

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

November 2016

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			2 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	52.6	23.9	38.2	39.6	32	75	26	0	.....	0	0.00	0.0	30.30	30.01	30.202	4.4	4.4	200	32	SSW	15	191	82	
2	63.6	46.1	54.8*	53.2	47	79	10	0	.....	0	0.00	0.0	30.12	30.05	30.088	4.2	4.2	211	25	S	14	213	49	
3	50.5	43.0	46.8	47.2	46	97	18	0	.....	0	0.35	0.0	30.05	29.76	29.913	0.4	0.4	7	13	NNE	7	30	12	
4	43.4	24.4	33.9	34.9	33	92	31	0	.....	0	0.19	T	30.17	29.93	30.101	1.1	1.1	330	18	NW	8	303	59	
5	42.8	25.1	33.9	37.1	35	92	31	0	.....	0	0.04	0.0	30.13	30.04	30.072	1.4	1.4	204	11	SSW	6	203	14	
6	41.5	28.7	35.1	37.0	34	90	29	0	.....	0	0.07	0.0	30.41	30.03	30.256	0.6	0.6	4	13	N	5	5	36	
7	50.4	24.2	37.3	35.9	29	78	28	0	.....	0	0.00	0.0	30.48	30.26	30.389	1.3	1.3	211	9	SSW	6	206	84	
8	62.0	31.9	46.9	45.9	34	65	18	0	.....	0	0.00	0.0	30.26	29.82	30.044	3.4	3.3	206	13	S	8	215	84	
9	49.6	31.7	40.6	42.3	38	84	24	0	.....	0	0.03	0.0	29.98	29.78	29.862	2.0	1.0	318	18	WNW	7	308	21	
10	44.9	24.6	34.8	36.9	30	76	30	0	.....	0	0.00	0.0	29.97	29.42	29.753	5.1	5.0	208	28	S	15	217	66	
11	46.7	28.9	37.8	38.0	29	71	27	0	.....	0	0.14	T	30.13	29.35	29.719	6.0	4.5	303	31	WNW	18	310	32	
12	40.8	24.7	32.8	33.8	24	69	32	0	.....	0	0.00	0.0	30.24	29.94	30.104	2.4	2.1	225	25	SSW	12	208	74	
13	52.3	34.7	43.5	42.3	33	71	21	0	.....	0	0.00	0.0	29.97	29.85	29.912	2.9	2.8	220	18	W	9	235	70	
14	57.0	38.6	47.8	45.1	30	58	17	0	.....	0	0.00	0.0	29.96	29.86	29.907	1.9	1.9	209	16	S	10	216	73	
15	59.8	35.7	47.8	45.7	37	72	17	0	.....	0	0.10	0.0	29.97	29.71	29.889	0.1	0.1	33	9	N	5	16	59	
16	44.7	41.4	43.1	43.3	42	97	22	0	.2.....	0	0.07	0.0	29.80	29.63	29.690	0.6	0.5	305	10	NNW	7	309	13		
17	44.1	38.8	41.4	42.1	40	93	23	0	.....	0	0.00	0.0	30.11	29.80	29.996	1.4	1.4	318	11	NW	7	316	16	
18	56.5	34.5	45.5	42.5	39	89	19	0	.....	0	0.00	0.0	30.14	30.00	30.081	0.2	0.1	228	8	SW	5	194	67	
19	67.2*	33.9	50.5	48.4	37	70	14	0	.....	0	0.00	0.0	30.00	29.52	29.760	2.4	2.0	208	18	SSW	10	214	67	
20	44.8	25.5	35.1	33.3	31	92	29	0	.....	3	0.69	3.0	29.52	29.19	29.292	1.9	1.4	280	18	W	8	267	13	
21	25.6	23.8	24.7*	24.9	23	93	40	0	.....	5	0.42	3.5	29.61	29.23	29.400	4.3	4.3	262	24	W	12	282	14	
22	28.4	25.3	26.8	26.8	24	88	38	0	.....	5	0.17	1.0	30.12	29.61	29.898	5.6	5.5	297	26	WNW	15	296	16	
23	32.7	25.3	29.0	27.4	24	87	36	0	.....	4	0.01	0.0	30.32	30.11	30.238	1.1	1.1	309	21	WNW	12	294	39	
24	34.5	23.5	29.0	29.6	28	93	35	0	.....	4	0.14	0.8	30.31	30.19	30.239	0.1	0.1	187	8	S	4	187	19	
25	37.1	31.7	34.4	34.8	34	97	30	0	.....	1	0.07	0.0	30.21	30.09	30.150	0.2	0.2	200	9	S	5	192	9	
26	38.1	31.1	34.6	35.0	34	98	30	0	.....	T	0.06	T	30.09	30.01	30.053	0.1	0.1	220	9	S	5	195	20	
27	33.3	27.7	30.5	30.9	28	88	34	0	.....	T	T	T	30.08	30.00	30.040	1.1	1.1	313	18	WNW	9	287	27	
28	34.6	21.6*	28.1	28.2	24	85	36	0	.....	T	0.00	0.0	30.17	30.07	30.119	0.1	0.1	317	10	NW	5	318	44	
29	41.6	25.1	33.3	36.7	35	93	31	0	.....	T	0.12	0.0	30.09	29.79	29.909	0.8	0.8	176	18	SSW	7	162	4	
30	48.5	39.2	43.9	44.0	42	94	21	0	.....	0	0.01	0.0	29.91	29.54	29.799	1.7	1.6	173	29	S	12	165	38	
Sum	Sum	-----	-----	---	----		Ttl	Ttl					Total	Total	For the month:						---				
	1370	915					797	0	Number of Days				2.68	8.3	30.48	29.19	29.963	2.0	1.2	245	32	SSW	18	310	
Avg	Avg	Avg	Mean	Avg	Avg	Avg	----	----	Precip	Season Ttl	Date	Date	-----	----	----	---	Date	Date	Avg						
	45.7	30.5	38.1	38.1	33	84.2	----	----	≥.01 inch	17	34.63	10.3	7	20	-----	----	----	---	1	11	41				
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			1482	448	Thunder	0	Precipitation		Snow, Ice Plts													
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	1	0.66	20-21	3.5	21	5	21+												
0	2	20	0	----	----	Clear	6	Partly Cloudy			5	Cloudy			19										

NOTES:
 Units: 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

November 2016: 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																																																																																																																																																																																																										
NOV 01										NOV 02										NOV 03																																																																																																																																																																																																											
01	0	30.27	0.00	32	28	85	00	0	0	0	30.09	0.00	51	41	69	20	8	21	0	30.05	0.00	48	47	96	00	0	0	04	0	30.28	0.00	26	25	94	00	0	0	0	30.08	0.00	52	44	75	22	9	22	0	30.00	0.00	48	47	97	00	0	0	07	0	30.28	0.00	24	23	95	00	0	0	0	30.10	0.00	52	45	78	22	8	20	0	29.92	0.00	48	47	97	00	0	0	10	58	30.28	0.00	32	30	93	20	1	9	64	30.11	0.00	53	46	78	20	8	18	26	29.89	0.00	49	48	97	00	0	0	13	399	30.23	0.00	47	36	64	18	7	20	153	30.09	0.00	57	49	74	22	5	16	27	29.82	0.06	49	49	98	02	1	9	16	203	30.14	0.00	52	35	53	20	5	16	205	30.06	0.00	64	52	66	20	2	7	34	29.86	0.00	47	47	97	02	2	12	19	0	30.12	0.00	48	36	61	20	6	16	0	30.09	0.00	50	47	89	00	0	0	0	29.90	0.00	46	45	97	33	0	7	22	0	30.10	0.00	50	38	64	20	10	28	0	30.08	0.00	46	45	95	00	0	0	0	29.91	0.00	44	43	97	02	0	4
NOV 04										NOV 05										NOV 06																																																																																																																																																																																																											
01	0	29.94	0.00	43	42	97	00	0	0	0	30.12	0.00	27	26	95	20	0	4	0	30.04	0.00	40	39	94	35	0	4	04	0	29.98	0.00	42	41	97	00	1	10	0	30.09	0.00	31	28	87	20	2	6	0	30.12	0.00	38	37	97	03	0	8	07	0	30.06	0.02	38	37	97	33	1	8	0	30.07	0.00	33	30	87	20	3	11	9	30.19	0.00	36	35	96	35	1	6	10	47	30.15	0.01	34	33	97	33	3	15	20	30.08	0.00	36	33	86	20	4	9	130	30.26	0.00	39	37	91	32	2	8	13	183	30.17	0.00	35	32	89	31	3	11	32	30.06	0.00	39	38	95	19	0	0	76	30.28	0.00	41	36	81	32	4	8	16	236	30.14	0.00	38	31	76	33	1	13	39	30.05	0.00	42	41	95	19	0	0	12	30.32	0.00	39	34	82	33	0	2	19	0	30.17	0.00	30	28	91	00	0	0	0	30.05	0.00	42	40	96	19	0	0	0	30.36	0.00	35	32	88	04	0	0	22	0	30.16	0.00	25	23	95	00	0	0	0	30.06	0.00	42	41	96	19	0	2	0	30.40	0.00	30	28	91	06	0	0
NOV 07										NOV 08										NOV 09																																																																																																																																																																																																											
01	0	30.41	0.00	27	26	94	06	0	0	0	30.25	0.00	36	29	78	20	2	5	0	29.81	0.00	49	37	64	20	4	7	04	0	30.44	0.00	25	24	95	06	0	0	0	30.20	0.00	33	29	87	20	0	0	0	29.79	0.00	47	44	89	22	0	6	07	11	30.46	0.00	25	24	96	06	0	0	11	30.17	0.00	32	29	89	20	0	0	0	29.80	0.00	47	44	88	22	0	0	10	323	30.47	0.00	41	31	68	23	4	6	304	30.11	0.00	49	36	60	20	4	10	49	29.83	0.00	43	41	95	02	3	13	13	339	30.41	0.00	49	33	53	20	2	6	336	30.01	0.00	60	38	44	21	4	9	250	29.85	0.00	42	40	91	01	3	9	16	16	30.35	0.00	48	32	53	21	0	6	16	29.93	0.00	57	37	47	20	5	10	5	29.88	0.00	41	36	82	02	0	0	19	0	30.32	0.00	34	30	84	21	0	0	0	29.90	0.00	50	35	57	19	2	7	0	29.95	0.00	38	32	80	31	2	11	22	0	30.29	0.00	39	30	72	20	4	7	0	29.86	0.00	48	35	61	19	4	9	0	29.97	0.00	35	30	82	31	1	7
NOV 10										NOV 11										NOV 12																																																																																																																																																																																																											
01	0	29.96	0.00	32	28	85	30	0	8	0	29.40	0.00	46	35	66	21	8	19	0	30.14	0.00	29	23	79	01	0	0	04	0	29.96	0.00	28	25	89	30	0	0	0	29.36	0.00	46	40	78	24	6	15	0	30.18	0.00	29	22	76	30	0	1	07	12	29.93	0.00	25	24	94	30	0	0	7	29.53	0.00	41	38	89	33	10	23	7	30.22	0.00	27	23	86	31	0	0	10	243	29.88	0.00	37	30	76	20	4	11	345	29.66	0.00	40	30	67	33	9	23	292	30.24	0.00	35	24	64	25	5	10	13	304	29.74	0.00	43	31	61	21	10	19	54	29.76	0.00	36	26	67	33	5	15	313	30.14	0.00	40	25	54	25	2	6	16	16	29.62	0.00	44	32	64	20	9	20	0	29.84	0.00	36	26	66	31	10	18	23	30.04	0.00	38	24	57	23	1	6	19	0	29.54	0.00	44	35	72	21	7	15	0	29.99	0.00	32	22	65	34	0	11	0	29.96	0.00	37	25	62	19	4	12	22	0	29.49	0.00	43	34	70	21	12	21	0	30.08	0.00	30	21	70	02	0	1	0	29.94	0.00	35	28	74	20	6	14
NOV 13										NOV 14										NOV 15																																																																																																																																																																																																											
01	0	29.94	0.00	35	28	75	21	6	11	0	29.86	0.00	40	32	73	20	0	7	0	29.96	0.00	37	30	76	19	0	0	04	0	29.94	0.00	39	31	75	22	3	7	0	29.87	0.00	41	30	65	20	4	12	0	29.96	0.00	39	33	79	19	0	0	07	7	29.95	0.00	36	31	81	22	2	7	7	29.90	0.00	39	25	56	18	4	8	7	29.95	0.00	36	32	84	19	0	0	10	251	29.97	0.00	47	37	67	23	6	11	257	29.92	0.00	50	28	42	20	4	11	141	29.96	0.00	47	37	66	19	0	0	13	304	29.91	0.00	51	37	59	24	2	7	308	29.88	0.00	56	33	41	21	2	8	308	29.88	0.00	58	35	42	03	0	0	16	14	29.86	0.00	50	36	59	21	3	7	14	29.91	0.00	53	33	46	19	0	0	7	29.86	0.00	53	40	62	36	0	0	19	0	29.88	0.00	41	34	76	19	0	4	0	29.95	0.00	43	32	65	19	0	0	0	29.83	0.00	48	41	76	00	0	0	22	0	29.86	0.00	40	33	76	20	0	6	0	29.96	0.00	41	32	71	19	0	0	0	29.75	0.00	44	42	93	04	1	8
NOV 16										NOV 17										NOV 18																																																																																																																																																																																																											
01	0	29.70	0.00	44	43	95	33	0	0	0	29.82	0.00	42	41	96	30	1	5	0	30.10	0.00	39	37	95	35	0	0	04	0	29.66	0.00	44	43	96	33	0	0	0	29.88	0.00	42	41	96	29	3	7	0	30.13	0.00	39	39	97	35	0	0	07	0	29.64	0.00	44	43	96	33	0	0	0	29.95	0.00	41	40	96	32	4	8	5	30.14	0.00	36	35	97	35	0	0	10	51	29.64	0.00	43	42	97	33	3	6	60	30.01	0.00	42	41	94	32	3	8	253	30.14	0.00	44	40	86	06	3	6	13	56	29.63	0.00	43	42	97	32	1	9	44	30.02	0.00	43	41	90	32	2	5	301	30.07	0.00	55	42	62	25	1	4	16	0	29.70	0.04	43	42	97	25	3	6	0	30.06	0.00	43	40	89	02	0	5	14	30.05	0.00	50	43	77	23	0	0	19	0	29.75	0.00	43	42	97	27	2	6	0	30.08	0.00	42	40	92	35	0	0	0	30.03	0.00	40	38	94	23	0	0	22	0	29.78	0.00	42	42	97	00	0	0	0	30.10	0.00	41	39	93	35	0	0	0	30.02	0.00	38	37	96	23	0	0

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.04	0.05	0.06	0.07	0.10	0.12	0.14	0.18	0.21	0.25	0.28	0.31
Ended: Date	11	11	11	11	11	11	03	03	03	03	03	03
Ended: Time	0450	0450	0450	0453	0450	0457	1230	1250	1240	1300	1300	1330

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 2016: 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	29.99	0.00	37	36	97	23	0	0	0	29.49	0.00	44	39	82	03	3	8	0	29.24	0.00	26	24	95	24	3	7
04	0	29.94	0.00	36	35	97	23	0	0	0	29.42	0.00	40	34	79	01	1	8	0	29.26	0.00	25	24	94	23	3	10
07	5	29.90	0.00	34	33	95	19	0	0	0	29.35	0.00	37	35	93	02	3	6	0	29.31	0.00	25	22	91	26	2	11
10	260	29.84	0.00	54	36	50	19	3	9	74	29.26	0.00	33	32	96	34	0	5	33	29.37	0.00	24	23	95	24	4	14
13	295	29.72	0.00	65	37	35	20	6	13	39	29.20	0.04	33	32	96	32	0	0	54	29.39	0.00	25	24	94	26	4	15
16	11	29.63	0.00	60	37	42	19	1	6	0	29.22	0.00	29	28	96	26	3	14	0	29.46	0.00	25	23	93	27	5	22
19	0	29.58	0.00	53	38	57	16	2	9	0	29.23	0.00	27	26	96	26	1	12	0	29.53	0.00	25	23	93	26	5	11
22	0	29.56	0.00	47	42	82	29	3	7	0	29.23	0.00	26	25	96	24	2	8	0	29.58	0.00	25	23	91	26	0	11
NOV 22									NOV 23									NOV 24									
01	0	29.63	0.00	26	23	89	28	6	16	0	30.13	0.00	27	24	86	32	4	15	0	30.30	0.00	26	25	93	13	0	0
04	0	29.69	0.00	26	23	90	30	1	9	0	30.17	0.00	26	23	86	30	8	13	0	30.27	0.00	24	23	94	13	0	0
07	0	29.80	0.00	26	24	93	32	0	7	0	30.22	0.00	26	22	87	32	1	15	0	30.29	0.00	26	24	94	13	0	0
10	58	29.88	0.00	27	25	93	29	0	0	111	30.26	0.00	27	23	85	29	0	0	37	30.26	0.00	29	28	93	18	1	8
13	70	29.93	0.00	27	23	86	29	11	21	285	30.23	0.00	31	26	82	02	0	1	174	30.20	0.00	34	31	89	19	0	6
16	0	30.01	0.00	28	24	86	29	8	16	5	30.26	0.00	27	24	86	02	0	0	0	30.20	0.00	33	30	90	19	0	6
19	0	30.07	0.00	28	24	85	31	5	19	0	30.30	0.00	27	24	89	09	0	0	0	30.20	0.00	32	30	94	19	0	0
22	0	30.10	0.00	28	24	86	29	11	18	0	30.31	0.00	27	25	91	13	0	0	0	30.20	0.00	31	30	96	19	0	0
NOV 25									NOV 26									NOV 27									
01	0	30.19	0.00	32	31	96	19	0	0	0	30.08	0.00	37	36	98	19	0	0	0	30.03	0.00	31	30	95	06	0	0
04	0	30.20	0.00	33	32	96	19	0	0	0	30.07	0.00	36	36	98	19	0	0	0	30.03	0.00	31	29	94	00	0	6
07	0	30.19	0.00	33	32	97	19	0	0	0	30.06	0.00	36	35	98	19	0	0	0	30.04	0.00	29	27	93	03	0	0
10	23	30.17	0.00	33	33	97	19	0	0	77	30.06	0.00	37	36	98	19	0	5	132	30.04	0.00	33	29	85	33	0	0
13	42	30.11	0.06	36	35	97	20	2	9	86	30.01	0.00	38	37	98	24	0	6	121	30.00	0.00	33	29	86	33	0	7
16	0	30.11	0.00	37	36	97	19	3	6	0	30.04	0.00	35	34	98	00	0	5	5	30.02	0.00	32	27	83	30	1	7
19	0	30.13	0.00	37	36	98	19	0	0	0	30.06	0.00	32	32	98	05	0	0	0	30.06	0.00	30	27	86	32	2	10
22	0	30.11	0.00	37	36	98	19	0	6	0	30.04	0.00	31	31	97	06	0	0	0	30.06	0.00	29	25	83	29	4	12
NOV 28									NOV 29									NOV 30									
01	0	30.08	0.00	29	24	82	31	0	7	0	30.08	0.00	27	24	91	03	0	0	0	29.83	0.00	41	40	98	20	0	5
04	0	30.08	0.00	28	24	85	32	0	0	0	30.04	0.00	28	26	93	08	0	0	0	29.88	0.00	43	42	98	22	4	6
07	0	30.14	0.00	28	24	84	32	0	0	0	29.99	0.00	39	32	78	18	0	9	0	29.89	0.00	40	40	98	20	0	0
10	90	30.17	0.00	30	25	83	02	0	0	9	29.91	0.00	40	38	95	11	0	10	125	29.91	0.00	43	42	98	20	0	1
13	290	30.13	0.00	34	26	73	21	0	0	14	29.86	0.00	40	39	95	19	2	8	58	29.82	0.00	48	47	95	10	1	5
16	11	30.11	0.00	31	26	81	09	0	0	0	29.83	0.00	40	39	96	18	0	0	0	29.78	0.00	47	44	90	19	0	0
19	0	30.12	0.00	26	24	91	07	0	0	0	29.81	0.00	39	38	97	08	0	0	0	29.71	0.00	46	44	91	19	4	12
22	0	30.11	0.00	22	21	94	07	0	0	0	29.80	0.00	39	38	97	08	0	0	0	29.63	0.00	44	40	86	16	9	19

WEATHER NOTES

NOTES:
 Units: 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	29.965	36	32	87	1.5	23	1.0
04	0	29.965	35	32	89	1.5	25	1.1
07	3	29.981	35	32	90	1.3	28	0.6
10	131	29.991	39	34	83	2.5	25	1.2
13	177	29.952	43	35	76	2.7	25	1.6
16	30	29.945	42	34	77	2.1	25	1.3
19	0	29.955	38	33	84	1.4	23	0.9
22	0	29.951	37	33	86	2.2	22	1.5

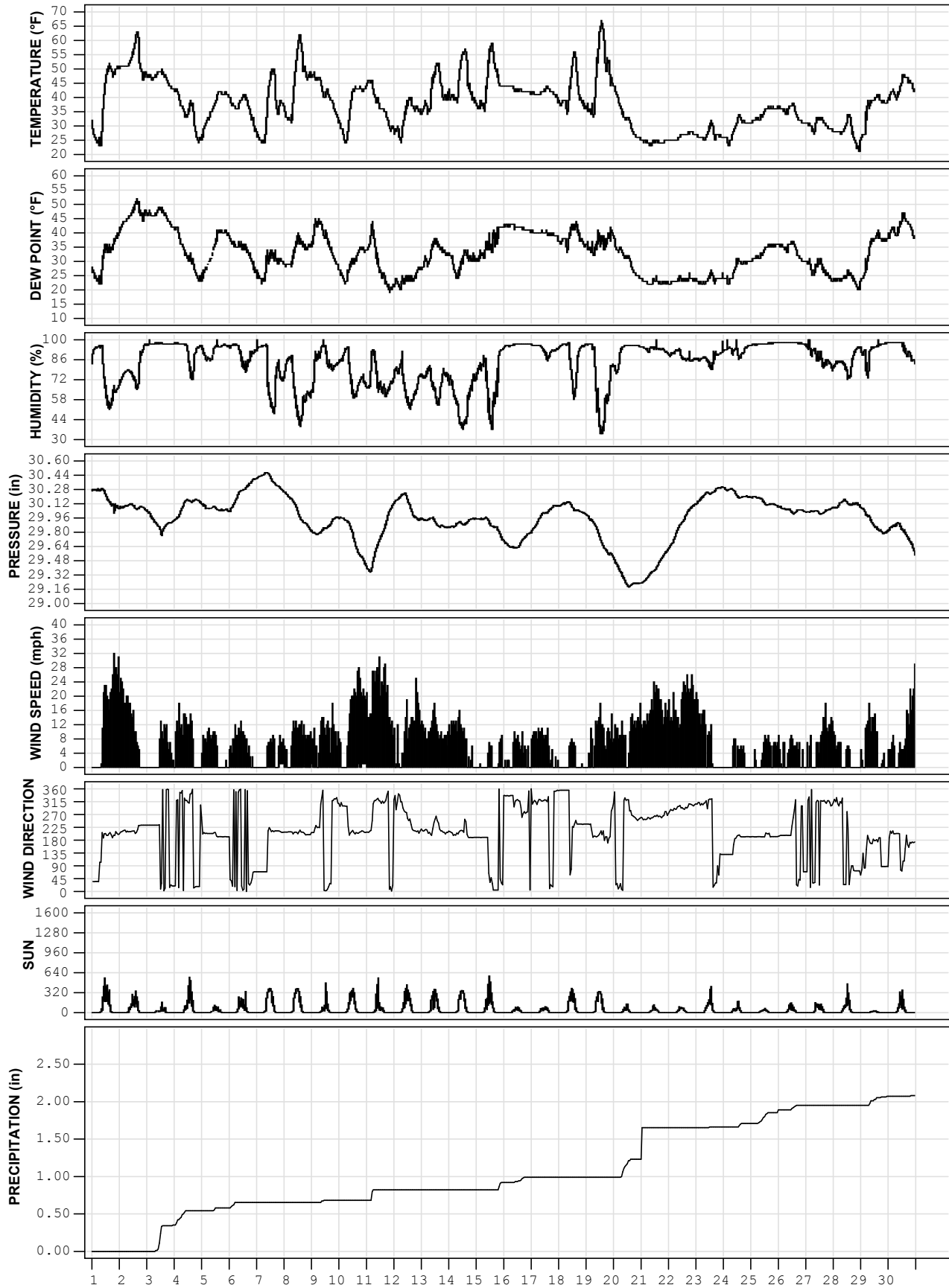
HOURLY PRECIPITATION (Water Equivalent) November 2016: Westford

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		0.03	0.04		0.02	0.01	0.04	0.01	0.02	0.02	0.08	0.13	0.09	0.01									0.01	04	
05																								05	
06		0.02	0.01	0.01	0.03																			06	
07																								07	
08																								08	
09									0.02		0.01													09	
10																								10	
11					0.12	0.02																		11	
12																								12	
13																								13	
14																								14	
15																				0.04	0.05	0.01		15	
16										0.01			0.01		0.01	0.02	0.01	0.01						16	
17																								17	
18																								18	
19																								19	
20								0.01	0.06	0.05	0.02	0.02	0.02	0.04		0.02								20	
21	0.42																							21	
22																								22	
23												0.01												23	
24															0.02	0.02	0.01							24	
25							0.01	0.01	0.01	0.02	0.03	0.01	0.03	0.01	0.01	0.01							0.04	25	
26												0.02	0.01	0.01	0.01	0.01								26	
27																								27	
28								0.03	0.03															28	
29												0.02		0.02			0.01						0.01	29	
30																			0.01					30	
Sum	0.42	0.05	0.05	0.01	0.17	0.03	0.06	0.12	0.13	0.09	0.15	0.24	0.18	0.07	0.07	0.04	0.01	0.02	0.00	0.05	0.05	0.01	0.02	0.04	Sum

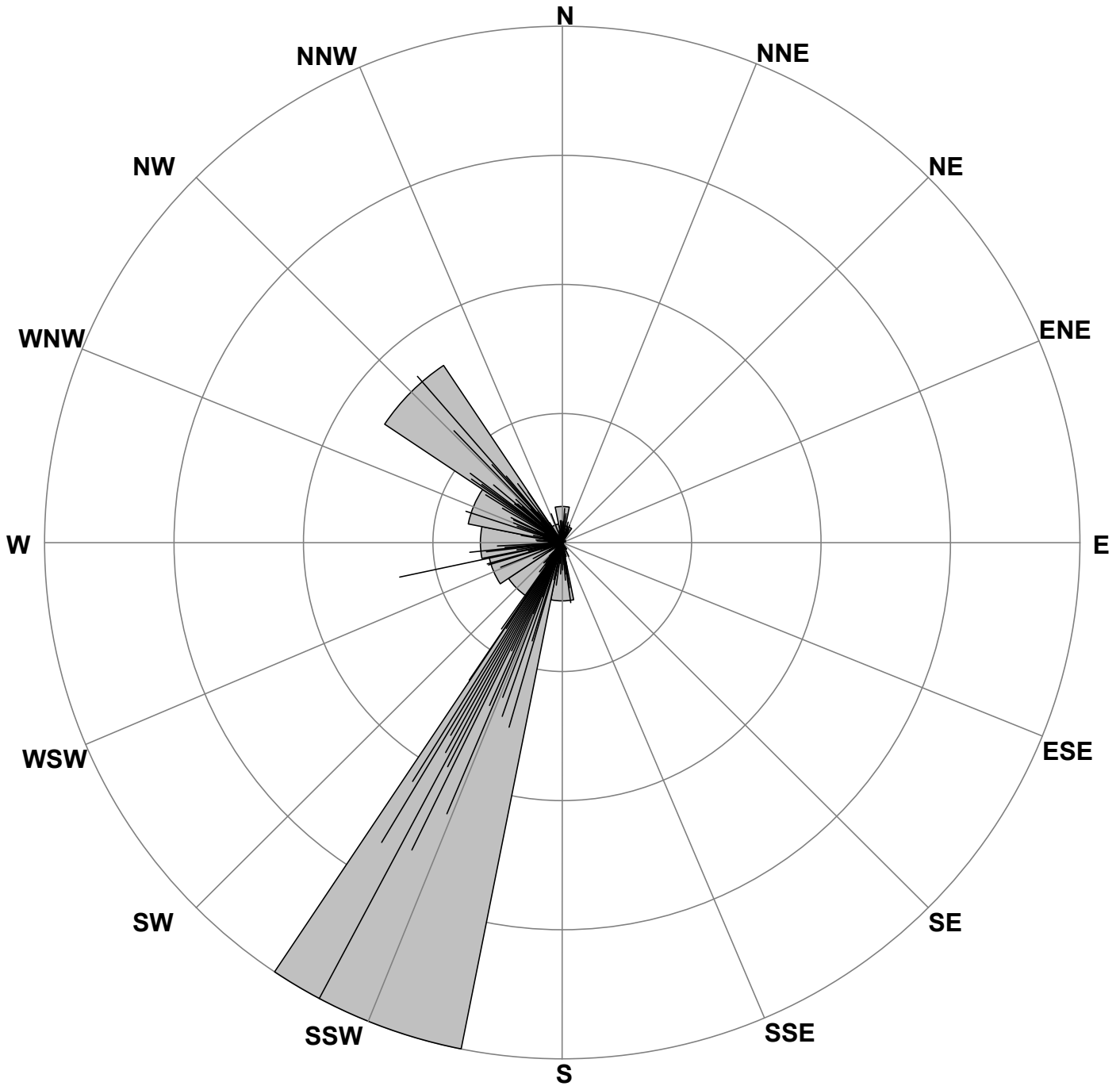
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

November 2016: Westford



**Wind Rose: November 2016
Westford**



**Maximum direction of wind: 84.0 miles from 208°
Maximum sector of wind: 615.3 miles from SSW
1413.3 total miles of wind**