

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

April 2019

Station: Westford

Latitude: 44° 00' 00" N Longitude: 73° 00' 00" 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
1	2	3	4A	4B	5	6	7	8															
1	34.7	20.4	27.6*	27.1	15	63	37	0	.....	1	0.01	1.2	30.28	29.78	30.055	5.4	5.3	306	27	WNW	17	288	230
2	46.9	21.5	34.2	35.2	19	52	30	0	.....	H	0.00	0.0	30.31	30.07	30.214	2.6	2.6	208	26	SSW	13	203	205
3	50.8	31.2	41.0	38.6	25	59	24	0	.....	H	0.01	T	30.07	29.69	29.886	5.2	4.5	259	36	W	21	269	164
4	34.9	25.0	30.0	29.7	13	49	35	0	.....	H	0.00	0.0	30.47	30.01	30.261	7.2	7.1	300	33	W	22	290	211
5	40.8	15.9*	28.3	29.6	16	59	36	0	.....	T	0.00	T	30.49	30.12	30.351	2.5	2.5	207	23	S	12	205	156
6	44.4	31.9	38.2	36.8	34	90	27	0	.....	H	0.12	T	30.18	30.07	30.118	3.7	3.5	215	25	S	13	208	65
7	51.7	31.4	41.6	41.1	34	77	23	0	.....	H	0.02	0.0	30.24	30.05	30.164	0.2	0.1	251	8	SSW	6	297	121
8	43.2	31.2	37.2	38.7	37	92	28	0	.....	H	0.30	0.0	30.05	29.60	29.774	2.9	2.6	185	26	SSW	13	200	41
9	39.6	27.6	33.6	31.7	30	94	31	0	.2...6...	H	0.22	0.5	29.79	29.43	29.626	1.2	0.9	287	19	NNW	11	309	57
10	36.4	26.6	31.5	29.9	26	85	33	0	.....	T	0.03	0.2	30.07	29.67	29.857	1.3	1.3	320	19	NNW	10	324	100
11	45.1	24.9	35.0	33.6	23	66	30	0	.....	0	0.00	0.0	30.26	30.06	30.199	0.2	0.2	322	18	NW	9	305	248
12	57.6	30.9	44.2	45.6	36	71	20	0	.....	T	0.05	0.0	30.26	29.88	30.081	3.3	3.3	200	27	SW	14	204	129
13	68.3	47.6	58.0	57.8	41	59	7	0	.....	0	0.04	0.0	29.94	29.85	29.895	5.5	4.9	244	27	WNW	16	262	220
14	49.6	34.4	42.0	42.1	31	67	23	0	.....	0	0.21	0.0	30.01	29.45	29.853	0.3	0.2	320	14	NNW	6	312	104
15	52.9	33.0	43.0	41.7	40	93	22	0	.....	0	0.33	T	29.62	29.13	29.311	3.6	3.0	287	30	WNW	18	286	46
16	43.8	32.3	38.0	37.6	30	73	27	0	.....	0	0.00	0.0	30.01	29.61	29.843	4.7	4.6	306	27	WNW	17	291	84
17	56.8	30.3	43.5	44.1	26	53	21	0	.....	0	0.00	0.0	30.16	30.01	30.105	0.5	0.5	321	14	NW	9	289	277
18	56.9	35.8	46.4	47.6	36	64	18	0	.....	0	0.06	0.0	30.12	29.65	29.898	4.6	4.6	196	32	SSW	17	204	109
19	70.9	40.6	55.8	55.6	50	83	9	0	.2.....	0	0.22	0.0	29.73	29.57	29.617	4.3	4.0	210	33	SW	15	220	113
20	51.8	39.2	45.5	43.1	42	96	19	0	.2.....	0	0.72	0.0	29.83	29.60	29.733	0.5	0.3	256	12	W	8	280	50
21	72.8*	49.3	61.1*	58.1	50	75	4	0	.....	0	0.00	0.0	30.10	29.77	29.924	2.4	2.0	211	20	SSW	12	201	200
22	68.9	46.5	57.7	55.4	46	72	7	0	.....	0	0.00	0.0	30.18	30.03	30.105	0.8	0.8	356	15	WNW	7	324	250
23	69.2	41.3	55.2	54.4	43	68	10	0	.....	0	0.18	0.0	30.03	29.55	29.840	0.5	0.2	248	20	S	8	195	229
24	55.9	39.6	47.8	44.7	41	87	17	0	.....	0	0.28	0.0	29.86	29.51	29.679	2.8	2.5	258	25	W	12	257	34
25	56.2	37.5	46.9	44.5	39	81	18	0	.....	0	0.04	0.0	29.94	29.86	29.893	0.2	0.1	268	12	NNW	7	280	164
26	50.5	39.0	44.8	45.9	42	86	20	0	.....	0	0.14	0.0	29.86	29.31	29.595	2.0	2.0	167	23	SSE	10	171	64
27	44.1	33.5	38.8	39.5	36	86	26	0	.....	0	0.85	0.0	29.73	29.23	29.396	3.7	3.4	268	27	W	18	262	84
28	48.2	33.6	40.9	38.7	30	71	24	0	.....	0	0.01	0.0	30.17	29.72	29.960	0.8	0.8	305	16	WNW	9	306	166
29	47.8	29.8	38.8	39.4	22	52	26	0	.....	0	0.00	0.0	30.41	30.17	30.305	1.3	1.3	322	21	WNW	11	299	263
30	52.9	37.2	45.1	42.9	28	57	20	0	.....	0	0.00	0.0	30.36	30.14	30.243	0.7	0.6	352	22	WNW	9	304	188
Sum	Sum	-----	-----	---	----	Ttl	Ttl				Total	Total	For the month:										---
1544	999					672	0		Number of Days		3.84	1.9	30.49	29.13	29.926	2.5	1.6	254	36	W	22	290	
Avg	Avg	Avg	Mean	Avg	Avg	----	----		Precip		Season Ttl	Date	Date	-----	----	----	---	Date	Date	Avg			
51.5	33.3	42.4	41.7	33	72.7	----	----		≥.01 inch	20	14.48	122.2	5	15	-----	----	----	---	3	4	146		
Number of Days						Season to Date	Snow, Ice ≥1.0 inch	1	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date								
Max Temperature			Min Temperature			7795	0	Thunder	0	Precipitation			Snow, Ice Plts										
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	3	0.94	19-20	1.2	1												
0	0	15	0	----	----	Clear	2	Partly Cloudy			12	Cloudy			15								

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

April 2019: 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
APR 19									APR 20									APR 21									
00	0	29.68	0.00	52	48	84	20	7	21	0	29.67	0.01	41	40	96	00	0	0	0	29.77	0.00	50	49	97	20	1	8
03	0	29.61	0.00	55	51	86	20	9	28	0	29.61	0.01	40	39	96	00	0	0	0	29.80	0.00	53	49	86	20	3	9
06	0	29.60	0.00	57	52	83	20	6	16	0	29.66	0.00	40	39	96	00	0	0	0	29.85	0.00	50	47	88	00	0	0
09	158	29.60	0.00	61	54	78	22	7	20	20	29.75	0.00	39	38	96	27	1	5	155	29.90	0.00	56	50	81	20	2	9
12	679	29.59	0.00	67	57	71	18	8	19	152	29.81	0.00	42	41	97	00	0	0	690	29.92	0.00	65	52	63	20	5	16
15	66	29.58	0.00	68	57	70	22	3	8	101	29.80	0.00	43	41	96	31	1	6	835	29.92	0.00	71	45	39	20	6	15
18	57	29.59	0.00	54	49	82	29	1	5	526	29.75	0.00	50	49	97	00	0	0	109	29.95	0.00	63	52	67	33	2	8
21	0	29.67	0.00	42	41	95	00	0	0	0	29.75	0.00	45	44	96	00	0	0	0	30.04	0.00	55	49	79	02	2	6
APR 22									APR 23									APR 24									
00	0	30.09	0.00	50	47	89	00	0	0	0	30.05	0.00	49	41	72	00	0	0	0	29.58	0.01	54	52	90	20	3	13
03	0	30.11	0.00	49	45	87	02	0	3	0	30.00	0.00	46	38	74	00	0	0	0	29.52	0.02	56	54	93	27	6	13
06	0	30.12	0.00	47	44	88	00	0	0	0	29.98	0.00	43	37	80	00	0	0	0	29.55	0.00	49	43	79	24	5	12
09	156	30.17	0.00	49	45	86	00	1	6	275	29.97	0.00	44	37	78	00	0	0	26	29.61	0.00	44	38	82	29	4	13
12	756	30.15	0.00	59	48	68	00	2	10	583	29.93	0.00	55	42	61	00	0	0	114	29.66	0.00	42	37	82	27	5	14
15	790	30.10	0.00	66	51	59	31	1	6	789	29.81	0.00	65	47	52	04	0	6	130	29.71	0.00	43	38	82	27	6	18
18	425	30.06	0.00	69	51	53	33	0	11	235	29.72	0.00	66	46	48	15	0	2	35	29.76	0.00	41	39	91	27	2	9
21	0	30.06	0.00	55	42	62	02	2	11	0	29.65	0.00	58	49	72	00	0	0	0	29.82	0.00	40	39	94	00	0	0
APR 25									APR 26									APR 27									
00	0	29.86	0.00	40	38	95	00	0	0	0	29.86	0.00	41	37	86	00	0	0	0	29.34	0.00	46	41	84	18	5	16
03	0	29.87	0.00	40	38	95	00	0	0	0	29.81	0.00	39	37	92	00	0	0	0	29.28	0.01	42	40	93	20	4	10
06	0	29.88	0.00	39	37	95	00	0	0	0	29.75	0.00	40	38	91	00	0	0	0	29.23	0.00	42	41	95	00	0	0
09	123	29.93	0.00	41	39	92	00	0	0	82	29.73	0.00	47	44	89	00	0	0	55	29.25	0.00	40	38	94	27	8	18
12	171	29.93	0.00	44	38	78	00	0	0	157	29.62	0.00	49	45	88	18	2	10	150	29.32	0.01	37	35	92	27	5	15
15	362	29.91	0.00	48	39	69	29	1	6	146	29.53	0.00	49	45	85	18	4	9	192	29.38	0.00	43	35	74	27	6	14
18	447	29.87	0.00	56	41	57	24	0	6	132	29.45	0.00	50	44	79	18	2	11	53	29.52	0.00	40	32	72	28	6	15
21	0	29.88	0.00	47	40	75	00	0	0	0	29.40	0.00	47	42	81	15	4	15	0	29.66	0.00	35	29	78	33	0	11
APR 28									APR 29									APR 30									
00	0	29.72	0.00	36	30	79	28	5	13	0	30.17	0.00	36	26	67	30	0	0	0	30.22	0.00	38	24	55	03	0	0
03	0	29.81	0.00	36	30	81	30	0	7	0	30.24	0.00	33	25	72	34	0	2	0	30.17	0.00	39	25	58	03	0	0
06	9	29.86	0.00	34	29	84	33	0	0	11	30.33	0.00	30	23	74	32	0	0	0	30.16	0.00	38	25	59	03	0	0
09	253	29.92	0.00	37	32	81	36	0	9	506	30.39	0.00	39	24	55	33	3	13	146	30.19	0.00	41	28	59	02	4	9
12	397	29.98	0.00	38	31	76	32	3	9	817	30.37	0.00	43	19	37	32	7	18	527	30.23	0.00	46	31	56	34	1	10
15	330	30.00	0.00	43	32	65	01	1	4	705	30.32	0.00	47	19	32	32	3	10	629	30.27	0.00	51	29	42	01	3	11
18	185	30.04	0.00	47	30	51	33	0	5	156	30.30	0.00	46	17	32	03	0	4	218	30.30	0.00	52	29	39	31	1	8
21	0	30.11	0.00	38	28	68	32	0	0	0	30.26	0.00	39	24	53	03	0	0	0	30.34	0.00	40	28	62	30	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	29.927	39	32	79	2.1	25	1.5
03	0	29.913	38	32	81	2.2	26	1.4
06	1	29.920	37	31	81	1.8	25	1.2
09	189	29.947	40	33	77	2.6	27	1.4
12	418	29.940	44	33	66	3.9	27	2.2
15	412	29.915	48	34	61	3.9	26	2.3
18	168	29.910	47	33	61	2.7	27	2.1
21	0	29.938	41	33	74	1.7	26	0.8

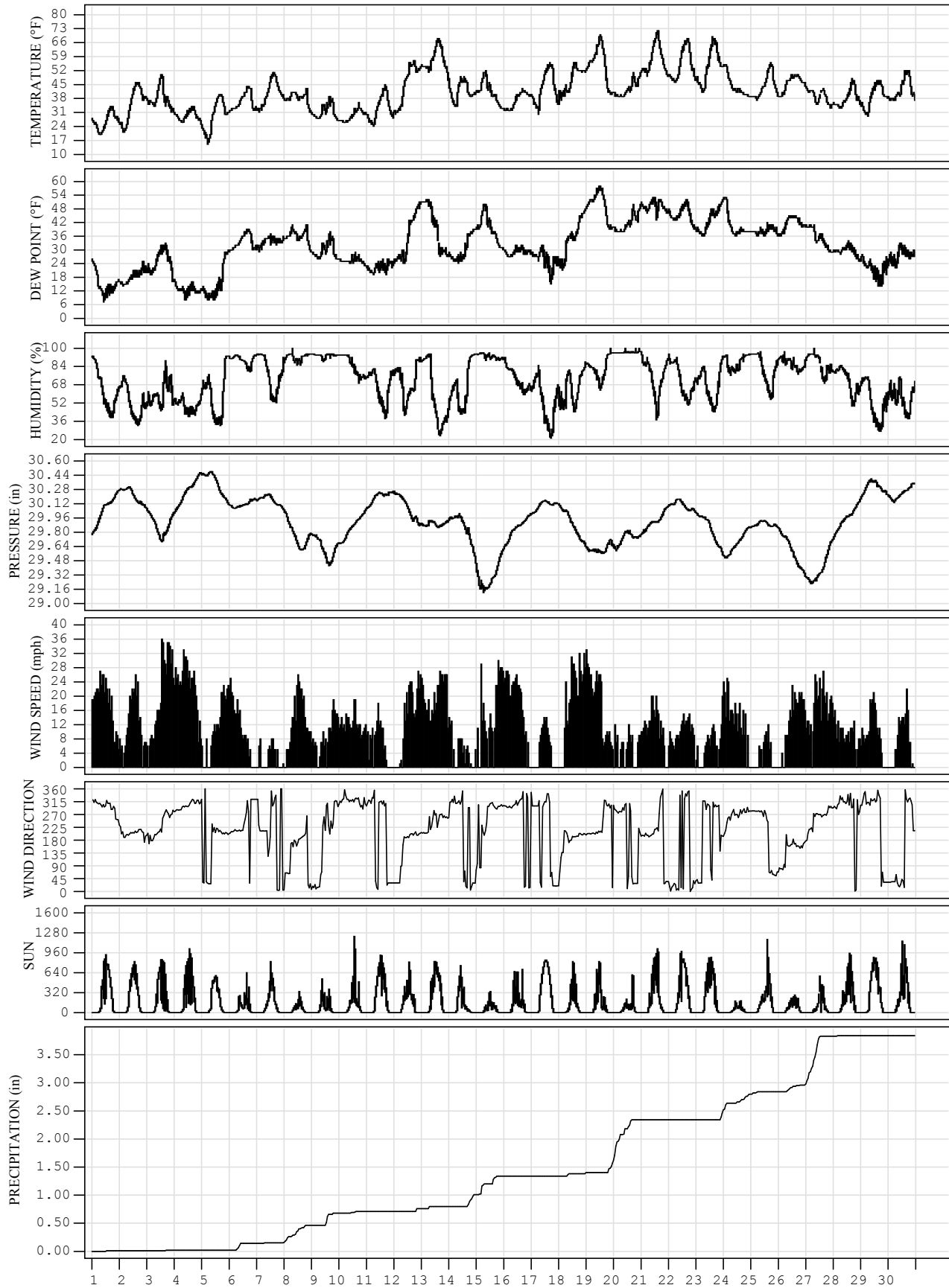
HOURLY PRECIPITATION (Water Equivalent) April 2019: Westford

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													0.01											01		
02																								02		
03																	0.01							03		
04																								04		
05																								05		
06								0.02	0.02	0.04	0.04													06		
07							0.01																0.01	07		
08	0.02	0.02	0.04	0.02			0.01	0.02		0.01	0.05	0.01	0.04		0.01	0.01		0.02	0.02					08		
09													0.06	0.10	0.04				0.02	0.02				09		
10											0.01		0.01	0.01										10		
11																								11		
12																				0.05				12		
13							0.04																	13		
14																								14		
15			0.01		0.14	0.02	0.02								0.08	0.03	0.03	0.05	0.03	0.02	0.05	0.03		15		
16																								16		
17																								17		
18								0.02	0.02														0.02	18		
19																								19		
20	0.09	0.16	0.08	0.01	0.03	0.09				0.01	0.09		0.04	0.03	0.07	0.02				0.07	0.01	0.03	0.06	0.05	20	
21																									21	
22																									22	
23																									23	
24	0.01	0.08	0.03									0.02			0.02	0.02		0.01	0.03	0.02			0.05	0.07	0.06	24
25		0.02			0.01	0.01																	0.03	0.01		25
26																									26	
27	0.06	0.04	0.10	0.02	0.06	0.04	0.10	0.02	0.02	0.02	0.02	0.02	0.02	0.01		0.01			0.01					0.02	27	
28								0.06	0.09	0.13	0.10	0.04	0.01												28	
29																									29	
30																									30	
Sum	0.18	0.32	0.26	0.06	0.24	0.16	0.20	0.14	0.18	0.29	0.18	0.07	0.18	0.14	0.23	0.09	0.05	0.10	0.11	0.16	0.06	0.14	0.14	0.16	Sum	

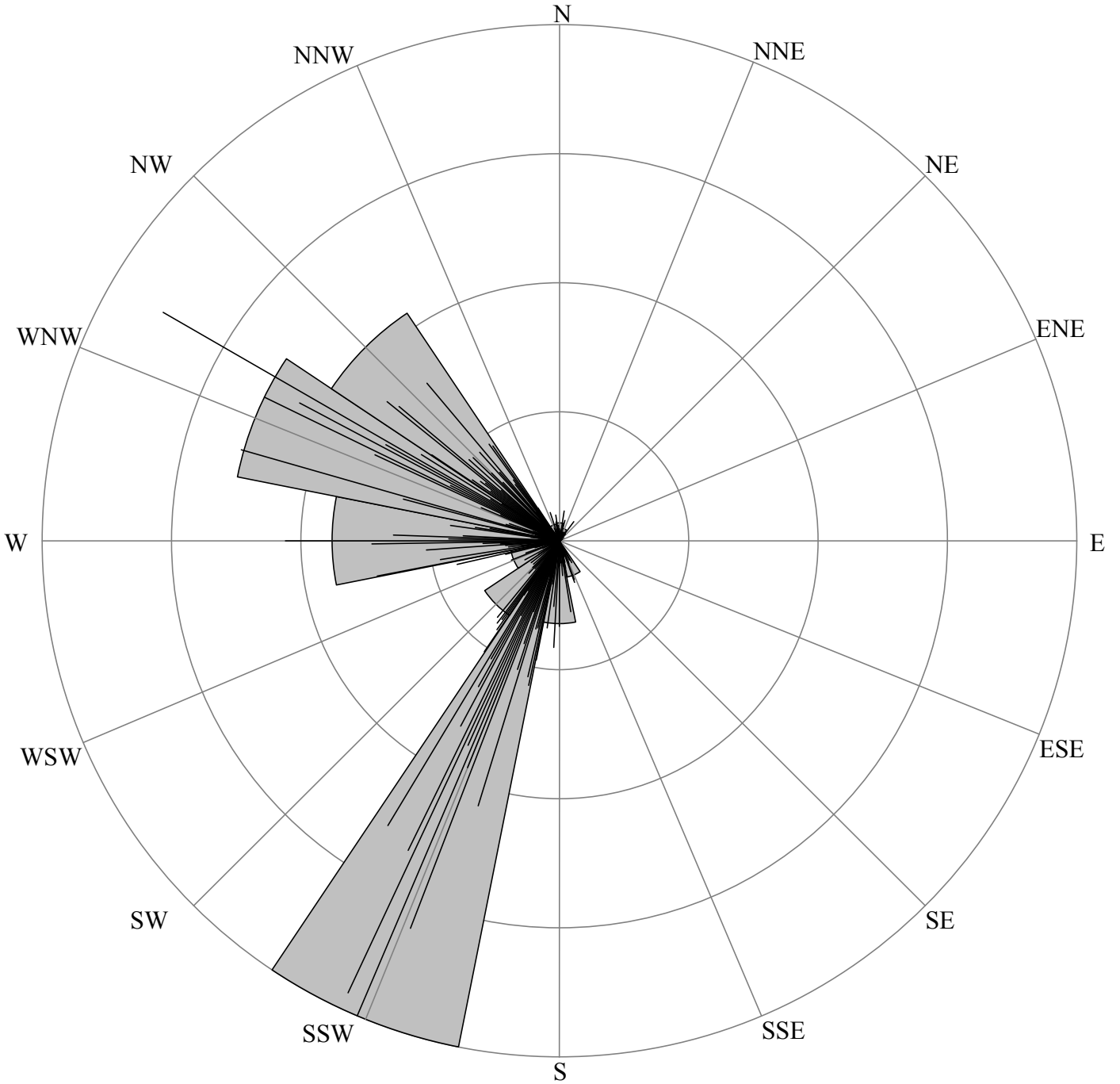
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

April 2019: Westford



Wind Rose: April 2019
Westford



Maximum direction of wind: 65.9 miles from 203°
Maximum sector of wind: 561.4 miles from SSW
1802.6 total miles of wind