

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### July 2009

Station: Westford  
 Latitude: 44° 37' 39" N Longitude: 73° 02' 29" W Elevation (Ground): 850 feet Time Zone: Eastern

Date	Temperature					Humidity Mean	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						Sun	
	Maximum	Minimum	Average	Mean	Dew Point		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		11	12	13	14	15	16	17	18	19	20	21	22	23	
1	77.0	53.8	65.4	65.0	60	84	0	1	.....	0	0.01	0.0	29.80	29.63	29.714	1.3	1.2	173	17	SE	8	211	
2	70.1	59.0	64.5	64.7	60	84	0	0	.....	0	T	0.0	29.79	29.70	29.753	0.9	0.9	163	14	SE	6	150	
3	72.4	60.5	66.5	63.6	61	91	0	2	..3.....	0	0.46	0.0	29.72	29.67	29.705	1.8	1.7	218	17	NNW	10	301	
4	71.2	54.6	62.9	61.5	57	87	2	0	.....	0	1.03	0.0	29.78	29.66	29.701	4.7	4.1	285	24	WNW	15	302	
5	75.0	51.6	63.3	62.7	54	74	1	0	.....	0	0.00	0.0	29.80	29.74	29.765	1.7	1.6	309	18	N	11	306	
6	75.8	48.8	62.3	60.3	53	80	2	0	.....	0	0.16	0.0	29.76	29.67	29.734	1.5	1.1	264	30	WNW	17	289	
7	67.7	50.0	58.8	58.1	56	92	6	0	..3.....	0	0.26	0.0	29.75	29.69	29.719	0.4	0.2	133	18	WNW	10	304	
8	63.6	52.4	58.0	57.8	56	92	7	0	.....	0	0.29	0.0	30.04	29.75	29.876	0.3	0.2	249	8	S	4	311	
9	76.3	51.4	63.9	62.2	57	86	1	0	.....	0	0.10	0.0	30.22	30.04	30.153	0.5	0.3	306	9	NNW	7	311	
10	79.8	51.3	65.6	66.0	55	71	0	1	.....	0	0.00	0.0	30.28	30.12	30.200	1.2	1.2	214	12	WSW	6	218	
11	75.8	60.9	68.4	66.5	59	78	0	4	.....	0	0.78	0.0	30.12	29.76	29.932	4.1	4.1	209	24	SSW	13	207	
12	72.1	54.5	63.3	62.6	56	80	1	0	.....	0	0.08	0.0	29.87	29.73	29.822	2.0	1.7	264	17	WNW	10	299	
13	70.7	47.3*	59.0	57.9	50	77	6	0	.....	0	0.01	0.0	29.87	29.73	29.799	2.5	2.2	255	23	W	12	266	
14	63.9	50.4	57.2*	56.3	51	83	8	0	.....	0	0.09	0.0	30.03	29.87	29.938	1.7	1.4	276	16	SW	8	292	
15	74.2	48.4	61.3	61.1	53	77	4	0	.....	0	0.00	0.0	30.06	29.90	29.999	1.1	1.0	306	15	WNW	8	312	
16	79.4	55.3	67.4	63.6	60	88	0	2	..3.5....	0	0.28	0.0	29.90	29.62	29.739	1.2	1.1	208	19	S	11	227	
17	78.0	58.6	68.3	66.2	60	82	0	4	.....	0	0.02	0.0	29.77	29.70	29.737	1.6	1.6	210	23	SSW	10	178	
18	77.4	56.9	67.2	66.6	60	81	0	2	.....	0	0.62	0.0	29.83	29.64	29.697	1.6	1.3	242	14	S	8	228	
19	72.6	53.0	62.8	62.6	55	76	2	0	.....	0	0.00	0.0	30.09	29.83	29.946	1.9	1.7	240	21	W	9	254	
20	79.7	51.4	65.5	65.0	56	76	0	1	.....	0	0.00	0.0	30.18	30.09	30.143	0.6	0.5	259	11	NW	7	318	
21	78.8	55.2	67.0	64.5	60	87	0	2	.....	0	0.30	0.0	30.20	30.10	30.154	0.2	0.1	38	12	NE	6	38	
22	75.3	57.8	66.6	64.3	61	91	0	2	.....	0	0.00	0.0	30.12	30.07	30.095	0.4	0.4	306	8	NW	5	316	
23	78.7	56.0	67.3	67.5	62	83	0	3	.....	0	0.00	0.0	30.09	29.90	30.006	1.1	0.8	165	14	SSE	8	154	
24	75.4	59.2	67.3	66.9	61	81	0	2	.....	0	0.10	0.0	29.90	29.78	29.831	0.5	0.2	150	13	SSE	6	190	
25	79.9	60.6	70.3	68.0	63	85	0	6	..3.....	0	0.00	0.0	29.87	29.81	29.832	0.5	0.4	222	9	SW	4	241	
26	81.3	61.1	71.2	71.2	65	82	0	6	.....	0	0.05	0.0	29.81	29.74	29.770	2.5	2.4	205	23	S	12	204	
27	79.4	63.5	71.5	71.3	63	76	0	7	.....	0	0.00	0.0	29.85	29.77	29.791	2.7	2.4	231	20	S	10	223	
28	83.5	59.5	71.5	72.2	63	73	0	7	.....	0	0.00	0.0	29.88	29.76	29.828	2.2	2.2	208	15	S	8	219	
29	84.1*	65.5	74.8*	73.1	66	80	0	10	.....	0	0.11	0.0	29.80	29.66	29.734	3.3	3.3	209	26	SSW	12	201	
30	80.8	59.2	70.0	70.8	63	79	0	5	.....	0	0.10	0.0	29.84	29.65	29.748	1.7	1.6	273	16	NW	10	290	
31	66.2	57.7	61.9	62.5	60	92	3	0	.....	0	1.16	0.0	29.91	29.79	29.825	0.9	0.8	212	11	SSW	6	221	
Sum	Sum	-----	-----	---	----	Ttl	Ttl						For the month:						---				
2336	1725					43	67		Number of Days	6.01	0.0	30.28	29.62	29.861	1.6	1.1	235	30	WNW	17	289		
Avg	Avg	Avg	Mean	Avg	Avg	----	----		Precip	Season Ttl	Date	Date	-----	----	----	---	Date	Date	Avg				
75.4	55.7	65.5	64.6	59	82.2	----	----		≥.01 inch	27.38	0.0	10	16	-----	----	----	---	6	6				
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			43	114	Thunder	4	Precipitation			Snow, Ice Plts										
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	1.44	3- 4	0.0	-	0						-					
0	0	0	0	----	----	Clear	2	Partly Cloudy			15	Cloudy			14								

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: Sunshine index 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 July 2009: Westford

Hour	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Wind				
						Humidity	Direction	Speed						Humidity	Direction	Speed						Humidity	Direction	Speed		
JUL 01									JUL 02									JUL 03								
01		29.64	0.00	59	57	93	15	3	7	29.78	0.00	61	57	85	14	0	4	29.70	0.00	61	59	94	15	0	1	
04		29.66	0.00	55	54	94	18	0	0	29.77	0.00	62	57	84	19	3	8	29.70	0.00	61	59	93	21	2	4	
07		29.70	0.00	60	59	96	18	0	0	29.78	0.00	63	58	86	17	0	1	29.72	0.00	61	60	94	20	1	5	
10		29.73	0.00	70	64	81	18	1	12	29.78	0.00	68	61	78	14	1	9	29.72	0.00	69	64	84	22	3	10	
13		29.72	0.00	71	63	77	16	1	11	29.76	0.00	68	61	80	20	0	11	29.69	0.06	65	63	93	18	0	6	
16		29.70	0.00	74	65	74	15	0	9	29.73	0.00	69	62	78	15	2	8	29.71	0.00	62	61	95	18	0	4	
19		29.75	0.00	68	62	79	14	0	9	29.72	0.00	64	60	88	13	0	4	29.70	0.00	64	61	91	21	2	9	
22		29.80	0.00	62	58	85	21	0	5	29.72	0.00	62	60	93	15	0	0	29.70	0.15	62	60	94	21	0	6	
JUL 04									JUL 05									JUL 06								
01		29.67	0.56	61	59	95	21	5	12	29.77	0.00	55	52	88	31	0	0	29.76	0.00	52	50	93	33	0	0	
04		29.66	0.00	61	60	96	23	5	9	29.75	0.00	55	51	84	22	0	2	29.75	0.00	49	47	93	22	0	0	
07		29.68	0.00	61	59	95	24	1	5	29.77	0.00	57	53	87	26	0	4	29.74	0.00	55	52	89	21	0	4	
10										29.79	0.00	66	55	68	31	2	9	29.75	0.00	69	58	68	18	3	10	
13		29.67	0.00	68	61	78	29	9	14	29.79	0.00	71	60	67	29	4	12	29.73	0.00	70	56	62	26	5	8	
16		29.71	0.00	63	56	78	30	6	19	29.76	0.00	74	55	53	31	3	10	29.68	0.00	75	60	59	25	1	4	
19		29.75	0.00	59	53	79	29	3	12	29.74	0.00	71	53	52	34	0	3	29.74	0.00	58	55	93	08	1	6	
22		29.78	0.00	56	51	85	31	3	11	29.75	0.00	54	51	90	33	0	0	29.74	0.00	55	53	94	08	0	0	
JUL 07									JUL 08									JUL 09								
01		29.73	0.00	51	50	95	08	0	0	29.77	0.00	54	53	95	21	2	6	30.05	0.00	56	55	96	12	0	2	
04		29.73	0.00	54	53	96	10	0	4	29.77	0.00	54	52	94	21	0	0	30.08	0.00	53	51	95	12	0	0	
07		29.72	0.00	57	56	96	14	0	0	29.81	0.00	56	54	96	04	0	0	30.14	0.00	56	55	97	09	0	4	
10		29.71	0.00	60	58	95	07	0	3	29.85	0.00	61	57	86	23	0	5	30.18	0.00	63	58	86	23	0	0	
13		29.71	0.00	64	61	91	14	1	5	29.88	0.00	60	58	92	32	0	4	30.18	0.00	72	64	75	31	2	5	
16		29.70	0.00	65	59	83	13	0	5	29.92	0.04	60	58	94	03	0	0	30.18	0.00	73	65	76	32	0	7	
19		29.71	0.00	61	59	93	18	0	0	29.95	0.00	62	59	90	04	0	1	30.18	0.00	71	62	74	32	0	0	
22		29.74	0.00	57	55	94	20	1	4	30.01	0.00	57	56	95	12	0	0	30.20	0.00	58	56	94	32	0	0	
JUL 10									JUL 11									JUL 12								
01		30.23	0.00	55	53	95	22	1	4	30.12	0.00	63	52	68	20	2	7	29.76	0.00	61	60	94	20	3	8	
04		30.25	0.00	52	50	95	20	0	0	30.08	0.00	63	54	75	21	1	10	29.77	0.00	60	59	95	27	2	10	
07		30.27	0.00	55	54	96	21	0	1	30.05	0.00	64	57	80	19	4	12	29.82	0.00	58	56	94	30	0	6	
10		30.25	0.00	70	62	76	22	1	6	29.99	0.00	72	61	70	22	6	20	29.85	0.00	67	57	70	26	2	12	
13		30.21	0.00	77	62	59	28	3	8	29.89	0.00	74	62	66	21	7	21	29.83	0.00	71	55	58	27	4	13	
16		30.17	0.00	79	57	47	19	1	8	29.82	0.00	73	63	71	22	8	18	29.83	0.00	68	59	75	31	0	5	
19		30.13	0.00	75	56	52	20	0	6	29.80	0.19	64	62	94	20	6	11	29.85	0.00	61	55	80	31	1	5	
22		30.13	0.00	64	52	65	20	2	5	29.77	0.00	61	59	94	20	2	9	29.86	0.00	58	52	81	21	1	4	
JUL 13									JUL 14									JUL 15								
01		29.84	0.00	51	48	89	33	0	0	29.88	0.00	51	49	93	21	1	5	30.02	0.00	57	51	79	31	0	6	
04		29.80	0.00	50	48	94	21	1	3	29.88	0.00	53	48	85	26	2	7	30.02	0.00	53	49	87	32	0	1	
07		29.80	0.00	54	51	90	21	2	5	29.92	0.00	54	49	86	21	1	6	30.05	0.00	53	51	95	30	1	5	
10		29.78	0.00	64	52	65	25	5	10	29.92	0.00	56	52	88	21	1	4	30.05	0.00	64	54	70	32	1	9	
13		29.74	0.00	65	51	60	22	3	12	29.94	0.00	58	54	88	29	1	4	30.03	0.00	69	54	59	02	1	7	
16		29.75	0.00	64	49	59	29	4	14	29.95	0.00	61	53	73	30	1	9	29.98	0.00	73	58	59	29	1	8	
19		29.81	0.00	59	48	66	23	2	6	29.98	0.00	59	52	77	27	0	5	29.94	0.00	66	57	73	04	0	1	
22		29.85	0.00	54	51	90	22	1	6	30.03	0.00	57	51	79	30	2	9	29.92	0.00	56	53	91	04	0	0	
JUL 16									JUL 17									JUL 18								
01		29.89	0.00	56	54	94	04	0	0	29.71	0.00	61	58	92	24	0	2	29.72	0.00	61	59	93	16	0	0	
04		29.83	0.00	56	53	91	26	0	0	29.71	0.00	59	55	88	20	1	5	29.67	0.00	60	59	95	08	0	3	
07		29.80	0.00	58	56	92	22	0	4	29.73	0.00	61	58	89	22	1	4	29.65	0.00	61	60	96	11	0	0	
10		29.73	0.00	64	61	89	21	3	10	29.75	0.00	69	63	81	22	3	7	29.66	0.00	67	63	89	22	3	9	
13		29.69	0.00	70	64	81	21	5	9	29.73	0.00	77	64	64	21	4	10	29.66	0.00	71	65	82	23	0	3	
16		29.64	0.00	79	68	69	16	1	6	29.73	0.00	76	65	68	23	1	9	29.67	0.00	74	65	74	22	0	9	
19		29.66	0.00	69	65	86	23	0	2	29.75	0.00	66	61	85	20	3	7	29.72	0.00	71	60	68	26	1	9	
22		29.72	0.00	61	58	92	15	0	0	29.76	0.00	64	60	88	21	1	6	29.81	0.00	64	52	65	29	3	13	

### MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.15	0.21	0.26	0.31	0.47	0.61	0.70	0.73	0.75	0.80	0.90	0.95
Ended: Date	16	04	04	04	04	04	04	04	04	04	04	04
Ended: Time	1709	0236	0237	0242	0257	0310	0316	0319	0319	0319	0313	0319

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

## July 2009: Westford

Hour	JUL 19									JUL 20									JUL 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		29.83	0.00	57	51	78	24	0	7	30.10	0.00	58	54	87	29	2	4	30.16	0.00	57	55	94	22	0	0		
04		29.85	0.00	54	50	87	20	0	3	30.12	0.00	52	50	94	20	0	0	30.17	0.00	56	54	95	22	0	0		
07		29.89	0.00	56	52	85	19	2	8	30.15	0.00	55	54	95	20	1	4	30.20	0.00	58	57	96	23	0	2		
10		29.92	0.00	67	57	70	21	5	12	30.17	0.00	70	59	68	14	1	6	30.18	0.00	70	62	78	05	1	5		
13		29.97	0.00	69	55	61	27	9	17	30.16	0.00	72	59	64	31	1	4	30.16	0.00	78	66	65	02	0	1		
16		29.99	0.00	68	58	71	26	0	4	30.14	0.00	79	60	53	31	2	8	30.13	0.00	67	63	88	32	0	0		
19		30.02	0.00	69	58	69	22	1	6	30.12	0.00	70	61	74	22	0	1	30.12	0.05	65	63	93	20	0	0		
22		30.07	0.00	59	54	84	20	0	2	30.16	0.00	60	57	89	22	0	0	30.11	0.04	62	61	95	26	0	2		
JUL 22									JUL 23									JUL 24									
01		30.09	0.00	61	59	95	00	0	0	30.09	0.00	60	59	96	06	0	0	29.88	0.00	64	58	81	17	0	6		
04		30.07	0.00	60	59	96	04	0	2	30.06	0.00	56	55	96	04	0	0	29.85	0.00	60	57	91	19	0	1		
07		30.08	0.00	61	60	96	04	0	0	30.07	0.00	60	59	96	08	1	4	29.85	0.00	60	57	90	14	0	2		
10		30.10	0.00	64	62	94	36	0	1	30.04	0.00	72	65	78	02	1	4	29.85	0.00	68	61	77	17	0	2		
13		30.11	0.00	67	64	90	29	0	1	30.01	0.00	76	65	70	20	2	9	29.82	0.00	74	62	68	05	0	5		
16		30.10	0.00	72	65	77	02	0	5	29.96	0.00	78	66	66	16	2	7	29.80	0.00	74	63	68	09	0	6		
19		30.10	0.00	68	64	85	36	0	2	29.94	0.00	71	64	77	14	0	4	29.79	0.00	72	64	76	08	0	3		
22		30.10	0.00	61	59	93	36	0	0	29.92	0.00	66	60	81	20	1	9	29.83	0.00	65	62	90	26	0	2		
JUL 25									JUL 26									JUL 27									
01		29.81	0.00	62	60	94	17	0	0	29.79	0.00	62	60	91	21	0	3	29.77	0.00	65	62	90	21	1	4		
04		29.82	0.00	62	61	96	23	1	3	29.78	0.00	65	63	93	26	0	2	29.77	0.00	65	63	92	21	0	2		
07		29.85	0.00	62	61	96	22	1	3	29.77	0.00	67	65	92	20	0	7	29.79	0.00	67	65	92	20	3	7		
10		29.86	0.00	68	64	89	26	1	5	29.77	0.00	72	67	86	20	2	14	29.79	0.00	75	67	76	19	4	12		
13		29.85	0.00	76	66	71	17	2	6	29.75	0.00	78	69	74	19	4	16	29.77	0.00	78	66	66	21	6	14		
16		29.82	0.00	78	65	64	20	0	4	29.74	0.00	78	67	70	20	3	13	29.77	0.00	78	65	65	24	5	12		
19		29.83	0.00	72	66	81	15	0	1	29.75	0.00	75	64	70	21	4	15	29.79	0.00	75	61	62	25	1	6		
22		29.83	0.00	63	60	89	14	0	0	29.79	0.00	70	64	81	21	1	10	29.84	0.00	69	58	69	29	5	12		
JUL 28									JUL 29									JUL 30									
01		29.86	0.00	66	58	75	27	1	4	29.78	0.00	69	63	82	20	2	8	29.66	0.00	66	65	96	22	1	5		
04		29.86	0.00	60	57	90	22	1	3	29.77	0.00	70	65	85	20	2	8	29.66	0.00	67	66	96	22	0	4		
07		29.87	0.00	63	59	87	19	2	8	29.79	0.00	69	64	84	19	4	10	29.72	0.00	66	65	96	29	0	4		
10		29.86	0.00	74	65	73	22	2	9	29.78	0.00	77	68	74	20	6	16	29.75	0.00	72	66	81	23	3	8		
13		29.83	0.00	80	67	64	19	2	11	29.73	0.00	84	69	62	20	3	13	29.77	0.00	77	62	59	25	4	12		
16		29.80	0.00	83	67	59	20	3	10	29.67	0.00	83	67	60	21	6	15	29.77	0.00	80	65	61	31	4	12		
19		29.77	0.00	79	66	63	20	4	12	29.69	0.00	68	65	90	20	1	12	29.79	0.00	77	63	62	32	0	2		
22		29.79	0.00	72	64	75	20	2	7	29.68	0.00	66	64	94	21	0	3	29.82	0.00	61	58	89	31	0	3		
JUL 31																											
01		29.84	0.00	58	55	92	23	0	2																		
04		29.82	0.00	62	56	80	21	1	7																		
07		29.84	0.13	61	58	92	21	0	0																		
10		29.81	0.04	60	59	95	08	0	2																		
13		29.80	0.05	64	62	94	21	5	11																		
16		29.79	0.00	65	63	95	21	0	6																		
19		29.81	0.00	66	64	94	21	0	5																		
22		29.88	0.00	63	62	95	20	1	5																		

### 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

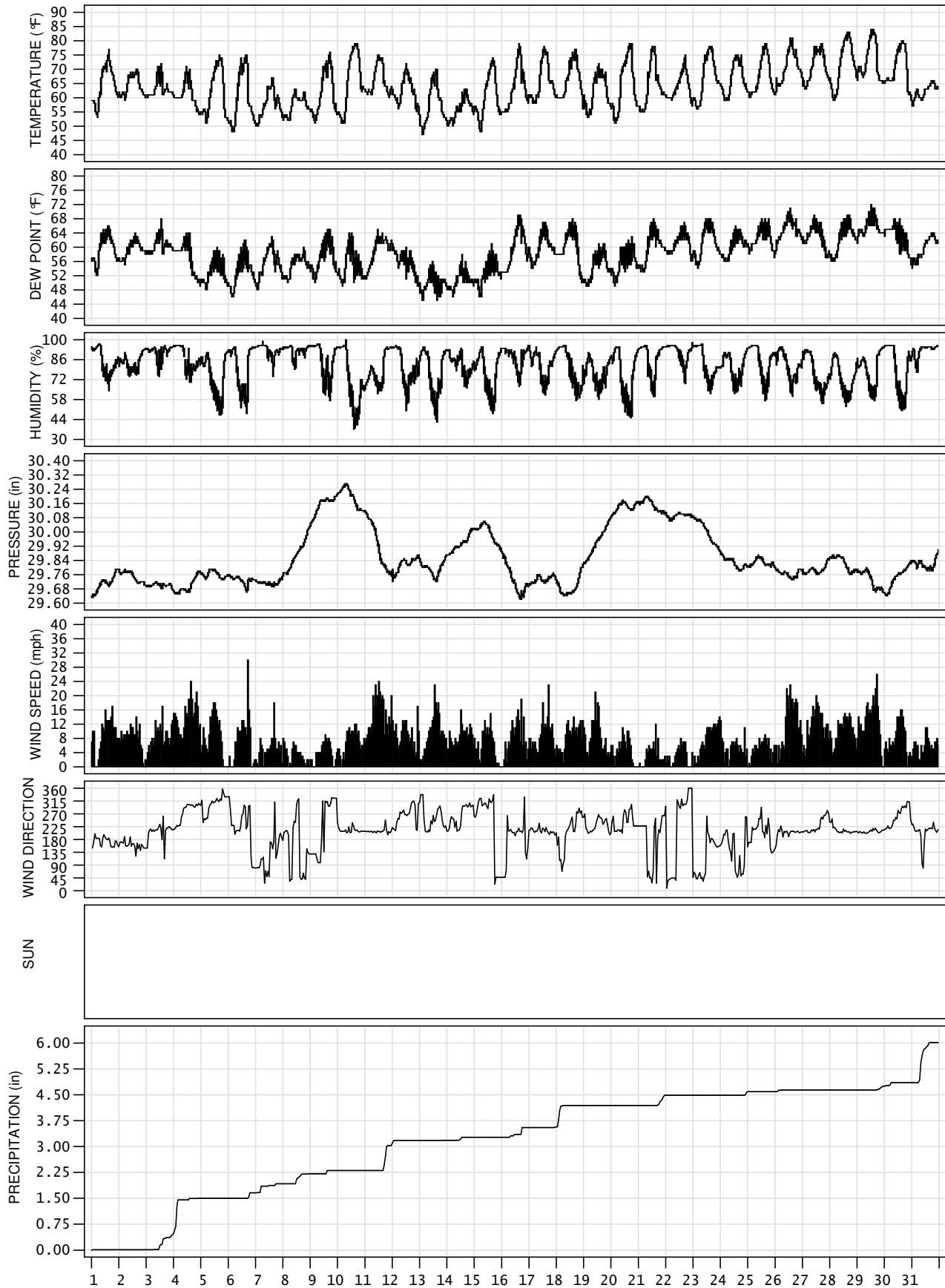
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01		29.860	59	56	90	0.8	21	0.7
04		29.854	58	55	91	0.7	22	0.6
07		29.871	60	57	92	0.8	21	0.7
10		29.879	68	61	79	2.0	22	1.6
13		29.857	71	62	72	2.7	24	2.1
16		29.843	72	62	70	1.8	25	1.2
19		29.851	68	60	78	1.0	22	0.7
22		29.875	61	57	87	0.8	25	0.6

## HOURLY PRECIPITATION (Water Equivalent) July 2009: Westford

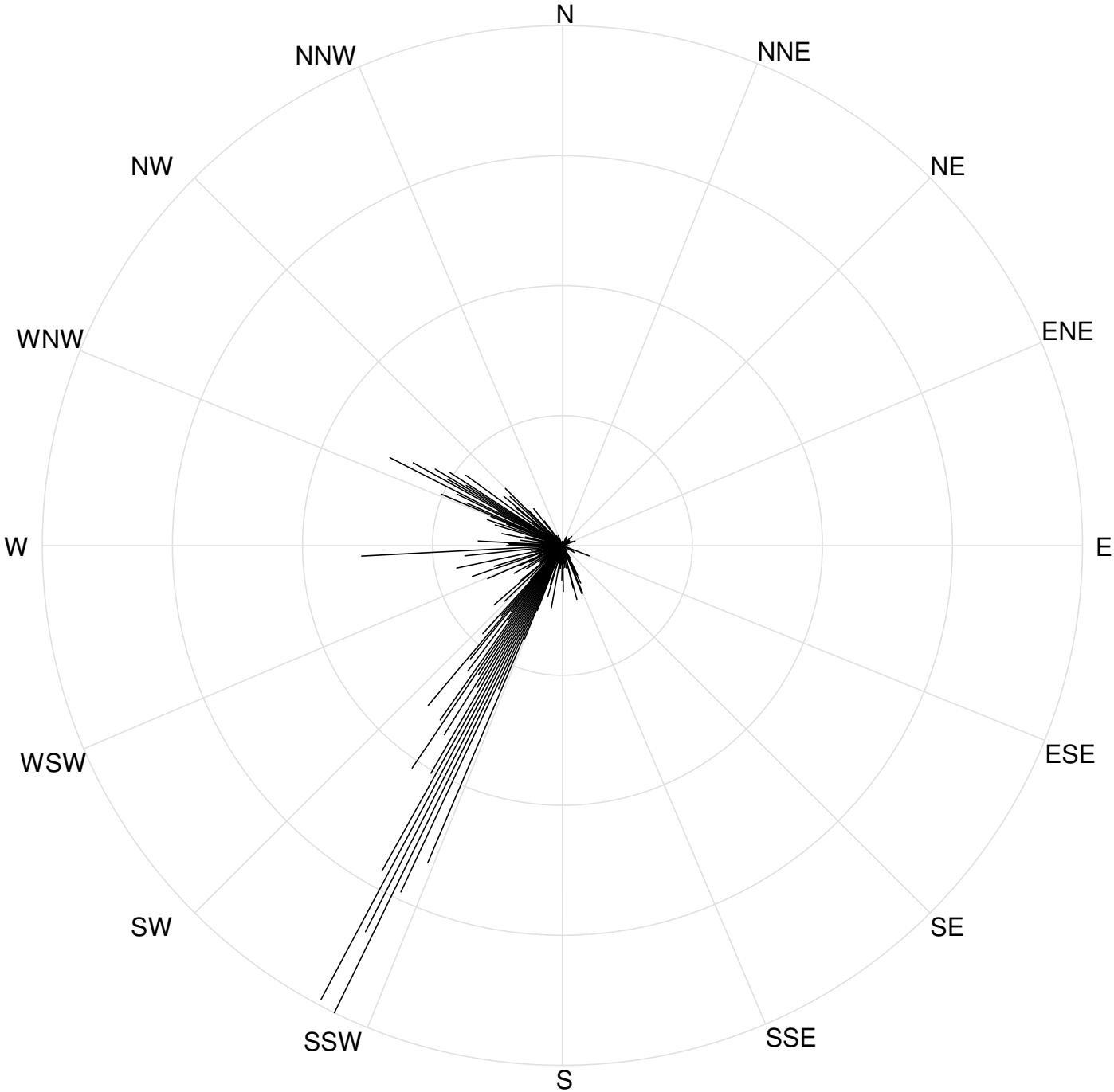
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01	0.01																							01	
02																									02
03																									03
04	0.10	0.13	0.59	0.16			0.01					0.11	0.03		0.16	0.02		0.03				0.04	0.03	0.03	04
05																						0.01			05
06																		0.03	0.13						06
07		0.01			0.18							0.02					0.05								07
08												0.13	0.03	0.03	0.02	0.05	0.02						0.01		08
09																									09
10																									10
11																	0.15	0.24	0.30	0.03					11
12	0.08																							0.06	12
13																				0.01					13
14									0.01			0.03	0.05												14
15																									15
16								0.04			0.03	0.01					0.20								16
17																							0.01	0.01	17
18		0.22	0.24	0.14	0.01	0.01																			18
19																									19
20																									20
21															0.01	0.03	0.07	0.03	0.04	0.07	0.05				21
22																									22
23																									23
24																					0.01	0.08	0.01		24
25																									25
26			0.04			0.01																			26
27																									27
28																									28
29																	0.02		0.02	0.03	0.02	0.02			29
30	0.01	0.01			0.01	0.07																			30
31						0.01	0.08	0.49	0.20	0.14	0.06	0.02	0.04	0.03	0.08	0.01									31
Sum	0.20	0.37	0.87	0.30	0.20	0.10	0.09	0.53	0.20	0.15	0.09	0.32	0.15	0.10	0.36	0.08	0.18	0.60	0.50	0.09	0.07	0.15	0.20	0.11	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 July 2009: Westford



Wind Rose: July 2009  
**Westford**



Maximum direction of wind: 55.7 miles from 206°.  
1158.1 total miles of wind.