

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### January 2013

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 Adj. to Sea Level			Wind						Solar Radiation			
	Maximum	Minimum	Average	Mean	Dew Point		Mean	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	29.4	3.6	16.5	14.3	6	70	48	0	.....	13	0.06	0.6	29.94	29.64	29.833	2.0	1.6	304	30	NNW	18	313	61		
2	12.0	-7.0	2.5	5.4	-1	74	62	0	.....	13	0.08	1.8	30.25	29.85	30.028	0.5	0.4	357	13	NNW	5	342	75		
3	13.2	-11.5	0.8	0.7	-6	72	64	0	.....	12	T	T	30.26	29.90	30.111	0.7	0.6	202	15	S	7	201	58		
4	32.2	13.2	22.7	25.2	19	77	42	0	.....	11	0.02	0.3	29.90	29.72	29.788	4.3	4.0	235	25	W	12	214	17		
5	31.5	8.7	20.1	20.9	13	70	44	0	.....	9	T	T	30.21	29.73	30.080	2.0	1.7	299	25	NNW	14	313	59		
6	30.8	16.2	23.5	25.2	20	81	41	0	.....	11	0.13	1.8	30.15	29.85	29.943	2.7	2.6	211	16	S	9	206	27		
7	22.0	9.9	15.9	15.2	9	78	49	0	.....	11	0.02	0.4	30.36	29.97	30.249	1.0	0.8	213	17	WSW	10	209	47		
8	35.9	21.8	28.9	28.9	21	71	36	0	.....	9	0.00	0.0	30.34	30.15	30.238	4.1	4.1	216	25	SSW	13	213	69		
9	40.2	18.4	29.3	31.5	23	72	36	0	.....	8	T	T	30.33	29.84	30.087	4.2	3.7	223	30	NW	15	213	28		
10	38.1	24.5	31.3	33.1	24	70	33	0	.....	7	0.03	0.4	30.53	29.98	30.366	3.7	3.7	298	29	WNW	19	289	45		
11	37.9	20.1	29.0	30.6	24	76	36	0	.....	6	0.01	0.0	30.51	30.03	30.252	2.9	2.9	199	27	SSW	14	196	32		
12	45.8	37.7	41.8	41.5	38	87	23	0	.....	3	0.02	0.0	30.07	29.97	30.019	5.8	5.8	206	23	SW	11	205	50		
13	48.5	37.0	42.8	43.2	41	91	22	0	.....	T	0.00	0.0	30.06	29.78	29.919	4.8	4.8	204	24	SSW	14	202	30		
14	48.7	31.6	40.2	40.8	34	76	24	0	.....	0	T	0.0	30.25	29.71	30.006	4.1	2.9	248	27	NW	17	289	46		
15	31.7	21.0	26.4	27.4	19	69	38	0	.....	0	0.00	0.0	30.31	30.21	30.255	0.4	0.3	327	10	WNW	5	308	55		
16	29.6	24.9	27.3	27.4	22	81	37	0	.....	2	0.04	1.5	30.21	29.72	29.924	1.3	1.3	211	16	S	9	213	12		
17	30.9	2.8	16.8	17.0	7	66	48	0	.....	1	0.01	0.3	30.17	29.72	29.975	2.1	0.9	276	25	NW	11	329	57		
18	18.1	-5.9	6.1	7.2	-5	56	59	0	.....	1	0.00	0.0	30.35	30.14	30.277	1.1	0.8	273	19	W	11	304	83		
19	39.6	16.9	28.2	29.0	18	64	36	0	.....	1	0.10	2.0	30.20	29.67	29.931	5.4	5.4	206	23	SW	13	206	14		
20	41.6	9.9	25.7	30.6	19	61	39	0	.....	1	0.01	0.2	29.93	29.32	29.596	7.2	5.8	253	43	W	24	259	48		
21	15.3	0.6	8.0	8.5	-0	68	57	0	.....	1	T	T	30.04	29.81	29.949	0.1	0.1	333	13	NW	6	334	63		
22	9.8	-3.3	3.3	4.0	-4	69	61	0	.....	1	0.02	0.4	30.08	29.79	29.920	0.9	0.9	310	19	NW	10	314	43		
23	-2.1	-13.9	-8.0*	-7.9	-18	62	73	0	.....	1	0.00	0.0	30.21	30.08	30.159	1.4	1.3	324	15	NNW	10	314	75		
24	6.9	-16.0*	-4.5	-3.5	-15	59	70	0	.....	1	0.00	0.0	30.38	30.17	30.241	2.6	2.6	321	22	NW	12	320	80		
25	10.1	-6.5	1.8	3.2	-7	61	63	0	.....	1	T	T	30.40	30.11	30.276	0.6	0.5	305	16	NNW	9	322	78		
26	10.4	-3.6	3.4	5.9	-3	68	62	0	.....	1	T	T	30.30	30.10	30.185	0.7	0.6	320	14	WNW	7	291	78		
27	16.5	1.6	9.1	7.2	-4	62	55	0	.....	1	0.00	0.0	30.51	30.30	30.453	0.5	0.5	324	13	NW	6	296	95		
28	22.4	3.3	12.8	14.0	7	73	52	0	.....	5	0.28	4.3	30.47	29.98	30.211	0.1	0.1	186	7	SSE	3	193	24		
29	36.9	19.8	28.4	26.2	21	81	36	0	.....	4	0.01	0.2	30.17	29.90	30.040	1.2	1.0	191	20	S	10	192	15		
30	55.4*	36.5	46.0*	47.1	44	88	19	0	.....	0	0.13	0.0	29.91	29.19	29.514	8.7	8.6	200	37	S	17	198	22		
31	54.9	18.1	36.5	36.7	27	70	28	0	.....	0	0.42	T	29.47	28.73	29.119	8.4	8.0	260	39	WSW	23	266	36		
<b>Sum</b>	<b>Sum</b>	-----	-----	---	----		<b>Ttl</b>	<b>Ttl</b>					<b>For the month:</b>										---		
894	330						1393	0					1.39	14.2	30.53	28.73	30.030	2.8	2.0	238	43	W	24	259	
<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>
28.8	10.7	19.8	20.5	13	71.7	----	----						≥.01 inch	17	1.39	49.5	10	31	-----	----	----		20	20	49
<b>Number of Days</b>							<b>Season to Date</b>		<b>Snow, Ice ≥1.0 inch</b>		<b>5</b>		<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>			4094	0	<b>Thunder</b>		1	<b>Precipitation</b>			<b>Snow, Ice Plts</b>											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	<b>Heavy Fog</b>		1	0.00	-	4.3	28				13		1+							
0	19	28	8	----	----	<b>Clear</b>		3	<b>Partly Cloudy</b>		11	<b>Cloudy</b>		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^2 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

## January 2013: Westford

Hour	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																																																														
JAN 01																						JAN 02																						JAN 03																																							
01	0	29.64	0.00	28	25	88	21	5	9	0	29.90	0.00	11	3	70	25	0	4	0	30.23	0.00	-8	-13	76	08	0	2	01	0	29.71	0.00	24	19	80	32	3	19	0	29.89	0.00	11	4	75	27	0	0	0	30.22	0.00	-8	-14	76	08	0	0	01	0	29.83	0.00	16	8	71	31	0	8	0	29.86	0.00	10	5	81	20	0	0	0	30.21	0.00	-11	-17	75	08	0	0
04	0	29.83	0.00	16	8	71	31	0	8	0	29.86	0.00	10	5	81	20	0	0	0	30.21	0.00	-11	-17	75	08	0	0	04	0	29.88	0.00	11	2	65	33	5	14	63	29.97	0.00	12	6	78	34	0	3	116	30.19	0.00	1	-5	77	08	0	0	04	0	29.85	0.00	11	0	61	30	0	0	16	30.12	0.00	1	-6	69	01	0	7	23	30.04	0.00	7	-3	65	21	0	0
07	0	29.83	0.00	20	16	84	21	4	11	0	30.01	0.00	26	17	67	31	10	21	0	29.97	0.00	23	19	85	20	4	9	07	0	29.85	0.00	13	5	70	27	1	6	336	30.00	0.00	10	1	67	35	1	9	165	30.10	0.00	7	-2	66	19	0	2	07	0	29.85	0.00	11	0	61	30	0	0	16	30.12	0.00	1	-6	69	01	0	7	23	30.04	0.00	7	-3	65	21	0	0
10	40	29.88	0.00	11	2	65	33	5	14	63	29.97	0.00	12	6	78	34	0	3	116	30.19	0.00	1	-5	77	08	0	0	10	0	29.92	0.00	8	-1	65	29	0	9	0	30.19	0.00	-3	-10	72	35	1	6	0	30.00	0.00	6	-2	67	19	2	5	10	0	29.91	0.00	7	-0	73	32	0	0	0	30.22	0.00	-5	-12	73	08	0	3	0	29.95	0.00	11	4	72	19	3	11
13	139	29.85	0.00	13	5	70	27	1	6	336	30.00	0.00	10	1	67	35	1	9	165	30.10	0.00	7	-2	66	19	0	2	13	0	29.74	0.00	30	22	73	22	3	13	374	30.20	0.00	23	9	55	05	0	6	46	29.86	0.00	29	24	80	20	5	9	13	0	29.74	0.00	30	22	73	22	3	13	12	30.19	0.00	19	8	63	08	0	0	14	29.86	0.00	31	25	80	21	5	10
16	16	29.85	0.00	11	0	61	30	0	0	16	30.12	0.00	1	-6	69	01	0	7	23	30.04	0.00	7	-3	65	21	0	0	16	0	29.75	0.00	31	23	74	27	3	10	0	30.19	0.00	10	4	78	08	0	0	0	29.88	0.00	30	27	88	21	3	7	16	0	29.74	0.00	30	22	73	25	4	20	0	30.17	0.00	11	6	81	08	0	0	0	29.91	0.00	20	16	85	32	0	0
19	0	29.92	0.00	8	-1	65	29	0	9	0	30.19	0.00	-3	-10	72	35	1	6	0	30.00	0.00	6	-2	67	19	2	5	19	0	29.75	0.00	31	23	74	27	3	10	0	30.19	0.00	10	4	78	08	0	0	0	29.88	0.00	30	27	88	21	3	7	19	0	29.75	0.00	31	23	74	27	3	10	0	30.19	0.00	10	4	78	08	0	0	0	29.88	0.00	30	27	88	21	3	7
22	0	29.91	0.00	7	-0	73	32	0	0	0	30.22	0.00	-5	-12	73	08	0	3	0	29.95	0.00	11	4	72	19	3	11	22	0	29.74	0.00	30	22	73	25	4	20	0	30.17	0.00	11	6	81	08	0	0	0	29.91	0.00	20	16	85	32	0	0	22	0	29.74	0.00	30	22	73	25	4	20	0	30.17	0.00	11	6	81	08	0	0	0	29.91	0.00	20	16	85	32	0	0
JAN 04																						JAN 05																						JAN 06																																							
01	0	29.88	0.00	14	8	77	20	5	8	0	29.75	0.00	30	23	75	24	4	13	0	30.12	0.00	19	12	73	19	0	7	01	0	29.88	0.00	14	8	77	20	5	8	0	29.75	0.00	30	23	75	24	4	13	0	30.12	0.00	19	12	73	19	0	7	01	0	29.88	0.00	14	8	77	20	5	8	0	29.75	0.00	30	23	75	24	4	13	0	30.12	0.00	19	12	73	19	0	7
04	0	29.87	0.00	16	11	80	19	2	7	0	29.85	0.00	31	24	75	27	5	20	0	30.01	0.00	23	17	75	19	3	7	04	0	29.87	0.00	16	11	80	19	2	7	0	29.85	0.00	31	24	75	27	5	20	0	30.01	0.00	23	17	75	19	3	7	04	0	29.87	0.00	16	11	80	19	2	7	0	29.85	0.00	31	24	75	27	5	20	0	30.01	0.00	23	17	75	19	3	7
07	0	29.83	0.00	20	16	84	21	4	11	0	30.01	0.00	26	17	67	31	10	21	0	29.97	0.00	23	19	85	20	4	9	07	0	29.83	0.00	20	16	84	21	4	11	0	30.01	0.00	26	17	67	31	10	21	0	29.97	0.00	23	19	85	20	4	9	07	0	29.83	0.00	20	16	84	21	4	11	0	30.01	0.00	26	17	67	31	10	21	0	29.97	0.00	23	19	85	20	4	9
10	200	29.76	0.00	26	21	80	21	8	20	104	30.18	0.00	19	10	66	03	0	17	116	29.94	0.00	27	22	84	20	3	10	10	200	29.76	0.00	26	21	80	21	8	20	104	30.18	0.00	19	10	66	03	0	17	116	29.94	0.00	27	22	84	20	3	10	10	200	29.76	0.00	26	21	80	21	8	20	104	30.18	0.00	19	10	66	03	0	17	116	29.94	0.00	27	22	84	20	3	10
13	35	29.73	0.00	30	22	73	22	3	13	374	30.20	0.00	23	9	55	05	0	6	46	29.86	0.00	29	24	80	20	5	9	13	35	29.73	0.00	30	22	73	22	3	13	374	30.20	0.00	23	9	55	05	0	6	46	29.86	0.00	29	24	80	20	5	9	13	35	29.73	0.00	30	22	73	22	3	13	374	30.20	0.00	23	9	55	05	0	6	46	29.86	0.00	29	24	80	20	5	9
16	0	29.74	0.00	32	24	72	25	3	13	12	30.19	0.00	19	8	63	08	0	0	14	29.86	0.00	31	25	80	21	5	10	16	0	29.74	0.00	32	24	72	25	3	13	12	30.19	0.00	19	8	63	08	0	0	14	29.86	0.00	31	25	80	21	5	10	16	0	29.74	0.00	32	24	72	25	3	13	12	30.19	0.00	19	8	63	08	0	0	14	29.86	0.00	31	25	80	21	5	10
19	0	29.75	0.00	31	23	74	27	3	10	0	30.19	0.00	10	4	78	08	0	0	0	29.88	0.00	30	27	88	21	3	7	19	0	29.75	0.00	31	23	74	27	3	10	0	30.19	0.00	10	4	78	08	0	0	0	29.88	0.00	30	27	88	21	3	7	19	0	29.75	0.00	31	23	74	27	3	10	0	30.19	0.00	10	4	78	08	0	0	0	29.88	0.00	30	27	88	21	3	7
22	0	29.74	0.00	30	22	73	25	4	20	0	30.17	0.00	11	6	81	08	0	0	0	29.91	0.00	20	16	85	32	0	0	22	0	29.74	0.00	30	22	73	25	4	20	0	30.17	0.00	11	6	81	08	0	0	0	29.91	0.00	20	16	85	32	0	0	22	0	29.74	0.00	30	22	73	25	4	20	0	30.17	0.00	11	6	81	08	0	0	0	29.91	0.00	20	16	85	32	0	0
JAN 07																						JAN 08																						JAN 09																																							
01	0	30.01	0.00	16	12	84	32	0	6	0	30.17	0.00	24	17	75	21	8	22	0	30.32	0.00	26	21	81	20	0	0	01	0	30.01	0.00	16	12	84	32	0	6	0	30.17	0.00	24	17	75	21	8	22	0	30.32	0.00	26	21	81	20	0	0	01	0	30.01	0.00	16	12	84	32	0	6	0	30.17	0.00	24	17	75	21	8	22	0	30.32	0.00	26	21	81	20	0	0
04	0	30.15	0.00	12	8	83	35	0	5	0	30.16	0.00	26	19	72	21	7	16	0	30.30	0.00	22	19	87	20	0	0	04	0	30.15	0.00	12	8	83	35	0	5	0	30.16	0.00	26	19	72	21	7	16	0	30.30	0.00	22	19	87	20	0	0	04	0	30.15	0.00	12	8	83	35	0	5	0	30.16	0.00	26	19	72	21	7	16	0	30.30	0.00	22	19	87	20	0	0
07	0	30.26	0.00	10	5	81	01	0	0	0	30.19	0.00	27	19	71	21	4	11	0	30.27	0.00	20	16	86	20	0	0	07	0	30.26	0.00	10	5	81	01	0	0	0	30.19	0.00	27	19	71	21	4	11	0	30.27	0.00	20	16	86	20	0	0	07	0	30.26	0.00	10	5	81	01	0	0	0	30.19	0.00	27	19	71	21	4	11	0	30.27	0.00	20	16	86	20	0	0
10	72	30.35	0.00	13																																																																															

# OBSERVATIONS AT 3-HOUR INTERVALS

## January 2013: Westford

Hour	JAN 19									JAN 20									JAN 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	30.16	0.00	17	11	76	20	7	18	0	29.62	0.00	40	24	53	20	5	14	0	29.94	0.00	8	-0	70	29	0	3
04	0	30.07	0.00	19	15	84	20	4	18	0	29.50	0.00	40	27	59	20	6	17	0	29.97	0.00	2	-5	72	32	0	0
07	0	29.99	0.00	22	17	82	19	8	18	0	29.36	0.00	40	25	55	19	9	21	0	30.01	0.00	2	-4	75	09	0	1
10	46	29.95	0.00	27	15	59	20	4	19	44	29.44	0.00	36	28	72	24	7	18	229	30.03	0.00	10	-0	63	06	0	0
13	97	29.88	0.00	32	17	55	20	6	17	98	29.51	0.00	33	21	63	28	17	29	279	29.95	0.00	15	1	55	25	0	0
16	14	29.88	0.00	34	20	56	21	6	11	40	29.65	0.00	28	14	55	25	13	28	33	29.92	0.00	14	2	59	32	0	0
19	0	29.84	0.00	36	22	57	21	5	11	0	29.79	0.00	19	10	66	31	5	15	0	29.92	0.00	10	2	69	32	0	0
22	0	29.75	0.00	39	24	55	21	4	16	0	29.87	0.00	13	4	65	33	5	12	0	29.86	0.00	9	3	78	07	0	0
JAN 22									JAN 23									JAN 24									
01	0	29.80	0.00	7	2	78	02	0	5	0	30.08	0.00	-5	-15	60	31	4	15	0	30.18	0.00	-12	-19	70	06	0	0
04	0	29.81	0.00	4	-1	79	30	0	0	0	30.12	0.00	-8	-17	62	30	0	8	0	30.17	0.00	-16	-22	71	06	0	0
07	0	29.85	0.00	3	-2	80	29	0	3	0	30.16	0.00	-11	-19	67	33	6	9	0	30.20	0.00	-11	-18	72	06	0	0
10	188	29.90	0.00	7	2	78	33	0	0	255	30.20	0.00	-8	-18	62	35	0	7	278	30.24	0.00	-2	-12	60	29	2	9
13	174	29.89	0.00	8	-1	66	01	0	3	322	30.17	0.00	-5	-18	54	29	0	3	380	30.18	0.00	5	-12	43	25	1	15
16	40	29.96	0.00	6	-2	68	33	0	3	54	30.16	0.00	-3	-17	51	02	0	1	33	30.24	0.00	3	-11	51	32	2	17
19	0	30.05	0.00	2	-14	46	28	3	7	0	30.19	0.00	-11	-20	64	00	0	0	0	30.31	0.00	3	-11	51	30	4	17
22	0	30.05	0.00	-1	-13	56	31	1	8	0	30.18	0.00	-11	-19	67	09	0	0	0	30.35	0.00	1	-11	56	30	4	18
JAN 25									JAN 26									JAN 27									
01	0	30.38	0.00	0	-10	62	32	3	10	0	30.10	0.00	6	-0	76	04	0	0	0	30.32	0.00	8	1	74	30	2	5
04	0	30.39	0.00	-3	-11	66	31	0	0	0	30.10	0.00	2	-3	77	33	0	0	0	30.38	0.00	6	-1	73	30	2	6
07	0	30.38	0.00	-5	-12	71	31	0	0	0	30.14	0.00	-3	-9	75	33	0	0	0	30.44	0.00	3	-4	71	33	0	3
10	299	30.37	0.00	2	-9	61	29	1	4	258	30.18	0.00	6	-4	64	01	0	5	320	30.50	0.00	8	-3	60	35	1	7
13	371	30.26	0.00	9	-4	56	16	1	4	374	30.18	0.00	9	-5	52	31	3	14	408	30.49	0.00	14	-4	45	00	0	3
16	37	30.21	0.00	9	-5	52	26	0	0	58	30.21	0.00	10	-3	55	32	1	4	56	30.49	0.00	16	-3	42	03	0	0
19	0	30.16	0.00	7	-4	58	04	0	0	0	30.24	0.00	9	1	69	32	0	3	0	30.50	0.00	6	-5	60	03	0	0
22	0	30.11	0.00	7	-2	65	04	0	0	0	30.27	0.00	9	1	69	29	1	3	0	30.48	0.00	2	-6	69	03	0	0
JAN 28									JAN 29									JAN 30									
01	0	30.45	0.00	5	-4	65	08	0	0	0	30.01	0.00	20	16	84	06	2	4	0	29.88	0.00	37	33	87	18	5	14
04	0	30.41	0.00	4	-5	66	08	0	0	0	30.05	0.00	20	16	83	04	0	0	0	29.77	0.00	39	37	90	19	8	18
07	0	30.38	0.00	6	-1	71	20	0	0	0	30.08	0.00	20	16	82	05	0	0	0	29.66	0.00	41	38	90	19	9	27
10	120	30.30	0.00	15	2	55	09	0	0	39	30.15	0.00	23	17	77	06	1	3	88	29.59	0.00	45	41	86	19	7	20
13	74	30.15	0.00	18	10	73	06	0	0	67	30.09	0.00	29	22	76	17	1	3	84	29.42	0.00	49	45	85	19	6	19
16	7	30.06	0.00	20	16	82	16	0	4	12	30.05	0.00	29	23	77	18	0	0	23	29.33	0.00	52	48	87	19	5	26
19	0	30.01	0.00	20	16	83	08	0	0	0	29.99	0.00	31	26	80	19	1	5	0	29.31	0.00	55	52	88	19	9	23
22	0	29.98	0.00	21	17	85	19	0	0	0	29.92	0.00	36	31	84	18	9	17	0	29.25	0.00	55	52	89	20	11	25
JAN 31																											
01	0	29.14	0.00	55	52	91	22	6	15																		
04	0	28.92	0.00	51	49	91	18	0	1																		
07	0	28.80	0.00	48	46	91	28	12	29																		
10	144	28.98	0.00	37	30	77	26	8	31																		
13	90	29.08	0.00	33	20	58	26	11	20																		
16	69	29.19	0.00	30	16	56	25	10	31																		
19	0	29.34	0.00	26	10	49	26	13	26																		
22	0	29.43	0.00	21	8	56	23	6	19																		

### 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	30.026	20	14	76	2.4	22	1.8
04	0	30.015	19	13	77	2.4	23	1.8
07	0	30.026	18	12	78	2.9	24	1.9
10	154	30.061	21	13	71	3.3	24	2.2
13	224	30.020	24	13	64	3.6	25	2.4
16	26	30.022	23	13	64	2.4	23	2.0
19	0	30.037	20	12	70	2.7	23	1.9
22	0	30.028	20	13	73	2.9	22	2.3

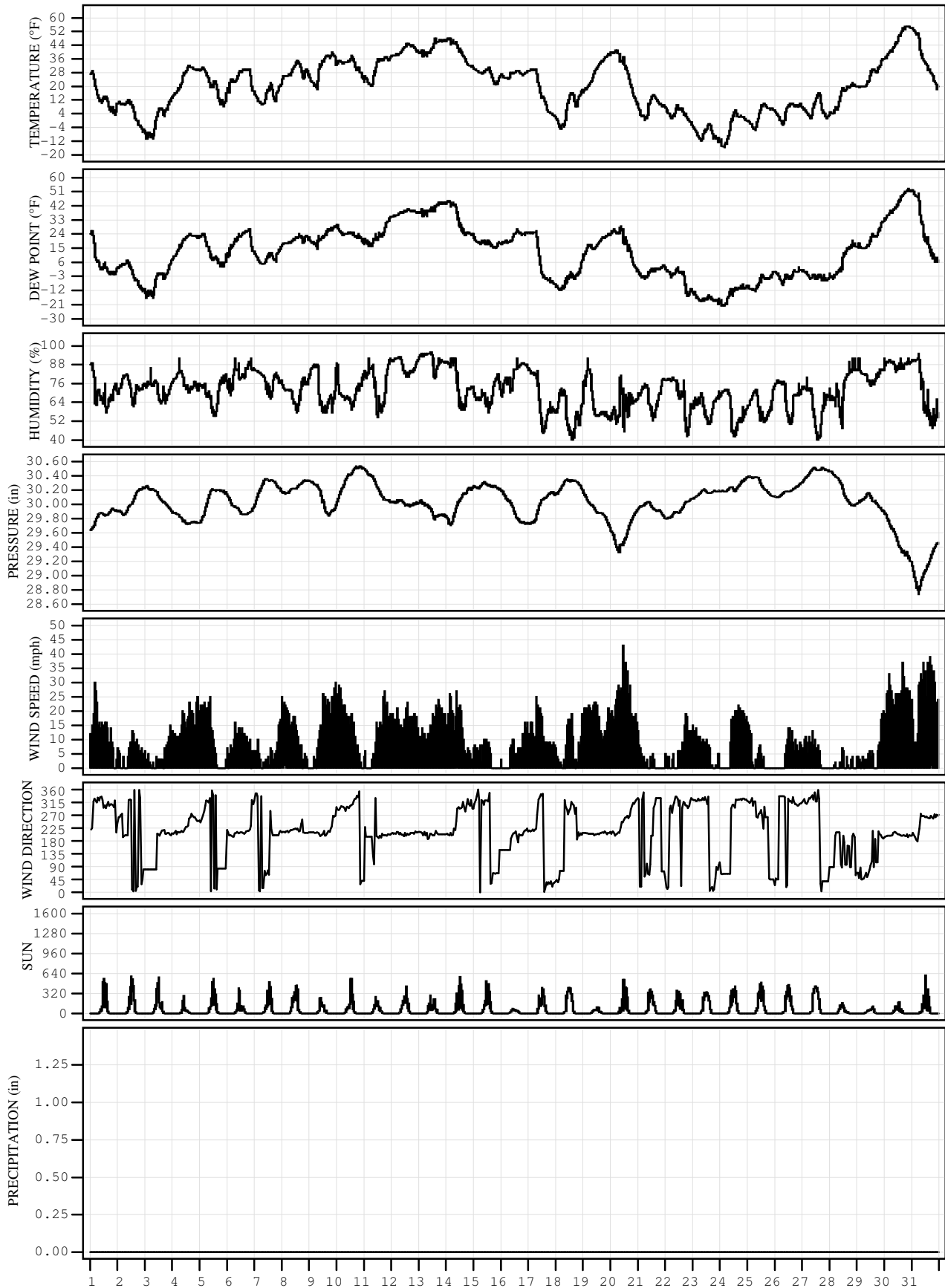
## HOURLY PRECIPITATION (Water Equivalent) January 2013: Westford

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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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>

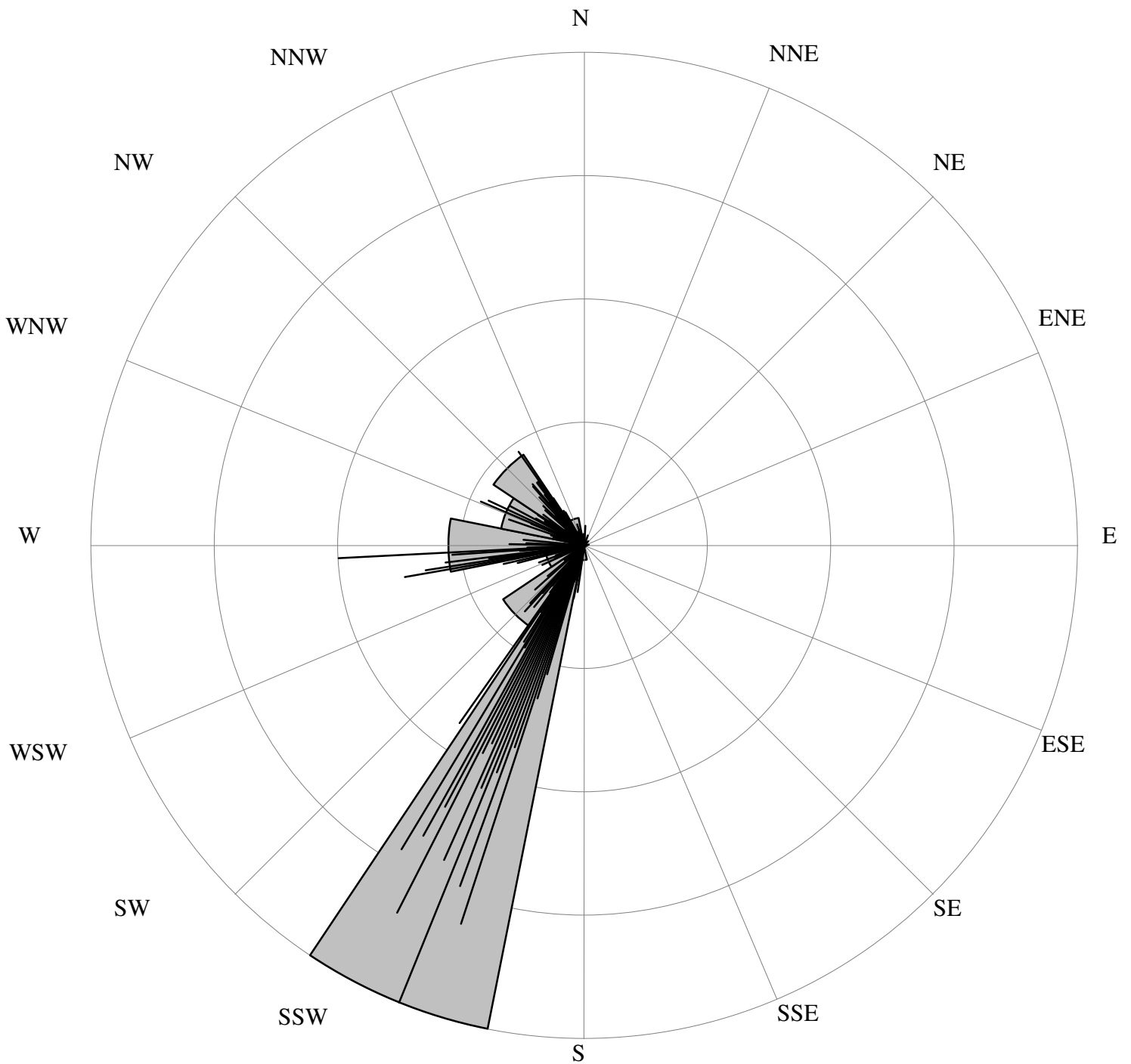
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

# HOUR-BY-HOUR DATA

## January 2013: Westford



Wind Rose: January 2013  
Westford



Maximum direction of wind: 100.6 miles from 202°  
Maximum sector of wind: 996.7 miles from SSW  
2051.3 total miles of wind