

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### September 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 duststz 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
1	2	3	4A	4B	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
1	82.0	61.1	71.5	70.0	58	65	0	7	.2.....	0	0.00	0.0	29.82	29.73	29.778	0.0	0.0	33	8	ENE	2	43	203	
2	79.3	59.0	69.2	68.6	55	61	0	4	.3.5....	0	1.11	0.0	29.76	29.58	29.674	0.4	0.3	231	23	SW	11	241	109	
3	72.6	58.8	65.7	63.9	51	62	0	1	.....	0	0.01	0.0	29.75	29.62	29.682	0.8	0.7	264	15	W	6	284	120	
4	69.1	54.4	61.8	61.1	48	62	3	0	.....	0	0.07	0.0	29.88	29.75	29.807	1.0	0.9	261	16	WSW	8	251	99	
5	62.9	40.8	51.9	52.9	39	58	13	0	.....	0	0.01	0.0	30.13	29.83	29.987	0.6	0.6	311	17	WNW	7	289	193	
6	67.3	38.9	53.1	52.5	38	58	12	0	.....	0	0.00	0.0	30.21	30.00	30.117	0.5	0.4	234	12	SSW	8	229	220	
7	67.4	53.1	60.3	58.8	48	68	5	0	.....	0	0.01	0.0	30.01	29.77	29.885	1.4	1.4	217	16	SW	8	222	116	
8	61.6	41.1	51.3	52.5	39	59	13	0	.....	0	0.27	0.0	30.05	29.71	29.877	0.6	0.5	312	22	WNW	11	307	176	
9	66.5	38.7	52.6	52.4	39	61	12	0	.....	0	0.01	0.0	30.16	29.98	30.069	0.7	0.7	215	15	W	7	229	179	
10	71.9	55.9	63.9	62.7	46	55	1	0	.....	0	0.30	0.0	30.02	29.89	29.940	3.2	3.2	212	19	WSW	9	219	59	
11	87.1*	66.3	76.7*	75.2	57	54	0	12	.3.....	0	0.66	0.0	29.94	29.80	29.880	2.6	2.6	217	21	SSW	10	213	157	
12	73.8	61.4	67.6	66.1	47	49	0	3	.3.....	0	0.29	0.0	29.88	29.56	29.699	0.4	0.4	210	10	NNW	5	214	49	
13	61.4	48.0	54.7	53.9	38	54	10	0	.....	0	0.47	0.0	29.83	29.56	29.661	1.0	1.0	321	14	NW	6	303	28	
14	58.3	41.6	49.9	48.8	35	58	15	0	.....	0	0.06	0.0	30.02	29.80	29.884	0.6	0.6	306	10	NW	6	301	76	
15	65.0	40.6	52.8	52.6	39	60	12	0	.....	0	0.02	0.0	30.09	29.95	30.018	1.5	1.5	219	13	SSW	8	203	147	
16	56.0	32.8	44.4*	46.3	32	57	20	0	.....	0	0.45	0.0	30.28	29.91	30.084	0.6	0.2	325	15	NE	6	307	105	
17	61.9	31.8*	46.9	44.7	31	58	18	0	.....	0	0.01	0.0	30.44	30.25	30.339	0.2	0.1	297	9	WSW	4	284	193	
18	69.5	37.3	53.4	51.5	35	54	11	0	.....	0	0.00	0.0	30.27	30.06	30.168	0.5	0.5	220	11	S	6	222	196	
19	75.2	42.4	58.8	56.1	39	54	6	0	.....	0	0.00	0.0	30.09	29.96	30.033	0.3	0.3	219	9	SW	6	224	194	
20	78.3	45.9	62.1	61.3	44	54	3	0	.....	0	0.00	0.0	30.02	29.81	29.879	1.2	1.2	217	17	SW	8	223	186	
21	73.3	59.0	66.2	65.1	50	58	0	1	.....	0	0.48	0.0	29.82	29.48	29.644	4.7	4.7	213	33	S	14	209	162	
22	59.5	43.7	51.6	52.8	36	52	13	0	.....	0	0.48	0.0	29.84	29.47	29.598	1.7	1.6	290	19	NW	10	299	81	
23	48.4	40.6	44.5	44.7	30	57	20	0	.....	0	0.00	0.0	30.00	29.83	29.948	1.3	1.3	305	16	W	10	299	48	
24	61.1	43.7	52.4	49.7	36	58	12	0	.....	0	0.00	0.0	29.99	29.85	29.888	1.0	1.0	308	17	WNW	10	305	155	
25	64.2	38.8	51.5	49.3	34	55	13	0	.....	0	0.00	0.0	29.98	29.86	29.900	0.5	0.4	324	13	N	8	293	160	
26	59.7	36.3	48.0	48.9	34	56	17	0	.....	0	0.00	0.0	30.06	29.98	30.036	0.2	0.2	10	11	NE	5	21	102	
27	65.7	44.9	55.3	53.5	37	53	9	0	.....	0	0.00	0.0	30.24	30.11	30.176	0.3	0.3	298	12	WNW	6	293	125	
28	72.4	41.5	57.0	54.1	37	53	8	0	.....	0	0.00	0.0	30.32	30.17	30.192	0.1	0.1	296	9	WNW	6	287	173	
29	72.7	43.0	57.8	55.7	39	53	7	0	.....	0	0.01	0.0	30.18	29.99	29.984	0.2	0.2	225	11	SSW	7	206	172	
30	73.1	42.9	58.0	55.1	38	52	7	0	.....	0	0.01	0.0	30.03	29.91	29.899	0.2	0.2	239	12	SSW	7	212	154	
<b>Sum</b>	<b>Sum</b>	-----	-----	---	-----	-----	<b>Ttl</b>	<b>Ttl</b>	<b>Number of Days</b>				<b>For the month:</b>						---					
2037	1384						260	28		4.73	0.0	30.44	29.47	29.924	1.0	0.7	244	33	S	14	209			
<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>				
67.9	46.1	57.0	56.0	41	56.9	-----	-----	≥.01 inch	19	36.82	0.0	17	22	-----	-----	-----	-----	21	21	138				
<b>Number of Days</b>							<b>Season to Date</b>	<b>Snow, Ice ≥1.0 inch</b>	0	<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>			331	386	<b>Thunder</b>	3	<b>Precipitation</b>			<b>Snow, Ice Plts</b>											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	-----	-----	-----	-----	<b>Heavy Fog</b>	1	1.12	2- 3	0.0	-	0			-							
0	0	1	0	-----	-----	-----	-----	<b>Clear</b>	8	<b>Partly Cloudy</b>		11	<b>Cloudy</b>		11									

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 September 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								
SEP 01										SEP 02										SEP 03									
01	0	29.74	0.00	65	53	66	21	0	0	0	29.75	0.00	65	51	62	14	0	0	0	29.63	0.00	60	46	60	22	0	4		
04	0	29.75	0.00	65	52	65	21	0	0	0	29.70	0.00	66	50	57	15	0	0	0	29.64	0.00	60	46	59	21	1	8		
07	37	29.80	0.00	62	50	65	21	0	0	0	29.71	0.00	67	51	57	19	0	0	5	29.69	0.00	60	45	59	23	0	0		
10	536	29.81	0.00	75	65	72	02	0	0	185	29.69	0.00	69	54	58	15	0	0	578	29.70	0.00	66	55	68	26	0	2		
13	269	29.80	0.00	78	67	70	01	0	0	257	29.67	0.00	76	65	68	20	0	8	824	29.68	0.00	72	61	67	26	2	9		
16	519	29.77	0.00	82	66	60	11	0	2	186	29.64	0.00	75	65	69	24	1	8	121	29.66	0.00	67	55	66	29	3	12		
19	19	29.76	0.00	73	64	73	02	0	0	11	29.60	0.00	70	54	58	22	0	0	9	29.69	0.00	62	45	54	22	3	6		
22	0	29.77	0.00	63	49	60	02	0	0	0	29.63	0.00	60	45	57	19	0	0	0	29.74	0.00	63	52	66	28	3	12		
SEP 04										SEP 05										SEP 06									
01	0	29.76	0.00	61	49	64	33	1	9	0	29.84	0.00	54	40	58	34	0	4	0	30.13	0.00	41	27	58	30	0	0		
04	0	29.77	0.00	60	48	64	23	0	3	0	29.88	0.00	49	35	59	04	0	3	0	30.14	0.00	40	27	58	30	0	0		
07	16	29.78	0.00	55	40	57	21	1	6	9	29.95	0.00	48	34	59	02	0	0	14	30.19	0.00	39	27	60	20	0	0		
10	504	29.81	0.00	67	56	69	25	5	8	527	29.98	0.00	60	48	64	07	0	0	522	30.20	0.00	56	45	65	18	0	6		
13	332	29.82	0.00	67	56	68	28	6	12	123	30.00	0.00	59	45	60	31	1	9	721	30.16	0.00	63	40	44	24	3	7		
16	63	29.82	0.00	65	53	65	13	0	7	503	30.02	0.00	61	42	49	31	2	13	469	30.08	0.00	67	47	48	19	0	6		
19	9	29.83	0.00	61	48	62	22	0	2	18	30.06	0.00	53	41	63	31	0	2	14	30.03	0.00	58	45	62	20	0	1		
22	0	29.87	0.00	57	41	55	29	0	0	0	30.12	0.00	42	28	57	30	0	0	0	30.02	0.00	51	40	67	21	0	0		
SEP 07										SEP 08										SEP 09									
01	0	29.99	0.00	54	44	70	22	0	2	0	29.78	0.00	54	37	53	20	0	1	0	30.07	0.00	41	27	56	30	0	0		
04	0	29.98	0.00	54	44	70	20	1	6	0	29.72	0.00	53	36	53	20	0	5	0	30.09	0.00	40	27	59	30	0	0		
07	11	29.95	0.00	54	44	70	21	1	8	14	29.80	0.00	50	34	55	01	1	5	26	30.11	0.00	39	26	60	21	0	0		
10	515	29.91	0.00	63	50	63	20	3	12	223	29.86	0.00	54	43	67	03	0	0	7	362	30.11	0.00	54	43	66	21	0	4	
13	281	29.87	0.00	63	50	63	20	5	13	271	29.90	0.00	57	44	63	00	0	1	338	30.10	0.00	62	45	55	21	3	15		
16	72	29.82	0.00	63	52	69	20	2	9	183	29.91	0.00	59	43	55	28	1	12	341	30.04	0.00	66	48	52	22	1	7		
19	0	29.81	0.00	60	50	69	22	1	5	11	29.97	0.00	52	39	61	33	1	9	7	30.02	0.00	58	47	67	19	0	0		
22	0	29.79	0.00	60	50	70	21	2	8	0	30.03	0.00	44	33	64	30	0	0	0	29.98	0.00	57	47	68	21	3	11		
SEP 10										SEP 11										SEP 12									
01	0	30.01	0.00	58	48	69	20	5	9	0	29.90	0.00	70	48	46	20	5	13	0	29.84	0.00	66	47	51	32	0	0		
04	0	29.97	0.00	59	48	67	22	2	12	0	29.89	0.00	70	49	47	20	4	12	0	29.80	0.00	65	47	53	12	0	0		
07	12	29.96	0.00	56	38	51	20	2	11	21	29.93	0.00	70	49	47	20	3	8	14	29.76	0.00	65	46	51	21	0	4		
10	16	29.94	0.21	59	42	53	21	7	16	443	29.92	0.00	80	64	58	20	5	16	93	29.73	0.00	67	47	48	21	1	8		
13	214	29.93	0.00	63	46	54	20	3	10	628	29.87	0.00	86	72	63	20	6	14	98	29.69	0.00	68	47	48	21	0	5		
16	218	29.91	0.00	71	54	54	19	4	11	95	29.83	0.00	83	67	58	21	1	7	105	29.62	0.00	69	48	46	23	0	2		
19	0	29.91	0.00	67	48	49	20	5	10	9	29.83	0.00	75	61	62	28	0	0	0	29.60	0.00	66	45	47	21	0	0		
22	0	29.93	0.00	69	49	49	21	2	9	0	29.91	1.05	67	46	47	20	0	5	0	29.58	0.04	63	44	50	20	0	0		
SEP 13										SEP 14										SEP 15									
01	0	29.57	0.23	61	43	52	32	0	0	0	29.83	0.00	48	33	57	07	0	2	0	30.02	0.00	42	28	57	22	0	0		
04	0	29.58	0.00	60	43	53	31	0	9	0	29.83	0.00	47	33	58	31	3	10	0	30.02	0.00	41	28	58	21	0	3		
07	0	29.63	0.00	56	40	54	31	2	7	0	29.89	0.00	46	32	58	31	0	5	32	30.06	0.00	42	29	58	20	2	6		
10	49	29.67	0.00	53	37	55	03	2	10	118	29.93	0.00	47	32	57	31	2	8	515	30.08	0.00	55	42	62	22	4	9		
13	91	29.70	0.00	52	36	54	33	0	7	248	29.93	0.00	53	40	61	28	4	8	431	30.03	0.00	64	51	63	23	2	11		
16	26	29.72	0.00	51	36	55	31	1	9	237	29.92	0.00	58	46	65	30	0	4	179	29.99	0.00	63	50	64	23	0	7		
19	0	29.74	0.00	50	35	56	31	2	10	0	29.98	0.00	51	36	55	10	0	0	0	29.96	0.00	57	44	62	22	1	5		
22	0	29.81	0.00	50	35	57	29	0	13	0	30.00	0.00	43	27	53	10	0	0	0	29.98	0.00	55	40	56	19	0	4		
SEP 16										SEP 17										SEP 18									
01	0	29.96	0.07	52	34	49	23	0	6	0	30.30	0.00	33	20	58	01	0	0	0	30.26	0.00	40	25	55	21	0	1		
04	0	29.95	0.09	51	34	52	21	0	5	0	30.33	0.00	32	20	60	01	0	0	0	30.24	0.00	40	25	55	24	0	0		
07	7	29.96	0.00	50	35	55	20	0	4	12	30.38	0.00	33	21	61	01	0	0	11	30.24	0.00	38	24	56	24	0	0		
10	97	30.07	0.00	43	29	57	01	2	14	480	30.43	0.00	49	34	55	11	0	1	478	30.23	0.00	55	43	63	20	3	10		
13	380	30.11	0.00	50	37	62	02	0	6	696	30.39	0.00	57	44	62	36	0	4	666	30.17	0.00	65	47	52	22	0	8		
16	496	30.13	0.00	50	39	64	03	0	11	432	30.33	0.00	61	42	49	28	2	5	424	30.09	0.00	69	48	47	22	1	7		
19	5	30.19	0.00	44	33	65	04	0	2	0	30.28	0.00	49	38	65	08	0	0	0	30.07	0.00	56	44	64	21	0	0		
22	0	30.24	0.00	34	20	55	01	0	0	0	28.95	0.00	40	24	52	08	0	0	0	30.06	0.00	48	30	50	21	0	3		

### MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.27	0.38	0.54	0.57	0.58	0.60	0.62	0.62	0.62	0.62	0.62	0.62
Ended: Date	02	02	02	02	02	11	11	11	11	11	11	11
Ended: Time	0731	0732	0734	0736	0736	2211	2223	2223	2223	2223	2223	2223

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

## September 2013: Westford

Hour	SEP 19									SEP 20									SEP 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	30.08	0.00	44	27	51	21	0	0	0	30.00	0.00	49	33	53	25	0	0	0	29.82	0.00	63	51	64	24	2	11
04	0	30.07	0.00	43	28	55	21	0	0	0	29.98	0.00	47	31	54	25	0	0	0	29.76	0.00	61	47	61	24	0	9
07	11	30.07	0.00	43	28	57	20	0	1	12	30.00	0.00	47	31	55	25	0	0	14	29.73	0.00	60	45	59	21	7	24
10	473	30.07	0.00	61	46	59	22	0	8	454	29.98	0.00	66	51	59	20	1	8	432	29.68	0.00	65	53	64	17	5	20
13	663	30.03	0.00	70	53	54	14	3	6	635	29.93	0.00	74	57	55	24	2	9	642	29.61	0.00	71	54	55	21	5	22
16	413	29.98	0.00	74	52	45	20	1	4	413	29.87	0.00	78	54	43	23	2	13	214	29.56	0.00	71	52	52	23	4	21
19	0	29.98	0.00	59	45	60	25	0	0	0	29.83	0.00	68	54	61	21	1	6	0	29.54	0.00	67	54	62	21	2	9
22	0	30.01	0.00	51	32	49	25	0	0	0	29.83	0.00	59	42	52	20	0	0	0	29.51	0.16	62	38	42	21	5	12
SEP 22									SEP 23									SEP 24									
01	0	29.49	0.10	59	38	47	28	0	11	0	29.84	0.00	43	26	50	32	0	6	0	29.98	0.00	45	31	56	29	0	0
04	0	29.48	0.00	56	37	49	22	0	1	0	29.87	0.00	41	25	51	31	0	8	0	29.97	0.00	45	31	58	32	0	4
07	0	29.53	0.00	55	36	49	30	1	11	0	29.92	0.00	41	25	53	31	3	10	0	29.96	0.00	44	30	57	33	1	4
10	209	29.60	0.00	57	39	52	27	3	10	79	29.96	0.00	44	29	57	32	0	10	192	29.94	0.00	46	33	60	29	1	11
13	290	29.65	0.00	54	39	57	30	7	18	102	29.97	0.00	47	34	61	30	5	11	737	29.91	0.00	56	42	61	32	0	8
16	95	29.69	0.00	53	38	58	32	0	3	86	29.98	0.00	48	35	60	30	1	10	390	29.86	0.00	60	44	56	03	1	9
19	0	29.76	0.00	48	32	53	28	0	6	0	29.99	0.00	47	34	60	31	1	11	0	29.86	0.00	54	43	66	32	0	0
22	0	29.82	0.00	46	30	54	28	0	12	0	30.00	0.00	47	33	59	30	5	10	0	29.86	0.00	48	35	61	29	0	0
SEP 25									SEP 26									SEP 27									
01	0	29.87	0.00	44	26	49	29	0	0	0	29.63	0.00	40	25	54	09	0	0	0	30.13	0.00	50	30	47	02	0	0
04	0	29.88	0.00	43	27	53	29	0	0	0	29.99	0.00	36	23	57	09	0	0	0	30.13	0.00	48	30	50	02	0	0
07	9	29.90	0.00	39	24	55	29	0	0	9	30.02	0.00	38	24	57	09	0	0	5	30.17	0.00	48	31	51	02	0	0
10	469	29.90	0.00	55	41	58	30	1	9	385	30.06	0.00	49	33	53	34	0	7	264	30.21	0.00	56	40	54	07	0	1
13	269	29.90	0.00	62	47	60	00	1	8	174	30.06	0.00	57	44	61	04	3	10	316	30.20	0.00	62	48	59	06	0	1
16	174	29.89	0.00	61	47	60	01	0	4	181	30.06	0.00	59	45	59	04	0	6	376	30.18	0.00	65	50	59	30	0	9
19	0	29.92	0.00	51	36	56	06	0	4	0	30.06	0.00	54	37	53	05	0	1	0	30.19	0.00	54	37	52	31	0	0
22	0	29.95	0.00	42	25	50	09	0	0	0	30.06	0.00	53	37	53	03	0	1	0	30.23	0.00	46	27	48	31	0	0
SEP 28									SEP 29									SEP 30									
01	0	30.24	0.00	44	28	52	31	0	0	0	30.17	0.00	46	29	51	29	0	0	0	30.00	0.00	47	28	48	22	0	0
04	0	30.25	0.00	43	27	54	31	0	0	0	30.15	0.00	44	28	53	29	0	0	0	30.00	0.00	45	28	51	22	0	0
07	7	30.29	0.00	42	27	55	31	0	0	7	30.14	0.00	43	28	54	29	0	0	7	30.01	0.00	43	27	53	22	0	0
10	436	30.31	0.00	56	38	50	31	0	0	432	30.13	0.00	56	37	48	19	0	1	425	30.00	0.00	61	45	55	20	0	6
13	619	30.27	0.00	70	55	59	29	0	3	617	30.08	0.00	71	54	56	20	0	8	190	29.96	0.00	69	53	57	30	0	3
16	360	30.21	0.00	71	55	58	25	0	4	359	30.02	0.00	73	55	54	23	0	1	350	29.92	0.00	72	53	52	32	0	4
19	0	30.20	0.00	55	40	56	29	0	0	0	28.87	0.00	59	43	55	22	0	0	0	29.91	0.00	55	39	54	32	0	0
22	0	30.18	0.00	48	29	47	29	0	0	0	30.01	0.00	50	29	44	22	0	4	0	29.94	0.00	48	28	46	31	0	0

### 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	29.921	51	36	55	0.5	22	0.4
04	0	29.928	50	35	56	0.3	24	0.2
07	11	29.951	49	34	56	0.8	24	0.5
10	350	29.964	58	44	59	1.5	22	1.0
13	404	29.947	64	49	59	2.0	25	1.2
16	269	29.917	65	49	56	0.9	25	0.6
19	4	29.881	58	44	59	0.5	23	0.4
22	0	29.893	52	36	55	0.7	24	0.5

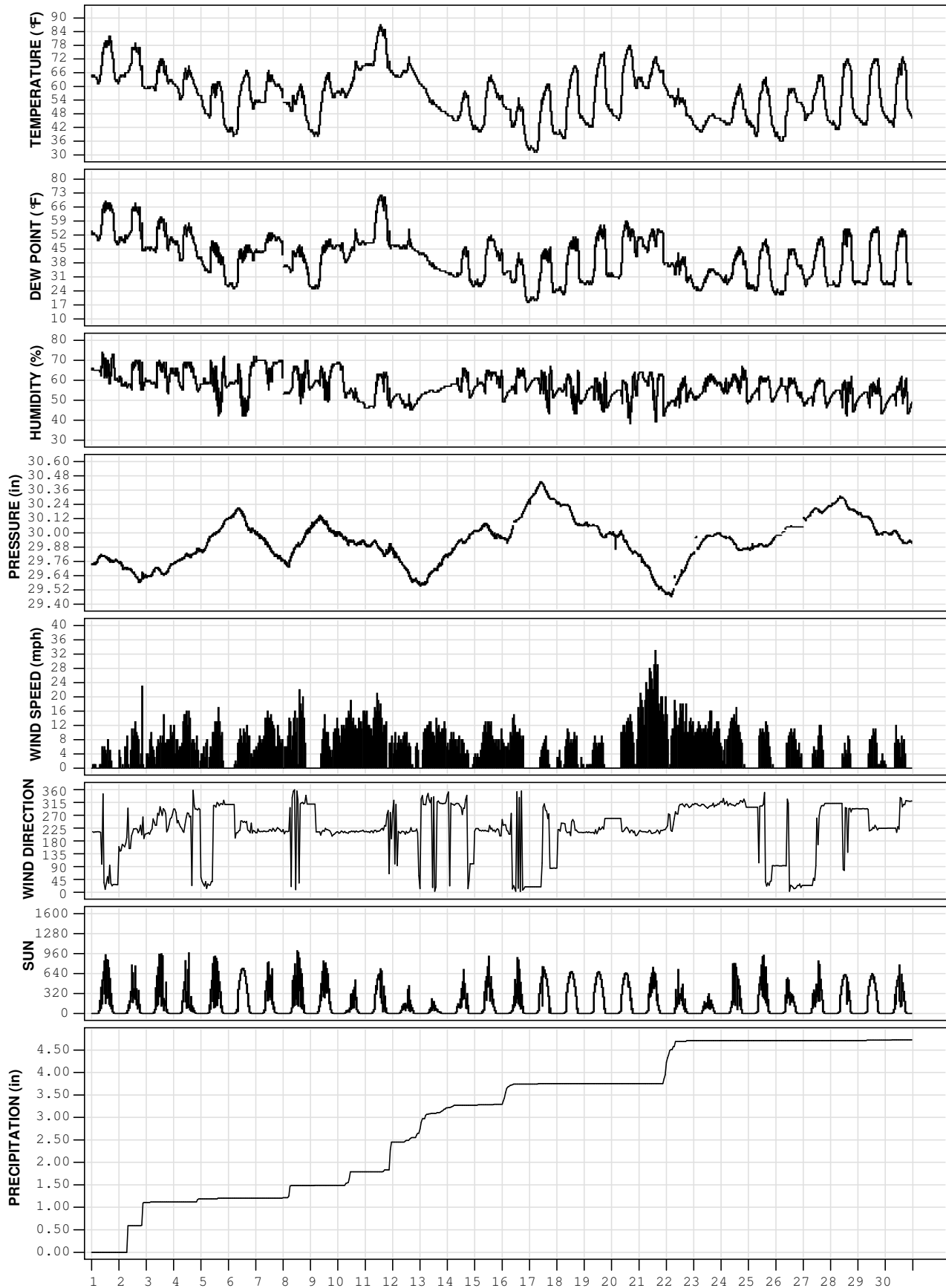
## HOURLY PRECIPITATION (Water Equivalent) September 2013: Westford

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							0.59												0.01	0.49	0.02			02	
03				0.01																	0.05	0.02		03	
04																								04	
05															0.01									05	
06																								06	
07																							0.01	07	
08					0.04	0.22	0.01																	08	
09				0.01				0.04	0.01	0.01	0.08	0.16												09	
10																								10	
11																								11	
12												0.02	0.02											12	
13	0.15	0.08			0.08	0.02									0.03	0.01						0.45	0.17	13	
14	0.01				0.01	0.02		0.01		0.01					0.02						0.06	0.04	0.09	14	
15			0.01	0.01	0.01																0.03	0.01	0.02	15	
16	0.07	0.07	0.12	0.10	0.03	0.01	0.02	0.01	0.01	0.01														16	
17								0.01																17	
18																								18	
19																								19	
20																								20	
21																								21	
22	0.10	0.06	0.10	0.02		0.07		0.11									0.02					0.11	0.09	22	
23																								23	
24																								24	
25																								25	
26																								26	
27																								27	
28																								28	
29								0.01																29	
30						0.01																		30	
<b>Sum</b>	0.33	0.21	0.24	0.15	0.16	0.35	0.07	0.75	0.02	0.10	0.18	0.02	0.00	0.00	0.06	0.03	0.05	0.03	0.02	0.02	0.63	0.65	0.28	0.38	<b>Sum</b>

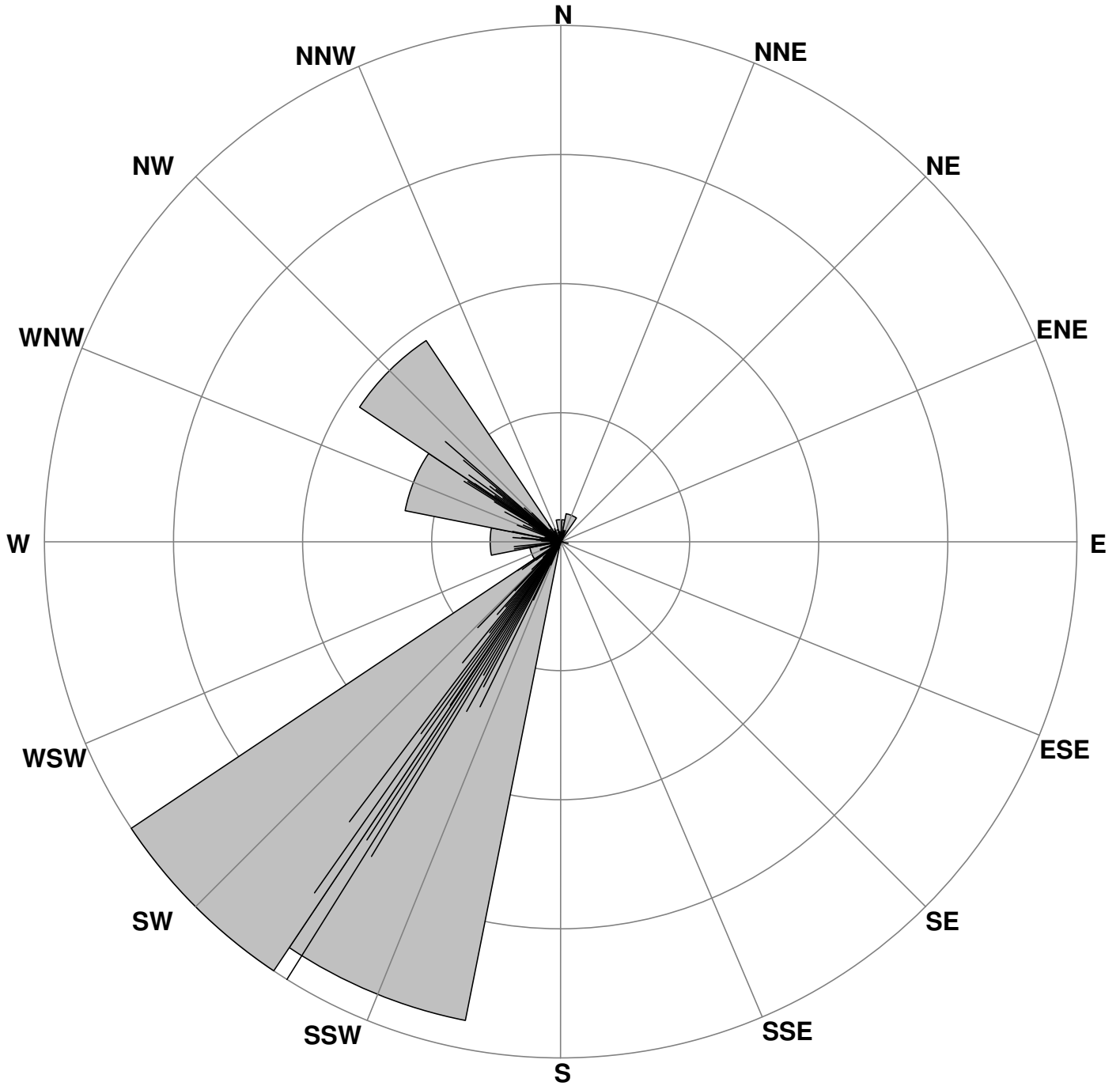
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

# HOUR-BY-HOUR DATA

## September 2013: Westford



**Wind Rose: September 2013  
Westford**



**Maximum direction of wind: 53.1 miles from 212°  
Maximum sector of wind: 224.5 miles from SW  
685.7 total miles of wind**