

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

October 2011

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	Speed		Dir	Speed	Dir	Speed	Dir
1	2	3	4A	4B	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
1	57.7	40.1	48.9	44.9	43	92	16	0	.....	0	0.61	0.0	29.91	29.67	29.803	1.7	1.7	24	17	NE	8	20	15		
2	52.6	42.2	47.4	47.5	46	96	17	0	.....	0	0.27	0.0	29.93	29.87	29.899	0.4	0.3	350	10	E	5	305	34		
3	60.1	48.2	54.1	53.0	52	95	11	0	.2.....	0	0.16	0.0	30.04	29.91	29.990	0.3	0.2	293	8	NW	5	312	73			
4	57.4	49.1	53.3	53.1	52	96	12	0	.2.....	0	0.02	0.0	30.04	29.99	30.015	0.4	0.4	356	19	NNE	6	319	41			
5	57.3	40.4	48.9	48.9	41	77	16	0	.....	0	0.01	0.0	30.23	29.98	30.086	1.1	1.1	4	24	ENE	7	16	114		
6	54.2	34.8	44.5	42.3	32	70	20	0	.....	0	0.00	0.0	30.34	30.23	30.294	0.8	0.8	328	17	NW	10	308	160		
7	65.7	32.5	49.1	48.2	39	72	15	0	.....	0	0.00	0.0	30.43	30.33	30.371	0.9	0.9	216	10	SSW	5	221	139		
8	74.0	46.0	60.0	59.4	48	68	5	0	.....	0	0.00	0.0	30.43	30.30	30.356	2.0	2.0	217	15	SSW	8	214	150		
9	80.2	53.7	66.9*	65.4	53	65	0	2	.....	0	0.00	0.0	30.34	30.19	30.265	1.3	1.2	235	15	W	7	256	147		
10	75.0	45.5	60.3	62.8	52	68	4	0	.....	0	0.00	0.0	30.20	30.13	30.164	0.8	0.5	294	14	NNW	9	299	124		
11	68.1	41.5	54.8	51.8	42	71	10	0	.....	0	0.00	0.0	30.23	30.14	30.181	0.2	0.2	318	8	W	6	296	148		
12	67.6	42.4	55.0	53.2	45	75	10	0	.....	0	0.00	0.0	30.16	29.99	30.092	0.7	0.7	193	14	SW	7	216	89		
13	69.4	50.9	60.2	57.1	51	81	5	0	.....	0	0.11	0.0	29.99	29.69	29.835	0.6	0.6	194	14	SE	6	156	93		
14	70.4	54.7	62.6	61.3	58	89	2	0	.3.....	0	1.44	0.0	29.69	29.17	29.450	1.0	0.9	185	22	SW	13	216	63			
15	56.0	45.9	51.0	50.9	46	84	14	0	.....	0	0.42	0.0	29.42	29.17	29.305	6.7	6.6	218	29	SSE	16	212	71		
16	56.9	45.1	51.0	49.8	40	71	14	0	.....	0	0.06	0.0	29.65	29.42	29.557	5.7	5.5	242	29	W	14	259	50		
17	54.3	40.1	47.2	46.2	40	80	18	0	.3.....	0	0.23	0.0	29.64	29.47	29.551	3.1	2.9	234	23	WNW	14	306	59			
18	53.2	44.4	48.8	48.6	42	78	16	0	.....	0	0.07	0.0	29.91	29.63	29.755	2.3	2.2	229	14	W	8	261	45		
19	59.9	42.4	51.2	50.3	43	76	14	0	.....	0	0.01	0.0	29.95	29.62	29.859	0.5	0.5	68	12	SE	6	56	50		
20	67.4	50.1	58.8	57.2	52	82	6	0	.....	0	0.23	0.0	29.62	29.25	29.395	3.0	2.7	199	24	WSW	13	210	88		
21	52.8	45.0	48.9	48.2	43	81	16	0	.....	0	0.13	0.0	29.88	29.51	29.691	2.5	2.4	225	19	SW	11	213	30		
22	49.1	40.6	44.8	45.2	41	86	20	0	.....	0	0.16	0.0	30.04	29.88	29.959	0.7	0.7	266	10	W	6	278	40		
23	49.4	36.2	42.8	43.5	38	81	22	0	.....	0	0.00	0.0	30.09	30.03	30.059	0.3	0.3	216	8	S	4	201	51		
24	61.8	34.4	48.1	47.2	39	76	17	0	.....	0	0.35	0.0	30.08	29.80	29.943	3.1	2.9	209	25	SW	16	256	104		
25	48.8	38.1	43.4	44.7	37	75	21	0	.....	0	0.00	0.0	29.98	29.82	29.898	3.8	3.4	284	21	WNW	14	298	47		
26	48.0	35.3	41.6	40.9	35	78	23	0	.....	0	0.00	0.0	29.98	29.77	29.863	0.3	0.1	281	8	NW	5	290	66		
27	39.3	33.4	36.4	35.6	27	71	29	0	.....	0	0.00	0.0	29.92	29.76	29.809	0.7	0.6	15	11	NNE	6	25	44		
28	45.0	26.3	35.6	34.2	23	65	29	0	.....	0	0.00	0.0	30.24	29.92	30.108	1.8	1.7	311	17	NW	10	284	90		
29	39.1	23.8*	31.4*	31.8	23	70	33	0	.....	0	0.00	0.0	30.26	29.99	30.162	0.4	0.4	40	11	NE	5	23	56		
30	45.5	30.9	38.2	36.2	27	70	26	0	.....	0	0.02	0.2	30.25	29.98	30.089	2.0	1.8	334	19	N	12	316	93		
31	50.5	32.2	41.4	41.6	29	61	23	0	.....	0	0.00	0.0	30.33	30.24	30.284	3.6	3.6	211	19	SSW	11	215	97		
Sum	Sum	-----	-----	---	----		Ttl	Ttl	Number of Days				For the month:													---
1787	1266						484	2			4.30	0.2	30.43	29.17	29.938	1.7	1.1	240	29	SSE	16	212				
Avg	Avg	Avg	Mean	Avg	Avg	----	----		Precip		Season Ttl		Date	Date	-----	----	----	---	Date	Date	Avg					
57.6	40.8	49.2	48.4	41	77.5	----	----		≥.01 inch	17	49.70	0.2	8	14+	-----	----	----	---	15+	15	79					
Number of Days							Season to Date	Snow, Ice ≥1.0 inch	0	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date										
Max Temperature			Min Temperature			623	405	Thunder	2	Precipitation			Snow, Ice Plts													
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----			Heavy Fog	3	1.75	14-15	0.2	30	0						-						
0	0	4	0	----	----			Clear	4	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/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

October 2011: 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																																																														
OCT 01										OCT 02										OCT 03																																																															
01	0	29.67	0.00	57	52	83	02	0	4	0	29.88	0.00	43	41	95	03	0	7	0	29.92	0.00	48	47	96	31	0	0	01	0	29.70	0.00	53	50	91	36	0	0	0	29.88	0.00	43	42	96	02	1	4	0	29.93	0.00	49	48	96	31	0	2	01	0	29.73	0.00	45	43	91	03	4	13	0	29.91	0.00	44	43	96	02	0	5	0	29.97	0.00	49	48	96	21	0	0
04	0	29.73	0.00	45	43	91	03	4	13	0	29.91	0.00	44	43	96	02	0	5	0	29.97	0.00	49	48	96	21	0	0	04	0	29.84	0.18	41	39	91	02	2	8	37	29.92	0.00	48	47	96	31	0	4	466	30.01	0.00	54	53	97	07	0	2	04	0	29.85	0.00	42	40	95	01	1	13	227	29.89	0.00	52	51	96	30	2	5	93	30.02	0.00	59	56	91	32	0	6
07	0	29.84	0.18	41	39	91	02	2	8	37	29.92	0.00	48	47	96	31	0	4	466	30.01	0.00	54	53	97	07	0	2	07	0	29.85	0.00	42	40	95	01	1	13	160	29.88	0.00	52	51	96	31	0	3	47	30.02	0.00	56	54	94	32	0	0	07	0	29.88	0.06	41	40	95	02	2	14	0	29.91	0.17	49	48	96	32	0	1	0	30.01	0.00	54	53	94	33	0	0
10	16	29.84	0.18	41	39	91	02	2	8	37	29.92	0.00	48	47	96	31	0	4	466	30.01	0.00	54	53	97	07	0	2	10	16	29.85	0.00	42	40	95	01	1	13	160	29.88	0.00	52	51	96	31	0	3	47	30.02	0.00	56	54	94	32	0	0	10	16	29.88	0.06	41	40	95	02	2	14	0	29.91	0.17	49	48	96	32	0	1	0	30.01	0.00	54	53	94	33	0	0
13	53	29.83	0.00	41	39	94	02	3	11	227	29.89	0.00	52	51	96	30	2	5	93	30.02	0.00	59	56	91	32	0	6	13	53	29.83	0.00	41	39	94	02	3	11	227	29.89	0.00	52	51	96	30	2	5	93	30.02	0.00	59	56	91	32	0	6	13	53	29.85	0.00	42	40	95	01	1	13	160	29.88	0.00	52	51	96	31	0	3	47	30.02	0.00	56	54	94	32	0	0
16	19	29.85	0.00	42	40	95	01	1	13	160	29.88	0.00	52	51	96	31	0	3	47	30.02	0.00	56	54	94	32	0	0	16	19	29.85	0.00	42	40	95	01	1	13	160	29.88	0.00	52	51	96	31	0	3	47	30.02	0.00	56	54	94	32	0	0	16	19	29.85	0.00	42	40	95	01	1	13	160	29.88	0.00	52	51	96	31	0	3	47	30.02	0.00	56	54	94	32	0	0
19	0	29.88	0.06	41	40	95	02	2	14	0	29.91	0.17	49	48	96	32	0	1	0	30.01	0.00	54	53	94	33	0	0	19	0	29.88	0.06	41	40	95	02	2	14	0	29.91	0.17	49	48	96	32	0	1	0	30.01	0.00	54	53	94	33	0	0	19	0	29.88	0.06	41	40	95	02	2	14	0	29.91	0.17	49	48	96	32	0	1	0	30.01	0.00	54	53	94	33	0	0
22	0	29.91	0.00	42	40	95	01	2	7	0	29.91	0.00	48	47	96	31	0	3	0	30.03	0.00	53	52	96	33	0	2	22	0	29.91	0.00	42	40	95	01	2	7	0	29.91	0.00	48	47	96	31	0	3	0	30.03	0.00	53	52	96	33	0	2	22	0	29.91	0.00	42	40	95	01	2	7	0	29.91	0.00	48	47	96	31	0	3	0	30.03	0.00	53	52	96	33	0	2
OCT 04										OCT 05										OCT 06																																																															
01	0	30.03	0.00	53	52	96	33	0	0	0	30.00	0.00	49	48	95	03	0	2	0	30.24	0.00	40	30	67	03	1	7	01	0	30.03	0.00	53	52	96	33	0	0	0	30.00	0.00	49	48	95	03	0	2	0	30.24	0.00	40	30	67	03	1	7	01	0	30.03	0.00	53	52	96	33	0	0	0	30.00	0.00	49	48	95	03	0	2	0	30.24	0.00	40	30	67	03	1	7
04	0	30.02	0.00	53	52	96	33	0	0	0	29.99	0.00	47	46	95	02	0	5	0	30.26	0.00	36	31	80	03	0	1	04	0	30.02	0.00	53	52	96	33	0	0	0	29.99	0.00	47	46	95	02	0	5	0	30.26	0.00	36	31	80	03	0	1	04	0	30.02	0.00	53	52	96	33	0	0	0	29.99	0.00	47	46	95	02	0	5	0	30.26	0.00	36	31	80	03	0	1
07	0	30.02	0.00	52	51	97	32	0	1	0	29.99	0.00	48	47	96	03	0	0	7	30.30	0.00	36	30	81	01	0	4	07	0	30.02	0.00	52	51	97	32	0	1	0	29.99	0.00	48	47	96	03	0	0	7	30.30	0.00	36	30	81	01	0	4	07	0	30.02	0.00	52	51	97	32	0	1	0	29.99	0.00	48	47	96	03	0	0	7	30.30	0.00	36	30	81	01	0	4
10	49	30.03	0.00	52	51	97	32	1	6	100	30.03	0.00	49	48	94	33	1	6	364	30.33	0.00	46	33	60	33	0	10	10	49	30.03	0.00	52	51	97	32	1	6	100	30.03	0.00	49	48	94	33	1	6	364	30.33	0.00	46	33	60	33	0	10	10	49	30.03	0.00	52	51	97	32	1	6	100	30.03	0.00	49	48	94	33	1	6	364	30.33	0.00	46	33	60	33	0	10
13	202	30.02	0.00	54	54	97	33	0	3	199	30.09	0.00	56	44	64	00	4	16	594	30.31	0.00	50	33	52	32	6	14	13	202	30.02	0.00	54	54	97	33	0	3	199	30.09	0.00	56	44	64	00	4	16	594	30.31	0.00	50	33	52	32	6	14	13	202	30.02	0.00	54	54	97	33	0	3	199	30.09	0.00	56	44	64	00	4	16	594	30.31	0.00	50	33	52	32	6	14
16	35	30.00	0.00	56	54	92	31	0	10	341	30.14	0.00	56	36	46	01	1	23	330	30.27	0.00	54	36	50	32	0	8	16	35	30.00	0.00	56	54	92	31	0	10	341	30.14	0.00	56	36	46	01	1	23	330	30.27	0.00	54	36	50	32	0	8	16	35	30.00	0.00	56	54	92	31	0	10	341	30.14	0.00	56	36	46	01	1	23	330	30.27	0.00	54	36	50	32	0	8
19	0	30.00	0.00	54	52	94	03	1	9	0	30.18	0.00	44	33	65	03	1	4	0	30.29	0.00	40	33	76	04	0	0	19	0	30.00	0.00	54	52	94	03	1	9	0	30.18	0.00	44	33	65	03	1	4	0	30.29	0.00	40	33	76	04	0	0	19	0	30.00	0.00	54	52	94	03	1	9	0	30.18	0.00	44	33	65	03	1	4	0	30.29	0.00	40	33	76	04	0	0
22	0	30.01	0.00	52	50	94	00	2	9	0	30.21	0.00	42	32	67	01	0	5	0	30.31	0.00	37	34	89	04	0	1	22	0	30.01	0.00	52	50	94	00	2	9	0	30.21	0.00	42	32	67	01	0	5	0	30.31	0.00	37	34	89	04	0	1	22	0	30.01	0.00	52	50	94	00	2	9	0	30.21	0.00	42	32	67	01	0	5	0	30.31	0.00	37	34	89	04	0	1
OCT 07										OCT 08										OCT 09																																																															
01	0	30.34	0.00	38	34	84	04	0	0	0	30.36	0.00	51	42	70	21	1	7	0	30.31	0.00	59	51	73	20	2	8	01	0	30.34	0.00	38	34	84	04	0	0	0	30.36	0.00	51	42	70	21	1	7	0	30.31	0.00	59	51	73	20	2	8	01	0	30.34	0.00	38	34	84	04	0	0	0	30.36	0.00	51	42	70	21	1	7	0	30.31	0.00	59	51	73	20	2	8
04	0	30.35	0.00	33	30	90	14	0	1	0	30.37	0.00	46	41	83	26	1	5	0	30.31	0.00	56	49	79	22	1	3	04	0	30.35	0.00	33	30	90	14	0	1	0	30.37	0.00	46	41	83	26	1	5	0	30.31	0.00	56	49	79	22	1	3	04	0	30.35	0.00	33	30	90	14	0	1	0	30.37	0.00	46	41	83	26	1	5	0	30.31	0.00	56	49	79	22	1	3
07	0	30.39	0.00	34	32	94	14	0	1	5	30.40	0.00	49	42	79	21	0	5	0	30.32	0.00	54	48	80	21	1	4	07	0	30.39	0.00	34	32	94	14	0	1	5	30.40	0.00	49	42	79	21	0	5	0	30.32	0.00	54	48	80	21	1	4	07	0	30.39	0.00	34	32	94	14	0	1	5	30.40	0.00	49	42	79	21	0	5	0	30.32	0.00	54	48	80	21	1	4
10	269	30.42</																																																																																	

OBSERVATIONS AT 3-HOUR INTERVALS

October 2011: Westford

Hour	OCT 19									OCT 20									OCT 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	29.92	0.00	44	40	87	23	0	2	0	29.58	0.00	52	47	83	01	0	2	0	29.52	0.00	49	41	76	20	1	8
04	0	29.93	0.00	44	40	86	23	0	0	0	29.49	0.00	52	49	90	04	0	0	0	29.54	0.00	48	42	80	21	4	8
07	0	29.93	0.00	43	39	85	08	0	0	0	29.42	0.00	57	53	84	18	5	12	0	29.59	0.00	45	43	91	20	0	6
10	102	29.94	0.00	50	42	73	08	0	5	125	29.36	0.00	62	55	77	20	6	19	186	29.65	0.00	48	42	80	21	8	15
13	132	29.89	0.00	56	44	64	08	0	1	503	29.30	0.00	63	58	86	18	7	14	81	29.70	0.00	51	43	76	21	2	11
16	84	29.83	0.00	58	44	60	05	0	1	70	29.25	0.00	65	53	65	17	3	13	25	29.75	0.00	52	46	81	24	0	1
19	0	29.79	0.00	53	45	74	08	0	2	0	29.35	0.00	56	52	85	20	3	12	0	29.83	0.00	47	44	87	27	0	4
22	0	29.73	0.00	51	46	83	13	1	11	0	29.46	0.00	52	49	87	25	1	4	0	29.87	0.00	47	41	81	19	1	4
OCT 22									OCT 23									OCT 24									
01	0	29.88	0.00	47	41	79	26	3	7	0	30.03	0.00	43	39	87	26	0	2	0	30.07	0.00	38	34	85	20	0	0
04	0	29.89	0.00	46	41	83	24	0	1	0	30.04	0.00	42	39	90	20	0	3	0	30.05	0.00	35	32	90	20	0	0
07	0	29.92	0.00	44	41	90	29	2	8	0	30.05	0.00	38	35	91	19	0	1	0	30.02	0.00	40	36	85	19	3	8
10	76	29.97	0.00	45	43	92	26	0	0	162	30.09	0.00	45	40	83	19	0	3	309	30.01	0.00	48	40	72	19	1	14
13	192	29.97	0.00	48	42	81	28	1	5	178	30.07	0.00	48	39	70	20	2	4	469	29.91	0.00	59	41	52	21	9	22
16	88	29.98	0.00	46	43	89	29	0	3	67	30.05	0.00	48	37	65	21	1	4	83	29.83	0.00	58	41	52	20	5	19
19	0	30.01	0.00	44	42	91	32	0	0	0	30.06	0.00	44	38	81	18	0	0	0	29.82	0.00	56	44	65	22	2	10
22	0	30.03	0.00	42	37	83	25	0	1	0	30.08	0.00	42	37	82	20	0	0	0	29.85	0.00	46	44	93	20	1	4
OCT 25									OCT 26									OCT 27									
01	0	29.85	0.00	45	43	93	19	0	1	0	29.97	0.00	38	32	80	30	3	7	0	29.79	0.00	38	33	83	03	0	5
04	0	29.83	0.00	46	41	83	25	3	10	0	29.92	0.00	37	33	85	30	0	0	0	29.79	0.00	36	29	78	02	0	9
07	0	29.86	0.00	46	40	80	25	3	6	0	29.91	0.00	36	33	90	30	0	0	0	29.79	0.00	34	27	75	02	2	5
10	81	29.90	0.00	46	40	79	25	5	8	146	29.90	0.00	44	37	75	19	0	3	239	29.81	0.00	37	27	67	03	1	5
13	139	29.90	0.00	47	35	63	30	5	9	146	29.85	0.00	46	37	70	29	3	7	125	29.80	0.00	38	25	60	33	3	7
16	49	29.91	0.00	46	34	63	30	6	15	163	29.79	0.00	47	36	66	05	1	2	39	29.77	0.00	36	25	65	35	0	7
19	0	29.96	0.00	42	32	69	31	0	4	0	29.80	0.00	41	35	79	01	0	0	0	29.83	0.00	34	26	73	34	0	1
22	0	29.97	0.00	41	33	72	30	5	10	0	29.78	0.00	40	34	79	01	0	4	0	29.90	0.00	35	26	70	32	1	4
OCT 28									OCT 29									OCT 30									
01	0	29.95	0.00	33	22	65	33	1	4	0	30.24	0.00	27	21	81	28	0	0	0	30.00	0.00	33	23	68	01	0	4
04	0	30.00	0.00	29	22	73	30	0	5	0	30.23	0.00	25	21	85	28	0	0	0	29.98	0.00	31	27	83	02	3	8
07	0	30.06	0.00	27	22	79	29	0	2	0	30.25	0.00	24	21	86	28	0	0	0	30.01	0.00	31	28	89	01	1	5
10	309	30.12	0.00	37	27	68	33	2	10	308	30.24	0.00	35	26	70	07	0	4	257	30.07	0.00	35	30	80	34	3	10
13	452	30.13	0.00	43	26	52	29	5	13	130	30.18	0.00	38	23	55	05	1	6	619	30.11	0.00	42	30	63	32	6	13
16	218	30.15	0.00	44	23	43	31	3	15	40	30.10	0.00	38	23	54	02	0	3	199	30.13	0.00	45	23	42	32	7	12
19	0	30.17	0.00	34	21	58	32	0	3	0	30.08	0.00	34	24	66	03	0	1	0	30.17	0.00	36	25	64	29	1	5
22	0	30.22	0.00	30	22	72	28	0	0	0	30.03	0.00	34	23	65	03	0	7	0	30.22	0.00	33	27	77	29	0	1
OCT 31																											
01	0	30.26	0.00	38	29	70	24	0	3																		
04	0	30.27	0.00	33	27	79	21	0	3																		
07	0	30.30	0.00	34	27	75	20	3	6																		
10	272	30.32	0.00	42	30	64	21	5	9																		
13	432	30.29	0.00	50	29	45	21	7	14																		
16	118	30.26	0.00	48	26	42	20	7	16																		
19	0	30.28	0.00	44	29	56	20	4	11																		
22	0	30.28	0.00	43	29	57	21	6	16																		

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

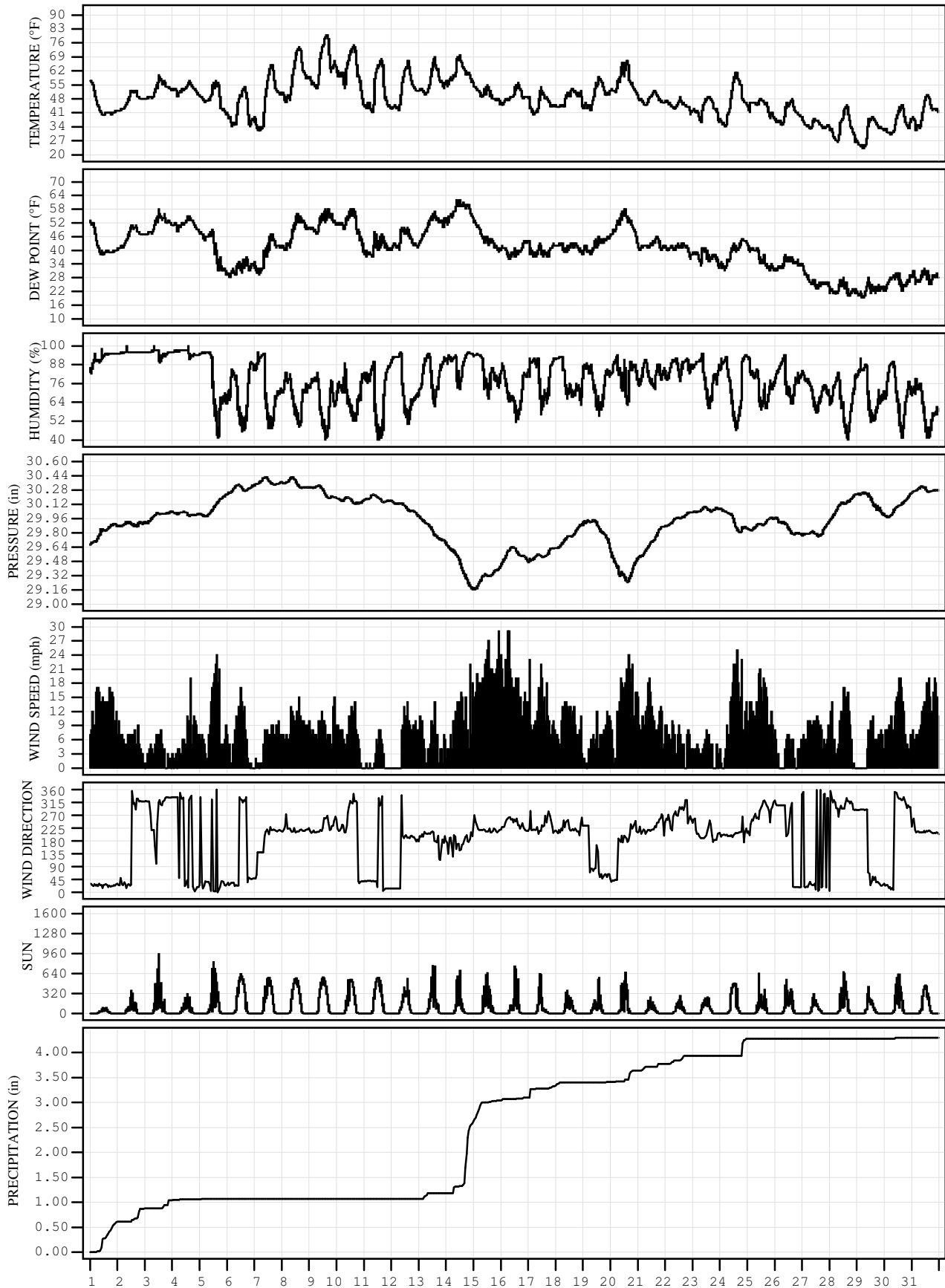
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01	0	29.927	46	41	82	1.1	25	0.9
04	0	29.924	44	40	86	0.9	24	0.6
07	0	29.945	43	40	87	1.5	23	0.9
10	205	29.967	50	43	77	2.1	23	1.5
13	286	29.943	54	43	67	3.0	25	1.7
16	133	29.919	55	42	64	2.3	23	1.4
19	0	29.935	49	41	77	0.8	22	0.5
22	0	29.947	47	40	80	1.7	23	1.2

**HOURLY PRECIPITATION (Water Equivalent)
October 2011: Westford**

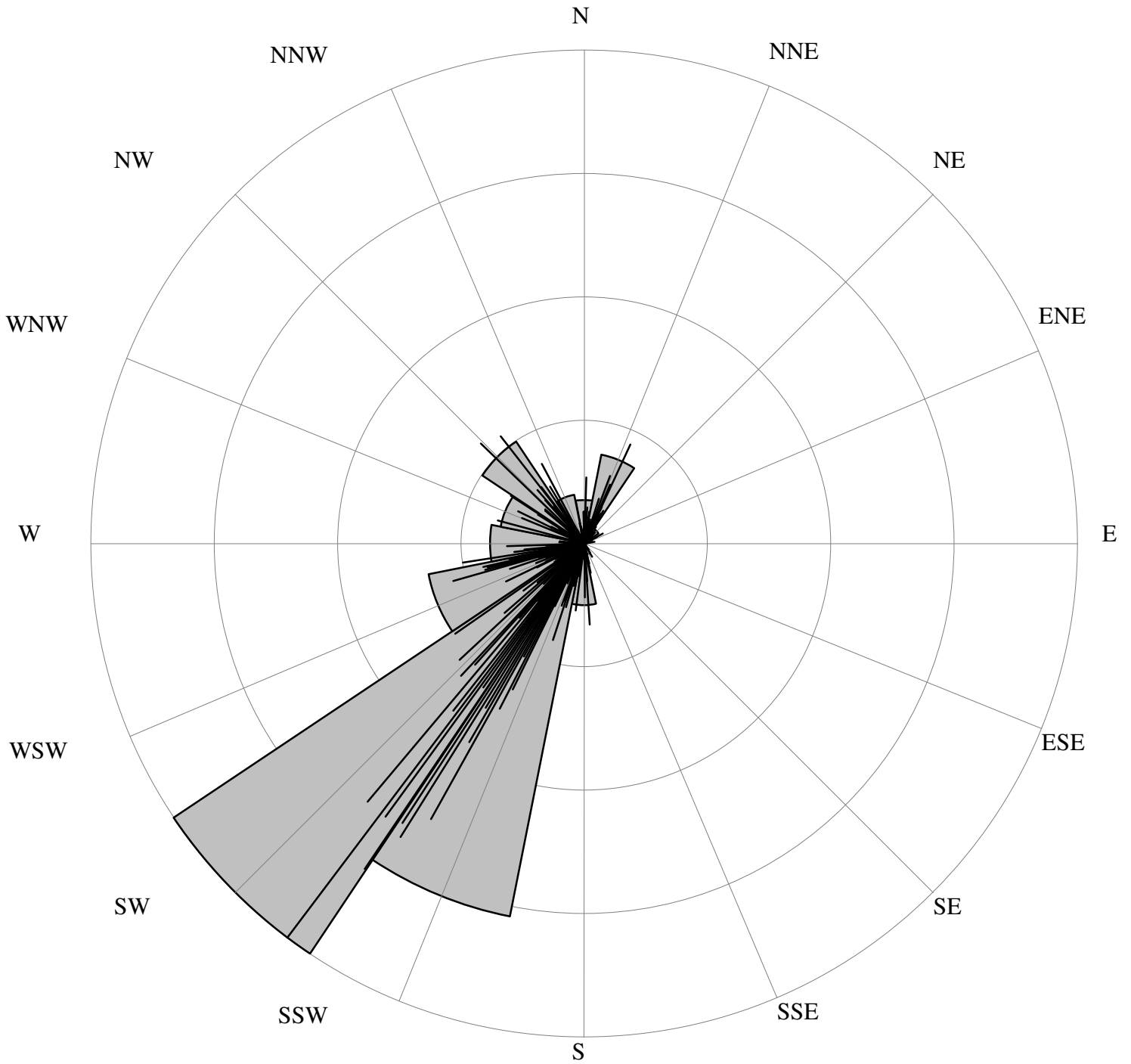
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01						0.01	0.01		0.01	0.07	0.16	0.02		0.02	0.04	0.03	0.04	0.03	0.04	0.05	0.02	0.02	0.03	0.01	01
02													0.04		0.02	0.01		0.02	0.12	0.05				0.01	02
03																0.01	0.05				0.10				03
04	0.01																								04
05		0.01																							05
06																									06
07																									07
08																									08
09																									09
10																									10
11																									11
12																									12
13					0.04	0.01	0.02	0.04																	13
14							0.12	0.01				0.01			0.02	0.04	0.31	0.28	0.33	0.13	0.09	0.03	0.03	0.04	14
15	0.04	0.04	0.05	0.07	0.05	0.06	0.06	0.01						0.01	0.01	0.01				0.01					15
16	0.01	0.02																			0.01	0.01			16
17		0.17												0.01					0.01	0.01	0.01	0.01		0.01	17
18	0.03	0.01	0.01	0.02															0.01	0.01	0.01	0.01			18
19																					0.01				19
20					0.01							0.04				0.12	0.03	0.02	0.01						20
21				0.01	0.03	0.02	0.01										0.06								21
22					0.01	0.03		0.03						0.02	0.02	0.04	0.01								22
23																									23
24																				0.25	0.07		0.03		24
25																									25
26																									26
27																									27
28																									28
29																									29
30									0.01	0.01															30
31																									31
Sum	0.09	0.25	0.06	0.10	0.14	0.13	0.24	0.09	0.01	0.08	0.17	0.03	0.08	0.06	0.10	0.14	0.54	0.42	0.52	0.51	0.32	0.06	0.09	0.07	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
October 2011: Westford



Wind Rose: October 2011
Westford



Maximum direction of wind: 58.1 miles from 217°
Maximum sector of wind: 384.1 miles from SW
1261.2 total miles of wind