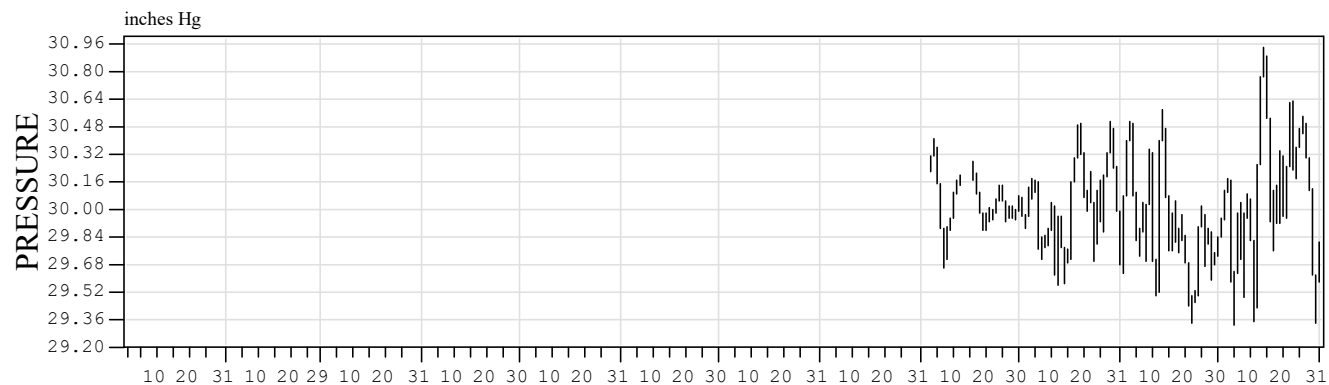
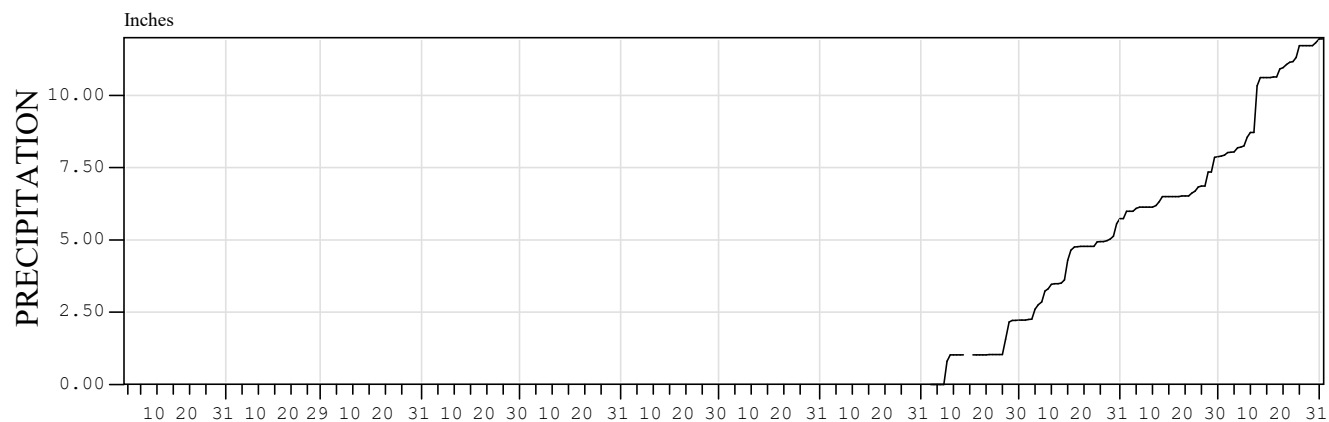
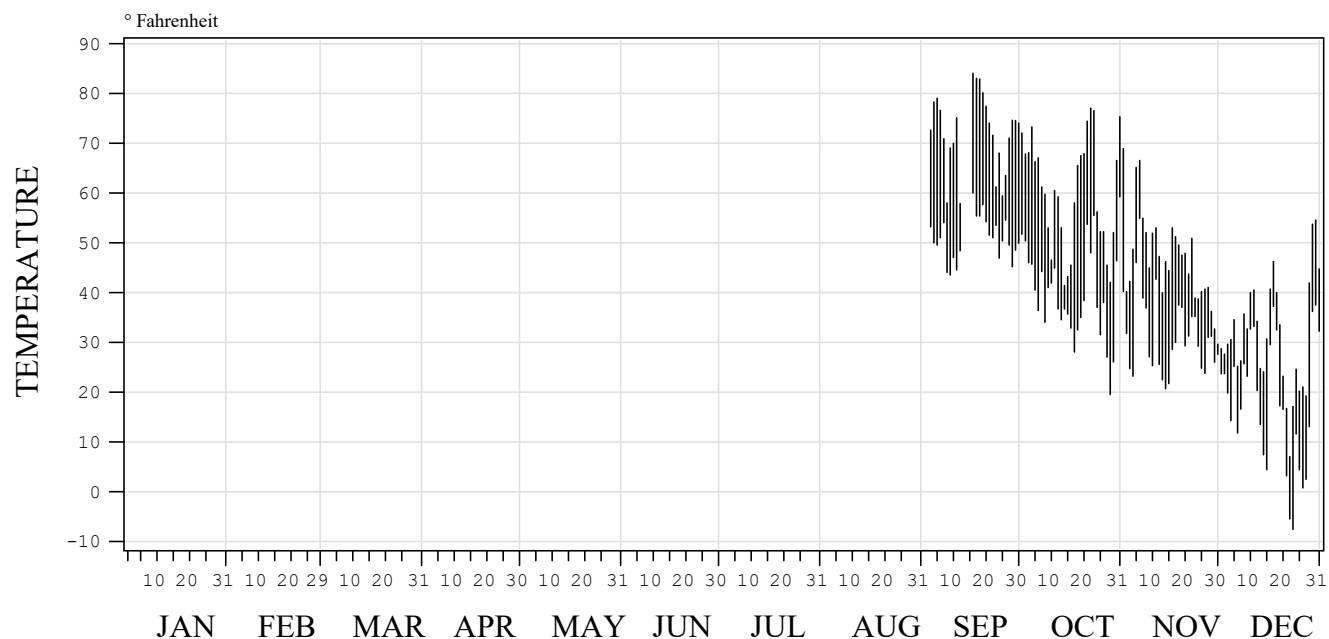


LOCAL CLIMATOLOGICAL DATA

Annual Summary with Comparative Data

Westford

Daily Data



METEOROLOGICAL DATA FOR 2024

Westford

Latitude: 44° 37' 38" N Longitude: 73° 02' 30" W Elevation (Ground): 850 feet Time Zone: Eastern

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
TEMPERATURE													
Average									72.3	60.2	47.0	31.3	52.7
-Daily Maximum									50.8	39.7	31.4	18.0	35.0
-Daily Minimum									61.5	50.0	39.2	24.7	43.8
-Monthly									55.2	42.8	32.8	20.9	37.9
-Monthly Dew Point													
Extremes													
-Highest									84.1	77.0	68.9	54.5	84.1
-Date									16	22	1	30	Sep 16
-Lowest									43.6	19.5	20.8	-7.7	-7.7
-Date									9	28	14	23	Dec 23
DEGREE DAYS													
Heating Base 65°F									100	462	766	1240	2568
Cooling Base 65°F									20	4	0	0	24
SOLAR RADIATION (W/m²)									150.6	95.0	44.1	29.2	79.7
NUMBER OF DAYS													
Sunrise to Sunset													
-Clear									9	12	6	2	29
-Partly Cloudy									11	9	9	7	36
-Cloudy									5	10	15	22	52
Precipitation													
.01 inches or more									9	24	15	22	70
Snow, Ice pellets													
1.0 inches or more									0	1	1	8	10
Thunderstorms									0	1	0	0	1
Heavy Fog, visibility													
¼ mile or less									1	0	0	1	2
TEMPERATURE:													
-Maximum													
90°F and above									0	0	0	0	0
32°F and below									0	0	1	17	18
-Minimum													
32°F and below									0	5	20	25	50
0°F and below									0	0	0	2	2
PRESSURE													
Average													
-Monthly									30.049	30.035	29.919	30.104	30.027
Extremes													
-Highest									30.42	30.52	30.58	30.95	30.95
-Date									4	28	13	14	Dec 14
-Lowest									29.66	29.57	29.34	29.34	29.34
-Date									7	12	22	5	Dec 5
RELATIVE HUMIDITY (%)													
Average													
-Monthly									85.1	80.8	79.9	84.4	82.5
-Local Time													
Hour 00									91	88	83	87	88
Hour 06									94	90	86	87	89
Hour 12									72	68	70	79	72
Hour 18									83	78	80	84	81
PRECIPITATION													
Water Equivalent													
-Total									2.24	3.50	2.14	4.05	11.93
-Greatest (24 hrs)									1.02	0.70	0.49	0.00	1.02
-Date									7- 8	13-14	26	1	Sep 7- 8
Snow, Ice pellets													
-Total									0.0	1.0	2.5	22.8	26.3
-Greatest (day)									0.0	1.0	1.9	4.0	4.0
-Date										27	28	8	Dec 8
WIND													
Resultant													
-Direction									202	213	224	203	211
-Speed									0.5	1.5	1.7	2.1	1.4
Average Speed									0.7	2.1	2.8	2.8	2.1
Maximum Two-minute													
Average													
-Direction									N	W	S	S	S
-Speed									0	17	20	17	20
-Date									3	12	4	17	Nov 4
Peak Gust													
-Direction									W	WSW	SSE	SW	WSW
-Speed									25	36	35	34	36
-Date									7	12	4	12	Oct 12

MEANS AND EXTREMES*

Westford

Latitude: 44° 37' 38" N Longitude: 73° 02' 30" W Elevation (Ground): 850 feet Time Zone: Eastern

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Year
TEMPERATURE													
Average													
-Daily Maximum	25.5	30.9	40.2	51.4	67.4	75.2	81.1	79.2	67.8	57.1	43.3	33.5	54.4
-Daily Minimum	8.3	12.2	21.9	32.4	44.6	52.3	58.2	57.1	47.7	38.5	28.0	18.6	35.0
-Monthly	16.9	21.5	31.1	41.9	56.0	63.8	69.7	68.2	57.7	47.8	35.7	26.1	44.7
-Monthly Dew Point	12.6	15.5	22.0	30.8	44.3	55.5	62.4	61.9	53.0	41.6	29.5	21.6	37.5
Extremes													
-Record Highest	57.3	65.7	71.2	75.9	91.8	91.7	93.5	90.8	89.0	79.6	71.4	62.1	93.5
-Year	2018	2018	2021	2021	2020	2020	2018	2018	2018	2018	2022	2020	Jul 2018
-Record Lowest	-19.2	-12.0	-5.1	15.1	28.1	33.2	45.2	43.1	0.0	0.0	-2.7	-7.7	-19.2
-Year	2018	2020	2022	2018	2020	2020	2022	2018	2019	2019	2018	2024	Jan 2018
MEAN DEGREE DAYS													
Heating Base 65°F	1483	1218	1044	684	298	97	14	24	198	512	871	1197	7641
Cooling Base 65°F	0	0	0	0	30	69	159	130	25	2	0	0	414
MEAN SOLAR RADIATION	28.9	58.8	104.0	124.2	168.4	179.7	171.6	188.2	139.9	81.6	43.7	30.7	110.0
MEAN NUMBER OF DAYS													
Sunrise to Sunset													
-Clear	3.8	4.2	5.6	4.2	5.4	6.6	5.8	8.8	6.2	6.2	3.8	2.7	63.2
-Partly Cloudy	4.6	6.0	7.0	7.4	9.4	10.6	13.0	14.6	11.3	9.3	7.2	9.3	109.8
-Cloudy	16.4	12.2	11.8	12.2	9.8	6.8	5.6	6.4	8.5	13.5	19.0	18.8	141.0
Precipitation ≥ .01"	13.2	9.8	11.6	17.6	14.0	14.6	13.6	15.8	12.2	18.2	16.7	17.8	175.0
Snow, Ice plts. ≥ 1.0"	6.2	4.4	1.8	1.2	0.2	0.0	0.0	0.0	0.0	0.2	3.2	5.3	22.5
Thunderstorms	0.0	0.2	0.4	0.4	2.2	2.8	3.6	5.4	1.7	0.8	0.0	0.0	17.5
Heavy Fog, vis. ≤ ¼ mi	0.4	0.2	0.2	0.6	0.8	0.4	0.4	0.4	0.3	0.2	0.5	0.5	4.9
TEMPERATURE:													
-Maximum													
90°F and above	0.0	0.0	0.0	0.0	0.4	1.4	1.8	1.0	0.0	0.0	0.0	0.0	4.6
32°F and below	22.8	15.4	8.4	0.6	0.0	0.0	0.0	0.0	0.7	0.5	5.3	14.8	68.5
-Minimum													
32°F and below	30.2	26.8	25.2	16.2	3.0	0.0	0.0	0.0	1.3	7.3	21.0	27.3	158.4
0°F and below	10.6	6.2	0.6	0.0	0.0	0.0	0.0	0.0	0.7	0.5	0.2	1.7	20.4
PRESSURE													
Average													
-Monthly	30.034	30.064	29.996	29.885	29.954	29.876	29.900	29.925	30.023	29.445	29.998	30.019	29.927
Extremes													
-Record Highest	30.83	30.81	30.75	30.49	30.46	30.45	30.31	30.34	30.62	30.62	30.68	30.95	30.95
-Year	2018	2018	2020	2019	2019	2020	2018	2019	2020	2022	2022	2024	Dec 2024
-Record Lowest	28.93	28.90	29.20	29.01	29.35	29.39	29.41	29.28	0.00	0.00	29.16	28.76	0.00
-Year	2022	2020	2020	2020	2022	2021	2020	2020	2019	2019	2019	2022	Sep 2019
RELATIVE HUMIDITY (%)													
Average													
-Monthly	81.3	76.2	70.7	69.2	68.5	77.0	80.3	83.9	82.1	80.6	79.1	81.8	77.6
-Local Time													
Hour 00	67	63	59	60	63	70	72	93	88	88	82	83	74
Hour 06	68	65	62	63	67	73	75	95	89	90	84	85	76
Hour 12	61	55	49	48	46	53	56	72	73	71	72	76	61
Hour 18	65	60	51	47	46	52	57	75	79	80	78	82	64
PRECIPITATION													
Water Equivalent													
-Mean	2.61	2.24	2.11	4.17	4.41	3.86	3.87	5.03	3.99	5.45	3.99	2.85	44.57
-Maximum Monthly	5.28	3.31	3.34	5.64	6.22	5.39	4.84	6.88	8.74	9.55	5.45	4.05	9.55
-Year	2019	2022	2022	2022	2019	2022	2021	2020	2022	2019	2018	2024	Oct 2019
-Minimum Monthly	0.00	0.00	0.85	2.13	2.08	2.67	1.51	2.68	2.24	3.50	2.14	1.36	0.00
-Year			2018	2020	2021	2020	2018	2018	2024	2024	2024	2020	
-Greatest (24 hrs)	0.00	0.00	0.71	1.23	2.53	1.53	1.85	2.51	3.17	3.08	1.56	0.15	3.17
-Year			2021	2022	2020	2022	2019	2020	2022	2019	2019	2020	Sep 2022
Snow, Ice pellets													
-Mean	22.1	18.7	7.7	3.6	0.6	0.0	0.0	0.0	0.0	0.2	10.0	14.4	77.3
-Maximum Monthly	47.8	28.1	19.2	9.3	3.0	0.0	0.0	0.0	0.0	1.0	27.5	22.8	47.8
-Year	2019	2022	2019	2021	2020					2024	2018	2024	Jan 2019
-Minimum Monthly	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	9.9	0.0
-Year											2024	2018	
-Greatest (day)	12.0	15.0	7.0	4.7	2.5	0.0	0.0	0.0	0.0	1.0	9.0	4.3	15.0
-Year	2019	2020	2019	2022	2020					2024	2018	2021	Feb 2020
WIND													
Resultant													
-Direction	207	203	215	240	224	212	213	206	208	206	212	199	211
-Speed	1.3	2.2	2.4	1.8	1.1	1.0	0.8	0.5	0.6	1.3	2.1	2.2	1.4
Average Speed	1.9	2.6	2.9	2.4	1.6	1.0	0.7	0.7	1.0	2.0	3.3	3.2	1.9
Maximum Two-minute													
Average													
-Direction	N	N	N	N	N	N	N	WSW	SSW	WNW	SW	WSW	N
-Speed	35	33	30	38	41	24	24	19	17	19	24	22	41
-Year	2018	2018	2018	2018	2018	2018	2018	2020	2019	2018	2019	2021	May 2018
Peak Gust													
-Direction	S	S	SW	SSE	N	WNW	WSW	SW	S	SSE	SW	S	S
-Speed	41	46	39	39	41	44	30	30	37	37	41	49	49
-Year	2020	2022	2022	2022	2018	2020	2019	2020	2019	2020	2019	2022	Dec 2022

* Length of record: January 2018 to December 2024

Westford

PRECIPITATION (inches)

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
2018	0.00	0.00	0.85	5.20	2.54	3.48	1.51	2.68	3.26	5.85	5.45	3.68	34.50
2019	5.28	2.85	2.49	3.84	6.22	4.20	3.62	4.50	2.44	9.55	5.00	2.26	52.25
2020	4.50	2.81	2.46	2.13	4.99	2.67	4.79	6.88	3.55	3.69	2.50	1.36	42.33
2021	2.01	2.23	1.43	4.02	2.08	3.55	4.84	4.34	3.72	6.52	4.29	2.62	41.65
2022	1.24	3.31	3.34	5.64	6.22	5.39	4.60	6.74	8.74	3.58	4.54	3.11	56.45
2023 2024									2.24	3.50	2.14	4.05	11.93

SNOWFALL (inches)

Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2017-18							0.0	0.0	0.0	0.0	0.0	0.0	0.0
2018-19	0.0	0.0	0.0	T	27.5	9.9	47.8	15.9	19.2	1.9	0.0	0.0	122.2
2019-20	0.0	0.0	0.0	0.0	15.6	14.6	23.7	22.4	4.8	0.6	3.0	0.0	84.7
2020-21	0.0	0.0	0.0	T	4.1	10.4	22.9	27.1	2.9	9.3	T	0.0	76.7
2021-22	0.0	0.0	0.0	0.0	7.7	14.6	16.3	28.1	11.8	6.1	0.0	0.0	84.6
2024-25			0.0	1.0	2.5	22.8							

Westford

TEMPERATURE °F

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
2018	17.2	27.2	28.9	37.4	58.8	61.8	71.1	68.9	61.2	44.6	30.2	23.3	44.2
2019	14.0	19.4	27.6	42.4	51.7	62.1	70.2	65.9	46.4	43.4	29.2	24.4	41.4
2020	23.0	21.7	34.5	40.5	55.1	64.7	72.0	66.6	58.2	46.6	40.5	27.8	45.9
2021	19.6	19.5	32.5	45.9	55.1	67.6	65.9	70.4	60.5	52.4	35.2	28.0	46.1
2022	10.7	19.7	31.8	43.3	59.2	62.7	69.1	69.1	58.6	49.8	39.7	28.2	45.2
2024									61.5	50.0	39.2	24.7	43.8

HEATING DEGREE DAYS: Base 65°F

Year	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total
2017-18							1481	1049	1112	816	197	135	4790
2018-19	8	15	174	627	1037	1280	1571	1267	1152	672	401	108	8312
2019-20	8	36	350	574	1066	1250	1289	1253	936	725	343	104	7934
2020-21	0	41	217	563	725	1145	1397	1264	1000	566	330	49	7297
2021-22	42	19	142	383	884	1134	1679	1259	1018	643	219	87	7509
2024-25			100	462	766	1240							

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COOLING DEGREE DAYS: Base 65°F

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
2018	0	0	0	0	16	48	163	136	69	4	0	0	436
2019	0	0	0	0	1	31	181	74	1	0	0	0	288
2020	0	0	0	0	49	103	225	99	23	0	0	0	499
2021	0	0	0	0	35	136	81	196	14	0	0	0	462
2022	0	0	0	0	48	28	147	144	21	1	0	0	389
2024									20	4	0	0	24

STATION LOCATION AND INSTRUMENTATION

Westford

Location	Occupied from	Occupied to	Latitude North	Longitude West	Elevation Above (ft)						
					Sea Level	Ground					
						Wind	Sun	Temp	Humidity	Rain	Barometer
			44° 37' 38"N	73° 02' 30"W	850	0	0	0	0	0	0

INSTRUMENTATION DETAIL

Units: Temperature=°F, Wind=mph, Pressure=Inches Hg, Precipitation=inches.

The following equipment is used for measuring meteorological data at this station:

Davis Vantage Pro

OBSERVER NOTES

None.