

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

July 2024

Station: Westford

Latitude: 43° 37' 38" N Longitude: 73° 02' 30" 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	76.2	54.2	65.2*	65.5	58	79	0	0	.....	0	0.00	0.0	30.16	29.87	30.031	0.6	0.6	299	13	W	7	271	315
2	83.6	49.4	66.5	66.3	57	76	0	2	.....	0	0.00	0.0	30.25	30.14	30.184	0.3	0.3	263	13	SW	7	247	316
3	81.1	55.1	68.1	69.5	60	74	0	3	.....	0	0.03	0.0	30.15	29.85	30.023	2.0	2.0	182	24	SSE	9	180	239
4	87.6	61.5	74.5	73.8	66	78	0	10	.....	0	0.07	0.0	29.86	29.75	29.813	1.3	1.1	208	20	SSE	7	178	302
5	86.9	65.9	76.4	75.9	71	85	0	12	.....	0	0.00	0.0	29.78	29.71	29.745	0.2	0.2	258	9	WNW	5	258	210
6	85.0	68.6	76.8	74.7	71	89	0	12	..3.....	0	0.23	0.0	29.83	29.67	29.741	0.5	0.4	267	10	W	6	263	219
7	85.9	62.8	74.4	73.4	68	84	0	10	.....	0	0.01	0.0	29.99	29.83	29.915	0.8	0.7	237	12	W	6	258	260
8	88.3	60.4	74.4	73.8	67	81	0	9	.....	0	0.00	0.0	30.02	29.90	29.968	0.5	0.5	234	9	WSW	5	267	295
9	88.0	61.3	74.6	74.4	69	85	0	10	.....	0	0.00	0.0	29.93	29.78	29.846	0.7	0.6	215	12	WSW	6	243	199
10	76.7	67.4	72.0	70.4	69	94	0	7	.23.....	0	2.33	0.0	29.84	29.65	29.760	0.3	0.3	10	14	NNW	4	22	43
11	80.9	66.9	73.9	70.3	69	95	0	9	.2.....	0	0.32	0.0	29.99	29.64	29.793	0.3	0.3	267	11	WSW	6	256	106
12	79.6	65.5	72.5	72.0	69	90	0	8	.....	0	0.00	0.0	30.10	29.99	30.062	0.1	0.1	267	7	W	3	254	152
13	84.4	64.8	74.6	74.1	69	86	0	10	.....	0	T	0.0	30.09	29.99	30.042	0.6	0.5	229	9	S	6	240	236
14	86.2	62.7	74.4	73.5	68	83	0	10	.....	0	0.01	0.0	30.01	29.82	29.926	0.8	0.7	220	12	WSW	6	262	281
15	90.5*	64.6	77.5*	75.9	71	84	0	13	..3.....	0	0.50	0.0	29.82	29.63	29.740	0.9	0.9	212	16	WNW	7	268	265
16	86.5	67.4	77.0	73.9	70	90	0	12	..3.....	0	0.47	0.0	29.70	29.55	29.647	1.1	0.9	204	16	S	6	265	229
17	80.2	65.0	72.6	71.4	69	92	0	8	..3.....	0	0.33	0.0	29.75	29.67	29.717	0.8	0.7	200	15	SSE	6	174	144
18	77.6	56.2	66.9	67.9	62	82	0	2	.....	0	0.00	0.0	29.98	29.73	29.836	1.7	1.7	256	17	SSW	9	263	264
19	80.7	54.8	67.7	66.5	60	81	0	3	.....	0	0.00	0.0	30.07	29.98	30.029	0.4	0.4	244	10	WSW	5	244	265
20	82.0	55.1	68.5	68.6	61	78	0	4	.....	0	0.00	0.0	30.05	29.91	29.983	1.3	1.3	226	15	SSW	7	246	294
21	78.1	55.1	66.6	67.6	61	81	0	2	.....	0	0.33	0.0	30.03	29.94	29.987	0.4	0.4	273	12	WNW	5	263	299
22	83.7	52.8	68.2	68.1	62	82	0	4	.....	0	0.00	0.0	30.05	29.93	29.997	0.6	0.5	195	11	SSE	6	232	257
23	79.1	64.2	71.6	70.0	67	89	0	7	.....	0	0.07	0.0	30.08	29.92	29.992	0.2	0.1	287	10	WSW	5	281	139
24	82.2	58.6	70.4	70.4	66	87	0	6	..3.....	0	0.14	0.0	30.09	29.94	30.022	0.8	0.8	161	18	SSE	5	184	193
25	76.0	60.8	68.4	67.8	63	85	0	4	.....	0	0.07	0.0	29.96	29.88	29.919	2.9	2.7	245	24	W	11	256	154
26	79.2	56.6	67.9	67.1	61	82	0	3	.....	0	0.05	0.0	30.06	29.95	30.018	0.6	0.6	255	13	WSW	7	261	278
27	84.1	55.0	69.5	69.1	62	80	0	5	.....	0	0.00	0.0	30.11	30.05	30.077	0.2	0.1	247	8	WSW	4	242	268
28	86.3	56.6	71.5	70.2	64	82	0	7	.....	0	0.00	0.0	30.13	29.99	30.062	0.3	0.3	217	10	SW	5	245	258
29	84.7	60.6	72.6	71.9	68	87	0	8	.....	0	0.00	0.0	29.99	29.80	29.887	0.4	0.3	262	11	W	6	263	196
30	87.4	66.8	77.1	74.2	70	87	0	12	..3.....	0	0.45	0.0	29.85	29.76	29.814	1.6	1.6	186	29	S	11	162	247
31	82.8	69.1	76.0	73.7	71	91	0	11	..3.....	0	0.44	0.0	29.81	29.71	29.773	1.2	1.1	187	18	SSE	7	261	127
Sum	Sum	-----	-----	---	----	Ttl	Ttl	Number of Days		Total	Total	For the month:										---	
2571	1886					0	223			5.85	0.0	30.25	29.55	29.915	0.8	0.6	224	29	S	11	256		
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	---	Date	Date	Avg			
83.0	60.8	71.9	71.0	66	84.5	----	----	≥.01 inch	17	33.08	0.0	2	16	-----	----	----	---	30	25	227			
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			0	361	Thunder	8	Precipitation			Snow, Ice Plts										
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	2	0.87	15-16	0.0	-	0						-					
1	0	0	0	----	----	Clear	12	Partly Cloudy			12	Cloudy			7								

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.

OBSERVATIONS AT 3-HOUR INTERVALS

July 2024: Westford

Hour	JUL 19									JUL 20									JUL 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	29.98	0.00	56	54	92	25	0	1	0	30.04	0.00	59	57	93	22	0	0	0	29.95	0.00	67	63	87	27	0	2
03	0	29.98	0.00	56	55	96	25	0	0	0	30.03	0.00	56	55	95	22	0	0	0	29.95	0.00	63	61	94	28	0	0
06	19	30.01	0.00	55	54	96	23	0	0	16	30.02	0.00	55	54	96	21	0	5	9	29.98	0.04	61	59	95	34	0	0
09	471	30.07	0.00	68	62	82	22	0	5	464	30.03	0.00	69	62	79	18	2	9	469	30.00	0.00	69	64	85	34	0	2
12	861	30.06	0.00	76	63	66	28	0	9	264	29.99	0.00	77	65	67	27	3	11	831	30.00	0.00	74	62	66	26	1	6
15	875	30.03	0.00	78	64	62	25	3	10	819	29.95	0.00	80	64	57	23	4	11	773	29.99	0.00	75	60	60	25	1	11
18	332	30.02	0.00	80	67	65	21	0	3	350	29.92	0.00	80	64	57	23	2	6	362	29.98	0.00	76	64	67	32	0	4
21	0	30.03	0.00	63	59	86	22	0	0	0	29.92	0.00	66	60	79	21	0	5	0	30.00	0.00	61	57	88	32	0	0
JUL 22									JUL 23									JUL 24									
00	0	30.03	0.00	55	53	94	32	0	0	0	29.94	0.00	68	65	90	19	0	4	0	30.07	0.00	64	62	93	14	0	0
03	0	30.03	0.00	54	53	96	32	0	0	0	29.93	0.00	66	64	93	19	0	0	0	30.07	0.00	61	59	95	14	0	0
06	16	30.03	0.00	53	52	96	32	0	0	0	29.96	0.00	66	65	96	25	0	2	19	30.08	0.00	59	58	96	14	0	0
09	466	30.04	0.00	68	63	84	16	2	7	104	29.98	0.00	68	66	96	25	0	0	439	30.07	0.00	74	70	87	15	0	6
12	828	30.02	0.00	79	66	65	10	0	8	272	30.00	0.00	74	69	85	26	0	0	844	30.05	0.00	80	71	73	14	2	11
15	789	29.97	0.00	81	68	63	15	0	7	403	30.00	0.00	77	71	83	31	2	4	819	29.98	0.00	82	73	75	10	2	8
18	127	29.94	0.00	78	69	74	17	0	1	308	30.00	0.00	77	69	76	04	0	5	139	29.97	0.00	78	70	78	10	0	11
21	0	29.95	0.00	70	66	87	17	0	0	0	30.06	0.00	68	65	91	02	0	0	0	29.95	0.00	69	66	93	19	0	7
JUL 25									JUL 26									JUL 27									
00	0	29.94	0.00	67	65	96	17	0	4	0	29.96	0.00	61	57	86	24	3	10	0	30.05	0.00	61	57	88	22	0	2
03	0	29.91	0.00	66	65	96	15	0	8	0	29.97	0.00	59	58	95	27	2	8	0	30.06	0.00	59	57	93	21	0	2
06	18	29.92	0.00	67	66	96	18	1	7	18	30.01	0.00	57	56	96	26	0	0	16	30.08	0.00	55	54	94	21	0	0
09	497	29.92	0.00	70	68	93	24	3	7	459	30.06	0.00	66	61	86	25	0	7	411	30.11	0.00	71	63	77	20	0	2
12	315	29.91	0.00	71	65	82	26	5	13	810	30.05	0.00	75	65	72	27	3	8	779	30.11	0.00	79	63	57	24	1	4
15	501	29.89	0.00	73	62	70	25	5	14	786	30.02	0.00	78	66	66	25	0	7	714	30.08	0.00	82	67	60	27	1	7
18	32	29.91	0.00	67	60	77	23	6	12	327	30.01	0.00	78	66	65	26	0	9	265	30.06	0.00	83	70	66	33	0	0
21	0	29.95	0.00	63	58	83	23	3	13	0	30.03	0.00	64	60	86	23	0	0	0	30.06	0.00	64	61	88	33	0	0
JUL 28									JUL 29									JUL 30									
00	0	30.08	0.00	61	59	95	33	0	0	0	29.99	0.00	62	61	95	23	0	0	0	29.83	0.00	70	67	90	17	2	7
03	0	30.10	0.00	58	57	96	33	0	0	0	29.95	0.00	62	60	96	23	0	0	0	29.81	0.00	68	65	90	17	3	9
06	14	30.12	0.00	57	55	96	33	0	0	11	29.94	0.00	62	61	97	23	0	0	18	29.83	0.00	67	65	92	21	1	8
09	387	30.12	0.00	72	67	86	33	0	0	260	29.94	0.00	73	69	85	23	0	0	406	29.85	0.00	74	69	85	16	1	15
12	765	30.08	0.00	81	69	67	17	0	6	773	29.89	0.00	82	73	73	01	0	2	766	29.82	0.00	83	74	75	18	4	12
15	680	30.04	0.00	84	69	61	23	0	5	475	29.84	0.00	82	75	79	26	1	11	728	29.79	0.00	86	77	74	15	1	8
18	269	29.99	0.00	84	71	66	23	0	0	137	29.81	0.00	80	73	79	25	0	0	79	29.77	0.07	76	73	92	19	0	1
21	0	30.00	0.00	66	63	89	23	0	0	0	29.82	0.00	70	67	90	25	0	0	0	29.81	0.05	70	68	94	23	0	0
JUL 31																											
00	0	29.81	0.00	69	68	96	23	0	0																		
03	0	29.80	0.00	71	68	93	18	3	10																		
06	11	29.80	0.00	71	68	91	19	0	6																		
09	148	29.80	0.00	72	70	92	17	0	12																		
12	178	29.78	0.00	79	74	86	22	1	13																		
15	158	29.73	0.00	81	75	81	18	1	14																		
18	100	29.72	0.15	72	69	91	23	1	8																		
21	0	29.77	0.00	71	70	96	19	1	4																		

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	29.918	65	63	93	0.2	22	0.1
03	0	29.909	63	62	95	0.4	21	0.3
06	15	29.927	62	61	95	0.1	20	0.1
09	366	29.942	72	67	86	0.8	19	0.7
12	655	29.933	78	69	75	1.6	23	1.1
15	629	29.902	81	69	70	1.4	24	0.9
18	225	29.883	79	69	73	0.6	23	0.5
21	0	29.900	68	65	88	0.4	23	0.3

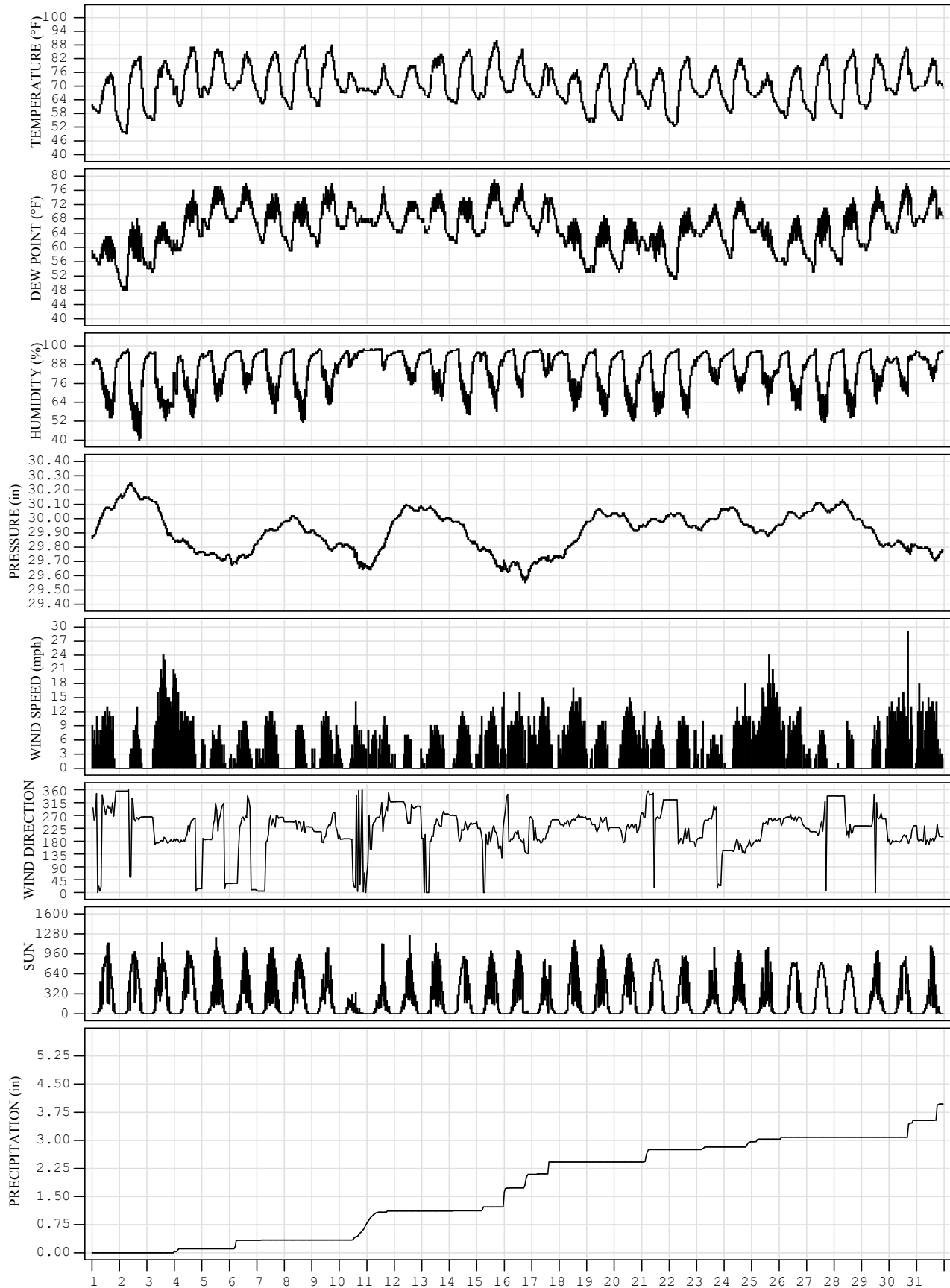
HOURLY PRECIPITATION (Water Equivalent) July 2024: Westford

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			0.05	0.02																				0.03		04
05																										05
06					0.06	0.16	0.01																			06
07				0.01																						07
08																										08
09																										09
10											0.01	0.05	0.02	0.01	0.01	0.04	0.04	0.03	0.04	0.03	0.05	0.07	0.05		10	
11	0.04	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.01	0.01																11
12																	0.03									12
13																										13
14				0.01																						14
15					0.04	0.06																		0.40		15
16	0.09	0.01			0.01													0.07	0.18	0.08	0.03				16	
17					0.01																					17
18															0.32											18
19																										19
20																										20
21			0.02	0.18	0.08	0.05																				21
22																										22
23					0.03	0.01	0.03																			23
24																										24
25				0.01	0.05	0.01														0.06	0.05	0.02	0.01			25
26		0.05																								26
27																										27
28																										28
29																										29
30																0.35	0.02	0.01		0.07						30
31															0.01		0.40	0.02	0.01							31
Sum	0.13	0.11	0.12	0.26	0.31	0.32	0.06	0.02	0.01	0.01	0.00	0.01	0.05	0.02	0.33	0.02	0.39	0.56	0.24	0.19	0.18	0.07	0.08	0.48	Sum	

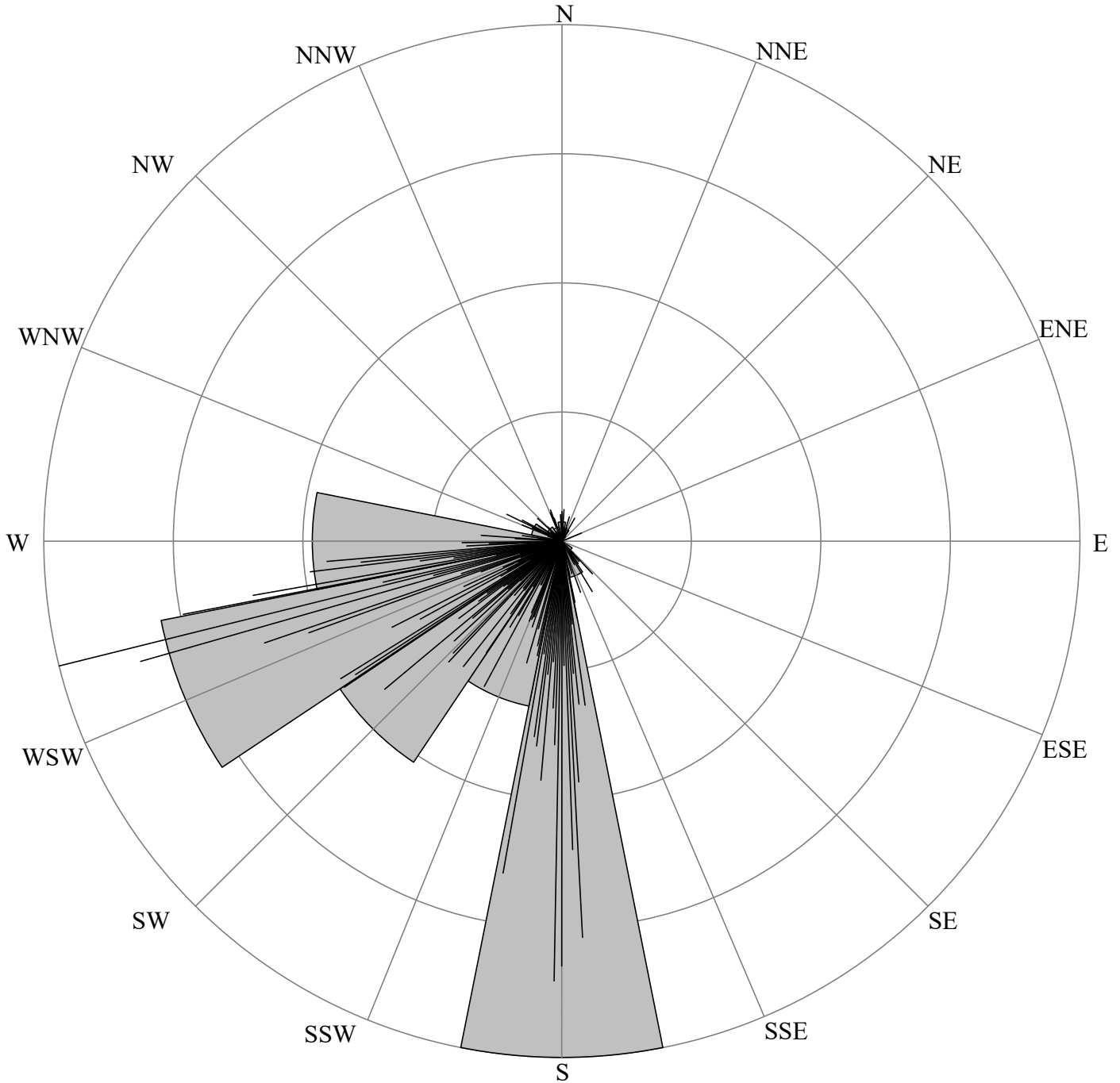
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

July 2024: Westford



Wind Rose: July 2024
Westford



Maximum direction of wind: 20.4 miles from 256°
Maximum sector of wind: 172.2 miles from S
584.7 total miles of wind