

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### March 2011

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						Solar Radiation	
	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
1	2	3	4A	4B	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	30.0	14.6	22.3	22.8	9	57	42	0	.....	14	0.00	0.0	30.26	29.87	30.123	5.1	2.9	280	26	S	15	205	171
2	33.3	4.7	19.0	23.1	9	55	46	0	.....	14	0.04	0.5	30.42	29.79	30.003	8.3	4.5	270	28	NW	18	302	90
3	17.4	-2.2*	7.6*	6.2	-8	54	57	0	.....	14	0.00	0.0	30.70	30.42	30.622	0.8	0.7	325	13	NW	7	274	176
4	35.7	-0.7	17.5	20.8	2	46	47	0	.....	13	0.00	0.0	30.70	30.35	30.544	4.7	4.7	199	34	S	18	204	160
5	47.5	33.5	40.5	40.6	34	78	24	0	.....	10	0.03	0.0	30.37	29.92	30.146	10.8	10.8	209	34	S	20	207	27
6	46.8	20.4	33.6	32.8	30	89	31	0	...4.6...	8	0.93	5.1	30.11	29.82	29.978	3.7	3.3	218	31	SSW	16	199	13
7	20.4	12.9	16.6	17.6	15	87	48	0	.....	28	1.55	20.9	30.37	29.81	30.033	0.0	0.0	0	0	NNW	0	343	23
8	27.5	7.0	17.3	16.7	13	84	47	0	.....	26	0.00	0.0	30.66	30.36	30.564	0.4	0.3	340	9	NNW	5	321	151
9	35.9	9.7	22.8	24.7	17	74	42	0	.....	25	0.00	0.0	30.66	30.37	30.564	2.3	2.2	179	23	S	14	170	130
10	40.1	28.3	34.2	34.7	28	78	31	0	.....	22	0.12	T	30.37	29.96	30.195	7.1	7.1	184	33	SE	16	178	45
11	51.0	34.1	42.5	42.1	37	83	22	0	.....	14	0.22	0.0	29.97	29.64	29.735	2.9	2.5	184	31	SE	13	160	66
12	36.7	31.1	33.9	34.1	30	87	31	0	.....	12	0.23	T	29.74	29.61	29.657	2.8	2.5	228	17	W	11	262	41
13	36.3	29.5	32.9	33.9	30	87	32	0	...6...	12	0.10	T	30.17	29.71	29.911	3.1	2.3	308	16	NW	10	316	60
14	33.9	20.4	27.2	27.5	20	73	38	0	...6...	11	T	0.0	30.41	30.17	30.303	1.6	1.5	333	11	NW	7	319	176
15	43.4	17.2	30.3	30.7	20	65	35	0	.....	9	0.00	0.0	30.45	30.23	30.372	3.2	3.2	208	17	SSW	10	216	192
16	39.7	33.3	36.5	36.9	32	82	28	0	.....	9	0.08	T	30.24	29.91	30.043	6.5	6.5	207	24	SSW	13	205	57
17	52.0	34.0	43.0	43.4	33	68	22	0	.....	7	0.00	0.0	30.08	29.75	29.982	4.6	4.5	214	21	S	11	209	196
18	53.6*	34.0	43.8*	45.0	34	65	21	0	.....	3	0.00	0.0	29.94	29.51	29.700	7.7	4.7	257	32	NW	18	298	125
19	34.0	20.2	27.1	28.6	19	68	38	0	.....	3	0.03	0.3	30.51	29.92	30.246	2.2	2.2	356	17	ESE	8	34	190
20	41.5	16.9	29.2	29.1	13	54	35	0	.....	2	0.00	0.0	30.63	30.39	30.547	0.5	0.4	283	9	W	6	270	214
21	36.4	27.8	32.1	32.7	23	71	33	0	...4....	4	0.28	2.2	30.39	29.78	30.026	3.6	3.5	191	21	S	10	190	31
22	36.5	25.8	31.1	32.2	27	82	33	0	.....	3	0.04	T	30.00	29.79	29.914	3.4	3.2	331	17	NW	9	331	46
23	31.0	16.1	23.6	22.6	13	67	41	0	.....	3	T	T	29.98	29.71	29.878	1.0	1.0	10	14	N	6	25	191
24	28.5	13.8	21.2	22.4	16	77	43	0	.....	3	T	T	29.86	29.69	29.768	1.2	1.0	332	11	NW	7	319	87
25	31.0	19.4	25.2	24.4	12	60	40	0	.....	0	0.01	0.0	29.92	29.83	29.871	3.4	3.2	311	19	NW	11	291	177
26	29.6	16.5	23.1	22.2	11	62	41	0	.....	3	T	T	29.95	29.88	29.910	6.1	6.0	305	26	NW	15	306	172
27	28.9	13.0	20.9	21.8	4	46	44	0	.....	3	0.00	0.0	29.94	29.81	29.886	6.5	6.3	316	24	NW	14	298	237
28	27.9	18.6	23.3	23.8	9	54	41	0	.....	3	T	T	29.96	29.84	29.891	4.8	4.5	317	21	WNW	14	310	145
29	36.9	22.2	29.6	28.4	18	65	35	0	.....	3	0.02	T	30.10	29.94	30.030	3.0	2.8	314	21	WNW	11	325	140
30	45.5	27.9	36.7	35.6	22	58	28	0	.....	2	0.00	0.0	30.12	29.96	30.047	1.4	1.2	327	14	WNW	9	270	243
31	48.2	27.2	37.7	37.3	23	59	27	0	.....	2	0.00	0.0	29.96	29.72	29.834	0.9	0.7	172	14	SSW	8	210	143
<b>Sum</b>	<b>Sum</b>	-----	-----	---	----		<b>Ttl</b>	<b>Ttl</b>					<b>For the month:</b>						---				
1137	627						1123	0	<b>Number of Days</b>	3.68	29.0	30.70	29.51	30.075	3.7	1.9	253	34	S	20	207		
<b>Avg</b>	<b>Avg</b>	<b>Avg</b>	<b>Mean</b>	<b>Avg</b>	<b>Avg</b>	----	----	<b>Precip</b>		<b>Season Ttl</b>	<b>Date</b>	<b>Date</b>	-----	----	----	----	<b>Date</b>	<b>Date</b>	<b>Avg</b>				
36.7	20.2	28.5	28.9	19	68.8	----	----	≥.01 inch	14	9.16	169.2	3	18	-----	----	----	----	4+	5	126			
<b>Number of Days</b>						<b>Season to Date</b>	<b>Snow, Ice ≥1.0 inch</b>	3	<b>Greatest in 24 Hours and Dates</b>						<b>Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date</b>								
<b>Max Temperature</b>			<b>Min Temperature</b>			6878	0	<b>Thunder</b>	0	<b>Precipitation</b>			<b>Snow, Ice Plts</b>										
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	0.00	-	20.9	7				28		7						
0	10	26	2	----	----	Clear	7	Partly Cloudy			6	Cloudy			17								

**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: Solar Radiation 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

## March 2011: Westford

Hour	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind																																																																																																																																																																																																						
							Direction	Speed	Gust							Direction	Speed	Gust							Direction	Speed	Gust	Direction	Speed	Gust																																																																																																																																																																																																	
MAR 01									MAR 02									MAR 03																																																																																																																																																																																																													
01	0	29.91	0.00	25	17	72	33	6	23	0	29.94	0.00	28	9	45	20	11	20	0	30.45	0.00	4	-8	59	33	1	8	04	0	30.04	0.00	19	11	70	32	6	17	0	29.85	0.00	30	12	47	21	9	22	0	30.51	0.00	0	-9	64	30	2	4	07	21	30.18	0.00	15	7	71	32	3	13	11	29.83	0.00	30	15	53	21	10	18	19	30.60	0.00	-2	-10	67	03	0	3	10	494	30.24	0.00	20	6	53	30	5	7	223	29.81	0.00	32	20	61	21	6	12	515	30.69	0.00	6	-8	51	28	3	10	13	624	30.24	0.00	25	6	44	29	5	9	694	29.88	0.00	30	16	55	32	7	22	636	30.67	0.00	14	-5	41	31	1	6	16	251	30.18	0.00	29	9	42	21	4	7	69	29.83	0.00	21	8	55	33	6	17	276	30.66	0.00	17	-6	35	01	2	6	19	0	30.14	0.00	23	8	52	20	2	9	0	30.24	0.00	13	-1	52	32	6	21	0	30.70	0.00	7	-7	51	03	0	0	22	0	30.05	0.00	25	11	54	20	8	15	0	30.36	0.00	7	-5	55	32	3	7	0	30.70	0.00	3	-9	58	03	0	0
MAR 04									MAR 05									MAR 06																																																																																																																																																																																																													
01	0	30.70	0.00	2	-9	60	03	0	0	0	30.36	0.00	34	23	65	19	10	28	0	29.91	0.00	46	41	83	22	10	20	04	0	30.67	0.00	1	-8	65	03	0	0	0	30.31	0.00	35	28	76	20	13	27	0	29.84	0.00	47	43	86	20	11	23	07	35	30.65	0.00	3	-7	63	03	0	2	14	30.25	0.00	37	31	78	19	12	23	5	29.83	0.00	47	43	88	22	9	21	10	265	30.60	0.00	22	-3	34	18	7	13	42	30.18	0.00	39	35	83	21	11	25	52	29.97	0.00	31	29	92	00	0	0	13	578	30.51	0.00	32	3	29	20	8	14	49	30.10	0.00	42	37	81	21	9	25	37	30.02	0.00	28	25	90	34	0	0	16	81	30.45	0.00	34	8	33	21	8	15	26	30.05	0.00	44	39	82	20	10	24	14	30.07	0.00	27	24	90	34	0	0	19	0	30.45	0.00	33	7	34	20	5	13	0	30.03	0.00	45	39	81	20	7	16	0	30.11	0.00	24	22	90	34	0	0	22	0	30.39	0.00	34	16	47	20	9	19	0	29.98	0.00	47	40	74	21	10	28	0	30.07	0.00	22	20	90	34	0	0
MAR 07									MAR 08									MAR 09																																																																																																																																																																																																													
01	0	29.99	0.00	20	17	89	34	0	0	0	30.37	0.00	11	7	85	00	0	0	0	30.66	0.00	13	9	86	07	0	0	04	0	29.86	0.00	18	15	88	34	0	0	0	30.44	0.00	10	7	85	00	0	0	0	30.64	0.00	12	8	85	07	0	0	07	0	29.83	0.00	18	15	88	34	0	0	21	30.53	0.00	8	4	85	34	0	0	47	30.64	0.00	13	9	86	07	0	0	10	46	29.88	0.00	16	13	86	34	0	0	81	30.62	0.00	20	16	86	30	0	0	466	30.64	0.00	29	23	79	07	0	3	13	79	29.98	0.00	18	15	87	34	0	0	670	30.60	0.00	25	20	82	31	4	7	510	30.57	0.00	35	22	59	18	6	9	16	51	30.11	0.00	20	17	88	34	0	0	243	30.61	0.00	26	20	78	07	0	3	95	30.51	0.00	34	23	64	17	3	9	19	0	30.24	0.00	19	16	88	34	0	0	0	30.64	0.00	18	14	84	07	0	1	0	30.48	0.00	32	21	65	18	6	13	22	0	30.32	0.00	14	11	86	34	0	0	0	30.65	0.00	14	11	86	07	0	0	0	30.42	0.00	31	21	67	17	5	20
MAR 10									MAR 11									MAR 12																																																																																																																																																																																																													
01	0	30.36	0.00	30	22	70	18	7	22	0	29.93	0.00	40	33	78	17	3	11	0	29.66	0.00	33	31	93	05	0	4	04	0	30.29	0.00	30	23	75	18	10	24	0	29.85	0.00	41	35	79	17	7	15	0	29.62	0.00	33	31	94	05	0	0	07	12	30.28	0.00	31	27	83	19	6	14	60	29.75	0.00	42	36	79	19	4	9	5	29.64	0.00	31	30	94	28	0	0	10	139	30.25	0.00	34	28	78	18	5	19	121	29.73	0.00	44	40	87	15	0	8	88	29.61	0.00	33	31	90	20	6	12	13	155	30.20	0.00	37	30	75	18	6	22	123	29.67	0.00	47	41	79	18	2	8	165	29.62	0.00	36	30	78	23	7	16	16	37	30.14	0.00	36	32	83	17	5	10	146	29.64	0.00	51	42	71	20	2	8	69	29.65	0.00	36	29	74	22	2	5	19	0	30.08	0.00	38	31	78	16	4	10	0	29.66	0.00	40	37	88	12	0	0	0	29.72	0.00	35	30	81	21	4	11	22	0	30.03	0.00	39	33	77	18	9	16	0	29.68	0.00	36	33	92	04	1	6	0	29.73	0.00	34	31	89	20	3	7
MAR 13									MAR 14									MAR 15																																																																																																																																																																																																													
01	0	29.71	0.00	35	31	87	21	1	5	0	30.17	0.00	29	25	85	33	1	6	0	30.42	0.00	21	16	83	14	0	2	04	0	29.72	0.00	35	32	86	21	3	9	0	30.19	0.00	27	21	80	04	0	7	0	30.43	0.00	19	15	82	18	1	4	07	0	29.77	0.00	34	32	93	21	0	4	0	30.25	0.00	24	18	77	03	0	7	0	30.44	0.00	18	13	82	18	0	2	10	107	29.84	0.00	34	32	93	33	1	3	200	30.32	0.00	26	19	73	01	0	5	441	30.44	0.00	31	19	61	21	4	9	13	151	29.91	0.00	35	33	90	30	3	7	707	30.34	0.00	32	20	61	34	2	7	680	30.40	0.00	37	23	56	20	5	13	16	258	29.97	0.00	36	31	82	31	4	10	492	30.34	0.00	33	20	59	34	4	9	554	30.33	0.00	42	24	48	21	6	14	19	0	30.07	0.00	33	28	80	32	5	11	0	30.36	0.00	29	19	66	01	0	2	0	30.29	0.00	40	22	49	20	7	12	22	0	30.15	0.00	31	28	89	33	3	9	0	30.39	0.00	22	16	78	04	0	0	0	30.26	0.00	37	24	59	20	5	11
MAR 16									MAR 17									MAR 18																																																																																																																																																																																																													
01	0	30.21	0.00	38	28	67	21	11	21	0	30.00	0.00	39	34	85	22	4	8	0	29.71	0.00	48	33	57	20	10	22	04	0	30.15	0.00	36	29	74	20	11	21	0	30.02	0.00	38	32	81	24	5	11	0	29.59	0.00	47	35	64	21	10	20	07	0	30.11	0.00	34	31	86	19	9	20	0	30.06	0.00	34	30	83	22	2	4	0	29.52	0.00	47	39	72	20	9	26	10	44	30.07	0.00	35	31	83	20	11	19	439	30.08	0.00	41	33	72	21	6	10	454	29.55	0.00	53	41	62	24	9	19	13	295	30.00	0.00	38	33	81	23	8	13	710	30.03	0.00	48	33	56	19	8	12	255	29.66	0.00	50	34	56	30	15	22	16	239	29.93	0.00	39	35	87	20	6	11	373	29.97	0.00	52	34	51	20	9	15	195	29.77	0.00	45	32	62	33	7	16	19	0	29.93	0.00	39	35	86	20	3	7	0	29.92	0.00	47	34	59	20	4	8	0	29.87	0.00	38	29	69	02	1	12	22	0	29.98	0.00	38	35	87	22	4	8	0	29.82	0.00	47	33	57	20	6	15	0	29.92	0.00	35	27	72	32	3	9

### 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

## March 2011: Westford

Hour	MAR 19									MAR 20									MAR 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	0	29.94	0.00	32	28	84	34	1	5	0	30.53	0.00	21	13	70	04	0	0	0	30.37	0.00	28	15	58	15	0	3
04	0	30.01	0.00	29	25	86	35	3	10	0	30.56	0.00	20	12	73	04	0	0	0	30.27	0.00	34	11	38	18	2	5
07	0	30.14	0.00	26	21	82	00	2	7	5	30.61	0.00	21	14	75	04	0	0	0	30.16	0.00	35	18	48	19	5	11
10	446	30.24	0.00	28	18	66	33	4	9	483	30.63	0.00	33	14	44	04	0	1	56	30.12	0.00	32	28	83	19	8	15
13	693	30.31	0.00	31	17	56	00	2	12	689	30.58	0.00	36	10	33	21	0	6	123	29.96	0.00	32	28	87	18	5	21
16	547	30.35	0.00	32	18	54	35	5	9	519	30.53	0.00	40	9	27	25	1	3	74	29.84	0.00	34	27	76	17	4	13
19	7	30.42	0.00	29	15	56	02	0	4	0	30.50	0.00	33	16	50	33	0	0	0	29.81	0.00	32	29	90	18	5	9
22	0	30.47	0.00	22	13	70	04	0	0	0	30.46	0.00	29	15	56	08	0	1	0	29.78	0.00	33	31	92	20	3	8
MAR 22									MAR 23									MAR 24									
01	0	29.81	0.00	33	31	94	32	0	3	0	29.98	0.00	22	13	68	02	1	8	0	29.73	0.00	17	10	74	02	0	0
04	0	29.84	0.00	31	29	94	33	1	10	0	29.97	0.00	18	11	75	34	0	6	0	29.70	0.00	17	11	77	02	0	0
07	0	29.90	0.00	31	29	92	33	3	9	9	29.98	0.00	17	11	77	00	0	4	7	29.72	0.00	16	10	78	02	0	1
10	26	29.93	0.00	32	28	85	33	1	5	388	29.93	0.00	22	12	65	03	4	8	223	29.75	0.00	27	17	67	02	2	6
13	132	29.93	0.00	34	27	76	32	8	11	302	29.87	0.00	26	14	61	35	4	10	199	29.77	0.00	26	20	78	32	5	10
16	160	29.93	0.00	35	27	72	32	4	9	230	29.79	0.00	29	14	54	35	2	6	149	29.78	0.00	28	20	72	35	4	8
19	7	29.94	0.00	34	25	72	31	4	15	7	29.79	0.00	25	15	65	01	1	8	5	29.83	0.00	26	21	81	33	0	3
22	0	30.00	0.00	30	22	73	02	1	5	0	29.76	0.00	20	11	67	00	0	2	0	29.85	0.00	24	20	87	28	0	2
MAR 25									MAR 26									MAR 27									
01	0	29.85	0.00	26	21	84	29	4	7	0	29.90	0.00	19	8	62	26	4	8	0	29.93	0.00	21	8	58	32	5	14
04	0	29.85	0.00	23	16	74	29	2	4	0	29.88	0.00	18	10	72	29	5	10	0	29.92	0.00	17	3	54	30	5	11
07	11	29.89	0.00	20	14	76	28	0	0	11	29.92	0.00	17	8	69	31	2	9	12	29.93	0.00	13	1	58	29	3	6
10	475	29.89	0.00	25	14	61	30	1	8	418	29.92	0.00	20	11	70	27	6	17	522	29.93	0.00	19	1	44	30	10	16
13	378	29.86	0.00	27	11	50	27	8	15	851	29.90	0.00	26	13	57	31	6	15	786	29.88	0.00	25	3	38	33	7	15
16	457	29.84	0.00	28	10	45	32	4	9	193	29.88	0.00	28	12	51	32	10	22	548	29.83	0.00	28	5	37	31	6	19
19	11	29.88	0.00	24	6	46	33	3	11	12	29.92	0.00	26	12	53	29	7	18	11	29.84	0.00	25	7	45	32	7	15
22	0	29.91	0.00	20	6	55	27	2	6	0	29.94	0.00	24	11	57	29	4	13	0	29.85	0.00	24	4	42	30	8	17
MAR 28									MAR 29									MAR 30									
01	0	29.84	0.00	23	5	45	31	5	17	0	29.95	0.00	24	13	62	25	2	6	0	30.09	0.00	31	22	69	32	2	5
04	0	29.84	0.00	20	4	49	28	8	20	0	29.95	0.00	24	12	62	31	1	5	0	30.07	0.00	32	23	68	34	3	6
07	18	29.88	0.00	19	4	52	31	3	14	12	30.00	0.00	24	13	65	31	1	4	16	30.10	0.00	30	23	74	28	0	2
10	457	29.89	0.00	23	7	50	31	7	14	116	30.05	0.00	25	21	84	31	2	8	540	30.12	0.00	37	24	59	33	1	6
13	443	29.89	0.00	27	10	48	31	7	13	459	30.07	0.00	30	21	68	33	5	15	798	30.08	0.00	42	23	46	06	3	9
16	329	29.88	0.00	28	16	62	01	4	10	717	30.05	0.00	35	20	55	34	3	10	564	29.99	0.00	45	21	38	35	2	9
19	9	29.92	0.00	27	15	58	33	6	17	16	30.07	0.00	34	20	55	29	6	10	14	29.97	0.00	40	22	49	05	0	3
22	0	29.96	0.00	25	14	63	29	2	6	0	30.10	0.00	33	22	65	31	3	9	0	29.97	0.00	32	21	64	05	0	1
MAR 31																											
01	0	29.95	0.00	28	18	68	16	0	0																		
04	0	29.90	0.00	29	21	72	07	0	3																		
07	12	29.89	0.00	29	22	73	07	0	2																		
10	236	29.87	0.00	37	23	57	07	2	4																		
13	506	29.83	0.00	47	23	39	21	2	7																		
16	258	29.78	0.00	46	25	43	20	4	8																		
19	18	29.76	0.00	40	27	59	17	0	3																		
22	0	29.75	0.00	39	28	64	17	1	5																		

### 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	0	30.075	26	18	72	3.2	23	2.0
04	0	30.057	25	18	73	3.9	23	2.5
07	12	30.073	25	18	76	2.7	22	1.9
10	278	30.089	29	20	70	3.9	24	2.1
13	435	30.075	33	20	62	5.0	27	2.6
16	265	30.061	34	21	60	4.2	27	1.6
19	4	30.083	31	20	66	3.1	26	1.4
22	0	30.087	28	19	70	3.0	23	1.9

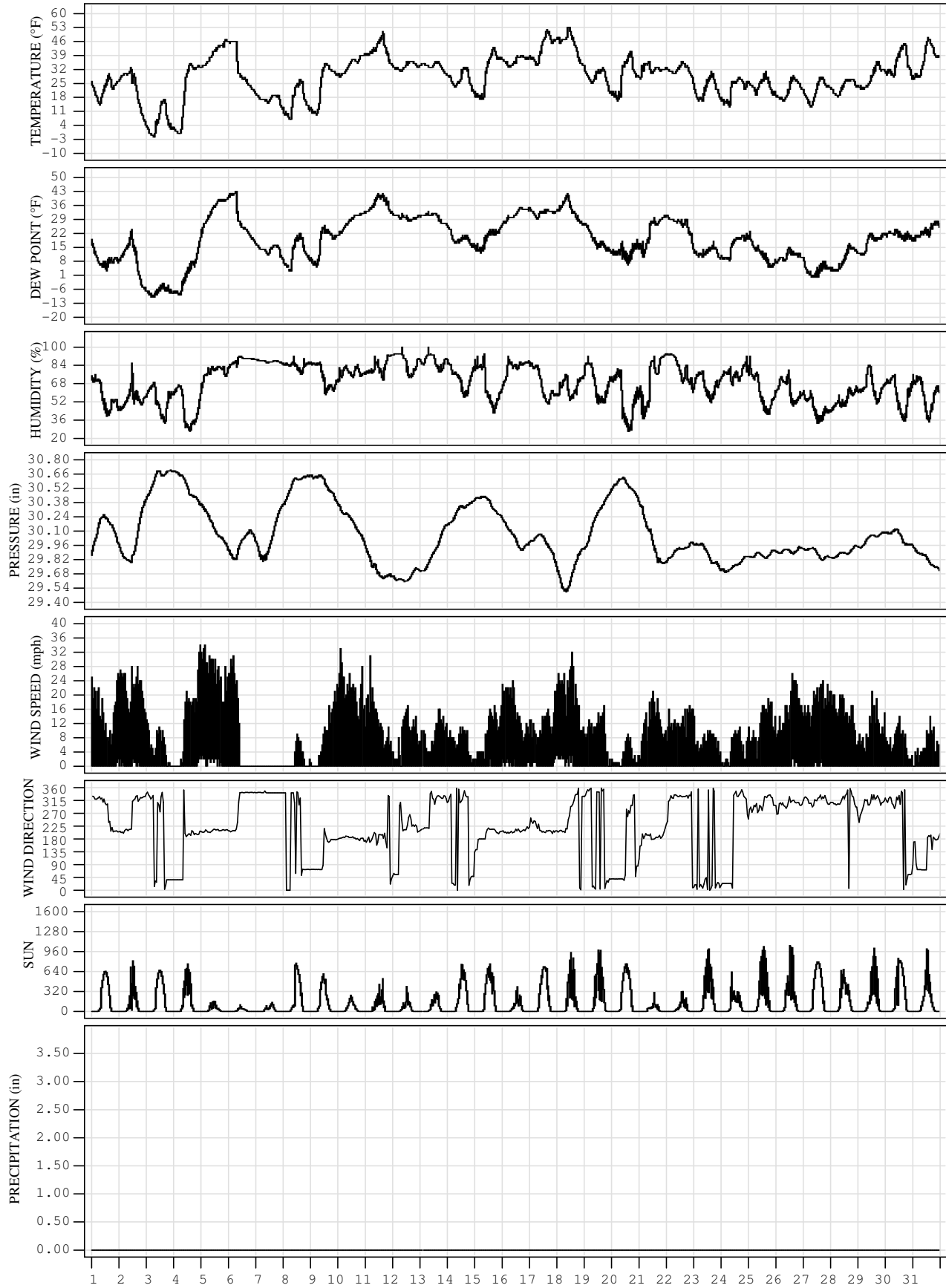
## HOURLY PRECIPITATION (Water Equivalent) March 2011: Westford

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
06																									06
07																									07
08																									08
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28																									28
29																									29
30																									30
31																									31
<b>Sum</b>	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	<b>Sum</b>

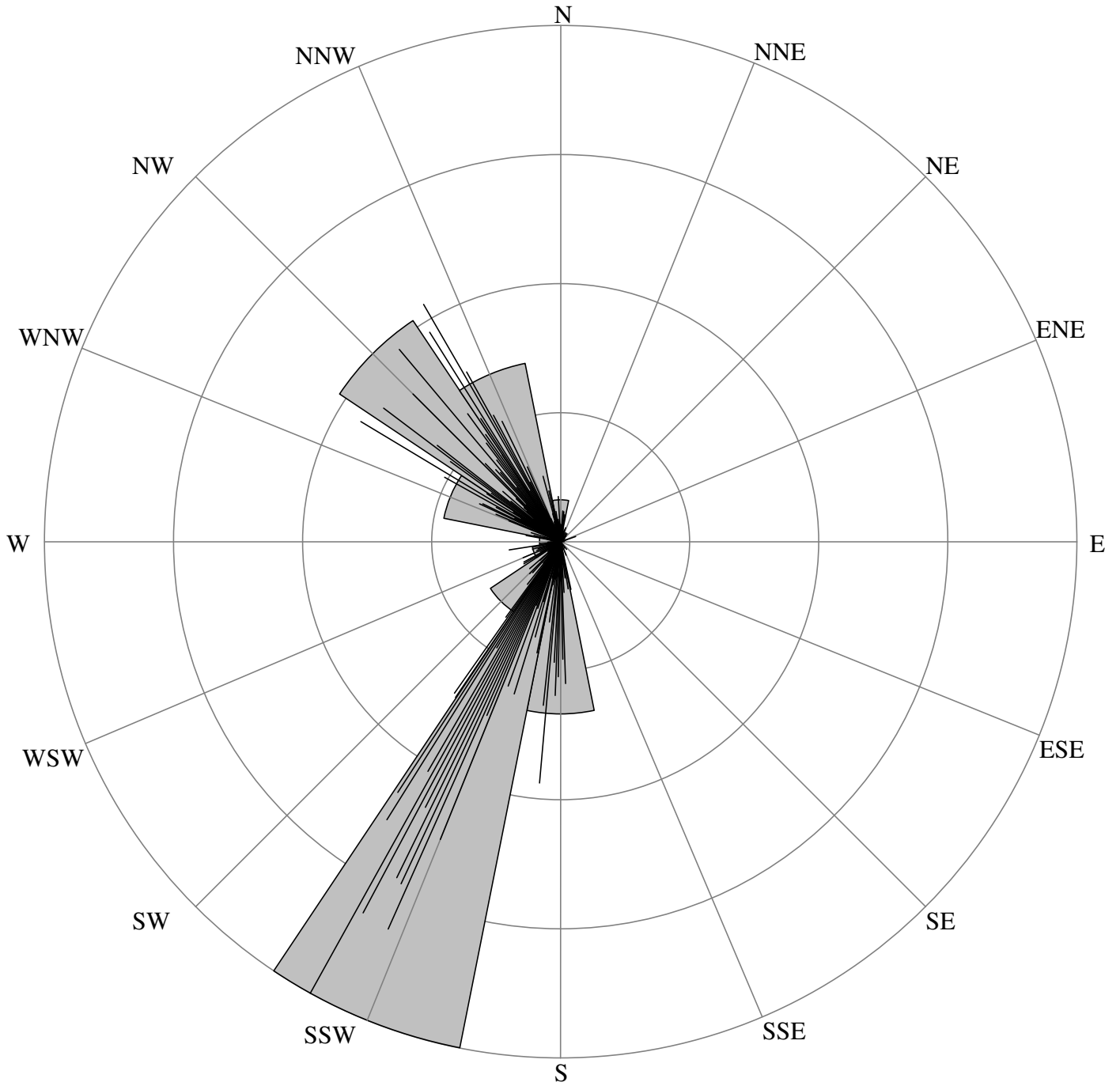
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

# HOUR-BY-HOUR DATA

## March 2011: Westford



Wind Rose: March 2011  
Westford



Maximum direction of wind: 105.3 miles from 209°  
Maximum sector of wind: 965.3 miles from SSW  
2725.4 total miles of wind