

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

March 2024

Station: Westford
 Latitude: 43° 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		11	12	13	14	15	16	17	18	19	20	21	22	23		
1	36.8	6.4	21.6	23.4	13	63	43	0	.....	0	T	T	30.51	30.35	30.440	4.3	4.0	176	23	SSE	11	170	125
2	42.3	34.7	38.5	38.3	32	79	26	0	.....	0	0.20	0.0	30.35	30.16	30.268	4.9	4.9	175	26	S	14	177	33
3	43.9	36.7	40.3	39.7	39	96	24	0	.....	0	T	0.0	30.29	30.13	30.213	0.3	0.2	319	9	WNW	6	263	44
4	56.6	38.0	47.3*	45.6	42	87	17	0	.....	0	0.00	0.0	30.36	30.24	30.292	1.9	1.9	164	16	S	9	181	107
5	52.3	40.2	46.3	45.4	41	85	19	0	.....	0	0.09	0.0	30.24	29.91	30.065	3.4	3.4	162	22	SSE	10	170	69
6	45.7	36.9	41.3	42.2	41	96	23	0	.....	0	0.70	0.0	30.02	29.91	29.979	2.3	2.1	179	18	SSE	10	183	19
7	45.8	28.9	37.3	37.1	34	89	27	0	.....	0	0.18	0.0	30.24	29.93	30.075	1.9	1.9	345	20	NW	9	340	75
8	49.8	23.8	36.8	35.2	28	77	28	0	.....	0	0.00	0.0	30.33	30.18	30.259	0.6	0.3	307	11	WSW	7	261	193
9	43.4	35.2	39.3	38.4	28	67	26	0	.....	0	0.09	0.0	30.18	29.61	29.942	4.7	4.7	156	29	S	12	170	54
10	35.7	24.5	30.1	32.1	30	94	34	0	.....	2	0.90	2.8	29.62	29.23	29.343	3.1	2.4	247	20	E	11	273	39
11	34.4	21.6	28.0	27.0	22	83	37	0	.....	5	0.63	6.0	29.70	29.33	29.513	8.0	7.9	271	27	W	15	290	34
12	45.6	27.0	36.3	35.4	22	59	28	0	.....	2	0.00	0.0	29.85	29.70	29.765	3.1	3.0	292	20	W	10	283	215
13	54.4	22.3	38.4	36.8	26	67	27	0	.....	1	0.02	0.0	29.92	29.83	29.867	0.5	0.5	185	9	SSE	5	189	151
14	53.7	32.2	43.0	41.5	33	73	22	0	.....	T	0.00	0.0	30.05	29.86	29.977	0.5	0.4	307	11	W	7	273	185
15	45.2	31.7	38.5	38.8	36	91	26	0	.....	0	0.53	0.0	29.92	29.74	29.783	1.0	0.8	359	11	NNW	5	6	42
16	44.5	31.5	38.0	37.5	35	90	26	0	.....	0	0.02	0.0	29.77	29.57	29.714	0.4	0.1	320	7	SSE	5	264	70
17	45.4	34.9	40.2	40.4	34	79	25	0	.....	0	0.16	0.0	29.57	29.36	29.459	5.0	4.5	212	29	SSE	15	233	77
18	36.2	28.6	32.4	32.6	27	81	32	0	.....	1	0.12	1.6	29.58	29.52	29.561	4.6	4.5	231	21	WSW	13	246	60
19	32.1	20.8	26.4	27.6	22	80	38	0	.....	2	0.32	4.4	29.66	29.56	29.603	3.3	2.8	254	20	WSW	12	261	44
20	39.7	23.8	31.8	31.0	27	86	33	0	.....	5	0.32	3.0	29.66	29.46	29.535	4.0	3.3	196	23	SSW	12	226	78
21	23.9	14.3	19.1	19.2	11	69	46	0	.....	2	0.01	0.2	30.20	29.66	29.934	8.1	8.1	263	30	WSW	16	255	104
22	26.7	10.0	18.4*	18.6	6	57	46	0	.....	2	0.00	0.0	30.40	30.20	30.324	3.0	2.9	272	23	W	12	263	164
23	27.7	16.8	22.3	21.3	18	87	42	0	.....	10	0.93	8.4	30.27	29.97	30.084	0.9	0.7	313	14	WNW	6	284	11
24	34.6	11.1	22.8	22.5	15	75	42	0	.....	8	0.00	0.0	30.49	30.03	30.278	1.0	0.9	299	14	NW	7	261	203
25	49.2	12.5	30.9	31.1	15	56	34	0	.....	3	0.00	0.0	30.53	30.37	30.461	1.6	1.6	160	18	S	9	166	245
26	57.0*	24.5	40.8	40.7	26	58	24	0	.....	1	0.00	0.0	30.37	30.01	30.189	1.9	1.5	161	21	S	11	154	150
27	48.5	37.9	43.2	42.9	39	87	21	0	.....	0	0.03	0.0	30.03	29.92	29.977	5.6	5.5	172	24	SSE	12	170	68
28	43.7	33.3	38.5	40.0	37	88	26	0	.....	0	0.00	0.0	30.03	29.86	29.947	0.5	0.4	353	11	N	5	19	50
29	46.0	30.5	38.3	36.8	27	69	26	0	.....	0	0.00	0.0	29.89	29.62	29.714	4.5	4.4	279	27	NW	16	265	216
30	43.4	28.7	36.1	34.8	22	61	29	0	.....	0	0.00	0.0	29.72	29.65	29.686	5.4	5.3	278	29	WSW	15	269	224
31	50.0	30.0	40.0	38.9	24	56	25	0	.....	0	0.00	0.0	29.94	29.69	29.808	2.3	2.2	267	21	W	11	260	222
Sum	Sum	-----	-----	---	----	Ttl	Ttl			Total	Total	For the month:						---						
1334	829					922	0	Number of Days		5.25	26.4	30.53	29.23	29.937	3.0	1.7	231	30	WSW	16	265			
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip		Season Ttl	Date	Date	-----	----	---	Date	Date	Avg						
43.0	26.8	34.9	34.6	28	77.0	----	----	≥.01 inch	17	9.75	71.6	25	10	-----	----	---	21	29	109					
Number of Days						Season to Date	Snow, Ice ≥1.0 inch	6	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date									
Max Temperature			Min Temperature			5891	0	Thunder	1	Precipitation		Snow, Ice Plts												
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	1	0.00	-	8.4	23	10		23										
0	4	22	0	----	----	Clear	4	Partly Cloudy		10	Cloudy		17											

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

March 2024: Westford

Hour	MAR 01			MAR 02			MAR 03			MAR 04			MAR 05			MAR 06			MAR 07			MAR 08			MAR 09			MAR 10			MAR 11			MAR 12			MAR 13			MAR 14			MAR 15			MAR 16			MAR 17			MAR 18																												
	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	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	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
00	0	30.40	0.00	11	-2	55	29	7	13	0	30.35	0.00	37	23	57	16	7	23	0	30.16	0.00	38	37	95	06	0	0	0	30.16	0.00	38	37	95	06	0	0	0	30.16	0.00	38	37	95	06	0	0	0	30.16	0.00	38	37	95	06	0	0	0	30.16	0.00	38	37	95	06	0	0																	
03	0	30.44	0.00	8	-3	62	23	0	3	0	30.33	0.00	36	24	60	16	4	15	0	30.14	0.00	38	37	95	02	0	5	0	30.14	0.00	38	37	95	02	0	5	0	30.14	0.00	38	37	95	02	0	5	0	30.14	0.00	38	37	95	02	0	5																										
06	0	30.48	0.00	10	1	65	16	4	8	0	30.34	0.00	35	25	65	17	6	16	0	30.16	0.00	38	37	96	04	0	0	0	30.16	0.00	38	37	96	04	0	0	0	30.16	0.00	38	37	96	04	0	0	0	30.16	0.00	38	37	96	04	0	0																										
09	237	30.51	0.00	19	8	62	16	4	12	90	30.31	0.00	39	30	68	17	8	17	95	30.20	0.00	41	40	97	03	0	3	95	30.20	0.00	41	40	97	03	0	3	95	30.20	0.00	41	40	97	03	0	3	95	30.20	0.00	41	40	97	03	0	3																										
12	346	30.50	0.00	26	16	65	18	8	19	100	30.27	0.00	40	37	87	19	4	18	178	30.22	0.00	42	41	96	27	1	6	178	30.22	0.00	42	41	96	27	1	6	178	30.22	0.00	42	41	96	27	1	6	178	30.22	0.00	42	41	96	27	1	6																										
15	299	30.42	0.00	34	22	62	17	6	10	51	30.23	0.00	41	37	85	17	5	16	111	30.23	0.00	42	41	96	32	1	5	111	30.23	0.00	42	41	96	32	1	5	111	30.23	0.00	42	41	96	32	1	5	111	30.23	0.00	42	41	96	32	1	5																										
18	0	30.41	0.00	34	23	64	17	4	12	0	30.21	0.00	40	38	94	17	1	6	0	30.24	0.00	41	39	94	01	0	0	0	30.24	0.00	41	39	94	01	0	0	0	30.24	0.00	41	39	94	01	0	0	0	30.24	0.00	41	39	94	01	0	0																										
21	0	30.39	0.00	34	23	64	17	5	11	0	30.18	0.00	37	36	95	06	0	0	0	30.28	0.00	39	37	95	01	0	0	0	30.28	0.00	39	37	95	01	0	0	0	30.28	0.00	39	37	95	01	0	0	0	30.28	0.00	39	37	95	01	0	0																										

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ended: Date	--	--	--	--	--	--	--	--	--	--	--	--
Ended: Time	----	----	----	----	----	----	----	----	----	----	----	----

The precipitation amounts may occur at any time during the month. The time indicated is the ending time of the interval. Date and time are not entered for trace amounts.

OBSERVATIONS AT 3-HOUR INTERVALS

March 2024: Westford

Hour	MAR 19									MAR 20									MAR 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	29.58	0.00	29	27	93	26	7	13	0	29.56	0.00	30	25	80	17	2	14	0	29.66	0.00	24	20	86	27	2	10
03	0	29.60	0.00	27	24	92	28	5	10	0	29.53	0.00	30	27	89	17	6	11	0	29.74	0.00	19	13	76	26	7	12
06	0	29.62	0.00	23	21	90	24	8	15	0	29.51	0.00	31	28	89	17	5	13	0	29.80	0.00	17	12	81	25	8	17
09	47	29.65	0.00	23	17	79	24	4	12	19	29.51	0.00	33	29	86	18	7	12	54	29.90	0.00	15	9	76	25	9	20
12	83	29.64	0.00	29	18	63	25	5	14	264	29.50	0.00	35	30	79	13	3	8	483	29.94	0.00	20	11	68	23	9	16
15	102	29.59	0.00	31	22	69	28	1	4	77	29.46	0.00	39	28	64	18	4	16	473	29.97	0.00	22	12	64	24	9	21
18	69	29.57	0.00	31	24	75	05	0	3	0	29.54	0.00	29	27	92	26	2	13	67	30.04	0.00	21	10	61	26	9	19
21	0	29.59	0.00	30	23	78	15	0	7	0	29.60	0.00	28	25	88	24	5	12	0	30.15	0.00	20	8	60	27	6	13
MAR 22									MAR 23									MAR 24									
00	0	30.20	0.00	18	6	59	26	10	19	0	30.27	0.00	20	10	64	33	0	3	0	30.03	0.00	17	15	91	33	2	8
03	0	30.30	0.00	14	4	63	26	9	17	0	30.23	0.00	19	15	85	34	0	0	0	30.08	0.00	15	13	90	34	1	5
06	0	30.35	0.00	11	2	65	28	5	16	0	30.16	0.00	19	17	90	00	0	3	0	30.16	0.00	12	9	89	00	0	0
09	316	30.39	0.00	15	5	64	32	4	11	16	30.10	0.00	22	19	91	06	0	0	62	30.24	0.00	19	17	90	01	0	4
12	510	30.38	0.00	19	6	57	24	6	9	33	30.07	0.00	26	23	90	09	0	0	759	30.31	0.00	28	18	65	25	1	8
15	573	30.31	0.00	25	5	43	20	1	7	21	29.99	0.00	27	25	89	33	0	4	744	30.34	0.00	33	17	52	28	2	7
18	107	30.31	0.00	24	7	47	26	0	6	0	29.98	0.00	21	18	90	27	2	11	202	30.37	0.00	33	19	55	34	0	4
21	0	30.31	0.00	22	9	58	28	0	4	0	30.00	0.00	17	15	91	32	0	9	0	30.47	0.00	23	17	78	02	0	0
MAR 25									MAR 26									MAR 27									
00	0	30.49	0.00	19	15	85	02	0	0	0	30.37	0.00	37	10	33	15	2	13	0	30.01	0.00	41	35	80	17	3	13
03	0	30.50	0.00	17	12	83	02	0	0	0	30.31	0.00	29	17	60	17	0	0	0	29.96	0.00	39	35	83	16	5	9
06	0	30.51	0.00	13	10	86	03	0	0	0	30.30	0.00	25	16	68	11	0	0	0	29.97	0.00	39	35	85	17	5	16
09	329	30.51	0.00	25	15	68	03	0	0	230	30.23	0.00	37	14	39	09	0	0	69	30.01	0.00	39	37	94	18	9	17
12	775	30.50	0.00	41	17	38	18	5	12	749	30.18	0.00	48	25	41	02	2	4	229	29.99	0.00	43	40	90	16	7	13
15	735	30.44	0.00	47	14	27	13	5	11	178	30.16	0.00	51	33	49	26	1	7	121	29.97	0.00	48	43	82	17	8	19
18	192	30.39	0.00	47	19	32	16	1	13	76	30.08	0.00	49	38	67	05	1	4	39	29.96	0.00	48	44	86	18	7	19
21	0	30.40	0.00	37	18	47	16	2	9	0	30.05	0.00	45	39	81	15	8	16	0	29.99	0.00	45	42	90	17	4	12
MAR 28									MAR 29									MAR 30									
00	0	29.99	0.00	42	40	91	18	0	3	0	29.89	0.00	34	31	89	35	0	0	0	29.66	0.00	33	23	65	27	10	21
03	0	29.97	0.00	40	38	95	18	0	0	0	29.81	0.00	32	28	88	27	0	0	0	29.66	0.00	33	24	70	29	7	15
06	0	30.00	0.00	42	41	96	21	0	1	0	29.76	0.00	33	27	80	01	1	8	0	29.69	0.00	30	19	64	26	10	23
09	40	30.02	0.00	38	37	96	02	2	10	148	29.75	0.00	34	28	77	29	3	8	165	29.71	0.00	30	20	67	27	7	19
12	97	29.98	0.00	42	37	83	34	0	5	682	29.70	0.00	43	30	61	28	10	18	230	29.71	0.00	37	23	57	27	7	18
15	186	29.93	0.00	43	37	80	01	0	0	763	29.63	0.00	44	25	48	26	14	24	747	29.67	0.00	43	25	50	32	3	16
18	25	29.89	0.00	42	35	77	35	0	4	214	29.63	0.00	41	26	54	26	10	24	230	29.66	0.00	43	24	48	28	3	9
21	0	29.89	0.00	36	33	87	35	0	0	0	29.66	0.00	34	24	65	26	7	12	0	29.70	0.00	34	21	59	25	2	7
MAR 31																											
00	0	29.70	0.00	32	21	66	25	0	0																		
03	0	29.70	0.00	33	22	63	25	0	0																		
06	0	29.75	0.00	33	24	69	26	0	3																		
09	141	29.82	0.00	36	25	62	24	5	11																		
12	482	29.83	0.00	41	23	47	26	9	17																		
15	747	29.82	0.00	48	25	41	27	6	12																		
18	156	29.84	0.00	49	26	41	34	0	8																		
21	0	29.89	0.00	38	25	59	35	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	29.946	32	26	79	2.4	25	1.6
03	0	29.933	31	25	81	2.7	22	1.5
06	0	29.940	30	25	83	3.2	22	1.9
09	126	29.959	32	27	81	3.4	22	1.9
12	346	29.950	38	29	72	4.2	24	2.4
15	326	29.918	41	30	68	3.5	22	2.0
18	70	29.920	39	30	72	2.5	24	1.6
21	0	29.939	34	28	80	2.3	23	1.6

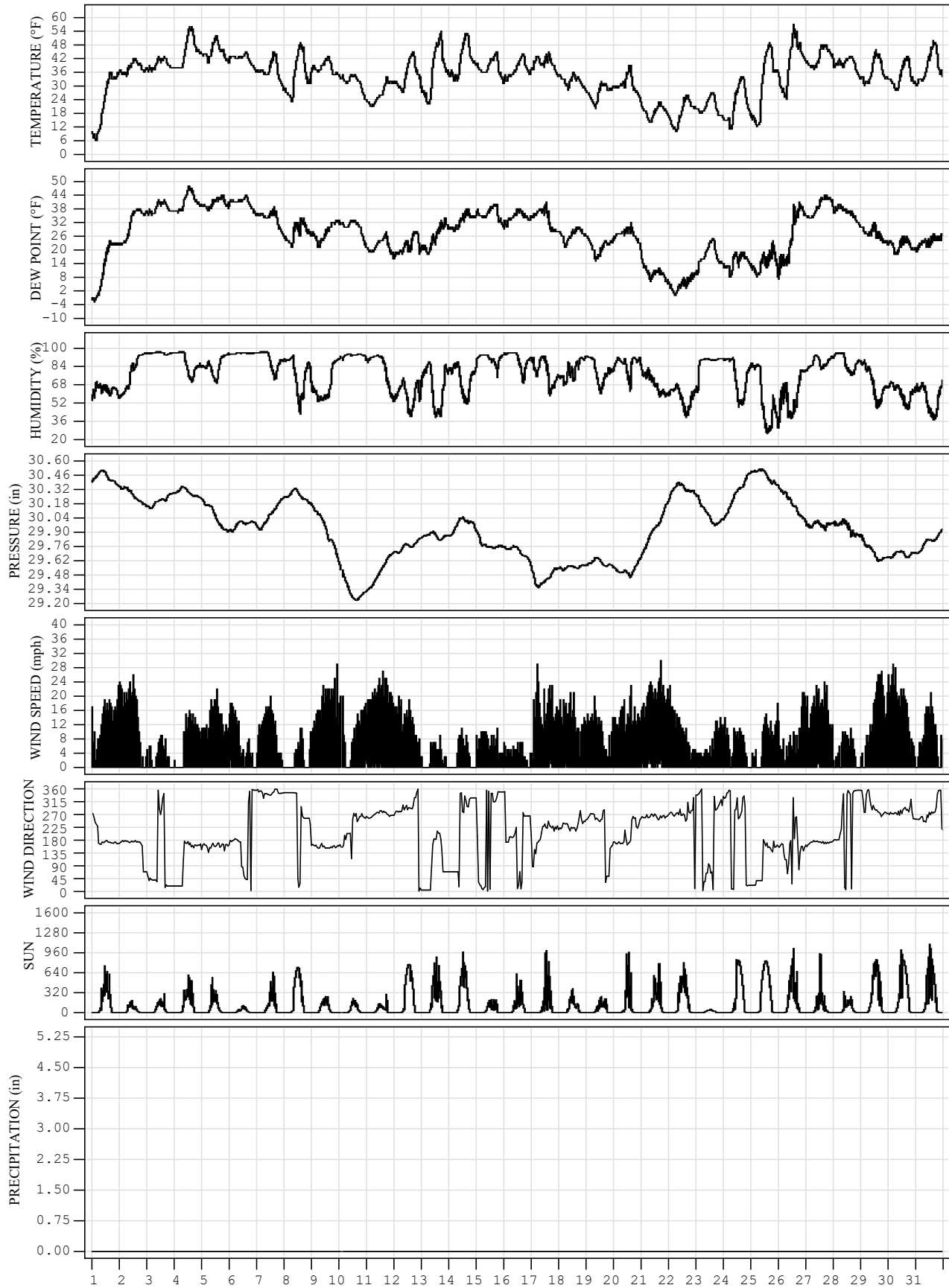
HOURLY PRECIPITATION (Water Equivalent) March 2024: Westford

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
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28																									28
29																									29
30																									30
31																									31
Sum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Sum

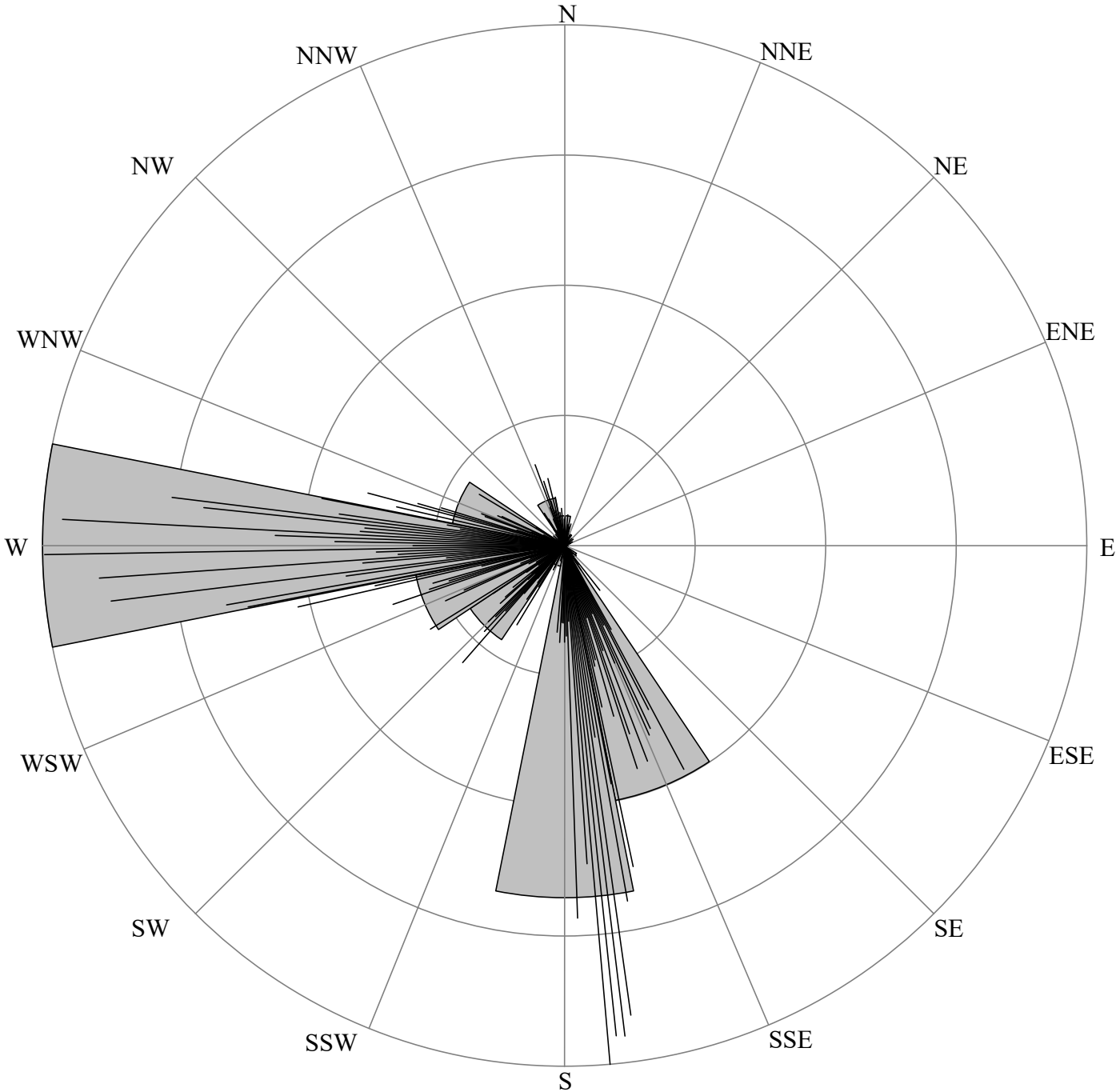
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

HOUR-BY-HOUR DATA

March 2024: Westford



Wind Rose: March 2024
Westford



Maximum direction of wind: 60.6 miles from 175°
Maximum sector of wind: 701.4 miles from W
2224.3 total miles of wind