

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

October 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	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
1	0.0	0.0*	0.0*	0.0	0	0	65	0	.....	0	1.44	0.0	0.00	0.00	0.000	0.0	0.0	0	0	N	0	0	0
2	0.0	0.0	0.0	0.0	0	0	65	0	.....	0	0.36	0.0	0.00	0.00	0.000	0.0	0.0	0	0	N	0	0	0
3																							
4																							
5																							
6																							
7	0.0	0.0	0.0	0.0	0	0	65	0	.....	0	1.07	0.0	0.00	0.00	0.000	0.0	0.0	0	0	N	0	0	0
8	56.8	37.1	46.9	43.1	39	87	18	0	.....	0	0.00	0.0	30.34	30.26	30.308	0.0	0.0	40	4	NNW	1	84	6
9	61.8	34.6	48.2	45.6	40	84	16	0	.....	0	0.00	0.0	30.42	30.34	30.368	0.3	0.2	356	10	W	5	278	124
10	66.8	37.5	52.2	49.3	42	79	12	0	.....	0	0.00	0.0	30.38	30.30	30.332	0.4	0.3	319	12	W	6	277	140
11	69.8*	35.4	52.6	51.5	36	62	12	0	.....	0	0.00	0.0	30.30	30.07	30.224	0.9	0.9	3	14	NNW	8	346	145
12	67.6	43.8	55.7	54.4	46	74	9	0	.....	0	T	0.0	30.07	29.85	29.937	0.7	0.5	219	14	W	9	279	135
13	62.3	40.9	51.6	50.5	39	67	13	0	.....	0	0.00	0.0	30.07	29.92	29.993	1.5	1.1	240	18	W	9	260	141
14	66.6	37.8	52.2	50.3	42	73	12	0	.....	0	0.14	0.0	30.01	29.79	29.893	2.6	2.1	201	26	S	11	169	105
15	57.8	34.4	46.1	43.1	35	77	19	0	.....	0	0.00	0.0	30.09	30.00	30.046	1.3	1.2	225	14	S	8	215	135
16	59.5	34.5	47.0	47.5	39	76	17	0	.....	0	0.10	0.0	30.02	29.42	29.783	2.0	1.9	147	21	S	11	159	89
17	46.7	39.6	43.1	42.9	42	95	21	0	.....	0	1.56	0.0	29.43	28.95	29.166	4.8	4.4	320	29	N	13	348	12
18	43.8	40.9	42.4	42.4	40	90	22	0	.....	0	0.16	0.0	29.94	29.43	29.732	5.8	5.7	273	23	W	13	272	23
19	53.4	30.4	41.9	40.9	34	78	23	0	.....	0	0.00	0.0	30.05	29.94	30.009	1.4	1.4	271	12	W	8	276	128
20	52.5	29.0	40.8	41.1	36	84	24	0	.....	0	0.03	0.0	30.03	29.97	30.004	1.9	1.8	175	21	S	13	179	55
21	63.3	35.2	49.3	46.8	42	85	16	0	.....	0	0.00	0.0	30.14	30.01	30.092	0.6	0.3	287	12	WSW	7	272	129
22	58.7	40.5	49.6	53.0	44	72	15	0	.....	0	0.20	0.0	30.09	29.76	29.944	3.5	3.5	154	25	SSE	12	158	42
23	60.5	46.7	53.6	52.4	44	75	11	0	.....	0	0.26	0.0	30.02	29.74	29.835	4.5	4.2	227	27	SW	15	228	109
24	58.4	40.7	49.6	49.8	39	67	15	0	.....	0	0.01	0.0	30.22	30.01	30.102	4.7	4.4	191	26	SSE	14	171	64
25	49.6	40.2	44.9	44.4	39	82	20	0	.....	0	0.04	0.0	30.29	30.14	30.222	0.3	0.3	264	12	W	6	278	43
26	53.7	31.3	42.5	42.0	36	82	22	0	.....	0	0.06	0.0	30.25	30.13	30.211	0.8	0.7	258	13	W	8	263	119
27	47.3	31.2	39.3	42.3	39	89	26	0	.....	0	0.91	0.0	30.22	29.76	29.949	3.5	3.5	154	24	SSE	12	142	21
28	57.7	44.8	51.3	50.9	48	90	13	0	.....	0	0.13	0.0	30.19	29.85	30.083	2.0	2.0	176	15	S	7	177	61
29	57.8	46.6	52.2	52.2	47	82	12	0	.....	0	0.00	0.0	30.21	30.12	30.176	5.9	5.9	173	31	SSE	18	176	66
30	63.9	51.7	57.8	56.0	51	85	7	0	.....	0	0.00	0.0	30.24	30.01	30.162	2.6	2.6	180	17	SSE	9	174	59
31	68.1	53.2	60.6*	60.1	59	94	4	0	.....	0	3.08	0.0	30.01	29.24	29.654	4.9	4.8	176	32	SSE	15	187	19
Sum	Sum	-----	-----	---	----	Ttl	Ttl	Number of Days		Total	Total	For the month:										---	
1404	938					574	0			9.55	0.0	30.42	0.00	26.675	2.1	1.4	204	32	SSE	18	176		
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl	Date	Date	-----	----	---	Date	Date	Avg					
52.0	34.7	43.4	42.7	37	71.4	----	----	≥.01 inch	16	46.28	0.0	9	1+	-----	----	---	31	29	73				
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			968	288	Thunder	0	Precipitation		Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	3.08	31	0.0	-	0					-						
0	3	7	3	----	----	Clear	3	Partly Cloudy		10	Cloudy	10											

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

October 2019: Westford

Hour	OCT 19									OCT 20									OCT 21								
	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Direction	Speed	Gust
00	0	29.94	0.00	42	36	82	26	4	13	0	30.01	0.00	31	29	95	29	0	0	0	30.01	0.00	43	41	91	17	3	6
03	0	29.97	0.00	40	35	80	27	2	8	0	30.01	0.00	29	28	95	29	0	0	0	30.05	0.00	38	36	95	18	0	0
06	0	29.99	0.00	39	35	87	26	0	0	0	30.01	0.00	30	29	96	29	0	0	0	30.09	0.00	36	35	96	18	0	0
09	33	30.04	0.00	37	33	85	28	3	11	86	30.02	0.00	34	33	97	29	0	0	42	30.11	0.00	39	38	97	18	0	0
12	610	30.04	0.00	45	36	69	23	3	6	181	30.00	0.00	51	39	64	19	3	6	527	30.13	0.00	59	47	65	06	3	6
15	352	30.01	0.00	50	34	54	27	4	7	56	29.99	0.00	52	40	63	19	1	8	272	30.09	0.00	63	47	57	28	1	3
18	5	30.00	0.00	43	35	74	29	0	0	14	29.98	0.00	51	41	70	19	3	16	0	30.11	0.00	51	45	78	25	0	0
21	0	30.03	0.00	33	31	93	29	0	0	0	30.00	0.00	47	42	83	17	4	11	0	30.11	0.00	45	43	93	25	0	0
OCT 22									OCT 23									OCT 24									
00	0	30.09	0.00	41	39	94	28	0	0	0	29.76	0.00	50	48	92	14	1	4	0	30.01	0.00	50	39	65	22	5	23
03	0	30.05	0.00	46	44	94	15	1	10	0	29.76	0.08	50	49	95	17	0	6	0	30.05	0.00	47	37	68	16	4	14
06	0	30.01	0.00	53	43	68	16	3	11	0	29.78	0.00	50	49	96	18	2	4	0	30.10	0.00	41	35	79	18	4	9
09	81	30.00	0.00	55	44	66	16	5	14	39	29.79	0.00	48	48	97	16	2	5	76	30.09	0.00	46	36	68	18	8	16
12	202	29.96	0.00	59	44	59	15	8	19	547	29.80	0.00	57	48	71	22	6	13	526	30.06	0.00	58	37	46	17	6	23
15	33	29.90	0.00	57	40	54	15	2	15	125	29.80	0.00	58	41	54	24	3	10	58	30.09	0.00	52	42	69	23	5	12
18	0	29.85	0.00	56	43	63	16	3	12	0	29.88	0.00	52	34	51	23	4	13	0	30.12	0.00	54	42	65	19	3	9
21	0	29.84	0.00	55	47	74	14	6	17	0	29.98	0.00	50	39	65	22	7	17	0	30.18	0.00	51	43	74	29	1	9
OCT 25									OCT 26									OCT 27									
00	0	30.22	0.00	47	41	79	27	3	7	0	30.14	0.04	43	41	95	18	0	0	0	30.22	0.00	31	29	92	10	0	0
03	0	30.26	0.00	42	37	85	27	0	6	0	30.14	0.00	42	40	95	18	0	0	0	30.17	0.00	32	31	95	08	0	0
06	0	30.27	0.00	41	38	88	25	0	0	0	30.18	0.00	35	34	94	18	0	0	0	30.09	0.00	44	38	81	16	3	9
09	123	30.28	0.00	43	41	92	25	0	0	93	30.24	0.00	41	40	97	18	0	3	16	30.05	0.16	42	40	91	14	3	15
12	156	30.27	0.00	47	38	70	25	0	2	547	30.24	0.00	49	39	68	26	7	13	33	29.91	0.09	43	40	91	14	7	19
15	148	30.19	0.00	49	39	68	03	0	0	269	30.23	0.00	51	33	49	26	3	6	88	29.78	0.00	46	43	91	13	6	17
18	0	30.17	0.00	45	39	81	18	2	4	0	30.24	0.00	44	34	68	22	0	0	0	29.78	0.00	46	41	83	17	8	19
21	0	30.16	0.00	42	40	91	18	0	0	0	30.23	0.00	35	32	88	21	0	0	0	29.81	0.00	44	43	94	16	4	12
OCT 28									OCT 29									OCT 30									
00	0	29.85	0.00	45	44	96	18	3	9	0	30.19	0.00	49	46	90	16	1	7	0	30.18	0.00	53	49	85	17	5	13
03	0	29.92	0.00	46	45	96	19	2	8	0	30.20	0.00	47	45	93	16	0	2	0	30.19	0.00	53	50	89	16	3	11
06	0	30.01	0.00	47	46	97	18	2	7	0	30.19	0.00	50	47	90	16	5	14	0	30.20	0.00	54	51	88	20	4	10
09	86	30.10	0.00	49	48	98	18	0	3	63	30.19	0.00	52	47	82	16	8	16	18	30.23	0.00	55	52	89	18	3	9
12	267	30.14	0.00	54	52	92	20	1	5	209	30.18	0.00	55	47	75	17	10	28	355	30.21	0.00	61	54	79	16	4	9
15	137	30.13	0.00	57	52	82	16	0	7	176	30.14	0.00	58	47	68	17	10	21	167	30.16	0.00	62	54	74	18	2	6
18	0	30.16	0.00	54	49	83	12	2	7	0	30.17	0.00	53	46	77	16	4	11	0	30.13	0.00	56	52	86	19	0	0
21	0	30.18	0.00	52	48	86	17	3	7	0	30.17	0.00	52	46	82	17	2	10	0	30.08	0.00	55	52	89	18	3	5
OCT 31																											
00	0	30.01	0.00	54	51	91	14	0	1																		
03	0	29.94	0.18	55	53	92	16	0	0																		
06	0	29.84	0.00	55	54	97	15	0	1																		
09	51	29.78	0.00	59	58	95	17	8	20																		
12	67	29.70	0.00	61	59	93	17	9	19																		
15	14	29.58	0.00	63	60	92	16	8	22																		
18	0	29.45	1.32	63	62	97	17	0	3																		
21	0	29.33	0.27	68	66	94	18	15	26																		

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	30.020	44	40	88	1.7	23	1.1
03	0	30.015	43	40	89	1.1	23	0.7
06	0	30.012	43	40	89	1.6	20	0.8
09	67	30.023	45	42	87	2.9	20	1.7
12	375	30.003	55	43	67	4.6	19	2.7
15	146	29.968	56	43	63	3.1	21	1.9
18	5	29.984	51	43	75	1.7	20	1.1
21	0	29.997	47	42	85	2.5	20	1.8

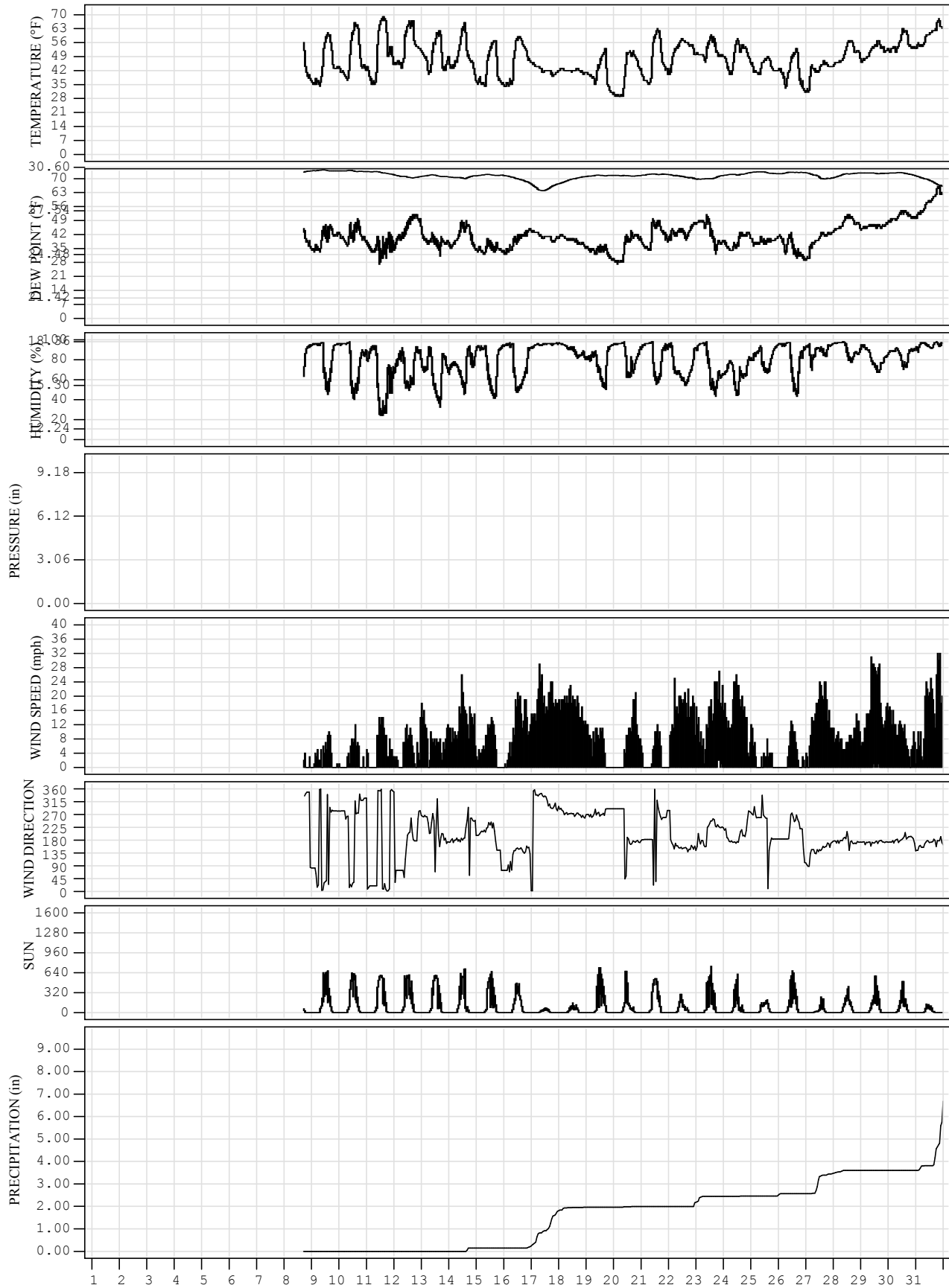
HOURLY PRECIPITATION (Water Equivalent) October 2019: Westford

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																								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															0.05	0.09									14
15																									15
16																									16
17	0.05	0.03	0.04	0.05	0.23	0.13	0.04	0.01		0.05	0.03	0.01	0.01	0.04	0.05	0.10	0.13	0.20	0.13	0.02	0.02	0.03	0.01	0.04	17
18	0.03		0.01	0.07	0.02			0.01												0.03	0.07	0.01	0.09	0.02	18
19																									19
20									0.02						0.01										20
21																									21
22																							0.17	0.03	22
23	0.01	0.04	0.13	0.03	0.03	0.02																			23
24															0.01										24
25																							0.04		25
26	0.04	0.02																							26
27						0.02		0.01	0.11	0.18	0.30	0.15	0.02	0.03	0.01				0.03	0.02			0.01	0.02	27
28	0.01	0.02	0.02	0.01	0.01		0.02	0.02	0.02																28
29																									29
30																									30
31			0.02	0.08	0.09	0.01		0.01								0.04	0.31	0.40	0.09	0.09	0.07	0.78	0.16	0.93	31
Sum	0.14	0.11	0.22	0.24	0.38	0.18	0.06	0.06	0.15	0.23	0.33	0.17	0.03	0.07	0.07	0.20	0.53	0.60	0.25	0.13	0.12	0.89	0.44	1.08	Sum

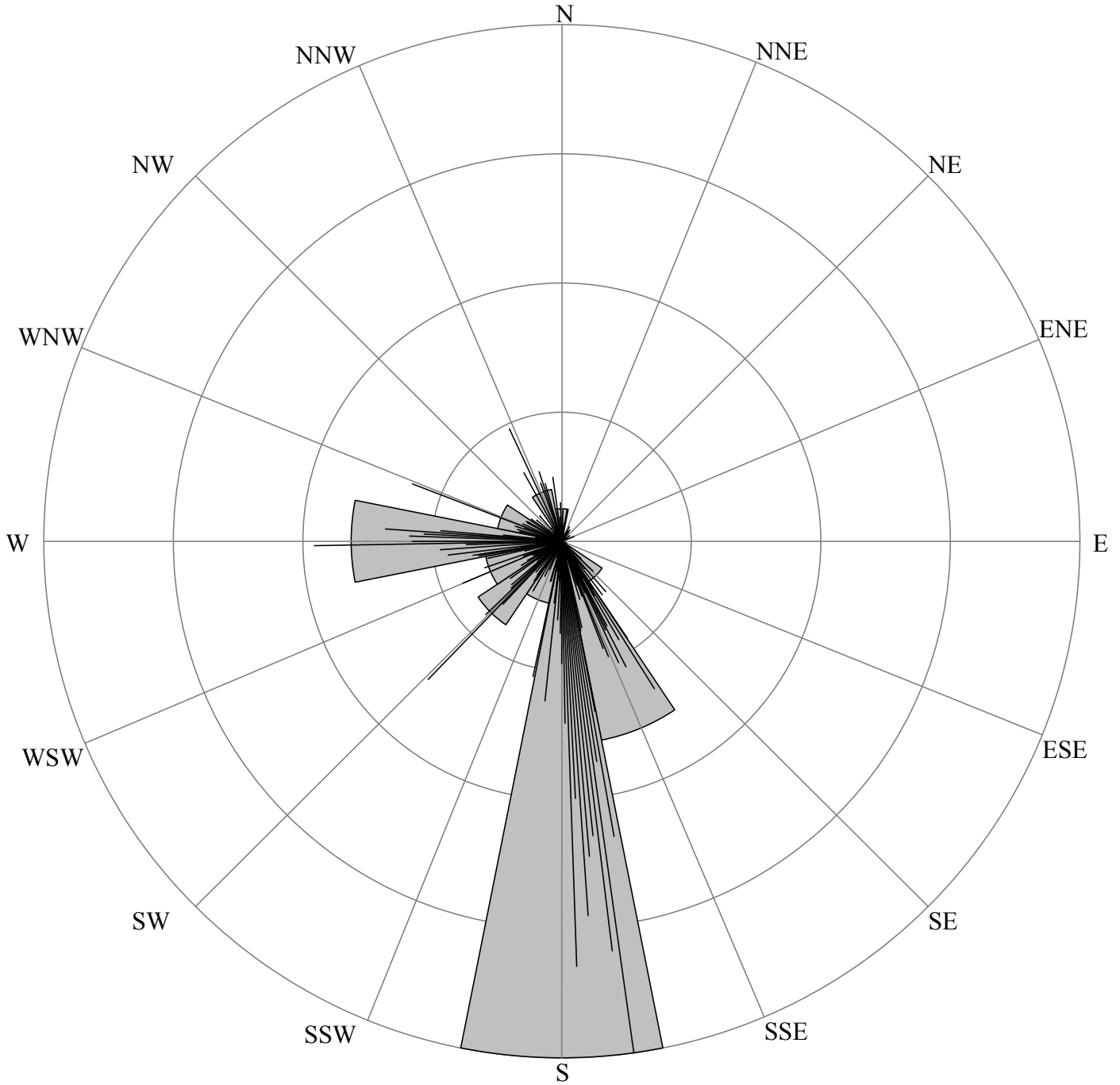
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

October 2019: Westford



Wind Rose: October 2019
Westford



Maximum direction of wind: 61.6 miles from 172°
Maximum sector of wind: 503.9 miles from S
1368.4 total miles of wind