

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### May 2008

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	52.7	28.8*	40.8*	40.9	28	63	24	0	.....	0	0.00	T	30.19	30.10	30.137	1.9	1.5	292	15	W	9	276	
2	58.2	31.4	44.8	45.8	31	58	20	0	.....	0	0.00	0.0	30.13	30.05	30.094	2.3	1.7	172	17	SSE	9	181	
3	53.1	44.7	48.9	47.3	42	80	16	0	.....	0	0.07	0.0	30.08	29.90	29.976	5.4	5.4	168	25	S	14	180	
4	56.5	42.2	49.4	47.4	42	81	15	0	.....	0	0.29	0.0	30.06	29.86	29.929	5.5	4.7	190	24	S	13	168	
5	64.9	35.8	50.4	50.7	36	60	14	0	.....	0	0.00	0.0	30.10	29.96	30.033	1.5	1.2	292	14	NNW	9	295	
6	71.4	41.9	56.7	56.3	35	48	8	0	.....	0	0.00	0.0	29.97	29.83	29.903	3.7	2.1	236	25	SSW	16	274	
7	64.1	40.6	52.3	53.4	36	55	12	0	.....	0	0.08	0.0	29.95	29.61	29.831	1.4	0.7	223	14	S	8	189	
8	66.4	45.4	55.9	56.3	46	69	9	0	.....	0	0.09	0.0	29.78	29.47	29.593	5.7	4.2	269	28	WNW	18	288	
9	59.8	37.8	48.8	50.0	38	64	16	0	.....	0	0.00	0.0	29.86	29.70	29.778	2.2	2.0	339	18	NW	10	294	
10	66.6	38.3	52.4	52.7	38	60	12	0	.....	0	0.00	0.0	29.84	29.68	29.747	1.9	1.8	333	18	WNW	10	317	
11	69.8	37.9	53.9	55.1	35	50	11	0	.....	0	0.00	0.0	29.89	29.69	29.788	1.6	0.8	348	20	ESE	10	269	
12	65.4	46.5	56.0	55.0	33	45	9	0	.....	0	0.00	0.0	29.92	29.71	29.805	2.3	0.9	58	16	N	9	6	
13	68.8	44.5	56.7	56.4	37	50	8	0	.....	0	0.00	0.0	30.08	29.91	30.020	1.7	1.6	321	18	WNW	12	293	
14	76.1*	42.2	59.1	60.6	39	48	6	0	.....	0	0.00	0.0	30.04	29.82	29.945	2.4	2.4	200	18	SSW	11	201	
15	65.7	49.1	57.4	57.6	44	64	7	0	.....	0	0.09	0.0	29.93	29.79	29.865	3.3	1.8	237	21	WNW	11	288	
16	60.6	38.1	49.3	50.3	37	63	15	0	.....	0	0.00	0.0	29.92	29.58	29.770	1.0	0.8	319	12	W	8	284	
17	71.1	39.0	55.0	55.1	39	58	10	0	.....	0	0.01	0.0	29.58	29.28	29.417	1.3	0.9	257	13	SE	8	272	
18	64.0	42.9	53.5	53.0	42	69	11	0	.....	0	0.01	0.0	29.39	29.23	29.300	4.0	3.8	210	30	SSW	16	199	
19	46.9	38.7	42.8	43.3	39	84	22	0	.....	0	1.10	0.0	29.47	29.21	29.287	5.0	4.8	223	22	WSW	13	230	
20	58.6	40.7	49.6	49.1	41	74	15	0	.....	0	T	0.0	29.50	29.35	29.420	3.0	2.8	216	19	SW	11	235	
21	58.2	38.8	48.5	48.6	39	70	16	0	.....	0	0.02	0.0	29.47	29.33	29.377	2.4	1.8	226	18	S	11	278	
22	57.5	40.8	49.1	48.0	38	70	15	0	.....	0	0.01	0.0	29.64	29.46	29.517	2.3	2.0	265	14	W	9	277	
23	59.0	43.6	51.3	50.7	45	80	13	0	.....	0	0.10	0.0	29.85	29.63	29.749	4.0	3.9	290	23	WSW	16	284	
24	65.8	46.9	56.4	54.8	43	66	8	0	.....	0	0.02	0.0	29.96	29.84	29.884	2.2	2.1	304	21	W	12	304	
25	72.7	39.1	55.9	58.2	38	51	9	0	.....	0	0.00	0.0	30.07	29.88	29.972	1.6	1.4	265	13	W	9	281	
26	69.2	51.6	60.4	59.8	48	65	4	0	..3.....	0	0.09	0.0	29.88	29.63	29.749	3.5	3.5	190	21	SSW	12	200	
27	63.5	43.6	53.5	55.2	47	74	11	0	.....	0	0.00	0.0	30.07	29.62	29.810	4.5	3.3	276	21	WNW	12	289	
28	60.4	37.2	48.8	48.8	34	59	16	0	.....	0	0.00	0.0	30.23	30.07	30.148	2.9	2.7	296	17	W	11	294	
29	72.6	41.6	57.1	57.3	39	53	7	0	.....	0	0.00	0.0	30.09	29.89	29.965	4.5	3.2	250	23	WNW	14	268	
30	71.3	41.5	56.4	57.4	41	57	8	0	.....	0	0.01	0.0	30.11	29.89	30.016	0.7	0.4	311	11	N	6	269	
31	72.9	53.4	63.2*	60.3	57	89	2	0	..3.....	0	0.76	0.0	29.89	29.46	29.611	2.8	2.2	197	21	S	10	195	
Sum	Sum	-----	-----	---	----	Ttl	Ttl						For the month:										---
1984	1285					369	0	Number of Days		2.75	T	30.23	29.21	29.788	2.9	1.5	244	30	SSW	18	288		
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	---	Date	Date			Avg	
64.0	41.4	52.7	52.7	40	63.8	----	----	≥.01 inch	15	15.27	121.6	28	19	-----	----	----	---	18	8				
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			7441	3	Thunder	2	Precipitation			Snow, Ice Plts										
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	1.10	19	T	1	0						-					
0	0	2	0	----	----	Clear	5	Partly Cloudy			18	Cloudy			8								

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 May 2008: 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								
MAY 19										MAY 20										MAY 21									
01	29.22	0.00	46	43	89	20	4	11	29.47	0.00	45	37	75	23	4	13	29.34	0.00	45	40	82	16	0	3					
04	29.21	0.00	45	41	88	23	2	6	29.46	0.00	43	38	81	24	3	15	29.33	0.00	44	39	81	19	0	3					
07	29.22	0.00	43	37	81	19	5	14	29.48	0.00	44	39	82	24	2	10	29.35	0.00	46	40	79	19	1	6					
10	29.23	0.00	45	40	81	22	2	13	29.46	0.00	52	39	63	22	3	11	29.36	0.00	54	40	58	16	4	15					
13	29.25	0.20	42	39	90	18	3	11	29.42	0.00	57	40	53	21	3	9	29.36	0.00	56	40	55	21	4	12					
16	29.30	0.42	39	36	90	24	10	20	29.37	0.00	58	44	60	20	5	11	29.38	0.00	53	42	65	30	3	6					
19	29.37	0.00	43	40	89	22	4	10	29.36	0.00	53	44	73	17	0	2	29.42	0.00	51	36	58	25	2	5					
22	29.44	0.00	44	37	75	24	5	15	29.36	0.00	44	41	91	19	0	0	29.47	0.00	45	40	83	01	0	0					
MAY 22										MAY 23										MAY 24									
01	29.48	0.00	43	36	75	23	3	5	29.64	0.00	46	43	90	29	1	7	29.85	0.00	49	45	86	32	0	5					
04	29.47	0.00	41	35	78	22	0	0	29.67	0.00	45	43	92	30	1	5	29.84	0.00	47	43	86	24	0	3					
07	29.48	0.00	42	36	79	18	2	5	29.73	0.00	47	44	90	28	6	11	29.88	0.00	48	43	84	28	2	5					
10	29.50	0.00	47	36	65	21	5	9	29.77	0.00	53	45	73	27	9	17	29.90	0.00	55	46	70	30	2	12					
13	29.50	0.00	54	38	55	28	6	10	29.75	0.00	56	47	72	27	8	16	29.90	0.00	60	39	46	30	7	21					
16	29.51	0.00	57	40	54	27	4	8	29.76	0.00	52	48	85	30	3	10	29.89	0.00	63	40	42	28	6	13					
19	29.56	0.00	52	40	63	28	4	7	29.81	0.00	54	46	74	30	4	10	29.90	0.00	61	44	53	28	0	1					
22	29.62	0.00	46	43	89	26	2	3	29.84	0.00	48	43	83	00	1	10	29.93	0.00	53	40	61	28	0	2					
MAY 25										MAY 26										MAY 27									
01	29.96	0.00	51	38	60	01	0	3	29.86	0.00	57	38	49	18	2	8	29.63	0.00	61	56	84	19	5	10					
04	29.98	0.00	40	36	84	03	0	0	29.84	0.00	53	37	54	18	2	7	29.64	0.00	61	57	87	20	6	15					
07	30.03	0.00	46	39	77	03	0	1	29.84	0.00	58	41	53	18	3	14	29.69	0.00	62	57	83	25	3	11					
10	30.06	0.00	61	39	44	26	2	5	29.79	0.00	64	45	51	20	8	17	29.78	0.00	53	48	82	30	4	19					
13	30.01	0.00	67	38	34	26	5	12	29.73	0.00	60	56	86	16	1	3	29.85	0.00	49	43	80	28	3	14					
16	29.95	0.00	72	37	28	26	4	9	29.66	0.00	68	56	66	22	5	10	29.89	0.00	55	43	63	30	5	15					
19	29.90	0.00	71	44	38	24	0	3	29.65	0.00	59	56	88	18	4	10	29.92	0.00	53	40	63	28	3	13					
22	29.91	0.00	60	38	44	26	2	6	29.64	0.00	62	56	80	18	5	14	30.02	0.00	48	34	67	31	2	13					
MAY 28										MAY 29										MAY 30									
01	30.08	0.00	40	32	73	30	3	7	30.07	0.00	46	34	62	19	2	4	30.01	0.00	52	31	44	01	1	5					
04	30.12	0.00	39	32	78	01	1	5	30.03	0.00	45	34	66	18	4	9	30.05	0.00	44	34	66	04	0	2					
07	30.19	0.00	40	34	78	00	1	10	30.01	0.00	46	36	67	19	7	14	30.10	0.00	46	35	65	02	0	5					
10	30.22	0.00	50	34	54	28	6	13	29.96	0.00	58	38	47	22	8	20	30.10	0.00	61	38	43	30	0	1					
13	30.20	0.00	55	36	49	28	3	16	29.91	0.00	68	43	40	26	8	17	30.06	0.00	67	40	38	29	4	6					
16	30.15	0.00	60	37	42	31	4	12	29.89	0.00	70	46	42	29	5	16	29.97	0.00	69	45	42	24	0	4					
19	30.11	0.00	59	34	40	30	3	9	29.90	0.00	68	44	41	31	8	14	29.92	0.00	64	50	60	13	0	0					
22	30.11	0.00	49	33	54	20	1	4	29.96	0.00	57	44	63	01	0	7	29.91	0.00	56	52	86	09	0	2					
MAY 31																													
01	29.85	0.00	55	52	88	08	2	4																					
04	29.75	0.00	54	52	93	06	0	0																					
07	29.70	0.09	54	52	93	08	1	5																					
10	29.59	0.00	59	56	92	18	4	13																					
13	29.54	0.00	62	60	92	21	4	14																					
16	29.48	0.00	70	65	84	22	8	13																					
19	29.46	0.00	69	64	83	19	3	8																					
22	29.56	0.05	60	57	89	30	0	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

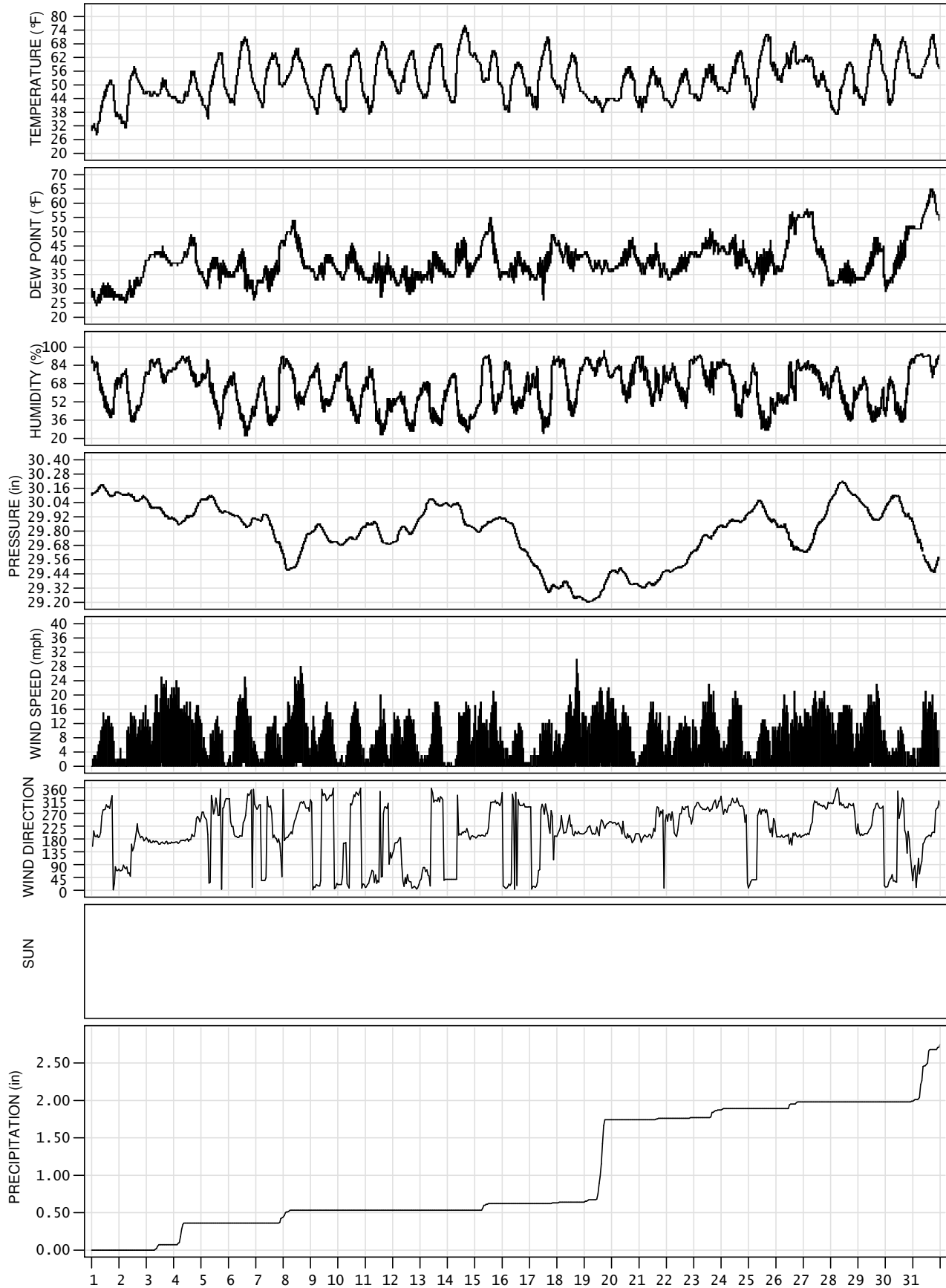
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01		29.800	47	38	71	1.7	20	1.1
04		29.790	44	38	77	1.2	19	0.9
07		29.815	46	39	77	1.9	20	1.2
10		29.814	55	40	59	3.7	24	2.4
13		29.785	59	41	54	4.2	27	2.6
16		29.755	62	41	50	4.7	27	2.7
19		29.762	58	41	55	2.8	26	1.2
22		29.788	50	40	68	1.3	22	0.8

## HOURLY PRECIPITATION (Water Equivalent) May 2008: Westford

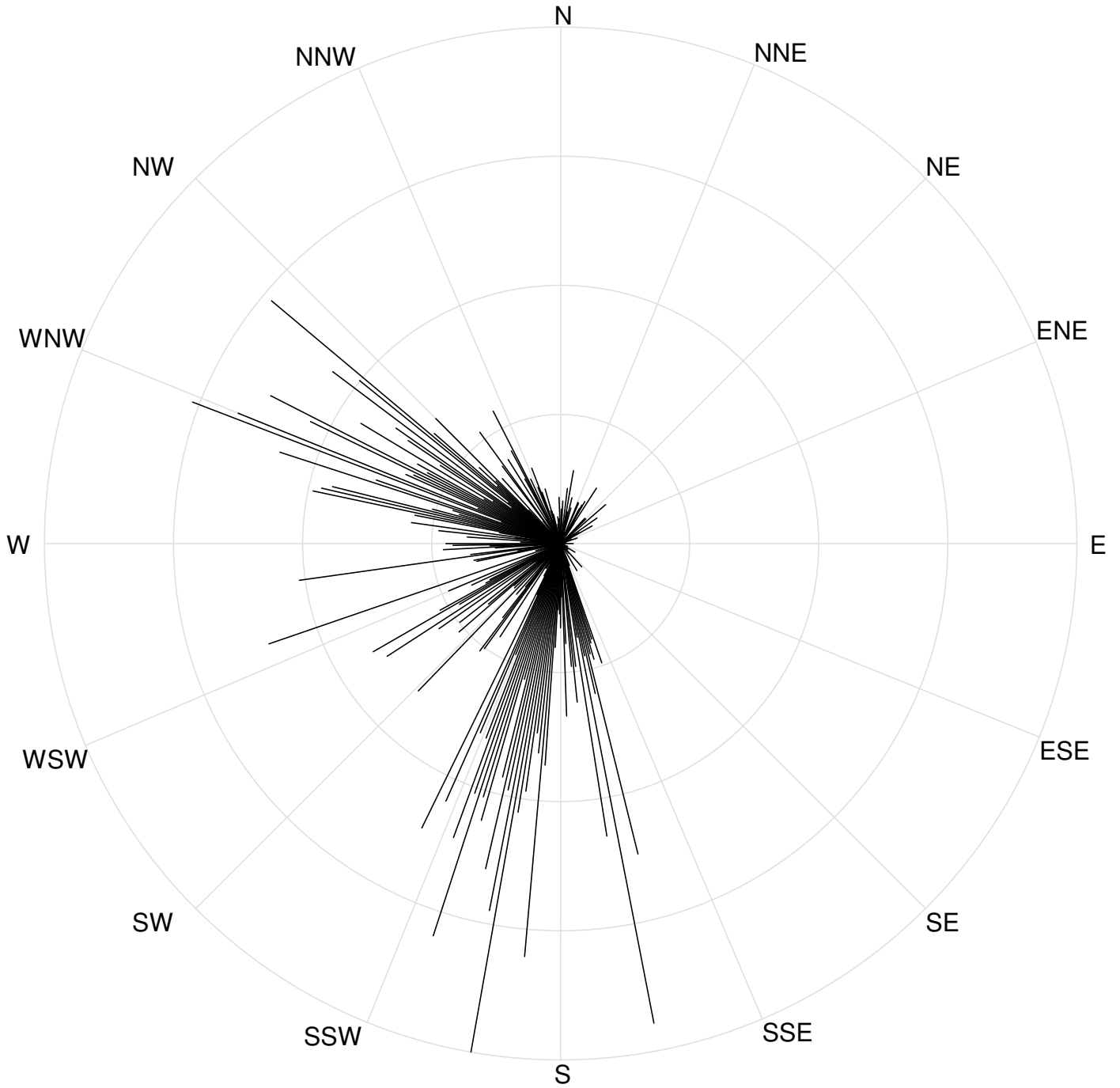
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01																								01	
02																									02
03																									03
04				0.02	0.01	0.08	0.10	0.01	0.01	0.03	0.02													04	
05																									05
06																									06
07																									07
08	0.02	0.04	0.01		0.01	0.01															0.01	0.05	0.01	0.01	08
09																									09
10																									10
11																									11
12																									12
13																									13
14																									14
15							0.03	0.04		0.01		0.01													15
16																									16
17																									17
18		0.01																			0.01				18
19	0.01		0.01	0.01						0.01	0.07	0.14	0.09	0.17	0.27	0.24	0.08								19
20																									20
21																0.01	0.01								21
22																									22
23																0.01	0.06		0.01	0.01		0.01	0.01		23
24	0.01	0.01																							24
25																									25
26																									26
27											0.05	0.01						0.02	0.01						27
28																									28
29																									29
30																								0.01	30
31	0.01	0.01			0.01	0.02	0.17	0.05	0.19	0.01		0.02	0.02	0.16	0.02							0.03		0.04	31
Sum	0.05	0.07	0.02	0.03	0.03	0.11	0.30	0.16	0.22	0.05	0.03	0.15	0.17	0.25	0.21	0.33	0.25	0.11	0.02	0.01	0.03	0.08	0.02	0.05	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 May 2008: Westford



Wind Rose: May 2008  
**Westford**



Maximum direction of wind: 47.1 miles from 190°.  
2120.6 total miles of wind.