

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

September 2005

Station: Westford
 Latitude: 44° 37' 39" N Longitude: 73° 02' 29" W Elevation (Ground): 850 feet Time Zone: Eastern

Date	Temperature					Humidity	Deq F		Precip Ty	Snow Cvr	Precip		Pressure			Wind				Sun											
	Maximum	Minimum	Average	Mean	Dew Point		Mean	Heating Base			Cooling Base	Adj. to Sea Level		Maximum	Minimum	Mean	Avg	Res	Res		Peak		Minute								
												Water Equivalent	Ice Pellets Snow								Speed	Speed	Dir	Speed	Dir	Speed	Dir				
1	2	3	4A	4B	5	6	7	8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	76.0	61.3	68.6	67.5	61	81	0	3	.....	0	0.00	0.0	29.78	29.50	29.662	2.6	2.3	262	19	WNW	0	0								
2	79.6	58.9	69.3	67.0	59	76	0	4	.....	0	0.02	0.0	29.82	29.68	29.761	3.5	3.0	219	21	WSW	0	0								
3	74.2	56.3	65.2	63.5	57	80	0	0	.....	0	0.00	0.0	29.97	29.79	29.887	1.6	1.4	270	14	WNW	0	0								
4	68.4	49.9	59.2	60.0	54	82	6	0	.....	0	0.00	0.0	30.30	29.97	30.144	0.8	0.6	350	13	WNW	0	0								
5	72.5	46.0	59.3	57.9	52	83	6	0	.....	0	0.00	0.0	30.41	30.30	30.367	0.5	0.5	308	10	WNW	0	0								
6	79.8	46.5	63.2	61.6	53	77	2	0	.....	0	0.00	0.0	30.42	30.27	30.356	0.4	0.3	194	10	SSW	0	0								
7	78.6	51.4	65.0	65.2	57	77	0	0	.....	0	0.00	0.0	30.28	30.06	30.188	1.5	1.2	209	14	SSW	0	0								
8	76.8	54.2	65.5	62.5	59	89	0	0	..3.....	0	0.45	0.0	30.06	29.91	29.975	1.7	1.3	207	17	SSW	0	0									
9	69.1	50.8	59.9	58.1	53	84	6	0	.....	0	0.00	0.0	30.14	29.97	30.050	0.9	0.8	266	18	W	0	0								
10	62.7	39.8	51.3	50.8	44	79	14	0	.....	0	0.00	0.0	30.26	30.13	30.227	0.7	0.3	157	13	SSE	0	0								
11	69.4	38.6	54.0	54.6	45	74	11	0	.....	0	0.00	0.0	30.33	30.00	30.208	2.5	2.3	114	18	ESE	0	0								
12	83.8	59.3	71.6	69.8	60	73	0	6	.....	0	0.00	0.0	30.00	29.85	29.916	2.6	1.1	151	17	ESE	0	0								
13	84.3*	65.3	74.8*	73.2	66	79	0	9	.....	0	0.00	0.0	29.95	29.83	29.888	1.8	1.7	202	12	S	0	0								
14	84.3	63.2	73.8	73.0	62	69	0	8	.....	0	0.00	0.0	29.89	29.78	29.845	2.6	2.5	180	22	S	0	0								
15	77.7	59.5	68.6	68.1	63	85	0	3	.....	0	0.00	0.0	30.08	29.88	29.982	0.6	0.3	234	10	WNW	0	0								
16	74.2	58.6	66.4	64.3	62	93	0	1	.....	0	0.47	0.0	30.13	29.89	30.046	0.4	0.1	178	10	SE	0	0								
17	73.3	58.4	65.9	64.5	63	95	0	0	.....	0	0.41	0.0	29.89	29.77	29.824	1.0	0.4	240	12	S	0	0								
18	59.6	51.0	55.3	56.4	56	97	10	0	.....	0	0.10	0.0	30.05	29.85	29.952	1.3	1.2	286	12	W	0	0								
19	75.1	50.4	62.8	61.1	57	87	3	0	.....	0	0.00	0.0	30.13	30.01	30.079	1.6	1.3	213	12	W	0	0								
20	73.3	57.6	65.5	65.1	59	80	0	0	.....	0	0.16	0.0	30.02	29.71	29.830	4.8	4.1	210	28	S	0	0								
21	76.1	51.6	63.8	62.4	53	72	2	0	.....	0	0.00	0.0	29.97	29.87	29.919	3.1	2.3	262	24	WSW	0	0								
22	78.3	58.1	68.2	66.7	57	71	0	3	.....	0	0.00	0.0	29.97	29.70	29.859	3.0	2.9	194	20	SSW	0	0								
23	68.1	47.6	57.8	59.9	53	78	8	0	.....	0	0.44	0.0	30.24	29.69	29.945	2.8	1.8	272	18	W	0	0								
24	63.1	37.8	50.4	49.0	42	79	15	0	.....	0	0.00	0.0	30.39	30.22	30.306	0.5	0.3	312	9	W	0	0								
25	62.6	40.2	51.4	55.9	50	80	14	0	.....	0	0.00	0.0	30.22	29.87	30.073	6.1	5.8	186	27	S	0	0								
26	64.8	54.4	59.6	62.7	61	95	6	0	.....	0	1.18	0.0	29.87	29.44	29.635	6.3	6.0	188	29	S	0	0								
27	64.2	46.2	55.2	53.6	48	83	10	0	.....	0	0.08	0.0	30.05	29.58	29.873	1.4	1.1	295	14	N	0	0								
28	69.3	45.7	57.5	57.3	48	72	8	0	.....	0	0.00	0.0	30.15	29.87	30.037	3.6	3.4	194	22	S	0	0								
29	64.2	43.3	53.7	55.6	48	75	12	0	.....	0	0.78	0.0	29.92	29.42	29.686	7.8	5.5	204	35	S	0	0								
30	55.7	35.0*	45.4*	44.9	37	76	20	0	.....	0	0.00	0.0	30.15	29.92	30.085	1.3	0.8	256	12	W	0	0								
Sum	Sum	-----	-----	---	----	Ttl	Ttl		For the month:										---												
2159	1537					153	37		Number of Days		4.09	0.0	30.42	29.42	29.987	2.3	1.5	211	35	S	0	0									
Avg	Avg	Avg	Mean	Avg	Avg	----	----		Precip		Season Ttl		Date	Date	-----	----	----	---	Date	Date	Avg										
72.0	51.2	61.6	61.1	55	80.8	----	----		≥.01 inch 10		32.77	0.0	6	29	-----	----	----	---	29	1+											
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			210	440	Thunder 1		Precipitation		Snow, Ice Plts																			
≥ 90°F	< 32°F	< 32°F	< 0°F	----	----	----	----	Heavy Fog 0		1.21	26-27	0.0	-	0			-														
0	0	0	0	----	----	Clear 11		Partly Cloudy 12		Cloudy 7																					

NOTES:
 Units are: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.
 Data in column 4A are (MAX+MIN) ÷ 2, whereas columns 4B, 5, 6, 15, 16, 23 are means via continuous observations for 24 hours.
 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: Sunshine index is measured in Watts/m² and is continuously averaged for 24 hours.
 Data in columns 4B, 5, 6, 15, 16, 23 are updated continuously, there by achieving a "true" mean.

OBSERVATIONS AT 3-HOUR INTERVALS

September 2005: Westford

Hour	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind		
							Direction	Speed	Gust							Direction	Speed	Gust							Direction	Speed	Gust
SEP 01									SEP 02									SEP 03									
01		29.52	0.00	63	63	98	20	1	2		29.80	0.00	61	58	89	18	1	4		29.80	0.00	58	55	88	27	0	4
04		29.55	0.00	64	61	93	18	3	10		29.79	0.00	59	57	91	20	2	6		29.82	0.00	58	53	86	22	0	2
07		29.63	0.00	62	60	96	20	1	3		29.81	0.00	61	57	87	18	4	10		29.89	0.00	58	55	89	20	0	1
10		29.66	0.00	71	64	80	27	5	11		29.79	0.00	70	62	76	18	5	16		29.92	0.00	64	57	79	29	1	5
13		29.69	0.00	72	60	67	27	4	10		29.73	0.00	75	64	68	20	8	17		29.90	0.00	71	59	67	24	4	10
16		29.70	0.00	74	62	66	27	2	7		29.68	0.00	79	60	52	27	4	11		29.89	0.00	74	61	64	29	2	7
19		29.74	0.00	72	62	72	00	0	0		29.73	0.00	68	58	72	27	3	8		29.91	0.00	67	58	75	00	0	0
22		29.77	0.00	65	59	79	20	1	6		29.77	0.00	62	58	88	24	0	2		29.95	0.00	62	57	85	20	1	5
SEP 04									SEP 05									SEP 06									
01		29.98	0.00	57	56	96	00	0	0		30.31	0.00	51	50	98	00	0	0		30.40	0.00	49	49	98	00	0	0
04		30.01	0.00	59	58	95	24	1	3		30.33	0.00	47	47	98	00	0	0		30.39	0.00	49	48	98	00	0	0
07		30.10	0.00	56	54	93	00	0	1		30.39	0.00	46	46	98	00	0	0		30.40	0.00	48	47	98	18	0	2
10		30.14	0.00	64	54	70	02	1	6		30.40	0.00	64	58	80	00	0	1		30.41	0.00	66	57	92	18	3	7
13		30.19	0.00	65	57	76	33	0	2		30.38	0.00	70	56	61	29	1	3		30.38	0.00	76	56	70	00	1	3
16		30.20	0.00	66	54	64	00	1	8		30.35	0.00	71	54	55	29	3	7		30.31	0.00	79	55	43	20	1	4
19		30.21	0.00	63	53	70	00	0	0		30.38	0.00	63	53	70	00	0	0		30.29	0.00	68	58	71	00	0	0
22		30.28	0.00	51	50	97	00	0	0		30.39	0.00	51	50	96	00	0	0		30.28	0.00	58	54	88	18	0	3
SEP 07									SEP 08									SEP 09									
01		30.28	0.00	58	53	84	18	2	5		30.05	0.00	60	58	94	18	0	2		29.98	0.00	54	53	98	11	0	2
04		30.27	0.00	53	52	95	00	0	0		30.03	0.00	56	55	97	15	0	1		30.00	0.00	53	52	98	00	0	0
07		30.27	0.00	53	53	97	18	1	6		30.01	0.00	59	56	88	20	2	7		30.05	0.00	52	51	97	02	0	2
10		30.26	0.00	67	60	76	20	5	12		29.99	0.00	68	61	76	20	8	17		30.07	0.00	60	55	82	09	1	3
13		30.20	0.00	77	61	58	29	2	6		29.92	0.00	74	63	68	20	3	10		30.05	0.00	67	58	74	29	1	7
16		30.13	0.00	78	61	57	22	3	7		29.95	0.04	63	62	96	09	4	10		30.04	0.00	67	54	61	27	5	11
19		30.07	0.00	72	60	68	00	0	0		29.91	0.00	62	61	97	00	0	0		30.07	0.00	60	51	71	00	0	0
22		30.08	0.00	62	59	88	18	0	1		29.95	0.00	57	56	98	00	0	0		30.12	0.00	51	47	87	31	0	1
SEP 10									SEP 11									SEP 12									
01		30.14	0.00	50	45	82	33	0	2		30.28	0.00	41	40	96	00	0	0		29.99	0.00	60	50	69	11	5	11
04		30.18	0.00	41	39	94	00	0	0		30.29	0.00	40	39	97	00	0	0		29.95	0.00	63	50	62	11	4	11
07		30.24	0.00	41	41	97	00	0	0		30.33	0.00	39	38	97	00	0	0		29.95	0.00	62	52	69	11	3	6
10		30.25	0.00	56	47	71	27	0	5		30.31	0.00	56	46	70	18	4	12		29.93	0.00	74	62	67	20	3	7
13		30.23	0.00	60	45	58	02	2	7		30.25	0.00	66	45	46	11	5	10		29.90	0.00	79	68	69	24	3	7
16		30.25	0.00	62	46	56	27	1	6		30.15	0.00	69	49	49	11	4	12		29.85	0.00	83	70	65	29	0	5
19		30.23	0.00	55	46	71	00	0	0		30.08	0.00	62	50	64	09	3	8		29.87	0.00	70	66	88	00	0	0
22		30.25	0.00	44	43	95	00	0	0		30.01	0.00	60	50	69	11	6	14		29.90	0.00	64	64	98	00	0	0
SEP 13									SEP 14									SEP 15									
01		29.89	0.00	67	64	88	00	0	0		29.88	0.00	66	62	86	20	1	5		29.89	0.00	70	61	74	31	0	4
04		29.89	0.00	67	65	92	18	2	6		29.87	0.00	66	61	84	18	1	6		29.89	0.00	66	62	86	15	1	5
07		29.93	0.00	67	64	89	18	3	7		29.87	0.00	66	61	83	15	0	3		29.95	0.00	67	64	90	18	0	2
10		29.95	0.00	74	67	77	22	3	7		29.88	0.00	75	65	70	18	6	14		29.99	0.00	70	65	86	29	2	7
13		29.90	0.00	82	67	61	15	2	8		29.82	0.00	83	64	54	15	6	19		30.01	0.00	71	65	83	20	0	2
16		29.84	0.00	84	68	58	22	3	7		29.78	0.00	83	64	52	18	4	17		29.99	0.00	75	66	74	31	1	5
19		29.84	0.00	74	67	77	18	0	1		29.80	0.00	75	60	61	18	0	3		30.03	0.00	67	62	84	00	0	0
22		29.87	0.00	69	65	85	18	0	2		29.84	0.00	70	57	62	20	1	5		30.08	0.00	61	60	97	00	0	0
SEP 16									SEP 17									SEP 18									
01		30.10	0.00	60	59	98	00	0	0		29.87	0.00	64	63	96	18	1	6		29.85	0.00	58	58	99	27	2	7
04		30.09	0.00	60	60	99	00	0	0		29.84	0.03	64	64	99	13	5	12		29.87	0.00	57	57	99	27	1	4
07		30.11	0.00	59	58	99	00	0	0		29.83	0.00	63	63	98	00	0	0		29.92	0.01	56	56	99	29	1	6
10		30.12	0.00	63	62	99	00	0	0		29.82	0.00	67	66	96	00	0	0		29.95	0.00	57	56	99	29	1	5
13		30.06	0.00	74	67	78	18	2	7		29.80	0.00	72	67	86	18	2	6		29.97	0.00	57	56	97	29	1	7
16		30.01	0.00	70	63	80	20	0	3		29.79	0.00	65	64	96	29	1	4		30.00	0.00	59	57	94	29	2	4
19		29.99	0.00	64	63	97	00	0	1		29.81	0.04	61	60	98	31	0	3		30.00	0.00	58	57	95	00	0	0
22		29.94	0.00	64	63	96	09	1	5		29.84	0.00	59	59	98	24	1	3		30.03	0.00	52	52	98	20	0	2

MAXIMUM SHORT DURATION PRECIPITATION

Time Period (minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation	0.20	0.34	0.37	0.40	0.42	0.45	0.48	0.50	0.57	0.73	0.75	0.77
Ended: Date	29	29	29	29	29	29	29	29	29	29	29	29
Ended: Time	1145	1145	1150	1155	1205	1217	1230	1250	1310	1335	1335	1330

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
September 2005: Westford**

Hour	Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind			Sunshine	Pressure	Rainfall rate	Temperature	Dew Point	Humidity	Wind		
							Direction	Speed	Gust							Direction	Speed	Gust							Direction	Speed	Gust
SEP 19									SEP 20									SEP 21									
01		30.05	0.00	51	51	98	00	0	0	30.00	0.00	59	58	98	24	0	5	29.87	0.00	59	55	87	29	2	6		
04		30.05	0.00	54	53	97	20	3	7	29.91	0.00	62	56	80	20	1	3	29.91	0.00	57	48	73	27	5	14		
07		30.09	0.00	54	53	97	18	3	7	29.82	0.00	65	56	73	18	8	18	29.96	0.00	52	47	83	00	0	0		
10		30.13	0.00	64	59	83	20	4	7	29.79	0.00	63	62	96	20	6	11	29.93	0.00	61	53	73	18	5	12		
13		30.12	0.00	72	61	69	24	3	8	29.75	0.00	70	63	77	20	10	21	29.88	0.00	73	57	57	22	5	13		
16		30.09	0.00	74	63	70	27	1	3	29.74	0.00	72	60	66	27	9	21	29.89	0.00	75	55	49	29	5	14		
19		30.08	0.00	61	59	92	00	0	0	29.79	0.00	67	58	72	27	7	14	29.93	0.00	62	54	74	00	0	0		
22		30.05	0.00	58	57	97	00	0	0	29.84	0.00	65	58	78	22	1	5	29.96	0.00	55	53	91	00	0	0		
SEP 22									SEP 23									SEP 24									
01		29.95	0.00	60	55	84	20	1	3	29.70	0.00	67	57	68	20	2	7	30.26	0.00	47	43	88	00	0	0		
04		29.95	0.00	58	53	83	20	3	6	29.71	0.00	62	61	97	20	4	7	30.29	0.00	42	40	92	00	0	0		
07		29.95	0.00	60	55	84	20	4	12	29.81	0.00	62	61	95	27	4	10	30.37	0.00	38	37	96	00	0	0		
10		29.94	0.00	66	57	72	20	4	12	29.94	0.00	57	53	88	33	1	5	30.39	0.00	53	43	69	06	1	3		
13		29.85	0.00	75	58	56	20	6	16	29.99	0.00	63	53	70	27	7	16	30.34	0.00	59	40	49	33	1	3		
16		29.78	0.00	76	60	59	18	2	6	30.03	0.00	66	51	59	02	1	7	30.28	0.00	62	48	60	27	3	6		
19		29.77	0.00	69	58	69	18	2	6	30.12	0.00	55	44	67	27	0	2	30.27	0.00	49	45	87	00	0	0		
22		29.73	0.00	68	56	66	18	3	7	30.21	0.00	51	44	78	22	1	7	30.24	0.00	45	44	97	13	0	3		
SEP 25									SEP 26									SEP 27									
01		30.21	0.00	42	41	97	00	0	0	29.85	0.00	63	59	84	20	9	18	29.61	0.00	52	51	97	00	3	8		
04		30.17	0.00	50	44	80	20	2	7	29.82	0.02	62	60	94	18	5	14	29.69	0.00	50	49	97	00	0	3		
07		30.17	0.00	54	45	72	18	5	12	29.75	0.01	61	60	96	18	9	19	29.82	0.00	50	50	99	31	2	7		
10		30.13	0.00	58	49	74	18	9	19	29.66	0.00	62	61	96	18	9	25	29.90	0.00	54	51	91	29	3	11		
13		30.08	0.00	62	51	69	18	11	22	29.58	0.00	65	62	92	18	7	20	29.93	0.00	61	50	68	24	0	3		
16		30.00	0.00	60	53	80	15	8	14	29.50	0.00	64	63	97	18	2	7	29.94	0.00	64	45	51	29	3	7		
19		29.97	0.00	60	56	86	18	9	21	29.46	0.00	65	64	99	22	3	10	29.99	0.00	49	46	87	00	0	0		
22		29.91	0.00	62	57	85	18	7	15	29.48	0.00	64	64	99	20	4	10	30.03	0.00	50	45	83	00	0	0		
SEP 28									SEP 29									SEP 30									
01		30.05	0.00	49	44	83	20	1	5	29.84	0.00	60	51	72	18	9	21	29.94	0.00	43	37	79	29	5	11		
04		30.07	0.00	48	43	85	20	2	6	29.71	0.00	61	52	73	18	12	29	30.02	0.00	38	34	85	00	0	0		
07		30.12	0.00	48	44	84	20	3	8	29.58	0.00	62	52	70	18	11	28	30.10	0.00	36	35	96	00	0	0		
10		30.14	0.00	58	49	71	22	6	13	29.45	0.00	64	53	67	15	10	26	30.15	0.00	46	38	74	27	4	8		
13		30.07	0.00	67	54	61	22	5	14	29.50	0.02	55	55	97	18	6	14	30.12	0.00	53	37	54	20	2	5		
16		29.99	0.00	69	51	54	18	4	12	29.69	0.00	53	41	63	27	9	19	30.09	0.00	54	36	50	18	2	6		
19		29.97	0.00	59	51	75	13	0	5	29.81	0.00	47	40	75	29	3	8	30.12	0.00	45	40	85	00	0	0		
22		29.91	0.00	59	46	63	20	6	14	29.89	0.00	47	41	81	27	4	10	30.12	0.00	44	39	82	18	1	5		

WEATHER NOTES

NOTES:

Units are: 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 0.01" pulses from the electronic rain gauge and interpolating this rate for one hour.

SUMMARY BY HOUR

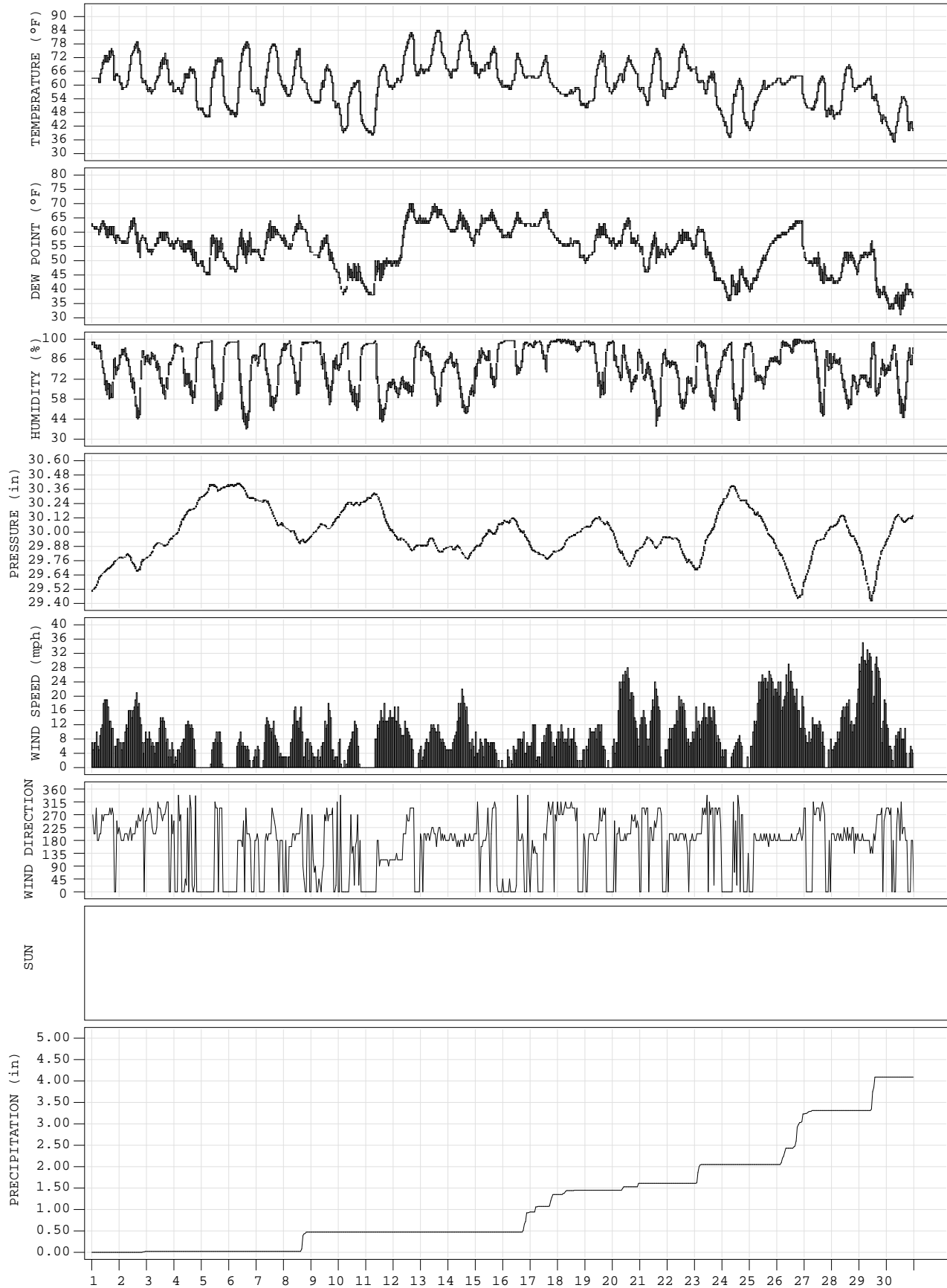
Hour	Averages						Resultant Wind	
	Sunshine	Pressure	Temperature	Dew Point	Humidity	Wind Speed	Direction	Speed
01		29.978	57	53	89	1.5	20	0.8
04		29.978	55	52	90	1.9	19	1.5
07		30.007	55	52	90	2.1	19	1.8
10		30.014	63	56	79	3.7	20	2.8
13		29.987	69	57	68	3.7	21	2.6
16		29.964	70	56	65	3.0	25	1.6
19		29.975	62	55	79	1.0	22	0.6
22		29.991	58	53	87	1.3	19	0.9

HOURLY PRECIPITATION (Water Equivalent)
September 2005: Westford

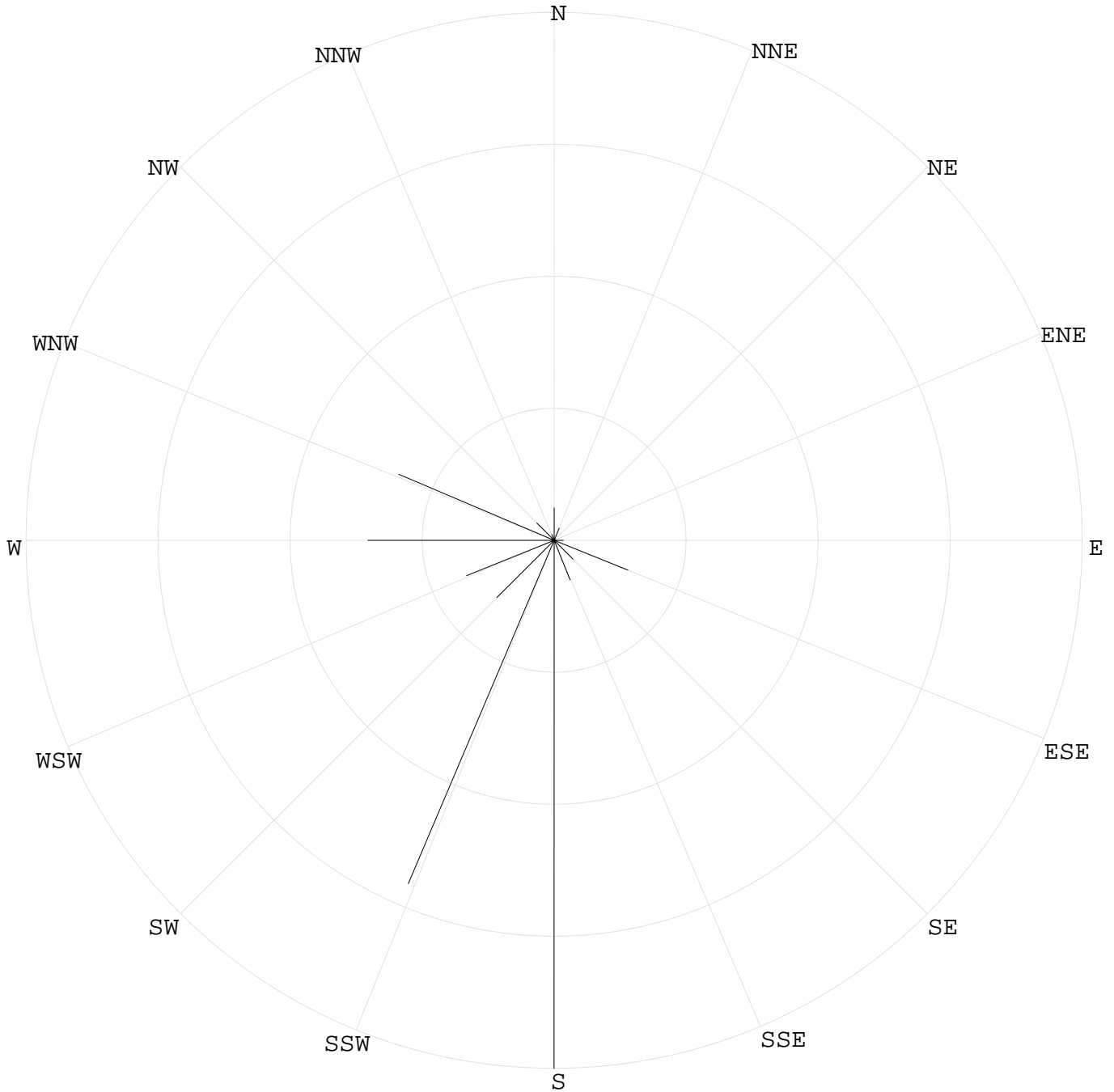
Date	A.M. Hour Ending at												P.M. Hour Ending at												Date
	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	
01																									01
02																					0.01		0.01		02
03																									03
04																									04
05																									05
06																									06
07																									07
08																0.06	0.31	0.04	0.01	0.03					08
09																									09
10																									10
11																									11
12																									12
13																									13
14																									14
15																									15
16																		0.04	0.15	0.06	0.20		0.01	0.01	16
17					0.12		0.01										0.01	0.12	0.08	0.07					17
18					0.02	0.01	0.04	0.02								0.01									18
19																									19
20									0.04	0.04													0.08		20
21																									21
22																									22
23		0.01	0.24	0.14	0.04	0.01																			23
24																									24
25																									25
26				0.04	0.11	0.04	0.10	0.09								0.03	0.02	0.12	0.32	0.06	0.05		0.02	0.18	26
27	0.01		0.02	0.02	0.01		0.02																		27
28																									28
29											0.03	0.41	0.10	0.24											29
30																									30
Sum	0.01	0.01	0.26	0.20	0.30	0.06	0.17	0.11	0.04	0.04	0.03	0.41	0.10	0.24	0.04	0.08	0.44	0.52	0.30	0.21	0.21	0.02	0.28	0.01	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.)

HOURLY-BY-HOURLY DATA
September 2005: Westford



Wind Rose: September 2005
Westford



Maximum direction of wind: 524.3 miles from 180°.
1658.2 total miles of wind.