20	S	12	181
15	30.9	11.3	21.1	22.8	15	73	44	0	.....	6....	...	16	0.01	0.1	30.18	29.84	29.948	7.1	4.6	216	30	S	18	194
16	22.1	2.5	12.3	10.7	0	62	52	0	.....	6....	...	16	0.00	0.0	30.31	30.18	30.269	1.7	1.2	263	16	NW	8	287
17	40.0	12.5	26.3	27.1	17	66	38	0	.....	6....	...	15	0.01	0.0	30.27	29.62	30.004	12.1	12.0	186	46	SSW	27	192
18	55.3*	33.9	44.6*	42.5	37	82	20	0	.....	6....	...	6	0.08	0.0	29.62	29.34	29.455	9.3	7.4	213	32	SW	19	203
19	34.0	18.8	26.4	27.7	16	60	38	0	.....	6....	...	6	0.00	0.0	29.80	29.50	29.627	8.5	8.3	249	31	W	20	282
20	20.6	7.3	14.0	14.5	4	62	51	0	.....	6....	...	6	T	T	30.18	29.80	29.969	3.3	3.0	284	18	WSW	12	265
21	20.7	2.8	11.8	11.1	-2	57	53	0	.....	6....	...	6	0.00	0.0	30.37	30.18	30.297	2.4	2.3	261	15	W	11	231
22	22.3	7.3	14.8	16.3	11	78	50	0	.....	6....	...	9	0.10	3.5	30.32	29.92	30.107	0.7	0.5	149	12	SSE	6	168
23	26.3	14.8	20.5	18.7	13	78	44	0	.....	6....	...	7	0.01	0.5	30.05	29.91	29.979	1.1	0.8	313	9	WNW	6	290
24	34.2	13.0	23.6	23.3	14	68	41	0	.....	6....	...	7	0.00	0.0	30.08	29.91	30.002	4.2	4.1	194	17	SSW	11	198
25	36.2	18.9	27.6	28.7	19	68	37	0	.....	6....	...	7	0.00	0.0	29.93	29.81	29.863	3.5	3.0	222	16	SW	10	200
26	33.8	27.9	30.8	30.5	27	88	34	0	.....	6....	...	10	0.31	2.9	29.84	29.33	29.642	1.6	1.2	198	16	S	9	193
27	30.2	9.9	20.1	17.2	14	86	45	0	.....	6....	...	15	0.37	6.2	29.75	29.31	29.505	2.5	2.4	329	18	WNW	12	304
28	10.4	-3.1	3.6*	4.4	-5	65	61	0	.....	6....	...	14	0.00	0.0	30.37	29.75	30.061	1.7	1.6	336	15	WNW	9	293
29	19.8	-8.8*	5.5	9.5	-2	61	59	0	.....	6....	...	13	0.00	0.0	30.54	30.15	30.405	2.8	2.6	186	23	S	13	164
Sum	Sum	-----	-----	---	----	Ttl	Ttl								For the month:						---			
851	382					1258	0		Number of Days	3.88	40.1	30.63	29.31	29.956	3.4	2.1	220	46	SSW	27	192			
Avg	Avg	Avg	Mean	Avg	Avg	----	----		Precip	Season Ttl	Date	Date	-----	----	----	---	Date	Date	Avg					
29.3	13.2	21.2	21.7	15	76.0	----	----		≥.01 inch	16	5.79	110.1	1	27	-----	----	----	---	17	17				
Number of Days						Season to Date	Snow, Ice ≥1.0 inch	10	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date									
Max Temperature			Min Temperature			5417	0	Thunder	0	Precipitation			Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	0.00	-	8.2	7	18		13										
0	15	28	3	----	----	Clear	3	Partly Cloudy			13	Cloudy			13									

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.

**OBSERVATIONS AT 3-HOUR INTERVALS  
February 2008: Westford**

Hour	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Wind																																																																																																																																																																																									
						Direction	Speed	Gust						Direction	Speed	Gust						Direction	Speed	Gust																																																																																																																																																																																							
FEB 01									FEB 02									FEB 03																																																																																																																																																																																													
01		30.61	0.00	14	6	71	01	2	4	29.59	0.00	32	31	93	27	0	0	30.12	0.00	24	22	89	04	0	0	04		30.57	0.00	15	8	72	01	1	4	29.59	0.00	30	28	93	27	0	0	30.13	0.00	25	22	91	06	0	0	07		30.51	0.00	18	9	66	07	2	5	29.84	0.00	21	18	88	27	0	0	30.15	0.00	26	24	92	17	0	0	10		30.44	0.00	26	17	70	12	1	7	29.98	0.00	26	22	86	27	0	0	30.15	0.00	29	27	91	17	0	0	13		30.24	0.00	26	20	79	14	7	18	30.01	0.00	27	23	84	27	0	0	30.13	0.00	32	29	87	19	3	7	16		30.08	0.00	29	25	86	17	1	4	30.06	0.00	29	24	82	24	0	0	30.17	0.00	31	28	91	23	2	4	19		29.96	0.00	31	26	83	16	4	10	30.09	0.00	27	25	92	27	0	0	30.22	0.00	30	28	91	18	2	4	22		29.74	0.00	32	30	90	01	1	3	30.12	0.00	24	22	89	04	0	0	30.27	0.00	30	28	89	19	3	6
FEB 04									FEB 05									FEB 06																																																																																																																																																																																													
01		30.27	0.00	29	27	91	29	0	0	30.07	0.00	31	29	92	15	2	6	29.81	0.00	32	29	91	32	2	6	04		30.31	0.00	28	25	89	01	1	4	29.96	0.00	32	30	93	16	7	14	29.79	0.00	31	28	92	01	1	6	07		30.33	0.00	27	24	90	04	1	4	29.86	0.00	34	31	89	16	5	15	29.74	0.00	30	28	92	01	0	1	10		30.35	0.00	31	24	75	03	1	3	29.77	0.00	36	33	90	17	6	12	29.71	0.00	28	26	91	34	4	14	13		30.33	0.00	34	24	66	20	1	2	29.69	0.00	40	37	89	18	11	23	29.70	0.00	25	22	89	31	5	12	16		30.29	0.00	33	26	76	07	0	4	29.71	0.00	40	39	93	22	5	17	29.74	0.00	25	21	86	34	3	10	19		30.28	0.00	25	22	90	07	0	0	29.80	0.00	37	35	93	30	1	2	29.73	0.00	23	21	91	35	1	5	22		30.22	0.00	28	25	90	12	0	1	29.84	0.00	33	31	91	32	1	7	29.75	0.00	23	21	91	32	2	5
FEB 07									FEB 08									FEB 09																																																																																																																																																																																													
01		29.64	0.00	23	21	91	34	1	8	29.98	0.00	15	12	87	02	0	2	29.99	0.00	24	20	84	17	4	9	04		29.62	0.00	21	19	91	03	2	4	30.00	0.00	15	12	88	07	0	0	30.01	0.00	24	21	88	18	5	10	07		29.65	0.00	17	14	88	33	0	2	30.02	0.00	16	13	88	23	0	2	30.01	0.00	24	21	86	19	2	5	10		29.70	0.00	19	16	88	01	0	2	30.02	0.00	21	17	87	19	4	11	29.99	0.00	28	23	79	19	1	4	13		29.73	0.00	21	18	86	28	3	4	29.96	0.00	27	19	73	19	3	6	29.92	0.00	32	25	77	18	4	7	16		29.81	0.00	20	17	88	29	0	1	29.94	0.00	27	19	73	19	2	3	29.87	0.00	30	27	89	12	1	3	19		29.94	0.00	15	12	88	31	0	3	29.98	0.00	22	17	83	17	3	6	29.82	0.00	29	27	92	15	1	4	22		29.96	0.00	16	13	87	04	1	4	30.00	0.00	23	19	84	20	4	6	29.73	0.00	31	28	92	19	2	4
FEB 10									FEB 11									FEB 12																																																																																																																																																																																													
01		29.64	0.00	32	30	91	19	4	12	29.78	0.00	7	-2	65	25	7	20	30.34	0.00	0	-5	77	35	0	1	04		29.57	0.00	33	30	91	18	5	16	29.84	0.00	5	-4	68	24	4	7	30.37	0.00	-2	-8	76	35	0	1	07		29.52	0.00	30	27	88	17	3	9	29.95	0.00	3	-6	65	27	8	18	30.43	0.00	-5	-10	78	34	0	0	10		29.46	0.00	31	28	88	18	3	7	30.04	0.00	6	-6	59	30	9	12	30.44	0.00	7	-5	58	06	0	3	13		29.42	0.00	29	26	89	23	5	15	30.07	0.00	10	1	67	26	11	18	30.41	0.00	14	-2	47	28	1	2	16		29.46	0.00	26	19	74	23	7	14	30.12	0.00	13	1	57	33	2	4	30.36	0.00	14	-0	53	18	1	2	19		29.64	0.00	17	1	49	24	14	25	30.24	0.00	4	-7	62	25	1	4	30.30	0.00	10	3	70	10	0	1	22		29.73	0.00	12	1	62	28	11	23	30.31	0.00	7	-3	62	26	3	7	30.22	0.00	13	6	74	16	2	5
FEB 13									FEB 14									FEB 15																																																																																																																																																																																													
01		30.07	0.00	16	13	88	12	0	4	29.81	0.00	18	14	84	28	4	11	29.94	0.00	25	22	88	19	10	20	04		29.91	0.00	21	16	79	16	13	19	29.87	0.00	16	12	82	32	1	7	29.86	0.00	27	21	77	20	9	22	07		29.78	0.00	25	20	79	17	8	16	29.95	0.00	12	8	85	02	1	3	29.85	0.00	28	22	79	18	8	19	10		29.73	0.00	25	22	89	20	3	10	30.03	0.00	21	12	68	35	1	5	29.84	0.00	30	24	79	21	8	14	13		29.66	0.00	31	28	90	20	0	0	30.03	0.00	24	13	62	29	2	8	29.85	0.00	30	25	83	28	5	16	16		29.64	0.00	32	29	91	02	0	2	30.04	0.00	27	15	60	25	3	10	29.97	0.00	22	7	52	28	9	16	19		29.67	0.00	29	26	92	33	3	11	30.04	0.00	20	16	81	18	5	9	30.06	0.00	12	4	69	01	1	4	22		29.74	0.00	20	18	89	31	5	12	30.00	0.00	24	18	79	17	4	15	30.15	0.00	14	2	59	30	4	12
FEB 16									FEB 17									FEB 18																																																																																																																																																																																													
01		30.19	0.00	9	-1	61	32	4	10	30.23	0.00	15	6	65	17	2	7	29.58	0.00	39	37	91	19	13	27	04		30.23	0.00	4	-5	68	24	0	2	30.22	0.00	13	5	70	19	5	14	29.50	0.00	42	40	94	20	12	22	07		30.27	0.00	5	-3	71	23	1	5	30.19	0.00	18	8	63	17	11	20	29.40	0.00	48	46	95	18	9	18	10		30.31	0.00	12	-0	58	28	2	5	30.10	0.00	28	12	51	19	11	23	29.38	0.00	52	48	88	18	10	23	13		30.27	0.00	18	2	49	20	1	5	29.99	0.00	32	18	57	18	20	36	29.35	0.00	54	47	75	20	9	19	16		30.27	0.00	20	4	49	26	2	4	29.91	0.00	33	22	62	19	11	27	29.44	0.00	37	32	82	30	3	10	19		30.30	0.00	11	1	63	19	1	2	29.81	0.00	36	26	67	19	20	27	29.51	0.00	36	27	68	25	7	18	22		30.30	0.00	10	1	69	18	2	4	29.69	0.00	38	34	85	19	13	32	29.53	0.00	34	26	71	23	5	14

**MAXIMUM SHORT DURATION PRECIPITATION**

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ended: Date	00	00	00	00	00	00	00	00	00	00	00	00
Ended: Time	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000

The precipitation amounts may occur at any time during the month. The time indicated is the ending time of the interval. Date and time are not entered for trace amounts.

# OBSERVATIONS AT 3-HOUR INTERVALS

## February 2008: Westford

Hour	FEB 19									FEB 20									FEB 21								
	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust
01		29.52	0.00	33	25	72	25	4	15		29.81	0.00	17	7	63	27	4	14		30.19	0.00	6	-2	68	30	0	2
04		29.51	0.00	31	25	76	22	5	14		29.87	0.00	14	7	73	29	2	6		30.24	0.00	5	-4	66	28	1	3
07		29.58	0.00	28	16	59	21	4	13		29.92	0.00	11	3	68	26	3	9		30.32	0.00	4	-6	62	26	2	7
10		29.60	0.00	31	16	54	26	12	18		29.94	0.00	18	6	59	29	5	7		30.37	0.00	10	-3	55	28	2	13
13		29.62	0.00	29	11	47	26	14	24		29.95	0.00	19	8	61	34	2	8		30.33	0.00	16	-1	46	28	5	12
16		29.64	0.00	26	16	67	26	5	16		29.97	0.00	19	4	53	31	5	13		30.28	0.00	21	2	43	24	2	9
19		29.73	0.00	23	13	64	23	5	13		30.08	0.00	11	-0	59	35	1	7		30.31	0.00	11	-0	61	18	1	2
22		29.76	0.00	21	9	60	26	7	23		30.15	0.00	9	-1	64	34	0	3		30.31	0.00	14	1	57	21	0	2
FEB 22									FEB 23									FEB 24									
01		30.30	0.00	12	4	69	17	0	2		29.92	0.00	19	16	88	01	0	2		30.05	0.00	15	9	78	24	2	3
04		30.27	0.00	11	4	71	18	2	7		29.93	0.00	17	14	88	30	0	3		30.06	0.00	14	10	83	20	2	3
07		30.23	0.00	9	3	77	19	0	1		29.98	0.00	16	13	88	29	0	2		30.07	0.00	14	10	83	18	3	5
10		30.15	0.00	20	11	67	16	2	5		30.01	0.00	19	14	80	28	6	9		30.08	0.00	24	14	64	18	8	12
13		30.07	0.00	21	17	84	17	2	5		29.98	0.00	23	14	68	28	2	5		30.01	0.00	31	16	54	19	6	14
16		30.00	0.00	22	17	82	16	2	5		29.95	0.00	25	13	59	33	2	7		29.93	0.00	34	18	52	18	7	12
19		29.97	0.00	20	17	88	05	1	2		30.01	0.00	17	10	76	03	0	1		29.92	0.00	29	18	61	20	5	13
22		29.94	0.00	19	16	87	07	1	2		30.04	0.00	15	10	78	21	0	2		29.92	0.00	25	17	72	20	4	6
FEB 25									FEB 26									FEB 27									
01		29.93	0.00	24	16	72	20	1	4		29.82	0.00	31	25	79	25	3	8		29.32	0.00	30	28	93	35	0	0
04		29.89	0.00	22	15	76	18	2	3		29.80	0.00	30	25	81	22	0	1		29.32	0.00	21	19	90	31	4	9
07		29.89	0.00	19	13	77	17	3	4		29.77	0.00	28	24	86	17	1	6		29.41	0.00	17	14	88	32	3	10
10		29.88	0.00	29	18	64	17	7	13		29.74	0.00	31	27	86	17	2	6		29.47	0.00	19	15	84	34	2	13
13		29.83	0.00	34	21	58	26	2	13		29.64	0.00	33	29	86	18	1	7		29.49	0.00	18	13	80	33	7	14
16		29.82	0.00	34	22	62	20	6	9		29.56	0.00	32	30	90	02	2	4		29.56	0.00	16	12	84	34	3	14
19		29.85	0.00	33	23	67	22	2	6		29.48	0.00	31	29	93	05	0	1		29.66	0.00	12	8	84	33	1	8
22		29.85	0.00	31	22	69	25	5	10		29.37	0.00	30	28	93	03	1	5		29.73	0.00	11	8	86	28	0	5
FEB 28									FEB 29																		
01		29.77	0.00	10	4	79	32	1	4		30.39	0.00	-2	-9	70	18	1	3									
04		29.84	0.00	5	-2	73	32	0	4		30.46	0.00	-3	-9	75	15	0	1									
07		29.93	0.00	1	-7	70	00	1	7		30.53	0.00	-3	-9	74	18	2	7									
10		30.03	0.00	4	-8	57	29	4	13		30.53	0.00	10	-5	51	20	5	8									
13		30.08	0.00	9	-5	51	00	2	6		30.46	0.00	16	-1	47	21	5	9									
16		30.15	0.00	10	-4	52	35	2	11		30.38	0.00	18	3	50	18	3	7									
19		30.26	0.00	1	-7	69	09	1	4		30.30	0.00	19	4	52	16	3	7									
22		30.34	0.00	-2	-7	76	35	0	0		30.24	0.00	20	8	59	16	9	23									

### WEATHER NOTES

NOTES:  
 Units are: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.  
 Wind Direction: Directions are those from which the wind is blowing, indicated in tens of degrees from true north: i.e., 09 for East, 18 for South, 27 for West, and 00 or 36 for North.  
 Wind Speed: The observed one-minute average speed in miles-per-hour.  
 Wind Gust: The maximum instantaneous wind speed for the 10-minute period preceding the observation.  
 Rainfall Rate: The instantaneous rainfall rate at the time of observation, calculated by timing consecutive 0.01" pulses from the electronic rain gauge and interpolating this rate for one hour.

### SUMMARY BY HOUR

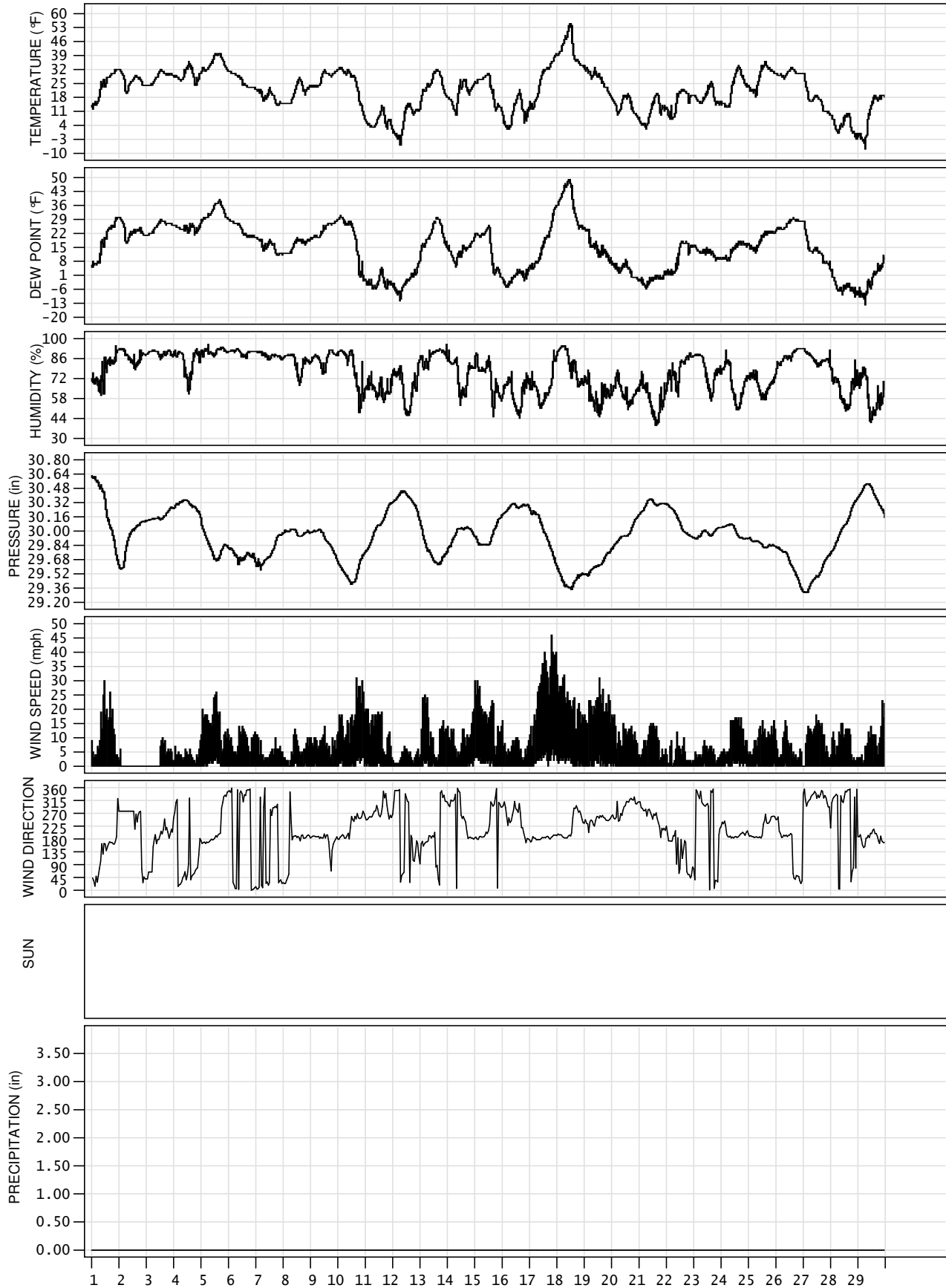
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01		29.954	20	15	80	2.5	23	1.5
04		29.948	19	14	81	2.9	20	1.9
07		29.968	18	13	80	2.7	20	1.8
10		29.974	23	15	73	4.1	22	2.4
13		29.939	26	17	70	4.8	23	2.9
16		29.935	26	17	70	3.1	24	1.6
19		29.963	21	15	76	2.8	21	2.0
22		29.964	21	15	78	3.1	23	1.8

## HOURLY PRECIPITATION (Water Equivalent) February 2008: Westford

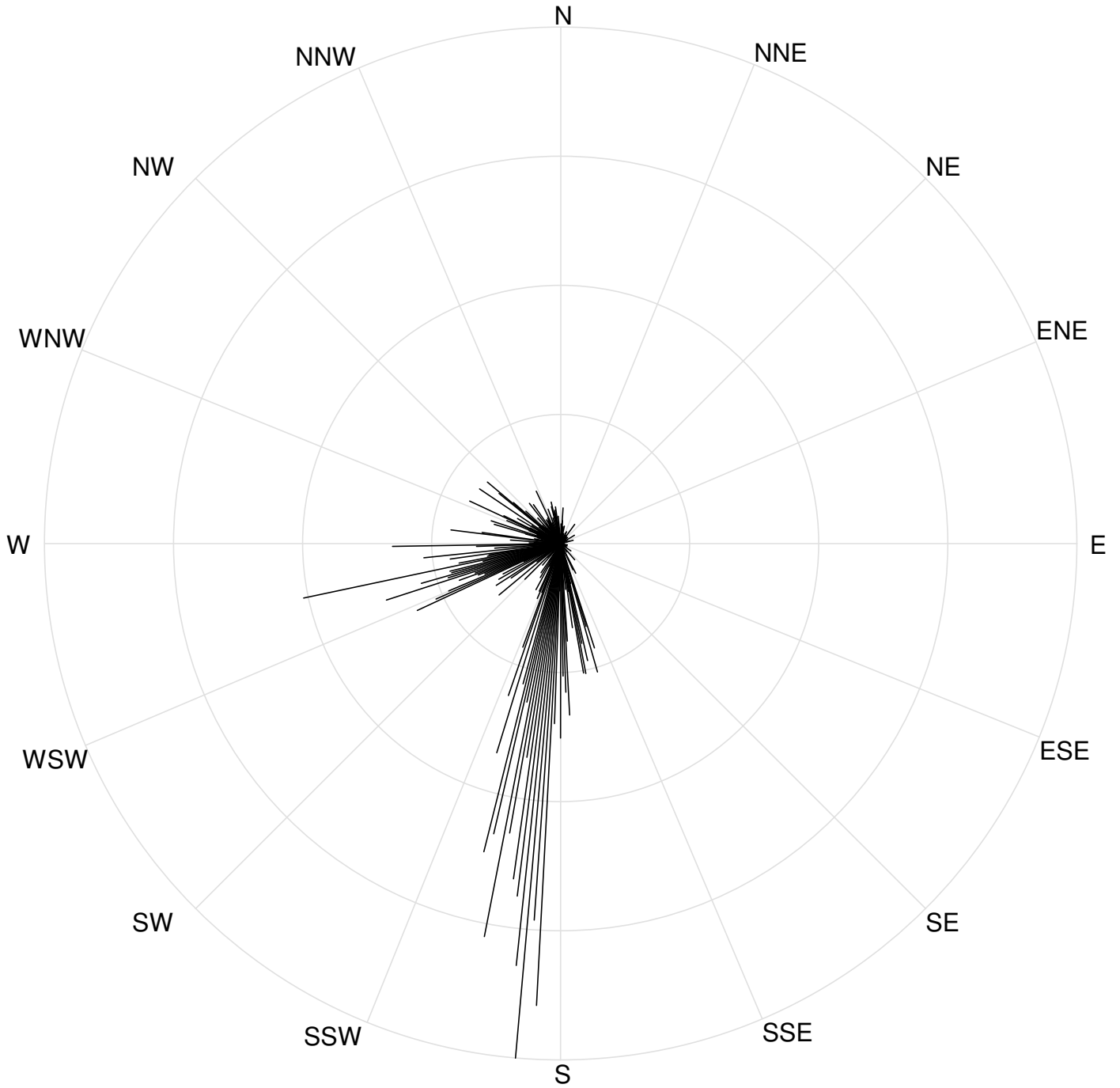
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01																								01	
02																									02
03																									03
04																									04
05																									05
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29																									29
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.)

# HOUR-BY-HOUR DATA February 2008: Westford



Wind Rose: February 2008  
**Westford**



Maximum direction of wind: 90.1 miles from 185°.  
2377.7 total miles of wind.