

LOCAL CLIMATOLOGICAL DATA  
 Monthly Summary  
 July 2006

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

Date	Temperature					Humidity	Dew Pt		Precip Ty	Snow Cvr	Precip		Pressure			Wind						Sun									
	Maximum	Minimum	Average	Mean	Dew Point		Mean	Heating Base			Cooling Base	Adj. to Sea Level		Maximum	Minimum	Mean	Avg	Res	Res	Peak			Minute		Mean Index						
												Water Equivalent	Ice Pellets							Speed	Dir		Speed	Dir		Speed	Dir				
1	2	3	4A	4B	5	6	7	8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	77.4	52.5	65.0	62.3	58	86	0	0	..3.....	0	0.29	0.0	29.97	29.85	29.925	2.6	2.3	202	22	WNW	0	0									
2	84.5	62.3	73.4	71.5	62	75	0	8	..3.....	0	0.64	0.0	29.85	29.61	29.712	5.4	4.1	228	25	WSW	0	0									
3	80.3	51.9	66.1	67.9	58	73	0	1	.....	0	0.00	0.0	29.97	29.84	29.902	1.2	0.8	208	12	WNW	0	0									
4	80.9	64.8	72.9	71.4	65	82	0	8	..3.5....	0	0.30	0.0	29.85	29.66	29.755	2.1	2.0	194	20	S	0	0									
5	76.1	59.3	67.7	67.2	59	77	0	2	.....	0	0.01	0.0	29.90	29.70	29.791	1.9	1.3	253	17	WSW	0	0									
6	71.1	53.3	62.2*	62.1	55	78	3	0	.....	0	0.00	0.0	30.07	29.89	29.978	1.2	1.0	292	13	WNW	0	0									
7	79.4	57.6	68.5	67.3	58	74	0	3	.....	0	0.00	0.0	30.17	30.07	30.125	0.8	0.6	287	12	NW	0	0									
8	82.4	55.0	68.7	69.5	59	71	0	3	.....	0	0.00	0.0	30.18	29.96	30.085	1.2	1.0	201	10	SSW	0	0									
9	82.4	58.9	70.7	70.3	60	73	0	5	.....	0	0.00	0.0	29.96	29.81	29.881	1.5	1.2	228	14	S	0	0									
10	81.6	62.9	72.3	71.8	63	74	0	7	.....	0	0.01	0.0	29.93	29.84	29.875	2.6	2.5	183	17	S	0	0									
11	78.3	64.2	71.3	71.0	64	78	0	6	.....	0	T	0.0	29.99	29.90	29.942	1.9	1.5	214	18	W	0	0									
12	75.4	61.3	68.4	68.2	65	89	0	3	.....	0	0.80	0.0	30.02	29.77	29.934	0.5	0.1	337	10	N	0	0									
13	81.8	63.1	72.5	71.4	67	86	0	7	.....	0	0.09	0.0	29.86	29.76	29.825	1.1	0.9	323	14	WNW	0	0									
14	88.6	65.2	76.9	75.5	68	79	0	12	.....	0	0.00	0.0	29.90	29.80	29.856	1.6	1.3	232	13	S	0	0									
15	83.8	63.9	73.9	73.5	68	83	0	9	..3.....	0	T	0.0	29.84	29.75	29.798	1.9	1.7	195	16	WSW	0	0									
16	87.8	66.4	77.1	77.1	69	77	0	12	.....	0	0.00	0.0	29.90	29.77	29.833	1.5	1.2	196	13	SSW	0	0									
17	89.5	68.9	79.2*	79.9	70	73	0	14	.....	0	0.00	0.0	29.83	29.69	29.778	2.2	2.0	200	13	SSW	0	0									
18	80.5	60.9	70.7	73.5	66	77	0	6	.....	0	0.00	0.0	30.01	29.70	29.832	1.4	0.9	272	18	WNW	0	0									
19	84.3	56.3	70.3	69.6	61	76	0	5	.....	0	0.00	0.0	30.16	30.01	30.095	0.4	0.2	302	11	NW	0	0									
20	84.1	60.4	72.3	72.9	61	70	0	7	.....	0	0.00	0.0	30.11	29.85	30.010	2.6	2.4	193	19	SSW	0	0									
21	81.2	63.1	72.1	72.1	66	83	0	7	.....	0	0.02	0.0	29.85	29.76	29.799	0.9	0.4	288	12	WNW	0	0									
22	73.3	58.4	65.9	64.3	63	95	0	0	.....	0	0.68	0.0	29.81	29.69	29.753	0.8	0.7	349	13	N	0	0									
23	74.6	55.3	64.9	62.3	59	90	0	0	.....	0	0.13	0.0	29.88	29.73	29.807	0.6	0.5	6	12	N	0	0									
24	80.5	53.9	67.2	67.0	59	78	0	2	.....	0	0.00	0.0	29.92	29.86	29.886	1.4	0.9	238	13	W	0	0									
25	81.4	65.2	73.3	70.4	64	81	0	8	..3.....	0	0.07	0.0	29.88	29.76	29.829	3.7	3.6	194	27	SSW	0	0									
26	84.0	65.5	74.8	73.7	68	83	0	10	..3.....	0	0.03	0.0	29.86	29.77	29.818	1.9	1.6	191	16	WNW	0	0									
27	84.9	69.3	77.1	76.0	70	83	0	12	.....	0	0.00	0.0	29.79	29.72	29.757	3.0	3.0	191	19	SSW	0	0									
28	76.8	69.1	73.0	73.1	70	90	0	8	.....	0	0.01	0.0	29.77	29.68	29.730	1.5	1.2	217	12	S	0	0									
29	85.5	65.2	75.3	73.8	68	83	0	10	.....	0	0.00	0.0	29.76	29.64	29.699	2.7	2.1	225	17	SSW	0	0									
30	74.4	51.9	63.2	64.7	55	72	2	0	.....	0	0.00	0.0	29.82	29.67	29.773	1.1	0.8	322	12	WNW	0	0									
31	82.4	50.5*	66.5	67.6	61	82	0	1	.....	0	0.02	0.0	29.85	29.69	29.777	1.1	0.9	211	12	S	0	0									
Sum	Sum	-----	-----	---	----	Ttl	Ttl	Number of Days		For the month:																	---				
2509	1877					5	176			3.10	0.0	30.18	29.61	29.857	1.7	1.2	219	27	SSW	0	0										
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl	Date	Date	-----	----	----	---	Date	Date	Avg												
80.9	60.5	70.7	70.3	63	79.8	----	----	≥.01 inch 14		33.28	0.0	8	2	-----	----	----	---	25	1+												
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			5	247	Thunder 6		Precipitation		Snow, Ice Plts																			
≥ 90°F	< 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog 0		0.93	1- 2	0.0	-	0					-														
1	0	0	0	----	----	Clear 8		Partly Cloudy 19			Cloudy 4																				

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 2006: Westford

Hour	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	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
JUL 01																											
01		29.93	0.00	56	53	90	20	2	6		29.81	0.00	64	59	84	18	1	5		29.88	0.00	60	55	84	29	1	7
04		29.95	0.00	53	51	91	18	2	6		29.74	0.01	63	61	95	18	1	6		29.90	0.00	55	53	94	00	0	0
07		29.96	0.00	56	51	82	20	5	11		29.72	0.00	63	61	96	18	6	13		29.95	0.00	57	56	98	18	0	6
10		29.95	0.00	66	58	74	18	5	11		29.69	0.00	71	65	83	20	7	14		29.96	0.00	70	56	61	24	3	7
13		29.92	0.00	69	64	83	22	4	11		29.66	0.00	79	68	67	24	8	18		29.94	0.00	77	62	61	22	2	8
16		29.90	0.00	74	63	70	29	1	3		29.62	0.00	84	64	51	24	8	16		29.88	0.00	80	63	57	20	3	9
19		29.91	0.00	64	63	96	00	0	0		29.66	0.00	79	62	56	22	7	17		29.86	0.00	75	62	64	20	0	1
22		29.90	0.00	61	60	98	00	0	0		29.79	0.00	70	55	59	29	10	22		29.86	0.00	70	61	74	18	1	5
JUL 02																											
JUL 03																											
JUL 04																											
JUL 05																											
JUL 06																											
JUL 07																											
JUL 08																											
JUL 09																											
JUL 10																											
JUL 11																											
JUL 12																											
JUL 13																											
JUL 14																											
JUL 15																											
JUL 16																											
JUL 17																											
JUL 18																											

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.25	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.37	0.45	0.49
Ended: Date	04	04	04	04	04	04	04	04	02	02	02	02
Ended: Time	1710	1715	1715	1715	1715	1715	1715	1715	1715	0550	0535	0555

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.

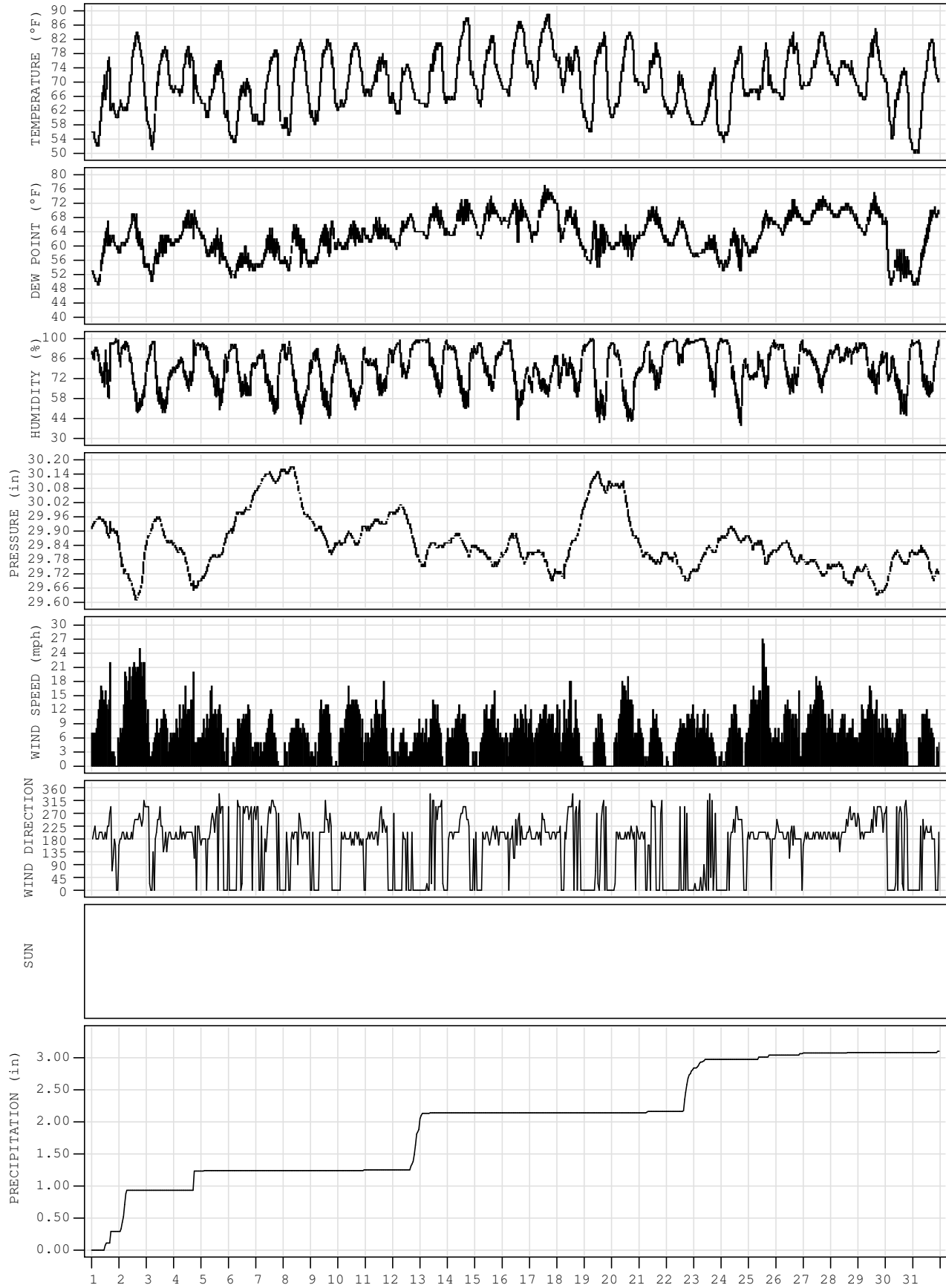


HOURLY PRECIPITATION (Water Equivalent)  
**July 2006: Westford**

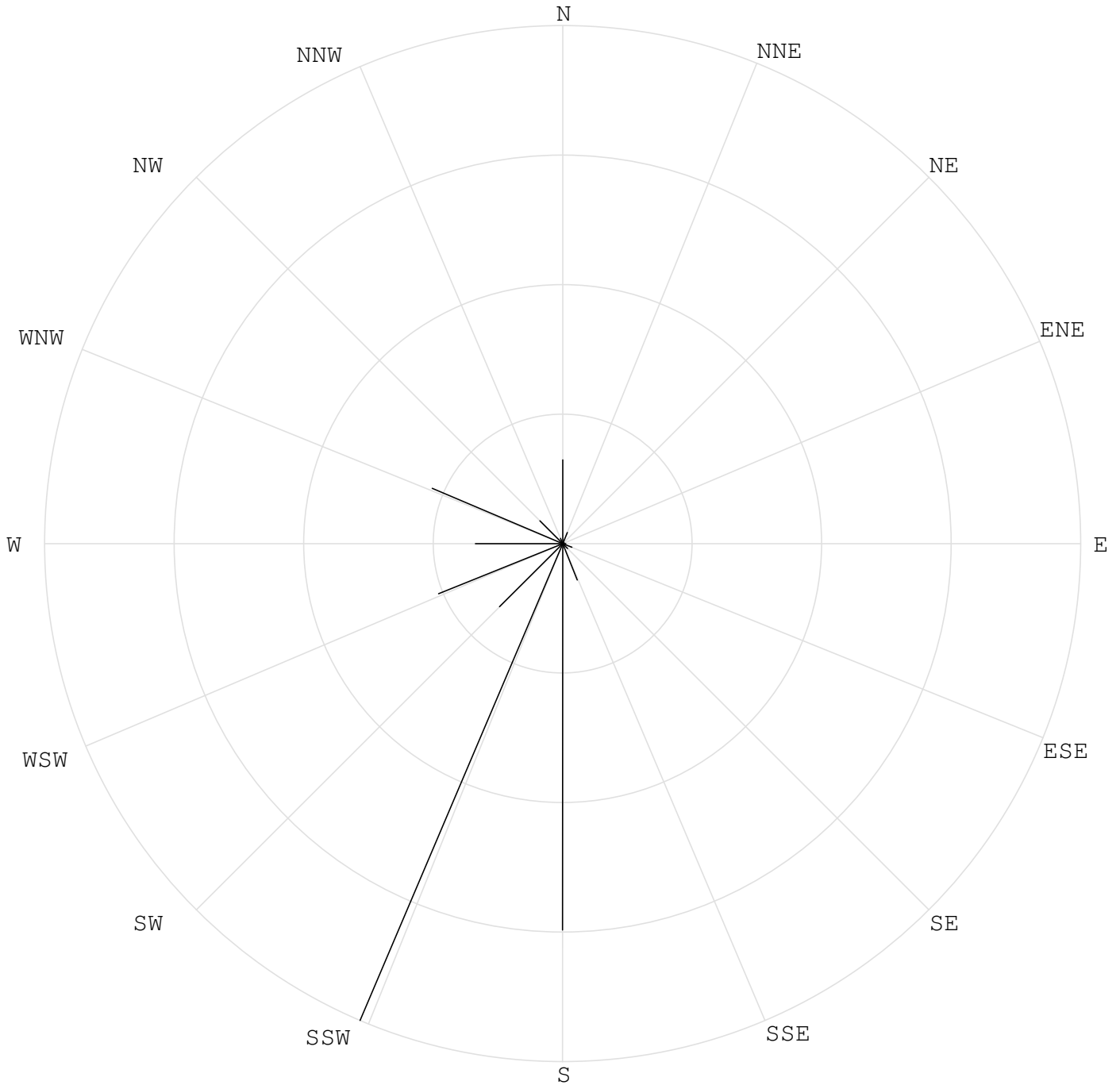
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01												0.07	0.04				0.18							01	
02		0.04	0.10	0.09	0.19	0.17	0.05																	02	
03																								03	
04																		0.30						04	
05			0.01																					05	
06																								06	
07																								07	
08																								08	
09																								09	
10																							0.01	10	
11																								11	
12																								12	
13	0.05	0.03									0.01				0.06	0.03	0.04	0.11	0.15	0.17	0.03	0.04	0.17	13	
14																								14	
15																								15	
16																								16	
17																								17	
18																								18	
19																								19	
20																								20	
21							0.01	0.01																21	
22															0.01	0.18	0.11	0.12	0.10	0.05	0.02	0.04	0.02	0.03	22
23			0.01	0.02	0.04	0.02		0.01	0.01	0.02														23	
24																								24	
25									0.04								0.03							25	
26																				0.02				0.01	26
27																								27	
28														0.01										28	
29																								29	
30																								30	
31																						0.02		31	
Sum	0.05	0.07	0.12	0.11	0.23	0.19	0.06	0.02	0.06	0.02	0.00	0.07	0.04	0.00	0.02	0.24	0.32	0.49	0.21	0.20	0.21	0.09	0.07	0.21	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.)

HOURLY-BY-HOURLY DATA  
July 2006: Westford



Wind Rose: July 2006  
**Westford**



Maximum direction of wind: 432.2 miles from 203°.  
1295.7 total miles of wind.