

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

May 2019

Station: Westford

Latitude: 44° 37' 38" 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						Solar Radiation	
	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		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	45.3	37.0	41.1*	40.7	27	59	24	0	.....	0	0.12	0.0	30.46	30.07	30.330	0.3	0.2	237	11	N	7	248	81
2	43.6	40.1	41.8	42.1	41	96	23	0	.2.....	0	0.14	0.0	30.16	30.03	30.107	0.2	0.1	283	11	S	6	204	46
3	51.7	42.7	47.2	46.9	46	97	17	0	.2.....	0	0.38	0.0	30.13	29.91	29.989	0.2	0.2	201	13	S	6	219	38
4	57.9	42.9	50.4	48.4	46	91	14	0	.2.....	0	0.03	0.0	29.94	29.84	29.894	0.1	0.0	337	8	NW	5	304	101
5	67.5	39.0	53.3	53.2	44	73	11	0	.....	0	0.00	0.0	29.90	29.78	29.847	0.5	0.2	259	13	NE	7	211	239
6	74.7	43.4	59.0	59.4	47	68	6	0	.....	0	0.00	0.0	29.93	29.84	29.892	0.4	0.3	215	16	S	8	208	226
7	59.7	44.3	52.0	54.0	48	82	13	0	.....	0	0.37	0.0	30.15	29.93	30.018	1.7	1.4	221	16	S	10	213	76
8	52.7	31.6*	42.2	42.3	30	63	22	0	.....	0	0.00	0.0	30.34	30.15	30.286	1.2	1.2	338	18	NW	10	301	308
9	63.5	32.3	47.9	48.9	33	58	17	0	.3.....	0	0.10	0.0	30.36	30.01	30.224	0.8	0.6	214	20	SSW	8	208	209
10	60.7	45.6	53.1	51.5	48	89	11	0	.....	0	1.62	0.0	30.02	29.75	29.870	4.9	4.3	216	32	WNW	20	286	59
11	54.1	38.0	46.0	46.6	37	71	19	0	.....	0	T	0.0	30.06	29.88	30.003	2.0	1.9	314	24	WNW	15	299	218
12	55.8	36.9	46.4	47.2	35	63	18	0	.....	0	0.00	0.0	30.06	29.88	29.977	0.2	0.2	307	9	W	5	304	151
13	59.6	39.9	49.8	50.2	37	62	15	0	.....	0	0.23	0.0	29.90	29.78	29.852	0.7	0.7	190	15	WSW	9	195	131
14	47.3	36.2	41.8	40.6	38	91	23	0	.....	0	0.40	0.0	29.86	29.79	29.817	0.3	0.1	355	10	WNW	6	288	117
15	58.0	39.2	48.6	47.1	40	78	16	0	.....	0	0.26	0.0	29.81	29.73	29.773	0.7	0.7	321	19	W	9	287	196
16	61.7	40.7	51.2	50.1	43	78	13	0	.....	0	0.00	0.0	29.85	29.75	29.798	0.2	0.2	305	15	W	9	294	197
17	69.7	44.7	57.2	53.6	47	80	7	0	.....	0	0.17	0.0	29.80	29.55	29.678	1.8	1.3	289	27	NW	14	322	218
18	61.1	45.1	53.1	51.2	43	73	12	0	.....	0	0.00	0.0	30.04	29.78	29.937	1.1	1.0	301	19	WNW	11	305	170
19	76.9*	49.3	63.1	59.1	53	81	2	0	.3.....	0	0.18	0.0	30.03	29.71	29.862	0.4	0.3	224	19	W	10	265	149
20	74.8	50.6	62.7	64.8	58	81	2	0	.3.....	0	0.42	0.0	29.73	29.57	29.631	3.0	2.8	246	26	W	13	277	142
21	57.2	44.0	50.6	49.4	41	73	14	0	.....	0	0.02	0.0	30.03	29.68	29.828	4.0	3.9	306	31	WNW	17	296	115
22	64.4	41.6	53.0	53.1	42	66	12	0	.....	0	0.00	0.0	30.26	30.03	30.166	0.5	0.4	336	15	NW	8	303	296
23	69.9	47.5	58.7	59.3	51	75	6	0	.....	0	0.16	0.0	30.17	29.57	29.895	2.0	2.0	211	29	SSW	13	192	148
24	58.6	44.9	51.8	53.7	51	90	13	0	.....	0	0.17	0.0	30.11	29.58	29.858	1.3	1.0	299	21	NNE	9	273	57
25	67.4	42.0	54.7	55.5	49	82	10	0	.....	0	0.93	0.0	30.16	29.80	30.024	2.3	2.3	211	26	SW	11	209	193
26	74.5	55.8	65.1*	63.9	57	79	0	1	.....	0	0.15	0.0	29.86	29.75	29.783	2.2	1.7	233	22	S	11	216	233
27	62.7	41.8	52.3	54.5	45	72	12	0	.....	0	0.00	0.0	29.97	29.85	29.933	0.3	0.3	350	13	NW	7	306	237
28	51.5	40.2	45.9	45.5	43	92	19	0	.....	0	0.37	0.0	29.95	29.73	29.844	0.2	0.2	189	12	SW	5	205	62
29	61.6	42.8	52.2	50.8	46	85	12	0	.....	0	0.00	0.0	29.77	29.64	29.710	0.4	0.4	253	11	WSW	7	271	202
30	73.0	45.0	59.0	60.1	52	78	6	0	.....	0	0.00	0.0	29.70	29.52	29.621	1.6	1.6	217	18	W	9	213	267
31	61.9	42.5	52.2	54.1	45	72	12	0	.....	0	0.00	0.0	29.80	29.54	29.720	0.2	0.1	334	14	NW	7	305	235
Sum	Sum	-----	-----	---	----	Ttl	Ttl			Total	Total	For the month:						---					
1899	1308					401	1	Number of Days		6.22	0.0	30.46	29.52	29.909	1.2	0.7	254	32	WNW	20	286		
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	---	Date	Date	Avg			
61.3	42.2	51.7	51.5	44	77.3	----	----	≥.01 inch	19	20.70	122.2	1	30	-----	----	----	---	10	10	165			
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			8196	1	Thunder	3	Precipitation		Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	3	1.72	9-10	0.0	-	0		-									
0	0	2	0	----	----	Clear	1	Partly Cloudy		10	Cloudy		20										

NOTES:

- Units: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.
- Column 4A: value is (MAX+MIN) ÷ 2.
- Data in columns 4B, 5, 6, 15, 16, 23 are updated continuously, there by achieving a "true" mean.
- 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 W/m² and is continuously averaged for 24 hours.

OBSERVATIONS AT 3-HOUR INTERVALS

May 2019: 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									
00	0	30.03	0.00	50	45	84	01	0	0	0	29.71	0.00	62	61	96	18	2	14	0	29.69	0.00	51	48	91	27	0	8
03	0	29.98	0.00	50	45	85	10	0	0	0	29.67	0.00	63	61	96	20	4	11	0	29.72	0.00	47	43	86	29	4	15
06	9	29.93	0.00	51	46	83	13	0	0	5	29.64	0.00	63	62	96	18	2	11	30	29.76	0.00	45	40	83	28	6	15
09	137	29.91	0.00	58	47	68	21	1	6	227	29.63	0.00	66	64	95	21	4	13	81	29.78	0.00	45	38	76	31	3	20
12	188	29.88	0.00	63	54	71	14	0	13	325	29.60	0.00	70	64	81	20	2	16	258	29.81	0.00	49	41	75	31	12	25
15	745	29.83	0.00	72	58	63	05	1	7	155	29.59	0.00	71	59	65	29	2	16	274	29.83	0.00	55	41	60	32	9	21
18	156	29.77	0.00	64	61	91	14	0	0	54	29.61	0.00	66	54	66	27	11	23	123	29.91	0.00	55	41	58	31	5	20
21	0	29.75	0.05	60	59	94	28	0	0	0	29.63	0.00	61	49	64	25	8	20	0	29.98	0.00	50	41	70	32	1	8
MAY 22									MAY 23									MAY 24									
00	0	30.03	0.00	49	40	73	33	0	8	0	30.16	0.00	52	44	73	14	0	0	0	29.60	0.00	58	55	92	22	4	10
03	0	30.07	0.00	44	39	82	35	0	4	0	30.11	0.00	50	46	86	14	0	0	0	29.59	0.00	58	53	85	28	6	18
06	25	30.16	0.00	42	38	87	02	0	0	23	30.06	0.00	49	45	85	14	0	0	5	29.67	0.00	51	49	95	32	0	14
09	538	30.22	0.00	52	42	68	03	1	10	290	30.01	0.00	62	44	50	19	4	14	37	29.80	0.00	50	49	96	33	0	0
12	877	30.23	0.00	58	42	55	34	0	14	497	29.94	0.00	69	51	53	22	4	10	83	29.88	0.00	53	51	93	33	0	13
15	810	30.21	0.00	61	43	51	29	2	13	186	29.82	0.00	69	54	59	12	0	8	97	29.96	0.00	56	51	84	04	0	9
18	167	30.19	0.00	62	41	46	31	0	2	25	29.72	0.04	61	58	91	22	6	18	134	30.03	0.00	57	52	83	32	0	2
21	0	30.15	0.00	53	42	66	31	0	0	0	29.62	0.00	60	58	93	20	6	16	0	30.08	0.00	51	49	92	31	0	0
MAY 25									MAY 26									MAY 27									
00	0	30.10	0.00	45	44	95	31	0	0	0	29.80	0.15	57	56	95	19	3	15	0	29.86	0.00	60	51	72	30	3	13
03	0	30.11	0.00	43	42	96	31	0	0	0	29.75	0.00	56	55	95	22	4	13	0	29.89	0.00	52	47	82	04	0	0
06	39	30.14	0.00	43	42	96	28	0	0	18	29.78	0.00	56	55	96	21	3	10	21	29.92	0.00	47	44	91	01	0	0
09	541	30.15	0.00	58	54	84	19	0	0	540	29.75	0.00	64	61	91	22	0	12	557	29.95	0.00	58	46	63	01	0	7
12	770	30.09	0.00	67	52	60	23	2	10	309	29.77	0.00	71	63	77	32	0	9	881	29.95	0.00	62	49	62	29	0	11
15	265	30.01	0.00	65	50	59	20	0	12	287	29.78	0.00	72	57	60	31	1	15	209	29.96	0.00	55	44	67	35	0	2
18	33	29.90	0.00	61	51	70	21	3	21	355	29.79	0.00	71	55	57	28	2	11	362	29.93	0.00	61	47	60	02	0	5
21	0	29.83	0.00	56	54	94	20	7	16	0	29.83	0.00	60	53	77	31	0	0	0	29.95	0.00	50	42	74	00	0	0
MAY 28									MAY 29									MAY 30									
00	0	29.94	0.00	42	39	91	00	0	0	0	29.73	0.00	44	43	94	15	0	0	0	29.67	0.00	49	47	95	21	0	5
03	0	29.93	0.00	41	39	94	23	0	0	0	29.72	0.00	43	42	94	10	0	0	0	29.68	0.00	46	44	95	21	0	0
06	23	29.94	0.00	42	41	95	23	0	0	28	29.75	0.00	44	42	95	10	0	0	33	29.69	0.00	50	49	96	21	0	0
09	181	29.90	0.00	50	46	87	10	0	0	260	29.77	0.00	49	44	82	24	0	9	548	29.68	0.00	61	56	84	22	0	11
12	83	29.88	0.06	48	46	92	21	1	5	499	29.73	0.00	54	47	79	26	4	11	473	29.66	0.00	67	56	67	22	3	13
15	167	29.81	0.07	48	46	93	10	0	7	928	29.72	0.00	58	49	72	24	1	10	830	29.59	0.00	72	55	55	21	3	15
18	84	29.74	0.00	47	45	91	21	0	7	121	29.64	0.00	60	51	72	21	1	5	195	29.54	0.00	69	55	60	22	1	9
21	0	29.74	0.00	45	43	93	15	0	0	0	29.66	0.00	51	48	89	21	0	0	0	29.53	0.00	62	53	72	20	0	11
MAY 31																											
00	0	29.54	0.00	62	56	81	24	4	13																		
03	0	29.61	0.00	54	48	83	33	0	7																		
06	28	29.68	0.00	47	44	87	01	0	0																		
09	408	29.75	0.00	52	44	75	35	0	0																		
12	765	29.78	0.00	58	40	50	28	4	9																		
15	352	29.75	0.00	61	45	56	28	1	8																		
18	193	29.74	0.00	58	43	58	03	0	0																		
21	0	29.78	0.00	52	44	76	02	0	0																		

WEATHER NOTES

NOTES:
 Units: 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 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	29.913	48	44	85	0.9	25	0.5
03	0	29.908	46	42	86	1.2	24	0.7
06	17	29.925	45	41	88	0.4	25	0.3
09	273	29.942	51	44	79	0.7	23	0.4
12	396	29.928	55	45	70	1.6	26	1.0
15	441	29.897	58	46	65	1.2	28	0.5
18	146	29.879	57	46	67	1.4	27	0.9
21	0	29.890	51	45	79	1.0	22	0.8

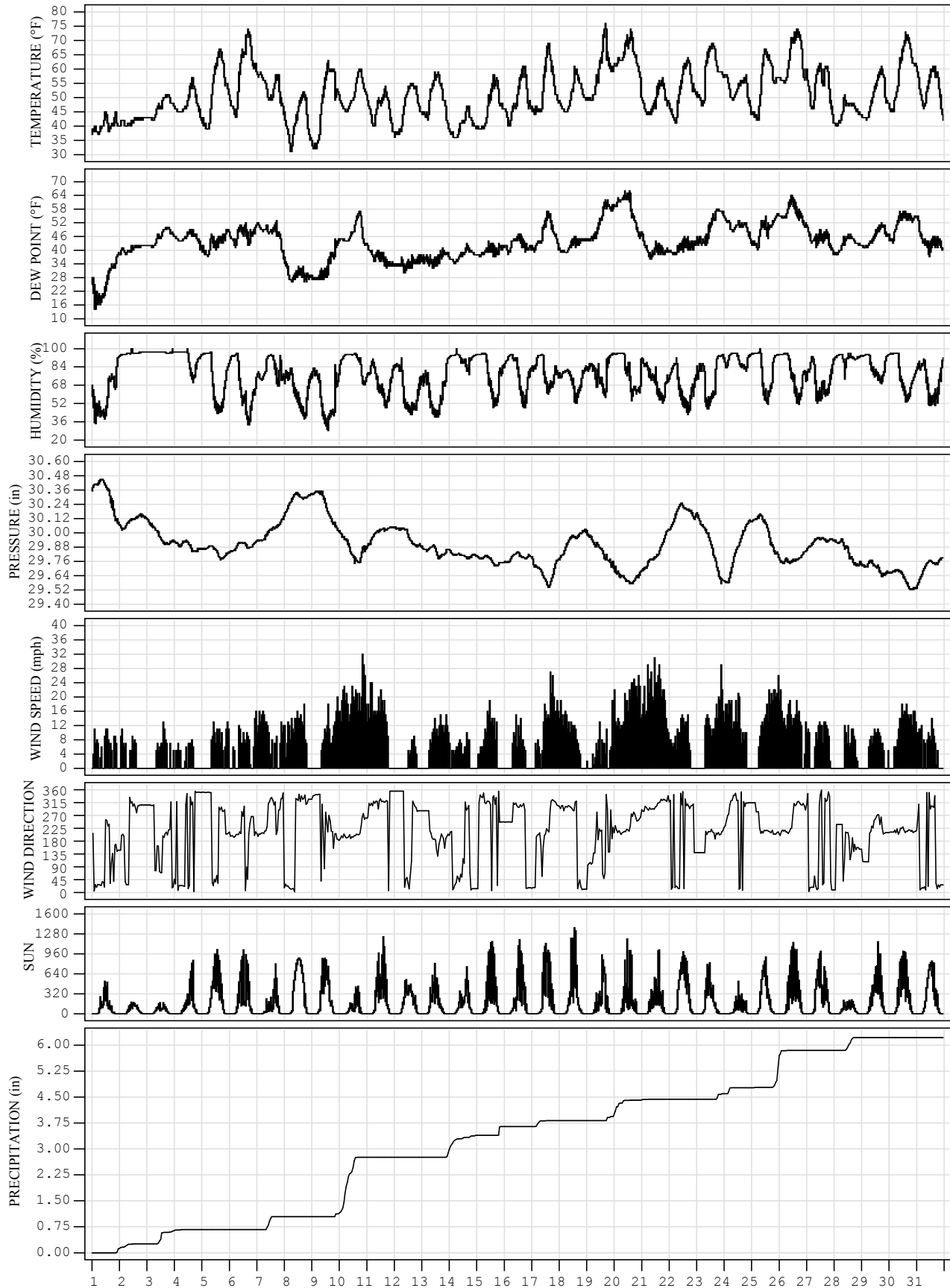
HOURLY PRECIPITATION (Water Equivalent)

May 2019: Westford

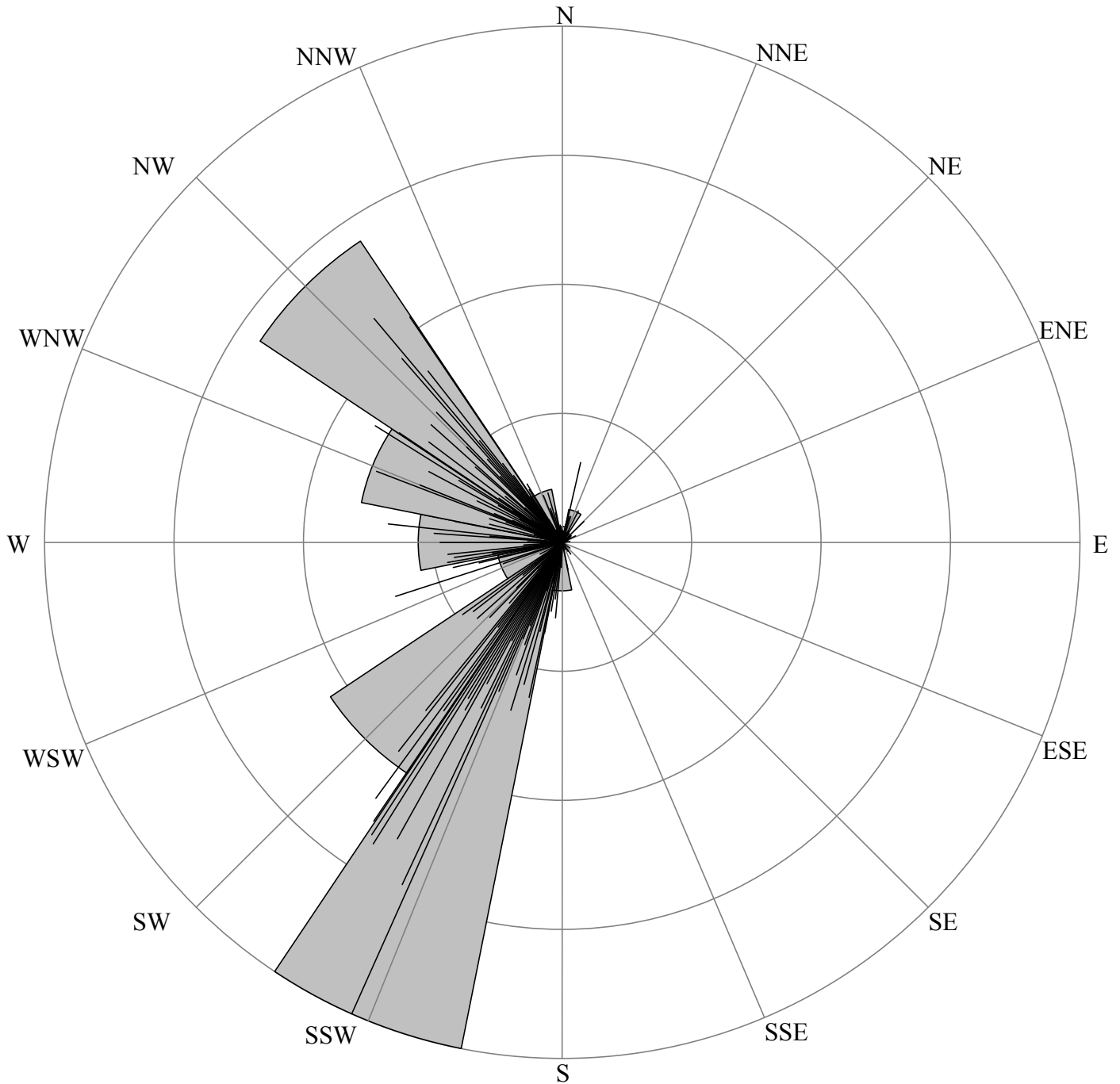
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date											
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12												
01																																				
02	0.03		0.01		0.02	0.03	0.01	0.02					0.01	0.01	0.01							0.02	0.09	0.01												
03																																				
04	0.02					0.01					0.02	0.06	0.04	0.19	0.01	0.01						0.01	0.02	0.01	0.01											
05																																				
06																																				
07																																				
08																																				
09											0.06	0.07	0.12	0.06	0.06																					
10	0.03	0.05	0.08	0.16	0.24	0.21	0.13	0.17	0.08	0.01	0.05	0.11	0.20	0.09		0.01							0.08						0.02							
11																																				
12																																				
13																																				
14	0.08	0.06	0.04	0.06	0.03	0.02	0.01			0.01			0.02	0.01								0.02	0.09	0.12												
15																		0.02	0.02	0.01	0.24	0.01		0.01												
16																																				
17				0.01	0.06	0.04	0.04	0.01					0.01																							
18																																				
19																		0.09																		
20	0.09	0.13		0.09	0.01	0.01		0.06	0.01					0.01									0.03							0.06						
21	0.01					0.01																														
22																																				
23																		0.04	0.10					0.02												
24				0.06	0.10	0.01																														
25			0.01																	0.02	0.04	0.08	0.06	0.37	0.35											
26	0.04	0.10					0.01																													
27																																				
28											0.01	0.04	0.06	0.06	0.04	0.09	0.05	0.02																		
29																																				
30																																				
31																																				
Sum	0.30	0.34	0.14	0.38	0.46	0.34	0.20	0.26	0.16	0.11	0.28	0.29	0.54	0.15	0.10	0.06	0.02	0.15	0.15	0.29	0.21	0.14	0.57	0.58											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 2019: Westford



Wind Rose: May 2019
Westford



Maximum direction of wind: 32.3 miles from 204°
Maximum sector of wind: 253.8 miles from SSW
859.9 total miles of wind