

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

November 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	Res	Res	Peak			Minute	
																				Speed	Dir		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	65.8	52.3	59.1*	58.6	52	79	6	0	.....	0	0.37	0.0	29.54	29.11	29.302	7.9	7.4	225	36	WSW	17	257	38
2	52.5	31.6	42.1	43.1	40	89	22	0	.....	0	0.21	0.0	29.85	29.51	29.619	1.0	0.6	282	20	NNE	8	257	15
3	36.6	21.2	28.9	29.1	20	71	36	0	.....	0	0.00	0.0	30.45	29.87	30.193	0.5	0.5	8	20	N	7	21	103
4	38.1	18.1	28.1	27.1	18	70	37	0	.....	0	0.00	0.0	30.66	30.45	30.593	0.1	0.1	16	12	N	4	9	101
5	48.5	26.9	37.7	38.7	26	60	27	0	.....	0	0.00	0.0	30.60	30.39	29.863	4.0	4.0	209	26	SSW	13	216	96
6	55.5	41.1	48.3	49.4	40	70	16	0	.....	0	0.00	0.0	30.41	29.75	30.093	6.9	6.9	205	31	SW	17	215	78
7	53.9	32.1	43.0	43.9	39	83	22	0	.....	0	0.31	0.0	30.21	29.61	29.720	4.2	2.9	236	26	SSE	14	257	16
8	35.8	30.9	33.3	33.6	26	73	31	0	.....	0	T	T	30.05	29.77	29.880	2.7	2.6	300	23	NW	15	303	20
9	40.5	29.0	34.8	34.4	25	69	30	0	.....	0	0.01	T	30.14	29.86	30.030	1.5	1.0	261	20	WNW	11	316	65
10	44.5	32.9	38.7	37.9	35	89	26	0	.....	0	0.25	T	29.83	29.63	29.704	4.1	3.4	227	23	W	12	296	28
11	39.7	27.7	33.7	35.1	29	78	31	0	.....	0	0.03	T	30.04	29.76	29.897	5.6	4.1	264	34	NW	18	308	51
12	27.8	20.6	24.2	24.1	18	78	40	0	.....	1	0.05	1.0	30.22	29.87	30.078	5.4	5.3	304	25	W	14	295	26
13	29.9	17.3	23.6	24.0	16	71	41	0	.....	T	T	T	30.29	29.95	30.181	2.8	2.1	260	21	SW	11	304	82
14	44.5	27.5	36.0	34.6	26	70	28	0	.....	0	0.00	0.0	29.99	29.93	29.964	3.5	3.4	221	25	SSW	11	256	76
15	51.4	35.1	43.3	41.2	22	46	22	0	.....	0	0.00	0.0	30.11	29.98	30.034	2.7	2.7	207	22	WSW	10	212	69
16	55.6	35.5	45.5	44.1	26	50	19	0	.....	0	0.00	0.0	30.22	30.09	30.170	1.5	1.5	207	14	SW	8	209	65
17	54.3	43.2	48.8	49.9	42	74	16	0	.....	0	0.11	0.0	30.17	29.56	29.948	4.8	4.7	187	25	SSE	13	198	24
18	56.4	38.2	47.3	48.8	41	74	18	0	.....	0	0.59	T	29.58	29.29	29.440	6.3	5.5	238	32	W	20	297	31
19	38.2	25.6	31.9	29.2	19	67	33	0	.....	T	T	0.2	30.33	29.57	29.982	5.6	5.4	307	30	WNW	17	301	29
20	32.8	18.6	25.7	24.7	18	77	39	0	.....	0	0.01	0.0	30.61	30.33	30.525	0.3	0.3	339	11	NNW	5	302	67
21	41.6	15.7	28.6	29.8	17	63	36	0	.....	0	0.00	0.0	30.59	30.29	30.456	2.6	2.6	206	24	SSW	14	216	60
22	37.8	32.7	35.3	36.0	31	83	29	0	.....	0	0.09	T	30.30	29.87	30.126	0.6	0.9	210	29	SSW	7	215	6
23	38.2	17.1	27.7	27.4	22	80	37	0	.....	2	0.00	1.9	29.93	29.70	29.827	3.6	3.4	310	29	NW	12	321	32
24	17.9	9.8	13.8*	14.4	6	71	51	0	.....	2	T	T	30.22	29.81	30.009	9.5	9.5	312	32	W	21	302	44
25	27.7	5.1	16.4	17.2	7	65	48	0	.....	2	0.00	0.0	30.35	30.09	30.229	2.9	2.5	219	26	SW	12	214	78
26	32.3	27.6	29.9	30.0	24	78	35	0	.....	2	0.00	0.0	30.18	29.90	30.102	3.6	3.6	210	21	SW	11	218	35
27	35.6	24.3	29.9	31.8	31	97	35	0	.2.4.....	3	1.35	2.0	29.91	29.33	29.487	1.8	1.7	310	22	W	11	288	8	
28	24.3	12.0	18.1	18.0	12	76	47	0	.....	3	0.00	0.0	30.39	29.49	30.027	4.6	4.5	294	24	W	16	293	65
29	23.1	5.9	14.5	13.5	8	81	50	0	.....	3	0.00	0.0	30.75	30.38	30.574	0.1	0.1	299	7	WNW	4	282	80
30	27.3	1.3*	14.3	15.6	9	75	51	0	.....	3	0.00	0.0	30.76	30.26	30.565	3.0	3.0	203	35	SSW	15	195	61
Sum	Sum	-----	-----	---	----	Ttl	Ttl						For the month:										---	
1208	757					959	0	Number of Days		3.38	5.1	30.76	29.11	30.021	3.5	2.3	249	36	WSW	21	302			
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	----	Date	Date	Avg				
40.3	25.2	32.8	32.8	25	73.6	----	----	≥.01 inch	12	43.11	5.1	30	1	-----	----	----	----	1	24	51				
Number of Days						Season to Date		Snow, Ice ≥1.0 inch	3	Greatest in 24 Hours and Dates					Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date									
Max Temperature			Min Temperature			1765	386	Thunder	0	Precipitation			Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	1	0.70	17-18	2.0	27				3		27+							
0	8	22	0	----	----	Clear	3	Partly Cloudy			10	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/m² 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

November 2013: Westford

Hour	NOV 01									NOV 02									NOV 03								
	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	29.50	0.05	58	57	96	21	9	20	0	29.54	0.00	52	43	72	25	5	11	0	29.88	0.00	31	28	89	01	1	16
04	0	29.33	0.05	58	56	94	19	8	24	0	29.52	0.00	51	42	73	25	4	9	0	30.00	0.00	27	21	79	03	0	5
07	0	29.23	0.00	59	57	95	19	10	24	0	29.53	0.00	46	42	86	23	0	0	16	30.11	0.00	25	21	84	00	0	1
10	88	29.19	0.10	61	60	96	21	6	23	46	29.57	0.00	47	44	92	19	0	4	381	30.19	0.00	32	22	67	03	1	13
13	251	29.15	0.00	62	56	80	21	11	26	67	29.57	0.00	44	43	96	36	0	3	394	30.21	0.00	36	19	50	01	1	13
16	26	29.23	0.00	63	42	47	25	17	36	12	29.61	0.00	41	40	96	04	0	1	18	30.28	0.00	33	17	52	02	0	5
19	0	29.40	0.00	56	43	61	25	5	20	0	29.73	0.04	35	34	96	00	2	20	0	30.36	0.00	28	17	64	02	0	0
22	0	29.51	0.00	53	43	69	27	3	16	0	29.82	0.00	35	34	97	34	0	1	0	30.40	0.00	25	19	78	03	0	0
NOV 04									NOV 05									NOV 06									
01	0	30.47	0.00	23	18	80	01	0	0	0	30.58	0.00	28	20	69	21	0	2	0	30.41	0.00	43	34	73	21	7	13
04	0	30.53	0.00	22	16	79	02	0	0	0	30.54	0.00	27	20	72	20	0	0	0	30.28	0.00	43	35	72	20	7	15
07	12	30.61	0.00	19	15	85	02	0	0	19	30.53	0.00	32	18	56	21	0	9	14	30.25	0.00	45	36	73	20	9	21
10	374	30.65	0.00	32	20	60	34	0	7	360	30.52	0.00	41	22	47	21	6	26	297	30.15	0.00	51	41	68	20	9	22
13	392	30.62	0.00	36	18	48	02	0	5	443	30.47	0.00	47	29	51	20	7	14	403	30.06	0.00	54	42	65	21	9	19
16	25	30.61	0.00	35	18	50	33	0	2	14	30.43	0.00	43	30	59	20	5	13	5	29.98	0.00	54	42	65	19	6	16
19	0	30.61	0.00	26	19	76	33	0	0	0	24.08	0.00	42	31	67	20	5	10	0	29.90	0.00	54	43	67	21	8	21
22	0	30.60	0.00	25	19	77	02	0	0	0	30.41	0.00	45	34	66	20	6	16	0	29.81	0.00	53	44	72	20	8	24
NOV 07									NOV 08									NOV 09									
01	0	29.73	0.00	53	46	77	19	8	22	0	29.78	0.00	33	26	74	26	0	4	0	30.06	0.00	32	24	71	30	3	13
04	0	29.67	0.00	52	48	87	19	3	15	0	29.78	0.00	34	27	75	28	1	6	0	30.09	0.00	32	25	74	31	1	5
07	0	29.63	0.11	51	50	95	20	8	19	23	29.81	0.00	32	27	82	29	0	3	14	30.11	0.00	29	23	78	26	0	0
10	32	29.68	0.04	46	43	90	26	4	10	62	29.84	0.00	35	27	74	31	1	12	241	30.12	0.00	36	26	67	21	0	8
13	163	29.72	0.00	42	38	88	34	1	14	49	29.86	0.00	34	25	69	32	0	15	288	30.05	0.00	38	25	60	31	0	0
16	16	29.75	0.00	39	33	79	33	9	19	7	29.93	0.00	34	26	71	32	8	19	35	29.99	0.00	37	23	56	22	0	3
19	0	29.79	0.00	36	31	82	32	1	3	0	29.99	0.00	34	25	69	31	2	16	0	29.97	0.00	36	25	65	16	0	4
22	0	29.79	0.00	35	26	70	27	0	14	0	30.03	0.00	32	23	70	29	4	16	0	29.92	0.00	36	29	76	19	6	10
NOV 10									NOV 11									NOV 12									
01	0	29.82	0.00	34	32	94	21	0	6	0	29.87	0.00	34	30	85	28	12	25	0	29.90	0.00	27	24	87	28	0	14
04	0	29.74	0.05	34	32	95	16	4	12	0	29.96	0.00	32	27	81	31	9	21	0	29.98	0.00	23	19	84	33	7	15
07	0	29.68	0.00	37	35	93	19	5	14	7	30.01	0.00	31	26	82	31	2	13	0	30.05	0.00	22	17	82	31	1	9
10	76	29.66	0.00	41	37	85	20	7	16	199	30.01	0.00	33	27	77	22	3	8	83	30.07	0.00	24	18	79	31	3	14
13	72	29.63	0.00	44	38	81	20	5	14	162	29.90	0.00	38	28	67	20	5	10	120	30.08	0.00	25	18	74	30	3	18
16	0	29.65	0.00	41	38	90	21	0	8	23	29.82	0.00	38	29	71	20	5	14	11	30.11	0.00	26	18	72	30	7	18
19	0	29.67	0.00	41	36	84	25	5	13	0	29.78	0.00	39	32	74	21	8	17	0	30.17	0.00	24	17	74	29	6	20
22	0	29.77	0.00	37	33	85	29	8	18	0	29.77	0.00	37	34	88	23	5	11	0	30.20	0.00	22	16	76	29	5	10
NOV 13									NOV 14									NOV 15									
01	0	30.22	0.00	20	14	76	32	5	13	0	29.96	0.00	28	21	75	21	4	14	0	29.99	0.00	37	23	57	20	3	9
04	0	30.23	0.00	20	14	80	29	0	3	0	29.94	0.00	30	21	71	19	4	14	0	30.01	0.00	35	20	54	21	2	7
07	12	30.27	0.00	18	12	76	29	6	16	9	29.96	0.00	28	21	73	21	2	8	7	30.03	0.00	36	19	49	20	4	11
10	274	30.28	0.00	22	14	69	27	6	13	297	29.98	0.00	38	28	66	25	9	18	246	30.06	0.00	44	21	39	20	7	12
13	348	30.21	0.00	28	14	56	25	1	10	330	29.95	0.00	43	30	60	25	4	12	359	30.02	0.00	51	23	33	19	2	13
16	11	30.16	0.00	28	18	67	28	2	8	21	29.97	0.00	39	29	66	20	1	7	14	30.01	0.00	47	23	38	22	0	2
19	0	30.11	0.00	28	18	67	20	3	10	0	29.98	0.00	34	29	81	19	1	4	0	30.06	0.00	40	21	47	19	0	2
22	0	30.01	0.00	28	21	75	21	7	11	0	29.97	0.00	35	26	71	20	2	6	0	30.09	0.00	42	22	44	21	1	7
NOV 16									NOV 17									NOV 18									
01	0	30.10	0.00	37	25	61	19	0	0	0	30.16	0.00	44	30	58	21	3	7	0	29.49	0.00	54	49	82	16	10	19
04	0	30.14	0.00	41	24	49	20	4	7	0	30.09	0.00	48	34	60	18	6	15	0	29.32	0.20	55	53	92	19	7	17
07	0	30.17	0.00	36	24	61	20	0	0	5	30.06	0.00	47	35	61	18	4	11	0	29.34	0.00	51	48	90	21	6	18
10	297	30.21	0.00	49	25	39	21	4	9	90	30.04	0.00	51	41	69	18	8	14	32	29.39	0.00	50	42	73	22	3	7
13	199	30.19	0.00	53	28	38	19	0	9	42	29.98	0.00	52	45	75	21	3	10	102	29.43	0.00	50	37	60	25	5	17
16	16	30.17	0.00	51	29	42	21	0	3	0	29.88	0.00	51	48	90	19	5	11	11	29.47	0.00	46	35	65	26	12	23
19	0	30.18	0.00	42	28	58	21	0	0	0	29.80	0.00	52	49	87	18	9	16	0	29.51	0.00	43	33	67	23	3	13
22	0	30.17	0.00	41	29	62	21	0	0	0	29.67	0.00	52	49	89	19	4	13	0	29.55	0.00	40	32	73	25	8	18

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.19	0.29	0.34	0.38	0.39	0.43	0.45	0.47	0.52	0.55	0.58	0.58
Ended: Date	18	18	18	18	18	18	18	18	18	18	18	18
Ended: Time	0512	0512	0515	0520	0525	0544	0555	0520	0533	0552	0606	0606

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

November 2013: Westford

Hour	NOV 19									NOV 20									NOV 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	29.58	0.00	36	28	71	23	5	14	0	30.35	0.00	25	18	76	31	0	7	0	30.59	0.00	19	16	89	04	0	0
04	0	29.71	0.00	30	19	64	30	9	25	0	30.43	0.00	22	18	83	34	0	8	0	30.55	0.00	18	15	90	04	0	0
07	0	29.85	0.00	29	17	62	29	13	29	5	30.51	0.00	21	18	88	34	0	0	0	30.53	0.00	16	14	90	13	0	0
10	130	29.95	0.00	29	18	61	32	11	24	313	30.57	0.00	29	20	70	04	0	1	279	30.51	0.00	35	17	47	20	9	18
13	95	30.01	0.00	30	19	63	30	6	20	169	30.55	0.00	32	18	58	01	0	2	192	30.43	0.00	39	13	34	20	3	11
16	7	30.11	0.00	29	19	66	30	5	17	12	30.55	0.00	29	19	65	32	0	0	9	30.38	0.00	38	12	33	20	6	13
19	0	30.21	0.00	28	18	66	31	4	15	0	30.59	0.00	22	18	83	04	0	0	0	30.38	0.00	33	21	59	19	1	6
22	0	30.28	0.00	27	18	70	34	4	18	0	30.60	0.00	20	17	89	04	0	0	0	30.34	0.00	35	24	65	21	1	7
NOV 22									NOV 23									NOV 24									
01	0	30.28	0.00	36	27	69	20	0	3	0	29.83	0.00	35	32	89	31	4	16	0	29.81	0.00	17	11	75	34	2	16
04	0	30.21	0.00	37	28	72	00	0	0	0	29.90	0.00	30	25	82	31	4	15	0	29.86	0.00	15	10	82	31	10	30
07	0	30.16	0.01	34	32	92	20	1	5	0	29.92	0.00	27	22	81	33	7	16	0	29.92	0.00	13	8	80	31	7	19
10	39	30.07	0.00	33	32	96	00	0	0	91	29.91	0.00	28	21	76	29	2	10	118	30.00	0.00	14	7	73	32	14	24
13	44	29.97	0.00	36	35	96	00	0	0	115	29.81	0.00	30	21	68	27	3	13	132	30.01	0.00	16	7	70	29	11	25
16	9	29.91	0.00	38	37	97	00	0	0	0	29.74	0.00	29	21	69	27	3	7	33	30.08	0.00	17	4	55	31	14	25
19	0	29.81	0.00	39	38	98	20	2	8	0	29.75	0.00	23	21	90	34	5	24	0	30.14	0.00	14	5	66	29	12	26
22	0	29.76	0.00	40	40	98	22	4	9	0	29.79	0.00	19	14	81	32	8	21	0	30.18	0.00	12	2	64	28	5	14
NOV 25									NOV 26									NOV 27									
01	0	30.22	0.00	8	1	72	26	0	3	0	30.10	0.00	28	16	60	21	6	13	0	29.86	0.00	32	31	96	15	0	0
04	0	30.28	0.00	7	2	78	25	1	3	0	30.11	0.00	29	16	59	20	4	12	0	29.66	0.00	33	32	97	15	0	0
07	0	30.34	0.00	6	2	80	28	2	4	0	30.12	0.00	28	21	74	20	4	11	0	29.47	0.00	34	33	97	25	0	0
10	239	30.33	0.00	15	5	62	28	0	4	176	30.16	0.00	31	24	77	21	5	14	62	29.35	0.00	35	34	98	08	1	3
13	383	30.25	0.00	23	5	47	21	2	9	130	30.14	0.00	32	26	77	21	7	15	30	29.34	0.00	33	32	98	36	0	6
16	9	30.18	0.00	23	10	58	19	2	7	0	30.13	0.00	32	26	79	21	1	6	0	29.37	0.00	32	31	96	31	0	4
19	0	30.14	0.00	26	16	66	20	8	19	0	30.10	0.00	30	29	94	21	0	7	0	29.42	0.00	30	30	97	29	6	13
22	0	30.11	0.00	27	15	61	20	5	12	0	29.98	0.00	31	29	95	15	0	0	0	29.46	0.00	28	27	94	30	3	12
NOV 28									NOV 29									NOV 30									
01	0	29.54	0.00	23	21	92	28	9	17	0	30.40	0.00	12	8	83	27	1	4	0	30.73	0.00	5	2	89	11	0	0
04	0	29.66	0.00	19	17	89	26	2	14	0	30.44	0.00	10	8	89	28	0	0	0	30.75	0.00	4	1	90	11	0	0
07	0	29.88	0.00	16	11	80	31	8	18	0	30.51	0.00	7	4	90	30	0	0	0	30.75	0.00	2	-1	88	11	0	0
10	230	30.02	0.00	18	11	74	29	11	21	243	30.58	0.00	17	12	79	07	0	0	244	30.70	0.00	13	10	87	11	0	0
13	403	30.09	0.00	22	11	62	29	9	18	374	30.58	0.00	21	10	62	26	2	7	311	30.57	0.00	24	12	61	18	4	10
16	11	30.20	0.00	19	8	62	29	6	14	9	30.62	0.00	17	9	69	01	0	0	14	30.47	0.00	23	13	64	18	3	8
19	0	30.30	0.00	17	10	74	26	0	6	0	30.68	0.00	13	9	85	09	0	0	0	30.34	0.00	24	15	70	18	7	21
22	0	30.36	0.00	13	9	84	26	0	0	0	30.72	0.00	8	6	91	09	0	0	0	30.28	0.00	27	13	55	20	9	35

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	30.025	31	25	78	3.2	24	2.1
04	0	30.023	31	24	78	3.2	25	1.7
07	5	30.045	29	24	80	3.3	25	1.9
10	188	30.059	34	26	72	4.3	25	2.8
13	219	30.029	37	26	65	3.5	24	2.6
16	13	30.027	36	25	66	3.9	27	2.7
19	0	29.831	33	25	74	3.5	24	2.2
22	0	30.045	32	25	76	3.5	24	2.4

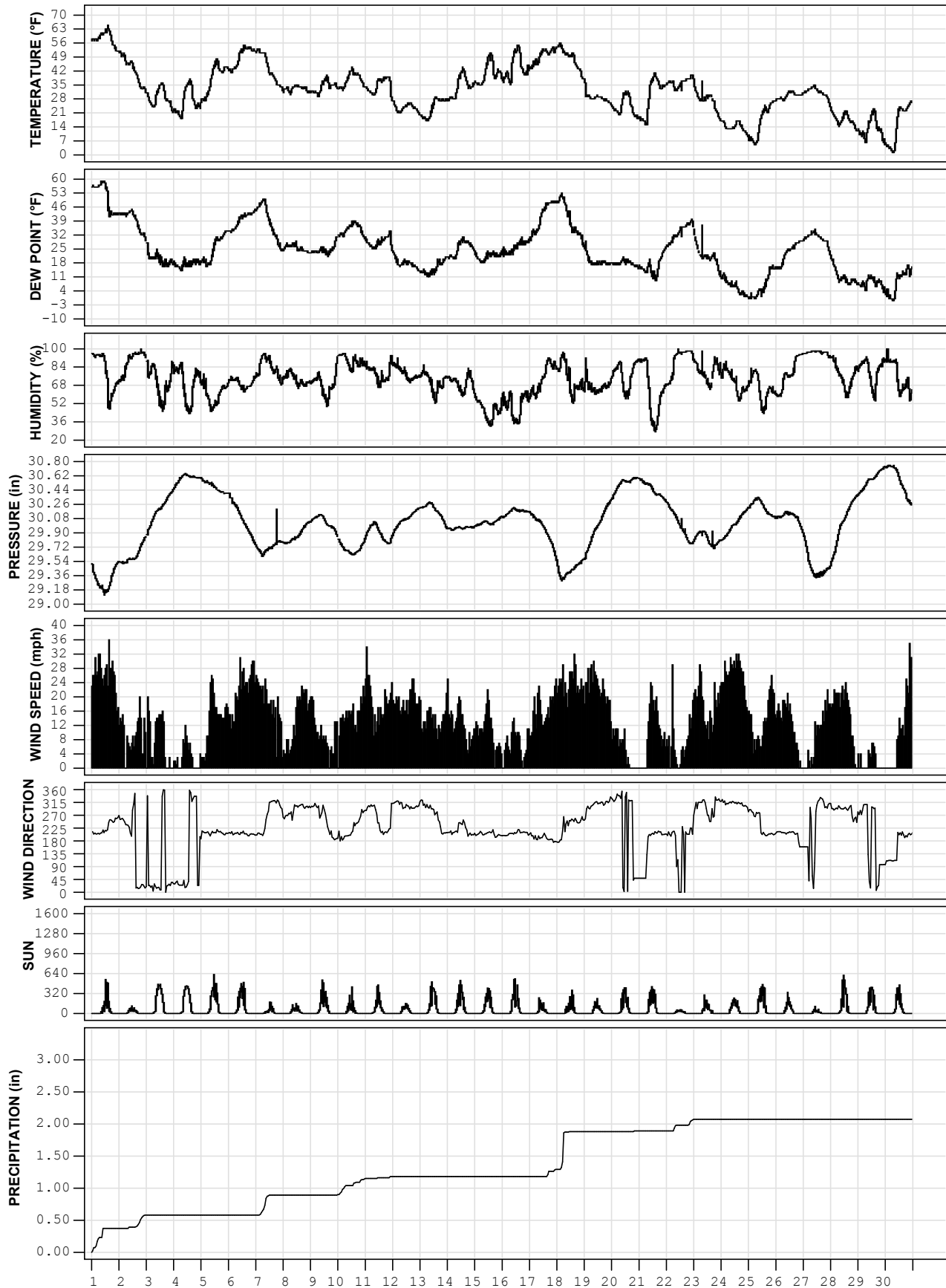
HOURLY PRECIPITATION (Water Equivalent) November 2013: Westford

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	0.02	0.05		0.03	0.07	0.04	0.02			0.14														01	
02								0.02							0.01	0.01	0.02	0.03	0.05	0.03	0.02	0.01	0.01	02	
03																								03	
04																								04	
05																								05	
06																								06	
07				0.01	0.03	0.03	0.02	0.06	0.11	0.03	0.01	0.01												07	
08																								08	
09																								09	
10		0.02	0.02	0.04	0.01	0.03	0.02							0.04		0.01				0.03	0.01		0.01	0.01	10
11											0.01													11	
12																						0.02		12	
13																								13	
14																								14	
15																								15	
16																								16	
17				0.03	0.09	0.45	0.01				0.01				0.03	0.05					0.02	0.01		17	
18																								18	
19																								19	
20																				0.01				20	
21																								21	
22							0.04	0.04	0.01											0.01	0.05	0.01	0.01	0.01	22
23																								23	
24																								24	
25																								25	
26																								26	
27																								27	
28																								28	
29																								29	
30																								30	
Sum	0.02	0.07	0.02	0.11	0.20	0.55	0.11	0.10	0.14	0.17	0.03	0.01	0.00	0.04	0.01	0.05	0.07	0.03	0.05	0.08	0.08	0.06	0.04	0.03	Sum

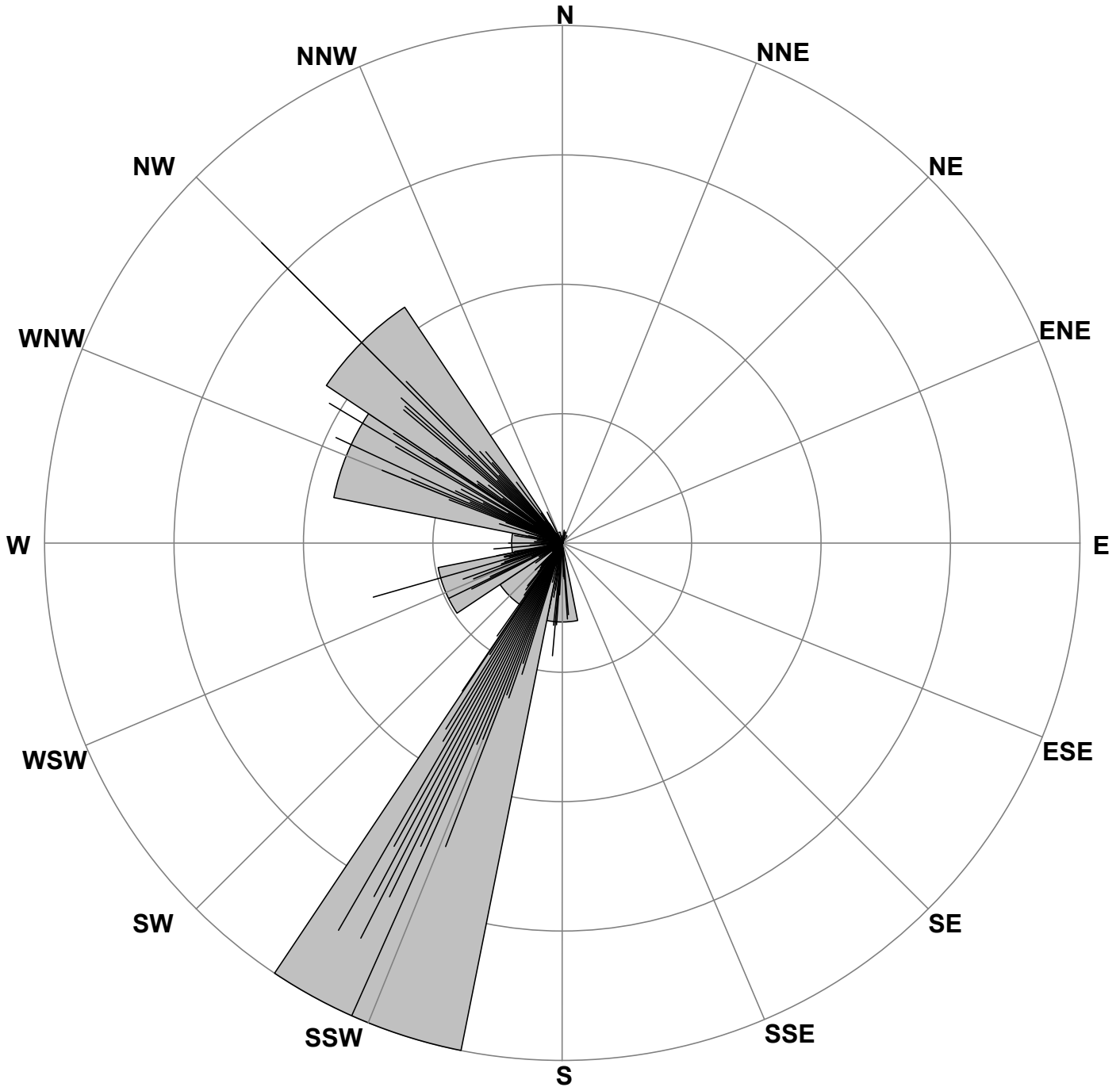
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

November 2013: Westford



**Wind Rose: November 2013
Westford**



**Maximum direction of wind: 98.6 miles from 204°
Maximum sector of wind: 932.3 miles from SSW
2500.9 total miles of wind**