

LOCAL CLIMATOLOGICAL DATA

Monthly Summary September 2024

Station: Westford
 Latitude: 44° 37' 38" N Longitude: 73° 02' 30" 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	Res	Res	Peak			2 Minute	
																				Speed	Dir		Speed	Dir	Speed	Dir
1	2	3	4A	4B	5	6	7	8																
1																								
2																								
3	72.7	53.3	63.0	63.7	54	73	2	0	.....	0	0.00	0.0	30.31	30.22	30.254	1.3	1.2	247	13	W	0	0	321
4	78.3	50.1	64.2	62.4	55	79	1	0	.....	0	0.00	0.0	30.42	30.31	30.358	0.7	0.6	201	11	S	0	0	220
5	79.0	49.5	64.3	63.0	56	81	0	0	.....	0	0.00	0.0	30.36	30.16	30.286	0.6	0.6	188	13	SW	0	0	213
6	76.7	51.1	63.9	63.3	57	81	1	0	.....	0	0.01	0.0	30.15	29.90	30.030	0.9	0.6	158	14	SSW	0	0	212
7	70.9	54.1	62.5	59.9	57	89	2	0	.....	0	0.80	0.0	29.90	29.66	29.761	0.9	0.5	197	25	W	0	0	63
8	58.0	44.1	51.0*	50.3	46	86	14	0	.....	0	0.22	0.0	29.90	29.72	29.797	3.3	3.1	224	23	WSW	0	0	95
9	69.1	43.6*	56.3	54.9	50	84	8	0	.....	0	T	0.0	29.96	29.89	29.925	1.4	1.2	199	14	SSW	0	0	134
10	70.1	47.1	58.6	55.9	50	81	6	0	.....	0	0.00	0.0	30.10	29.96	30.032	0.8	0.8	251	13	W	0	0	202
11	75.2	44.6	59.9	58.1	52	82	5	0	.....	0	0.00	0.0	30.18	30.10	30.136	0.7	0.6	206	13	S	0	0	201
12	57.9	48.4	53.2	50.9	50	96	12	0	.....	0	0.00	0.0	30.21	30.15	30.172	0.1	0.1	180	8	S	0	0	55
13																								
14																								
15																								
16	84.1*	60.0	72.0*	73.4	65	77	0	7	.....	0	0.00	0.0	30.28	30.18	30.214	0.4	0.2	177	8	ESE	0	0	291
17	83.0	55.4	69.2	65.9	60	84	0	4	.....	0	0.00	0.0	30.21	30.10	30.159	0.2	0.0	198	8	SSE	0	0	170
18	82.9	55.4	69.2	66.4	61	86	0	4	.....	0	0.00	0.0	30.11	29.98	30.054	0.1	0.0	343	6	SSW	0	0	168
19	80.2	57.8	69.0	66.6	62	87	0	4	.....	0	0.00	0.0	29.98	29.88	29.931	0.0	0.0	266	10	NE	0	0	155
20	77.4	54.3	65.9	64.2	61	89	0	1	.....	0	0.01	0.0	29.99	29.89	29.949	0.2	0.1	264	8	SW	0	0	127
21	74.0	51.5	62.8	61.9	57	86	2	0	.....	0	0.00	0.0	30.01	29.93	29.971	0.2	0.1	323	8	W	0	0	136
22	71.7	51.0	61.3	60.4	55	83	3	0	.....	0	0.00	0.0	30.01	29.94	29.981	0.4	0.2	133	11	S	0	0	134
23	61.2	53.6	57.4	57.3	51	80	7	0	.....	0	0.00	0.0	30.06	29.99	30.022	0.6	0.5	161	12	S	0	0	41
24	68.0	46.9	57.5	56.4	50	82	7	0	.....	0	0.00	0.0	30.15	30.06	30.109	0.7	0.5	180	14	S	0	0	161
25	59.4	50.4	54.9	54.2	51	89	10	0	.....	0	0.53	0.0	30.14	30.05	30.101	1.4	1.3	168	17	S	0	0	43
26	63.5	54.5	59.0	57.8	56	95	5	0	.....	0	0.60	0.0	30.06	29.94	29.981	2.0	1.9	183	17	SSE	0	0	38
27	71.0	49.6	60.3	59.4	56	89	4	0	.....	0	0.05	0.0	30.02	29.96	29.987	0.8	0.5	206	11	S	0	0	148
28	74.7	45.2	59.9	58.1	54	88	5	0	.....	0	0.00	0.0	30.03	29.95	29.991	0.2	0.1	349	9	W	0	0	158
29	74.5	48.6	61.5	59.2	55	88	3	0	.....	0	0.01	0.0	30.00	29.95	29.983	0.4	0.1	248	10	WSW	0	0	155
30	74.0	49.9	62.0	58.9	56	91	3	0	.2.....	0	0.01	0.0	30.09	30.00	30.042	0.2	0.2	272	9	WSW	0	0	125	
Sum	Sum	-----	-----	---	----		Ttl	Ttl	Number of Days		Total	Total	For the month:										---	
1807	1270						100	20			2.24	0.0	30.42	29.66	30.049	0.7	0.5	203	25	W	0	0		
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl		Date	Date	-----	----	----	----	Date	Date	Avg				
72.3	50.8	61.5	60.1	55	85.1	----	----	≥.01 inch	9	2.24	0.0	4	7	-----	----	----	----	7	3+	151				
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			100	20	Thunder	0	Precipitation			Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	1	1.02	7- 8	0.0	-	0					-							
0	0	0	0	----	----	Clear	9	Partly Cloudy		11	Cloudy		5											

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

September 2024: Westford

Hour	SEP 01									SEP 02									SEP 03								
	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																											
03																											
06																											
09																											
12																											
15																			702	30.25	0.00	69	53	58	27	4	9
18																		354	30.23	0.00	72	58	61	22	1	5	
21																		0	30.26	0.00	55	52	89	00	0	0	
					</																						

OBSERVATIONS AT 3-HOUR INTERVALS

September 2024: Westford

Hour	SEP 19									SEP 20									SEP 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	29.99	0.00	61	59	94	00	0	0	0	29.89	0.00	61	60	94	00	0	0	0	29.98	0.00	62	59	90	00	0	0
03	0	29.97	0.00	59	58	96	00	0	0	0	29.90	0.00	58	57	94	00	0	0	0	29.99	0.00	57	55	91	00	0	0
06	0	29.95	0.00	58	57	96	00	0	0	0	29.93	0.00	56	54	95	00	0	0	0	29.99	0.00	54	52	94	00	0	0
09	87	29.97	0.00	61	60	98	00	0	0	80	29.97	0.00	56	55	97	00	0	0	29	30.00	0.00	52	51	96	00	0	0
12	441	29.95	0.00	75	67	76	00	0	0	467	29.99	0.00	67	63	88	06	0	2	417	30.00	0.00	69	62	78	00	0	1
15	389	29.91	0.00	79	69	73	24	1	7	602	29.95	0.00	76	68	75	27	3	8	182	29.95	0.00	72	64	74	24	1	3
18	138	29.89	0.00	78	68	73	00	0	0	248	29.94	0.00	74	66	78	00	0	0	331	29.94	0.00	73	65	74	24	3	7
21	0	29.90	0.00	64	61	89	00	0	0	0	29.96	0.00	65	63	91	33	0	1	0	29.94	0.00	59	56	90	00	0	0
SEP 22									SEP 23									SEP 24									
00	0	29.95	0.00	56	54	94	00	0	0	0	30.00	0.00	56	50	80	13	1	4	0	30.06	0.00	54	51	88	00	0	0
03	0	29.95	0.00	57	55	95	00	0	0	0	30.00	0.00	55	48	76	18	1	9	0	30.08	0.00	50	48	92	00	0	0
06	0	29.95	0.00	52	51	95	00	0	0	0	30.00	0.00	54	48	80	18	0	2	0	30.10	0.00	49	47	94	00	0	0
09	92	30.00	0.00	55	54	97	00	0	0	51	30.02	0.00	56	50	80	00	0	0	33	30.14	0.00	48	47	95	00	0	0
12	317	30.00	0.00	67	60	76	18	0	4	93	30.02	0.00	60	51	74	13	1	5	510	30.14	0.00	64	53	69	18	2	10
15	249	29.99	0.00	69	59	70	15	1	6	99	30.02	0.00	60	54	79	00	0	0	414	30.10	0.00	67	54	64	18	3	11
18	175	29.97	0.00	69	58	69	11	1	6	52	30.03	0.00	61	55	81	09	0	2	256	30.10	0.00	64	53	68	04	1	6
21	0	29.99	0.00	56	53	88	15	0	10	0	30.04	0.00	57	53	87	00	0	0	0	30.11	0.00	54	50	86	00	0	0
SEP 25									SEP 26									SEP 27									
00	0	30.12	0.00	53	49	87	15	0	3	0	30.06	0.01	54	53	95	18	1	6	0	29.99	0.00	58	57	96	18	1	3
03	0	30.10	0.00	54	48	78	18	0	3	0	30.03	0.00	55	53	95	15	1	8	0	29.97	0.00	57	56	96	18	1	6
06	0	30.11	0.00	51	49	91	18	0	1	0	29.99	0.00	55	54	95	18	1	6	0	29.97	0.00	56	56	97	20	2	7
09	26	30.14	0.00	51	49	93	20	1	8	12	29.99	0.00	56	55	96	18	1	8	45	30.01	0.00	56	55	97	22	0	3
12	183	30.13	0.00	55	53	93	18	2	8	113	29.98	0.00	59	58	96	20	3	10	157	30.01	0.00	64	59	85	22	0	2
15	68	30.10	0.00	57	52	86	18	2	11	127	29.94	0.01	60	58	96	15	1	10	619	29.97	0.00	69	61	76	27	3	9
18	38	30.09	0.00	55	53	91	15	1	10	156	29.94	0.00	62	61	94	20	3	7	227	29.96	0.00	69	60	73	33	1	6
21	0	30.09	0.00	56	53	90	15	1	8	0	29.98	0.00	58	57	95	18	1	5	0	29.99	0.00	54	51	92	00	0	0
SEP 28									SEP 29									SEP 30									
00	0	30.02	0.00	50	49	94	00	0	0	0	29.97	0.00	55	53	95	00	0	0	0	30.00	0.00	53	52	95	00	0	0
03	0	30.02	0.00	49	47	95	00	0	0	0	29.98	0.00	51	50	95	00	0	0	0	30.00	0.00	52	51	95	00	0	0
06	0	30.00	0.00	49	48	96	00	0	0	0	29.98	0.00	49	48	96	00	0	0	0	30.02	0.00	50	49	96	00	0	0
09	56	30.01	0.00	50	49	97	00	0	0	25	30.00	0.00	53	52	97	00	0	0	54	30.07	0.00	55	54	97	00	0	0
12	548	30.01	0.00	66	60	81	00	0	2	548	30.00	0.00	69	62	78	18	1	4	195	30.08	0.00	59	58	97	00	0	0
15	617	29.97	0.00	72	61	67	11	1	3	352	29.96	0.00	71	63	76	00	0	0	573	30.04	0.00	71	64	77	27	2	4
18	131	29.95	0.00	73	65	75	00	0	0	212	29.95	0.00	73	63	70	00	0	0	214	30.03	0.00	73	64	75	33	0	2
21	0	29.97	0.00	57	54	92	00	0	0	0	29.99	0.00	56	54	92	00	0	0	0	30.05	0.00	59	57	93	00	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	30.037	56	53	92	0.3	18	0.3
03	0	30.037	54	51	92	0.3	21	0.2
06	0	30.038	52	50	94	0.3	20	0.3
09	53	30.060	54	52	95	0.4	18	0.4
12	438	30.060	66	59	77	1.4	20	1.2
15	443	30.033	71	60	70	1.7	22	1.1
18	199	30.018	70	60	72	1.0	20	0.6
21	0	30.028	58	55	90	0.2	20	0.2

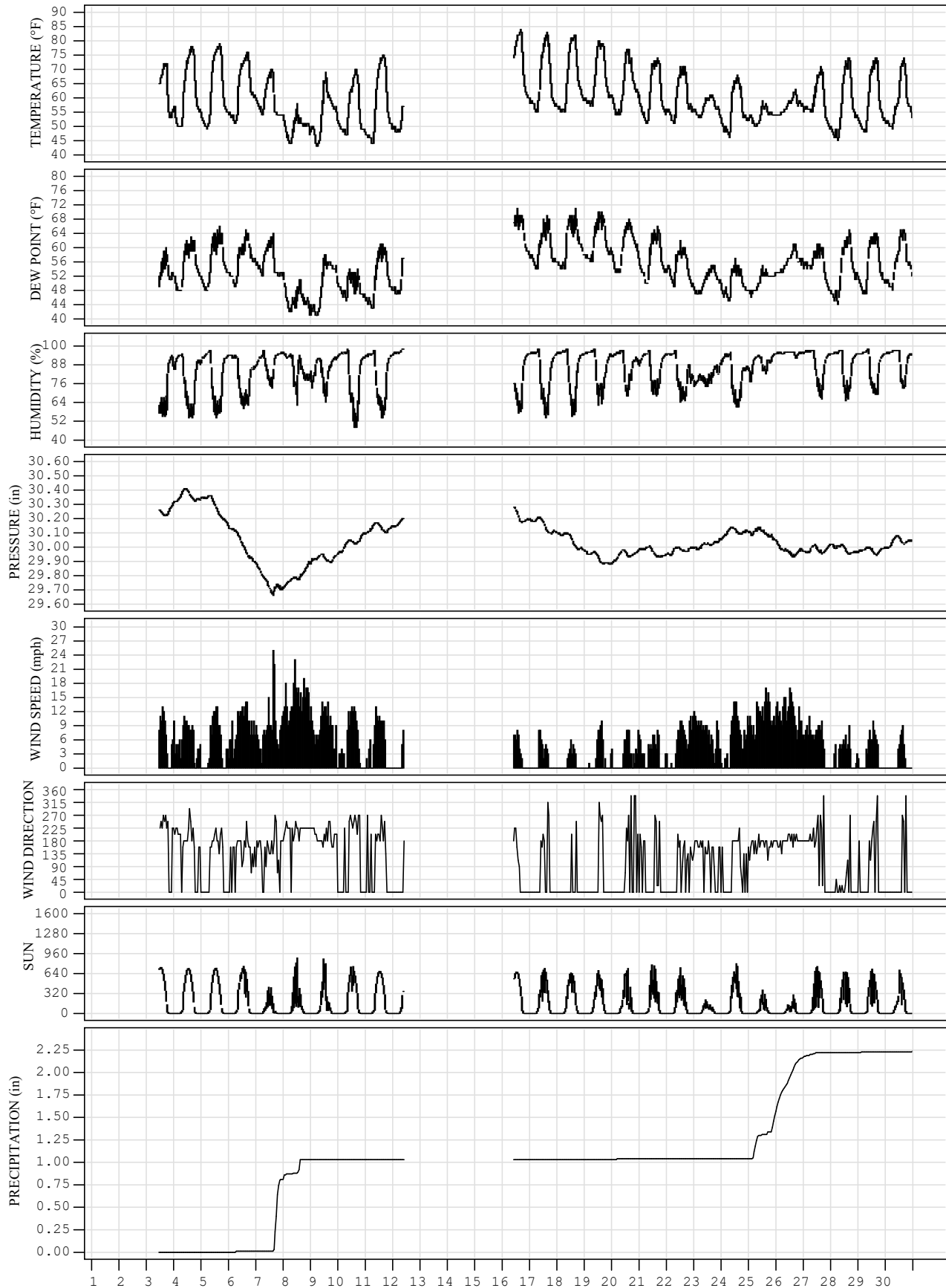
HOURLY PRECIPITATION (Water Equivalent) September 2024: Westford

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																									04
05																									05
06																									06
07																									07
08	0.05		0.01																						08
09																									09
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22																									22
23																									23
24																									24
25																									25
26	0.05	0.05	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.01	0.02	0.01	0.01				26
27	0.01		0.01			0.01			0.01		0.01														27
28																									28
29			0.01																						29
30																								0.01	30
Sum	0.11	0.05	0.07	0.05	0.11	0.09	0.09	0.07	0.05	0.02	0.04	0.04	0.04	0.06	0.14	0.05	0.26	0.19	0.25	0.12	0.12	0.09	0.06	0.07	Sum

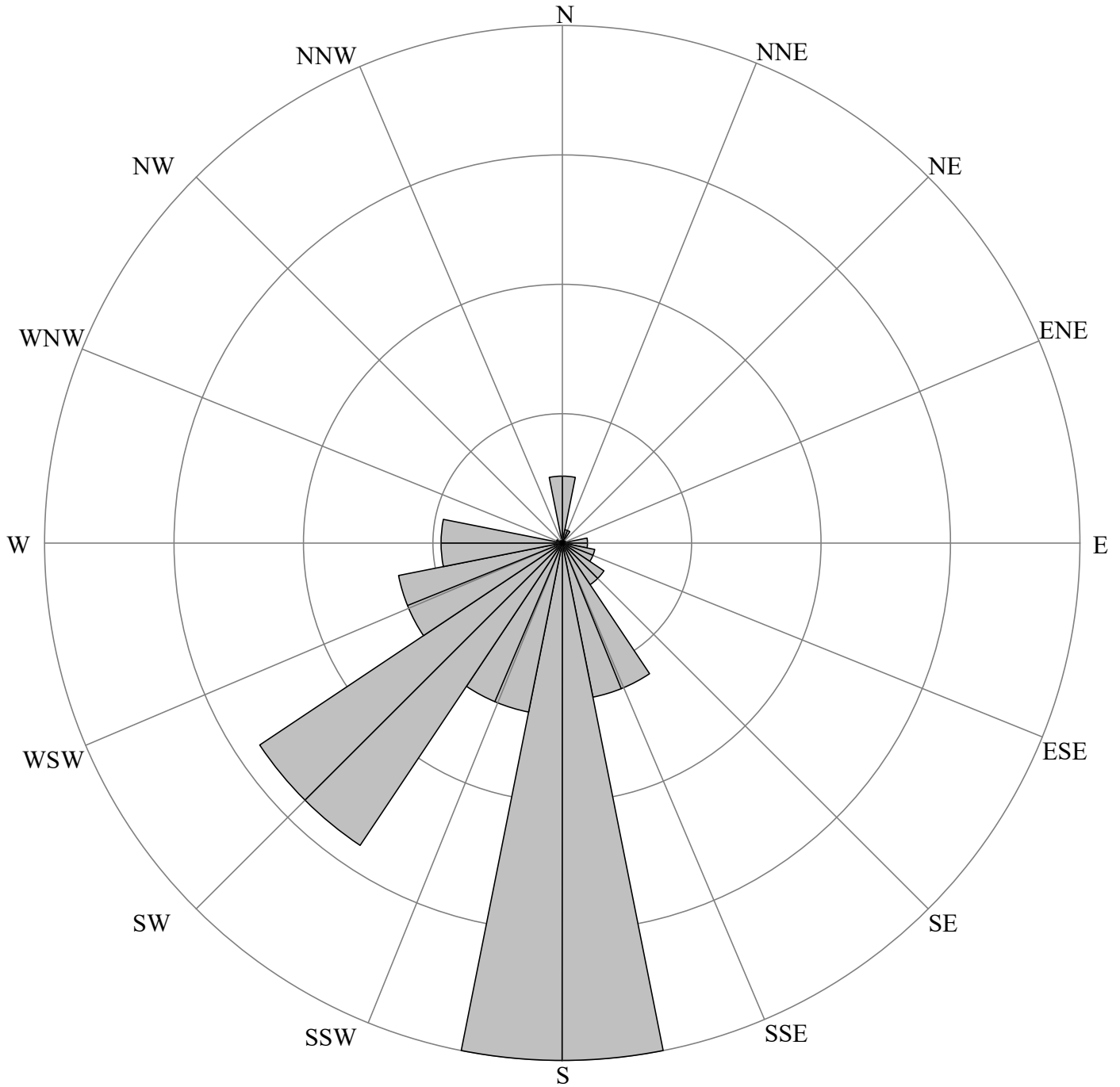
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

September 2024: Westford



Wind Rose: September 2024
Westford



Maximum direction of wind: 127.5 miles from 180°
Maximum sector of wind: 127.5 miles from S
420.4 total miles of wind