

# LOCAL CLIMATOLOGICAL DATA

## Monthly Summary

### February 2023

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
1	2	3	4A	4B	5	6	7	8		11	12	13	14	15	16	17	18	19	20	21	22	23	
1	20.8	-4.4	8.2	9.3	2	74	56	0	.....	8	0.00	0.0	30.28	30.17	30.226	2.5	2.3	192	18	SSE	10	175	55
2	28.4	15.8	22.1	22.3	14	70	43	0	.....	8	0.00	0.0	30.18	29.55	29.894	7.1	6.7	179	27	SSE	16	179	44
3	17.6	-18.9	-0.6	-9.1	-18	63	66	0	.....	8	0.02	0.3	30.39	29.65	30.051	7.8	7.8	278	30	W	16	246	70
4	8.1	-24.5*	-8.2*	-9.9	-22	55	74	0	.....	8	0.00	0.0	30.60	30.27	30.470	5.3	4.1	202	32	SSE	17	171	104
5	37.1	8.1	22.6	26.0	14	59	42	0	.....	7	0.00	0.0	30.27	29.87	30.000	8.5	8.5	176	33	SSE	15	174	61
6	37.3	8.3	22.8	25.0	18	76	42	0	.....	7	0.00	0.0	30.34	29.88	30.121	1.8	1.1	278	16	WNW	8	182	94
7	37.2	3.9	20.6	22.6	13	69	44	0	...4.....	7	T	T	30.34	29.90	30.126	5.3	5.3	173	33	S	16	179	82
8	40.8	31.3	36.0	34.9	28	77	29	0	.....	6	0.01	T	30.23	29.93	30.072	4.7	4.1	222	19	W	11	259	58
9	42.4	23.7	33.1	32.5	29	89	32	0	.....	6	0.66	T	30.25	29.63	30.042	2.0	1.9	165	22	SSE	12	175	33
10	43.4	32.8	38.1	38.9	35	85	27	0	...4.....	3	0.04	T	29.86	29.56	29.702	6.8	6.3	212	30	WSW	16	245	20
11	34.6	20.5	27.5	27.8	19	71	37	0	.....	3	0.00	0.4	30.24	29.84	30.103	4.5	3.1	232	24	S	14	177	132
12	42.9	23.4	33.2	30.5	23	73	32	0	.....	2	0.00	0.0	30.08	29.85	29.993	3.0	2.9	187	21	S	10	174	110
13	45.9	21.7	33.8	33.0	26	76	31	0	.....	1	0.00	0.0	29.85	29.47	29.620	0.9	0.7	192	13	NW	7	292	122
14	43.1	27.3	35.2	34.2	26	73	30	0	.....	1	T	T	30.11	29.59	29.921	2.2	1.9	268	17	W	10	264	129
15	53.5*	28.4	40.9	43.7	31	61	24	0	.....	1	0.00	0.0	30.08	29.65	29.811	5.6	5.5	176	32	SSE	15	177	59
16	51.0	33.2	42.1*	40.6	33	74	23	0	.....	T	0.00	0.0	29.98	29.69	29.876	4.7	4.0	249	31	WSW	17	261	103
17	34.0	12.1	23.1	21.1	19	90	42	0	...4.6....	2	0.19	1.9	30.05	29.47	29.723	2.3	1.9	302	20	WSW	12	258	16
18	30.4	5.3	17.8	20.6	16	81	47	0	.....	2	T	T	30.26	30.05	30.185	1.5	1.2	187	19	SSE	10	169	115
19	41.2	28.2	34.7	35.4	25	68	30	0	.....	T	0.00	0.0	30.30	29.80	30.075	5.1	4.9	175	34	S	17	174	69
20	41.6	22.6	32.1	35.5	28	74	32	0	.....	T	T	0.0	29.80	29.55	29.645	4.8	3.5	199	22	SSE	11	174	25
21	41.7	13.4	27.6	27.2	21	78	37	0	.....	T	0.06	0.1	29.78	29.45	29.615	2.7	2.2	189	24	SSE	12	164	109
22	32.6	16.1	24.3	21.3	13	70	40	0	.....	T	T	T	30.17	29.77	30.082	2.0	1.5	296	18	NW	9	279	95
23	20.6	14.1	17.4	16.5	14	88	47	0	.....	5	0.54	4.8	30.11	29.84	29.954	1.1	0.6	326	12	N	7	252	17
24	14.3	-2.5	5.9	8.4	4	82	59	0	.....	5	0.05	1.0	30.56	29.85	30.266	2.3	2.2	289	15	W	8	276	36
25	11.1	-6.8	2.2	2.7	-2	79	63	0	.....	5	0.05	0.4	30.58	30.13	30.378	0.6	0.6	178	12	SSE	7	180	33
26	25.2	-1.3	12.0	13.4	10	86	53	0	.....	6	0.06	0.8	30.13	29.68	29.854	1.6	1.3	178	24	SSE	12	169	26
27	26.5	11.8	19.2	20.6	13	74	45	0	.....	5	0.01	T	30.04	29.78	29.932	1.2	0.7	273	16	WNW	8	246	101
28	31.9	22.8	27.3	27.6	23	83	37	0	.....	7	0.31	3.1	29.95	29.67	29.755	4.3	4.0	168	21	SSE	12	185	24
Sum	Sum	-----	-----	---	----	Ttl	Ttl		Number of Days	Total	Total	For the month:										---	
935	366					1164	0			1.69	12.8	30.60	29.45	29.982	3.7	2.5	208	34	S	17	174		
Avg	Avg	Avg	Mean	Avg	Avg	----	----	Precip	Season Ttl	Date	Date	-----	----	----	---	Date	Date	Avg					
33.4	13.1	23.2	23.3	16	74.9	----	----	≥.01 inch	12	6.06	49.6	4	21	-----	----	---	19	19	69				
Number of Days						Season to Date	Snow, Ice ≥1.0 inch	4	Greatest in 24 Hours and Dates						Greatest Depth on Ground of Snow, Ice Pellets or Ice and Date								
Max Temperature			Min Temperature			4941	0	Thunder	0	Precipitation		Snow, Ice Plts											
≥ 90°F	≤ 32°F	≤ 32°F	≤ 0°F	----	----	Heavy Fog	0	0.00	-	4.8	23	8			1+								
0	11	26	6	----	----	Clear	3	Partly Cloudy		11	Cloudy		14										

**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

## February 2023: Westford

Hour	FEB 01									FEB 02									FEB 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	0	30.28	0.00	1	-4	77	04	0	0	0	30.18	0.00	16	10	75	17	3	8	0	29.65	0.00	18	14	86	29	7	18
03	0	30.27	0.00	-3	-7	81	04	0	0	0	30.13	0.00	16	10	77	16	6	12	0	29.80	0.00	4	-4	70	29	8	17
06	0	30.26	0.00	-3	-8	82	04	0	0	0	30.09	0.00	18	12	78	17	8	16	0	29.90	0.00	-3	-8	77	26	4	12
09	32	30.26	0.00	3	-2	81	14	0	3	79	30.05	0.00	20	14	77	17	6	14	105	30.00	0.00	-9	-18	65	26	6	16
12	211	30.22	0.00	16	4	59	18	4	14	190	29.94	0.00	23	15	73	16	8	19	253	30.04	0.00	-11	-21	61	28	7	23
15	120	30.18	0.00	20	10	66	18	4	14	134	29.76	0.00	26	15	63	17	10	27	134	30.11	0.00	-15	-26	56	26	7	23
18	0	30.20	0.00	16	11	81	16	2	7	0	29.70	0.00	27	14	59	17	10	25	0	30.23	0.00	-18	-27	62	26	7	19
21	0	30.19	0.00	14	8	78	20	2	5	0	29.60	0.00	28	15	57	17	9	21	0	30.32	0.00	-18	-30	53	26	10	21
00	0	30.39	0.00	-19	-28	61	26	7	19	0	30.27	0.00	8	-6	51	17	10	23	0	29.89	0.00	37	24	61	19	5	14
03	0	30.50	0.00	-20	-30	61	24	6	10	0	30.16	0.00	14	2	57	16	13	27	0	29.91	0.00	36	28	73	22	4	9
06	0	30.56	0.00	-22	-30	64	25	2	9	0	30.10	0.00	18	7	60	18	7	23	0	29.95	0.00	35	28	78	22	0	0
09	32	30.59	0.00	-19	-27	65	22	3	5	83	30.05	0.00	22	10	61	17	10	18	28	30.08	0.00	24	21	89	28	2	11
12	376	30.55	0.00	-8	-23	47	19	3	8	301	29.96	0.00	28	15	58	17	9	21	519	30.17	0.00	27	19	72	29	3	14
15	109	30.47	0.00	-2	-19	44	14	5	11	169	29.88	0.00	33	20	59	18	6	18	274	30.20	0.00	27	15	62	28	5	9
18	0	30.41	0.00	-3	-17	50	17	8	14	0	29.89	0.00	35	23	62	17	6	20	0	30.25	0.00	16	9	75	34	2	8
21	0	30.32	0.00	3	-12	48	16	7	18	0	29.89	0.00	36	24	60	17	6	17	0	30.30	0.00	12	8	82	34	1	3
00	0	30.33	0.00	9	6	87	01	0	0	0	29.93	0.00	33	28	84	18	6	13	0	30.23	0.00	32	26	78	22	4	7
03	0	30.33	0.00	6	3	87	01	0	0	0	29.95	0.00	31	29	92	17	6	14	0	30.19	0.00	29	25	85	22	0	0
06	0	30.32	0.00	5	2	88	01	0	0	0	30.00	0.00	33	29	88	20	3	7	0	30.23	0.00	24	22	91	22	0	0
09	32	30.25	0.00	12	9	90	19	2	6	21	30.07	0.00	35	29	79	23	2	8	118	30.21	0.00	29	27	92	29	0	0
12	459	30.14	0.00	32	13	46	17	5	17	322	30.07	0.00	38	29	70	25	4	12	171	30.13	0.00	36	30	77	05	0	3
15	79	30.00	0.00	36	16	43	22	7	14	84	30.09	0.00	39	28	64	22	7	16	21	30.01	0.00	34	33	93	10	0	2
18	0	29.96	0.00	34	20	56	15	8	29	0	30.12	0.00	36	27	69	21	4	14	0	29.85	0.00	35	34	95	15	5	10
21	0	29.95	0.00	33	26	76	17	8	21	0	30.20	0.00	35	27	73	22	3	7	0	29.73	0.00	38	36	95	17	6	13
00	0	29.63	0.00	42	41	93	16	8	22	0	29.84	0.00	33	28	80	25	10	15	0	30.08	0.00	26	19	75	18	5	17
03	0	29.56	0.00	42	41	95	16	7	19	0	29.93	0.00	26	24	90	29	3	13	0	30.04	0.00	26	19	77	18	7	17
06	0	29.60	0.00	41	40	94	18	3	11	0	30.07	0.00	23	19	85	28	6	21	0	30.04	0.00	24	19	80	17	5	8
09	74	29.62	0.00	41	36	80	20	3	13	276	30.22	0.00	22	15	74	26	2	8	237	30.07	0.00	28	21	73	18	5	9
12	90	29.66	0.00	40	32	73	22	10	21	561	30.23	0.00	29	16	58	30	2	6	661	30.01	0.00	39	26	59	20	3	8
15	19	29.76	0.00	37	32	80	21	8	15	309	30.18	0.00	33	18	53	24	6	11	225	29.95	0.00	40	27	59	19	0	2
18	0	29.82	0.00	36	31	80	23	4	10	0	30.14	0.00	28	18	66	16	0	5	0	29.93	0.00	32	26	76	18	0	0
21	0	29.84	0.00	34	32	91	20	6	14	0	30.10	0.00	30	20	66	17	11	21	0	29.91	0.00	27	23	86	18	0	0
00	0	29.85	0.00	25	22	90	18	0	0	0	29.59	0.00	34	30	87	29	2	13	0	30.08	0.00	30	22	71	16	4	9
03	0	29.78	0.00	24	21	91	04	0	0	0	29.68	0.00	31	29	90	28	2	7	0	30.04	0.00	33	23	67	16	2	9
06	0	29.73	0.00	22	20	91	04	0	0	0	29.79	0.00	32	30	89	25	2	8	0	29.98	0.00	37	25	63	16	3	11
10	225	29.67	0.00	27	25	89	05	1	3	380	29.92	0.00	35	28	77	24	6	17	109	29.88	0.00	43	27	53	15	10	21
12	559	29.59	0.00	42	29	58	17	4	8	563	29.96	0.00	40	28	61	27	5	12	130	29.76	0.00	47	31	55	17	9	23
15	104	29.49	0.00	46	29	53	19	2	7	332	30.00	0.00	43	23	45	29	1	7	287	29.68	0.00	53	35	50	17	9	24
18	0	29.48	0.00	37	28	70	18	0	0	0	30.07	0.00	33	22	65	35	0	0	0	29.66	0.00	52	38	59	18	4	16
21	0	29.52	0.00	34	27	75	18	0	2	0	30.08	0.00	28	22	77	35	0	0	0	29.67	0.00	45	37	74	21	2	6
00	0	29.70	0.00	51	40	67	23	11	26	0	29.73	0.00	34	30	85	02	0	0	0	30.05	0.00	13	10	88	04	0	4
03	0	29.78	0.00	45	36	71	26	8	16	0	29.61	0.00	33	29	86	04	0	0	0	30.13	0.00	12	9	86	36	0	0
06	0	29.88	0.00	40	33	75	17	3	8	0	29.54	0.00	29	27	93	23	4	8	0	30.20	0.00	8	5	87	36	0	0
09	276	29.94	0.00	42	33	70	25	7	19	30	29.54	0.00	25	23	93	27	8	18	176	30.23	0.00	16	12	85	22	2	6
12	480	29.96	0.00	44	33	66	24	8	12	79	29.63	0.00	18	16	91	27	4	13	522	30.20	0.00	24	17	75	18	6	15
15	142	29.91	0.00	42	33	69	31	1	4	42	29.77	0.00	15	13	89	32	3	9	156	30.14	0.00	27	20	73	17	0	0
18	0	29.93	0.00	35	30	80	35	1	5	0	29.89	0.00	14	12	89	33	1	9	0	30.20	0.00	27	21	77	15	0	0
21	0	29.87	0.00	34	29	84	02	2	5	0	29.95	0.00	13	10	89	35	3	6	0	30.22	0.00	30	24	78	23	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

## February 2023: Westford

Hour	FEB 19									FEB 20									FEB 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	30.26	0.00	30	25	83	24	4	10	0	29.80	0.00	39	29	65	17	9	21	0	29.69	0.00	23	13	67	33	0	0
03	0	30.28	0.00	29	23	79	22	1	6	0	29.74	0.00	38	30	71	18	6	13	0	29.69	0.00	17	13	81	32	0	3
06	0	30.27	0.00	29	23	80	20	0	0	0	29.65	0.00	38	31	74	18	6	15	0	29.66	0.00	14	11	87	32	0	0
09	167	30.24	0.00	32	25	74	16	6	10	19	29.60	0.00	39	31	74	18	8	17	295	29.64	0.00	21	16	79	00	1	4
12	281	30.12	0.00	38	28	69	15	5	18	99	29.58	0.00	40	33	77	20	5	10	522	29.55	0.00	34	22	61	18	4	9
15	123	29.96	0.00	40	27	58	18	3	24	33	29.56	0.00	40	34	77	22	5	12	171	29.46	0.00	40	28	61	16	5	11
18	0	29.84	0.00	41	25	52	19	4	16	15	29.64	0.00	32	26	80	29	3	9	0	29.53	0.00	33	30	91	16	7	15
21	0	29.84	0.00	40	26	55	16	9	29	0	29.71	0.00	28	21	75	27	0	3	0	29.68	0.00	33	30	91	21	3	7
FEB 22									FEB 23									FEB 24									
00	0	29.78	0.00	33	27	81	21	5	14	0	30.10	0.00	17	14	87	35	3	6	0	29.86	0.00	14	12	89	27	1	3
03	0	29.93	0.00	24	20	82	31	1	8	0	30.01	0.00	16	13	89	01	0	5	0	29.98	0.00	10	7	89	26	2	9
06	0	30.03	0.00	19	12	75	28	0	2	0	29.98	0.00	15	12	89	00	3	8	0	30.08	0.00	8	5	87	30	2	9
09	301	30.13	0.00	18	9	68	27	2	9	44	29.98	0.00	18	15	87	00	0	2	25	30.20	0.00	10	7	87	28	5	14
12	380	30.16	0.00	23	9	54	27	0	4	93	29.97	0.00	20	16	84	32	0	2	77	30.30	0.00	10	5	82	29	3	10
15	153	30.16	0.00	23	11	60	03	1	5	42	29.96	0.00	17	14	87	26	1	4	76	30.37	0.00	11	5	76	30	2	8
18	0	30.17	0.00	20	10	67	01	2	5	0	29.88	0.00	16	14	91	15	2	5	0	30.46	0.00	7	0	73	28	1	10
21	0	30.12	0.00	18	9	68	01	2	6	0	29.86	0.00	16	14	90	06	0	4	0	30.55	0.00	4	-3	72	26	2	7
FEB 25									FEB 26									FEB 27									
00	0	30.56	0.00	-3	-7	81	26	0	0	0	30.13	0.00	0	-3	87	18	0	0	0	29.84	0.00	19	17	91	34	0	0
03	0	30.56	0.00	-2	-7	81	26	0	0	0	30.05	0.00	-1	-5	85	18	0	0	0	29.92	0.00	18	16	90	28	2	10
06	0	30.53	0.00	-4	-8	83	26	0	0	0	29.95	0.00	-1	-4	85	18	0	0	0	29.99	0.00	13	11	89	03	1	4
09	72	30.48	0.00	4	-3	74	26	0	0	67	29.86	0.00	14	11	88	17	3	10	134	30.03	0.00	17	12	81	33	0	0
12	127	30.39	0.00	9	-1	62	17	4	7	107	29.73	0.00	22	18	83	18	7	20	497	30.01	0.00	23	10	56	33	2	5
15	70	30.30	0.00	11	5	78	18	1	3	39	29.69	0.00	25	21	87	20	0	7	174	29.96	0.00	24	13	62	23	3	7
18	0	30.25	0.00	9	5	82	18	0	0	0	29.76	0.00	22	19	86	32	2	10	0	29.91	0.00	22	15	72	24	0	0
21	0	30.18	0.00	0	-3	86	18	0	0	0	29.80	0.00	17	14	86	34	0	0	0	29.82	0.00	23	15	74	23	0	0
FEB 28																											
00	0	29.78	0.00	25	14	63	08	1	10																		
03	0	29.72	0.00	24	18	78	11	6	11																		
06	0	29.72	0.00	23	17	77	15	5	11																		
09	67	29.70	0.00	27	20	76	15	6	15																		
12	77	29.67	0.00	29	25	87	16	4	14																		
15	51	29.71	0.00	30	26	87	16	5	15																		
18	0	29.77	0.00	30	28	93	19	5	18																		
21	0	29.88	0.00	31	28	90	21	4	9																		

### 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	29.982	22	16	78	3.7	21	2.5
03	0	29.989	20	15	81	3.2	20	1.9
06	0	30.003	18	14	82	2.4	20	1.5
09	125	30.018	21	15	78	3.8	21	2.6
12	311	29.989	27	17	67	4.5	21	3.2
15	131	29.955	28	18	66	3.9	21	2.8
18	1	29.962	25	18	74	3.2	19	2.1
21	0	29.968	24	17	76	3.3	19	2.4

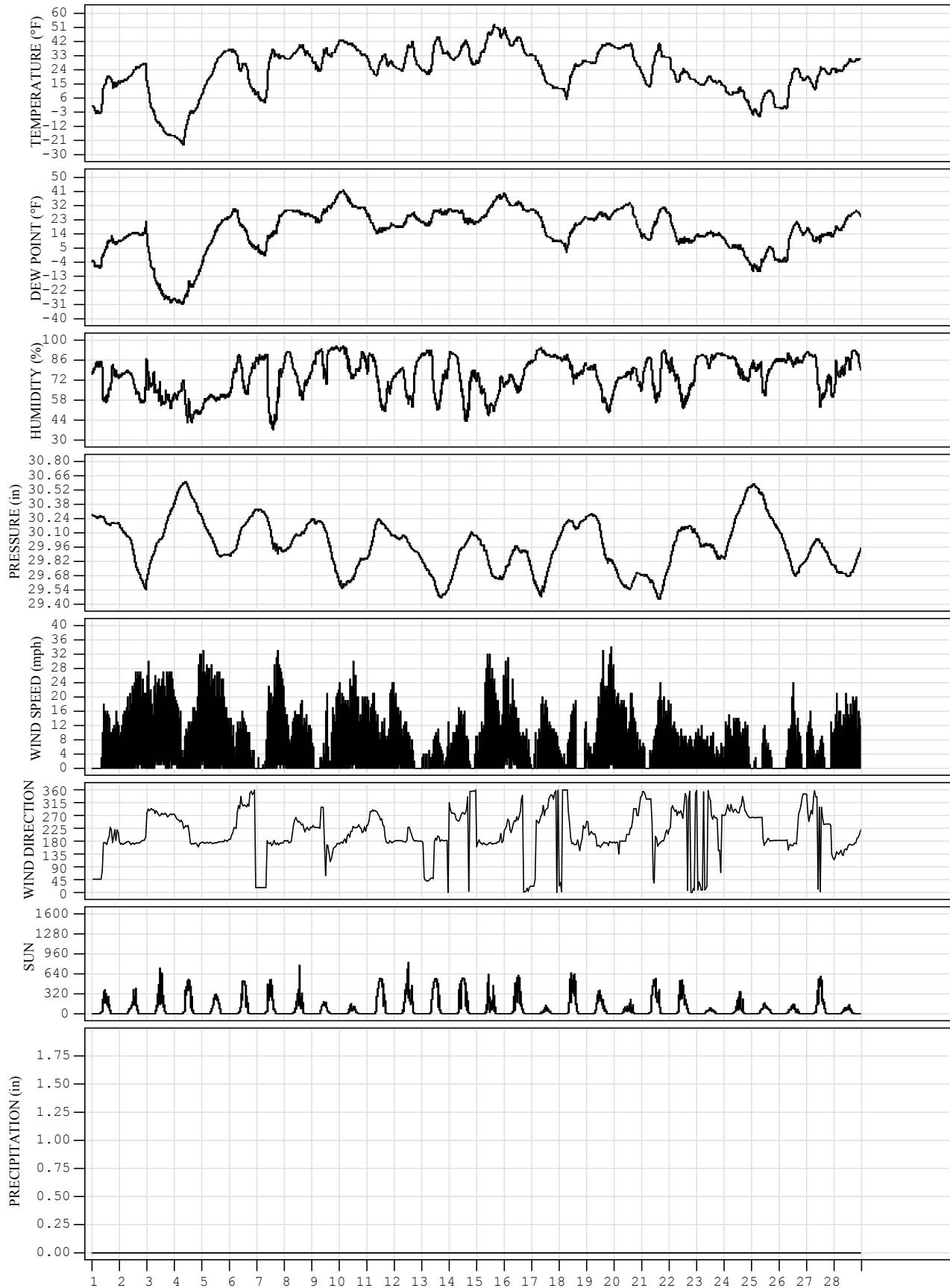
## HOURLY PRECIPITATION (Water Equivalent) February 2023: Westford

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
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26																									26
27																									27
28																									28
<b>Sum</b>	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	<b>Sum</b>

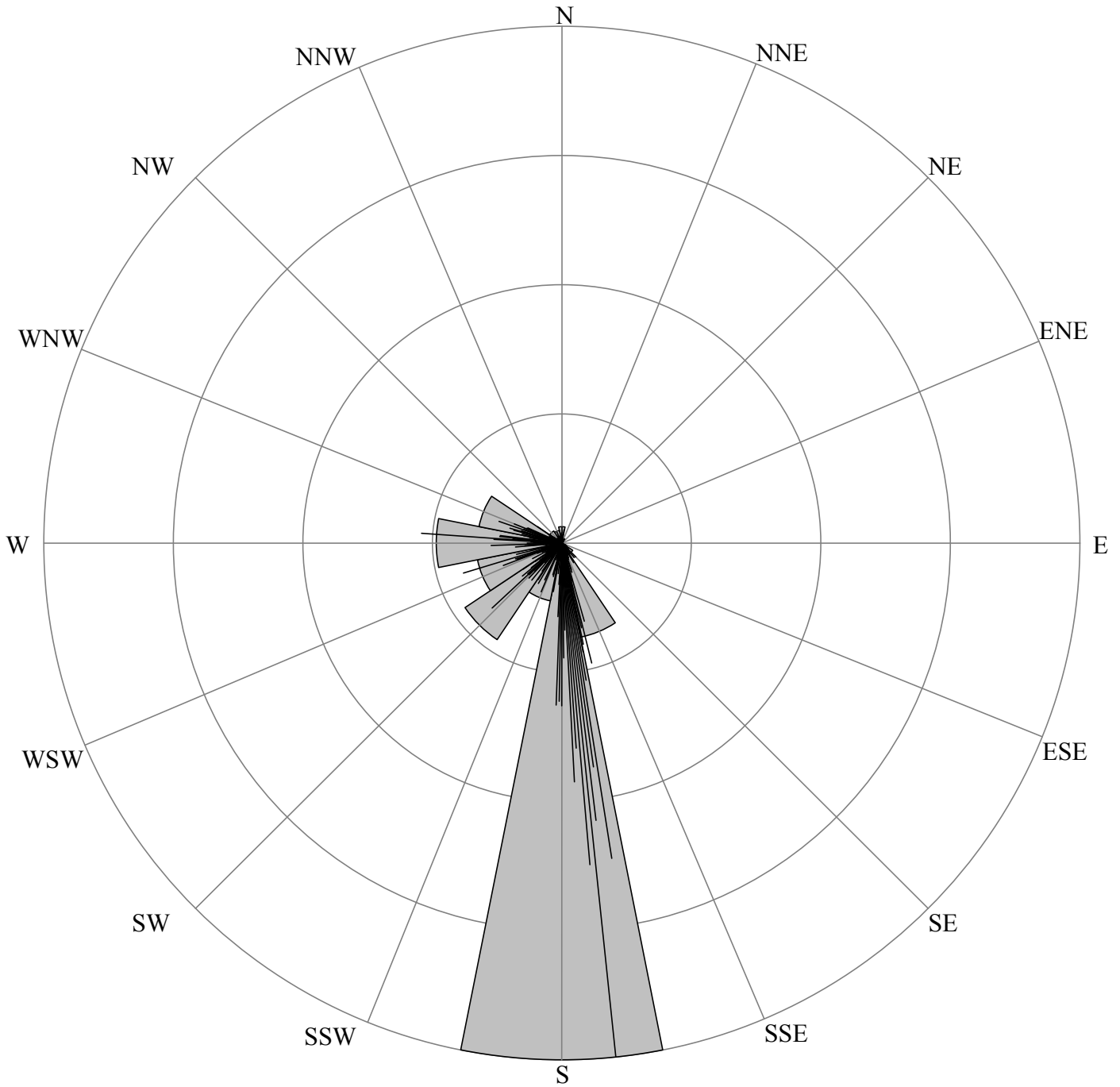
During a frozen precipitation event, hourly precipitation totals may not be recorded. In this case, daily amounts are typically entered in the last column (hour ending at 12 A.M.)

# HOUR-BY-HOUR DATA

## February 2023: Westford



Wind Rose: February 2023  
Westford



Maximum direction of wind: 174.2 miles from 174°  
Maximum sector of wind: 1105.3 miles from S  
2453.2 total miles of wind