

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

February 2017

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		11	12	13	14	15	16	17	18	19	20	21	22	23		
1	29.2	11.9	20.6	22.1	19	87	44	0	.....	4	0.09	0.9	29.90	29.73	29.793	1.5	1.4	234	15	SSW	8	214	20
2	26.5	16.3	21.4	22.3	13	69	43	0	.....	4	0.01	0.6	30.07	29.87	29.949	2.4	2.3	275	24	W	14	305	81
3	22.7	14.9	18.8	18.5	13	79	46	0	.....	5	0.06	1.4	30.07	30.00	30.038	1.3	1.3	267	13	W	8	290	36
4	24.4	9.1	16.8	19.1	11	70	48	0	.....	5	T	T	30.20	30.07	30.127	3.0	2.8	264	21	WSW	11	316	64
5	30.5	20.1	25.3	25.6	17	69	39	0	.....	5	T	T	30.08	29.64	29.793	4.6	4.0	227	27	WNW	16	313	50
6	25.0	9.4	17.2	13.9	8	78	48	0	.....	7	0.10	2.4	30.09	29.76	30.026	1.6	1.6	317	29	W	17	309	75
7	29.8	13.6	21.7	21.0	18	87	43	0	...4.6...	8	0.32	2.4	30.07	29.43	29.890	2.1	2.0	185	31	SSW	12	187	10	
8	41.1	19.9	30.5	32.4	28	82	34	0	...6...	5	0.17	0.0	29.80	29.30	29.558	3.4	2.7	220	30	SW	15	301	67	
9	19.9	1.2	10.5	8.1	3	79	54	0	.....	6	0.14	1.5	29.91	29.75	29.815	0.6	0.6	342	18	NNE	9	322	14
10	10.1	1.0*	5.6*	5.4	-5	63	59	0	.....	6	T	T	30.19	29.90	30.085	3.4	3.4	313	26	WNW	17	305	104
11	20.2	4.5	12.4	13.5	11	88	52	0	.....	7	0.08	0.9	30.16	29.91	30.008	0.0	0.0	0	0	N	0	19	10
12	25.4	7.8	16.6	18.7	17	92	48	0	.....	13	0.43	5.1	30.17	29.55	29.919	1.3	1.3	190	16	SSW	9	199	9
13	25.0	15.0	20.0	19.8	18	91	45	0	.....	18	0.31	6.2	29.95	29.51	29.767	1.6	1.6	321	22	SSW	12	312	6
14	29.7	9.3	19.5	22.0	16	79	45	0	.....	16	T	T	29.93	29.58	29.789	1.6	1.3	220	12	S	8	197	41
15	33.4	21.1	27.3	28.8	25	86	38	0	.....	18	0.34	4.8	29.58	29.32	29.408	0.9	0.4	189	14	NW	7	311	35
16	24.2	20.0	22.1	21.8	19	91	43	0	.....	21	0.22	3.8	29.67	29.35	29.498	2.0	1.9	309	24	NW	13	292	14
17	29.8	13.5	21.6	19.9	13	77	43	0	.....	19	T	T	29.83	29.67	29.769	1.6	1.6	304	21	NW	12	316	131
18	47.4	17.7	32.6	34.8	24	65	32	0	.....	14	0.00	0.0	29.81	29.38	29.573	5.3	5.3	210	28	SSW	16	217	129
19	47.7	33.4	40.6	41.4	34	74	24	0	.....	9	0.00	0.0	29.98	29.51	29.702	2.6	2.1	263	20	NW	11	321	72
20	33.4	16.0	24.7	27.0	19	73	40	0	.....	9	0.00	0.0	30.39	29.98	30.228	0.8	0.7	331	24	NNW	9	308	133
21	41.2	11.6	26.4	29.2	17	63	38	0	.....	8	T	0.0	30.37	29.95	30.164	4.0	4.0	204	28	S	13	204	82
22	54.1	37.2	45.6	42.6	33	69	19	0	.....	6	0.00	0.0	29.96	29.76	29.875	3.3	3.2	210	19	SSW	10	214	110
23	59.2	44.3	51.8*	50.9	42	72	13	0	.....	1	T	0.0	29.80	29.55	29.682	6.0	5.5	213	25	S	14	207	94
24	46.9	34.4	40.7	39.7	37	91	24	0	.2.....	1	0.03	0.0	29.88	29.72	29.801	0.2	0.1	297	13	WNW	8	294	46	
25	64.2*	32.2	48.2	48.1	44	88	17	0	.23.....	1	0.89	1.2	29.72	29.32	29.530	3.9	2.8	223	32	W	22	298	57	
26	33.8	19.9	26.8	27.2	19	71	38	0	.....	1	T	T	30.06	29.51	29.813	5.4	5.2	278	26	W	17	278	103
27	41.8	25.0	33.4	34.1	24	68	31	0	.....	T	0.00	0.0	30.29	30.04	30.147	3.5	3.3	217	23	S	12	215	71
28	50.4	25.9	38.2	39.8	30	68	27	0	.....	0	0.00	0.0	30.34	29.84	30.181	2.0	2.0	195	18	SSW	9	216	115
Sum	Sum	-----	-----	---	----		Ttl	Ttl					Total	Total	For the month:						---			
967	506						1075	0	Number of Days				3.19	31.2	30.39	29.30	29.855	2.5	1.7	239	32	W	22	298
Avg	Avg	Avg	Mean	Avg	Avg	Avg	----	----	Precip				Season Ttl	Date	Date	-----	----	---		Date	Date	Avg		
34.5	18.1	26.3	26.7	20	77.5	----	----	----	≥.01 inch	14			4.45	66.4	20	8	-----	----	---		25	25	63	
Number of Days							Season to Date	Snow, Ice ≥1.0 inch	9	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date								
Max Temperature			Min Temperature			5018	0	Thunder	1	Precipitation			Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	----	----	Heavy Fog	2	0.00	-	6.2	13	21			16							
0	15	24	0	----	----	----	----	Clear	2	Partly Cloudy			10	Cloudy			16							

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 February 2017: 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
FEB 01																											
00	0	29.78	0.00	13	8	80	22	0	0	0	29.89	0.00	26	20	79	25	2	7	0	30.07	0.00	17	14	89	35	0	0
03	0	29.76	0.00	15	11	87	22	0	0	0	29.87	0.00	26	20	79	23	5	12	0	30.05	0.00	15	13	91	13	0	0
06	0	29.73	0.00	17	15	91	22	0	0	0	29.89	0.00	23	15	70	28	0	4	0	30.03	0.00	18	13	78	24	3	7
09	23	29.75	0.00	22	20	92	19	3	5	113	29.96	0.00	22	17	81	29	5	8	32	30.06	0.00	19	15	86	30	0	0
12	54	29.74	0.00	27	23	87	21	4	7	388	29.97	0.00	23	10	58	30	5	15	39	30.03	0.00	19	16	86	31	3	9
15	54	29.78	0.00	27	24	87	27	5	8	172	29.95	0.00	24	7	48	30	0	4	116	30.00	0.00	21	14	76	28	1	6
18	0	29.86	0.00	25	21	85	24	3	5	0	29.95	0.00	21	8	57	18	1	6	0	30.02	0.00	19	11	71	24	0	0
21	0	29.88	0.00	25	21	85	20	2	6	0	30.03	0.00	18	14	83	27	0	3	0	30.04	0.00	18	10	71	26	5	8
FEB 02																											
FEB 03																											
FEB 04																											
FEB 05																											
FEB 06																											
FEB 07																											
FEB 08																											
FEB 09																											
FEB 10																											
FEB 11																											
FEB 12																											
FEB 13																											
FEB 14																											
FEB 15																											
FEB 16																											
FEB 17																											
FEB 18																											

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ended: Date	--	--	--	--	--	--	--	--	--	--	--	--
Ended: Time	----	----	----	----	----	----	----	----	----	----	----	----

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 February 2017: 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	Direction	Speed	Gust						Direction	Speed	Gust			
FEB 19									FEB 20									FEB 21															
00	0	29.51	0.00	45	36	72	21	5	12	0	29.98	0.00	33	27	78	34	0	9	0	30.37	0.00	16	13	87	03	0	0						
03	0	29.56	0.00	43	36	76	23	2	7	0	30.03	0.00	30	24	79	01	0	0	0	30.35	0.00	19	14	83	03	0	0						
06	0	29.59	0.00	42	35	78	24	2	9	0	30.11	0.00	28	22	77	32	3	12	0	30.31	0.00	14	11	90	03	0	0						
09	114	29.61	0.00	41	36	80	23	3	12	128	30.21	0.00	25	18	74	03	0	16	299	30.27	0.00	27	17	65	21	3	8						
12	301	29.66	0.00	44	35	70	29	6	9	640	30.26	0.00	30	20	66	31	0	8	346	30.18	0.00	37	15	40	21	9	19						
15	137	29.72	0.00	45	34	64	32	0	7	357	30.31	0.00	32	18	57	01	1	11	163	30.05	0.00	41	18	40	19	6	12						
18	0	29.82	0.00	42	32	69	34	0	5	0	30.35	0.00	25	15	66	03	0	0	0	29.99	0.00	38	20	49	21	10	24						
21	0	29.91	0.00	37	32	82	34	0	4	0	30.38	0.00	23	16	75	03	0	0	0	30.00	0.00	39	22	52	20	10	18						
FEB 22									FEB 23									FEB 24															
00	0	29.95	0.00	38	26	61	18	4	15	0	29.77	0.00	45	38	74	20	6	12	0	29.80	0.00	45	40	82	32	1	10						
03	0	29.93	0.00	38	28	67	21	4	10	0	29.74	0.00	46	38	72	20	6	12	0	29.86	0.00	40	37	88	04	0	0						
06	0	29.93	0.00	38	29	72	20	4	10	0	29.72	0.00	45	38	77	20	5	12	0	29.86	0.00	36	35	94	05	0	0						
09	369	29.94	0.00	41	31	67	21	5	11	95	29.68	0.00	49	42	78	20	9	18	186	29.86	0.00	40	38	91	09	0	4						
12	315	29.88	0.00	47	34	61	21	3	8	540	29.58	0.00	56	44	64	18	12	25	121	29.81	0.00	46	40	79	04	0	0						
15	362	29.83	0.00	52	39	61	20	4	11	125	29.58	0.00	58	45	63	21	8	22	54	29.78	0.00	42	41	95	34	0	1						
18	0	29.81	0.00	39	33	79	28	0	0	0	29.65	0.00	53	45	74	23	1	9	0	29.77	0.00	39	38	96	31	0	5						
21	0	29.79	0.00	41	36	82	19	3	5	0	29.74	0.00	52	45	76	26	4	12	0	29.73	0.00	36	35	97	28	0	0						
FEB 25									FEB 26									FEB 27															
00	0	29.72	0.00	36	35	97	28	0	0	0	29.51	0.00	34	32	94	22	0	0	0	30.05	0.00	25	19	77	21	1	11						
03	0	29.66	0.00	41	41	98	19	0	7	0	29.54	0.00	32	26	79	26	5	13	0	30.04	0.00	27	20	74	19	5	15						
06	0	29.62	0.00	51	51	97	19	6	13	0	29.64	0.00	27	20	74	27	12	22	0	30.07	0.00	27	20	75	20	5	14						
09	141	29.57	0.00	55	51	85	18	6	13	58	29.77	0.00	26	20	76	27	4	18	141	30.12	0.00	32	23	68	20	6	16						
12	181	29.50	0.00	59	52	78	15	2	11	747	29.84	0.00	29	19	66	29	0	11	385	30.15	0.00	39	26	60	22	6	12						
15	162	29.33	0.00	63	51	65	18	7	15	162	29.92	0.00	27	13	54	29	11	20	56	30.16	0.00	40	28	62	24	4	10						
18	0	29.41	0.00	46	44	93	29	14	29	0	29.99	0.00	24	14	63	31	0	0	0	30.22	0.00	40	28	61	25	4	12						
21	0	29.52	0.00	32	31	95	26	0	0	0	30.03	0.00	24	16	71	23	0	0	0	30.26	0.00	37	28	70	25	0	4						
FEB 28									FEB 29									FEB 30															
00	0	30.29	0.00	35	27	71	27	0	4																								
03	0	30.31	0.00	32	26	79	26	0	5																								
06	0	30.33	0.00	27	24	90	29	0	0																								
09	311	30.33	0.00	37	28	69	20	4	7																								
12	543	30.26	0.00	48	33	56	16	2	11																								
15	123	30.14	0.00	48	31	52	16	4	9																								
18	0	30.07	0.00	45	32	62	17	4	9																								
21	0	29.95	0.00	46	32	59	19	4	11																								

WEATHER NOTES

NOTES:
 Units: Temperature= $^{\circ}$ 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
00	0	29.853	24	20	82	1.6	24	1.0
03	0	29.848	24	19	82	1.9	24	1.3
06	0	29.856	23	19	83	3.1	25	2.0
09	108	29.877	26	20	79	3.4	24	2.3
12	273	29.857	30	21	71	3.4	23	2.1
15	138	29.830	32	22	68	3.3	23	2.0
18	0	29.850	28	21	75	2.4	24	1.8
21	0	29.862	26	20	79	1.9	23	1.5

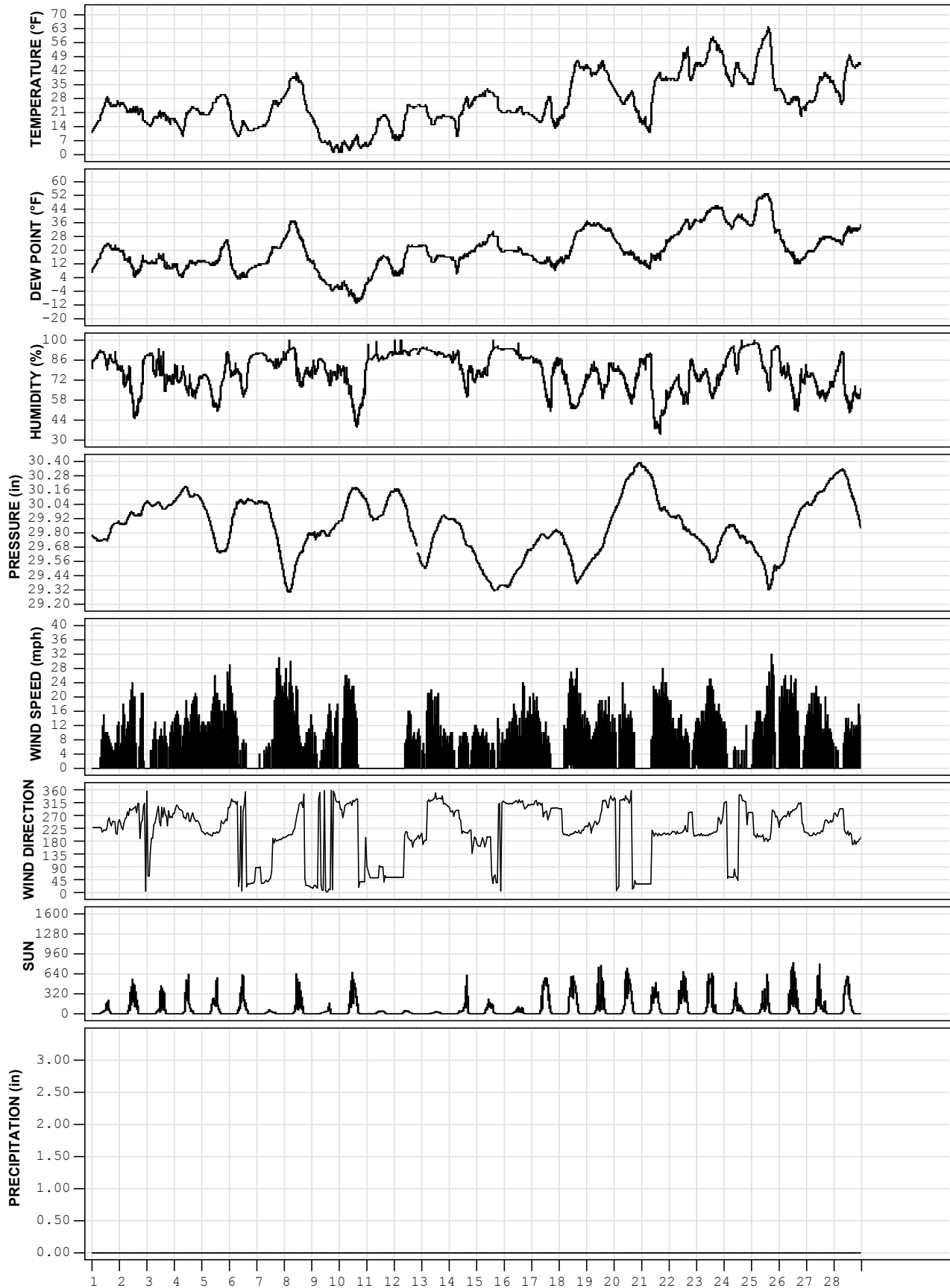
HOURLY PRECIPITATION (Water Equivalent) February 2017: Westford

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																									04
05																									05
06																									06
07																									07
08																									08
09																									09
10																									10
11																									11
12																									12
13																									13
14																									14
15																									15
16																									16
17																									17
18																									18
19																									19
20																									20
21																									21
22																									22
23																									23
24																									24
25																									25
26																									26
27																									27
28																									28
Sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Sum

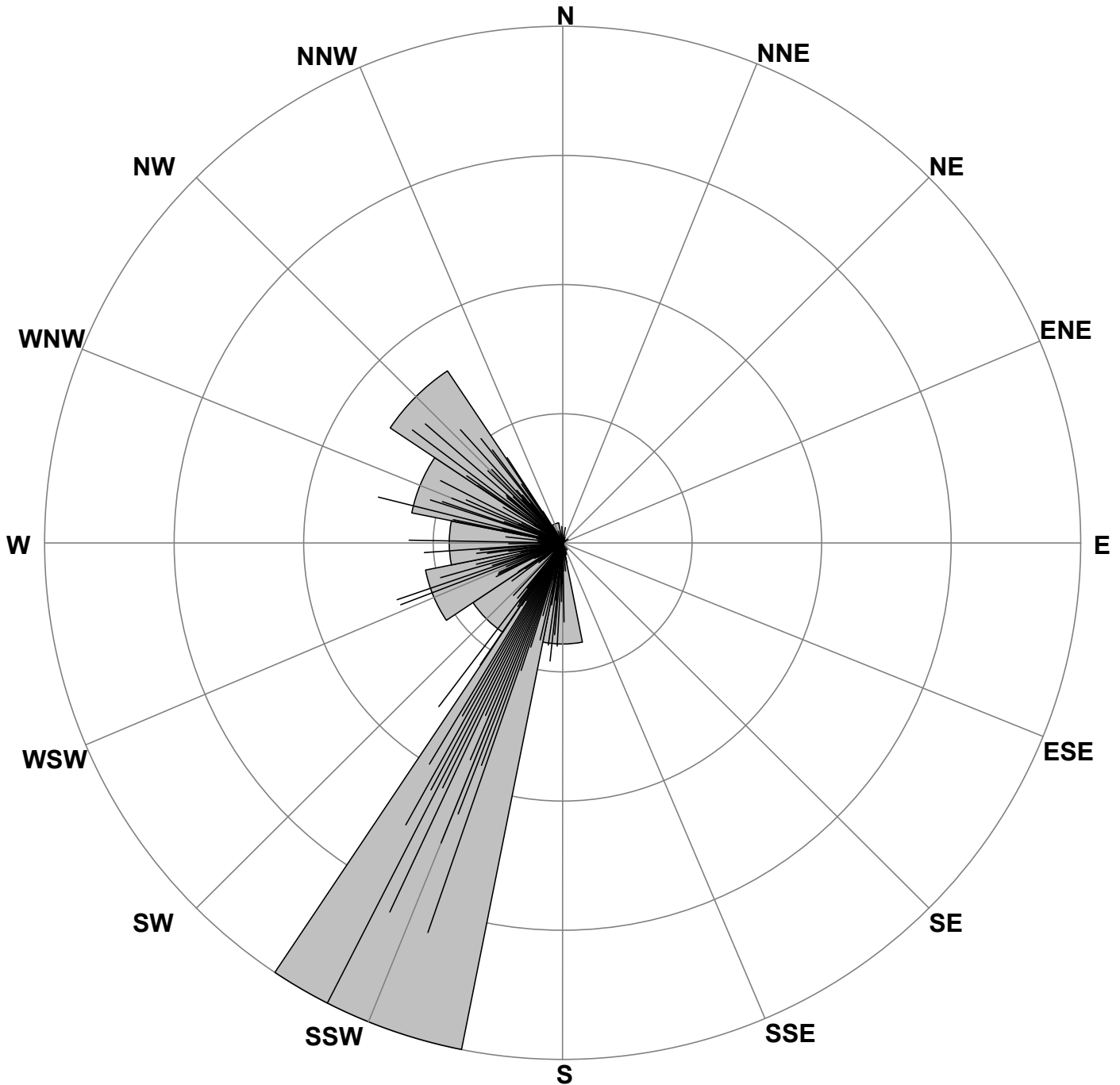
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOURLY-BY-HOURLY DATA

February 2017: Westford



**Wind Rose: February 2017
Westford**



**Maximum direction of wind: 70.3 miles from 207°
Maximum sector of wind: 627.6 miles from SSW
1678.3 total miles of wind**