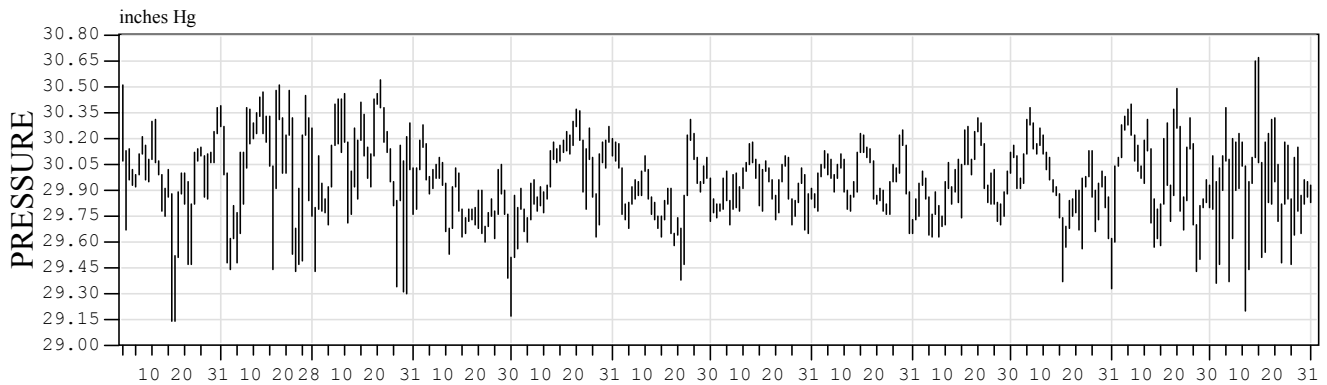
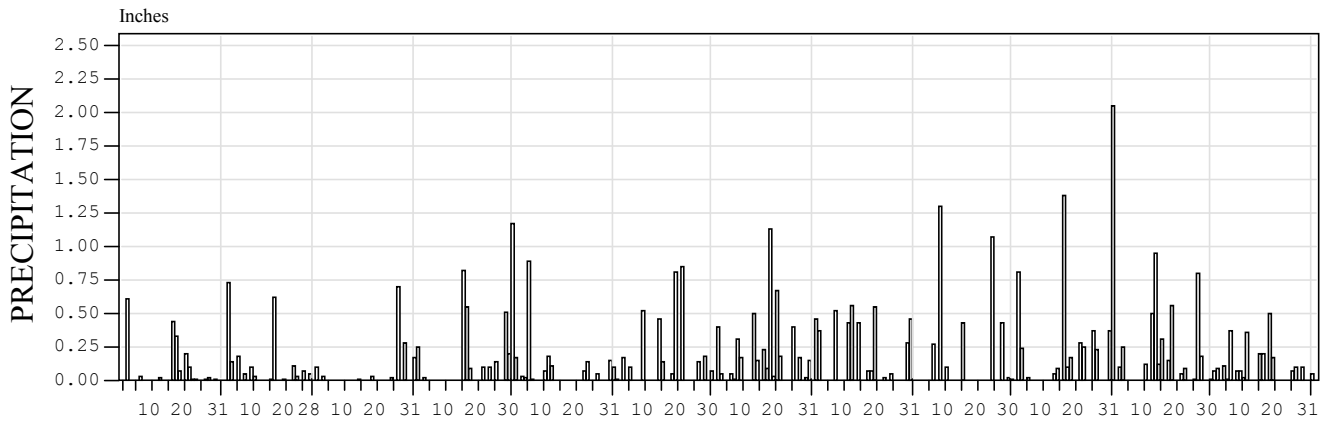
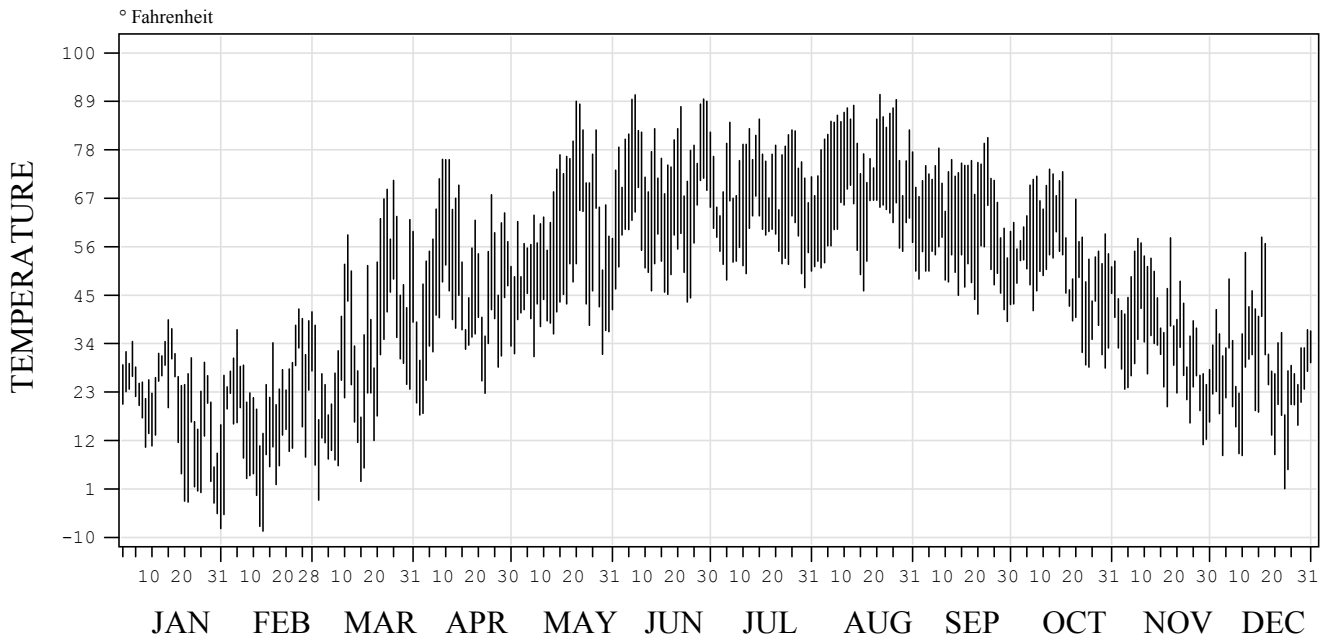


2021

LOCAL CLIMATOLOGICAL DATA

Annual Summary with Comparative Data

Westford Daily Data



METEOROLOGICAL DATA FOR 2021

Westford

Latitude: 44° 37' 38" N Longitude: 73° 02' 29" 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	25.9	27.9	43.2	56.4	66.9	78.8	75.2	80.7	70.8	60.5	43.1	35.7	55.4
-Daily Minimum	13.3	11.1	21.8	35.4	43.4	56.3	56.5	60.0	50.2	44.3	27.4	20.3	36.7
-Monthly	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
-Monthly Dew Point	16.4	13.4	20.8	34.6	43.5	58.7	60.8	64.7	55.6	48.3	29.4	22.7	39.1
Extremes													
-Highest	39.4	41.9	71.2	75.9	89.0	90.5	85.0	90.7	80.8	73.7	58.1	58.2	90.7
-Date	15	24	25	9	20	7	15	21	23	12	18	16	Aug 21
-Lowest	-8.0	-8.6	-1.5	17.9	31.1	43.5	46.7	46.0	39.1	28.5	11.2	1.1	-8.6
-Date	31	13	2	2	7	23	29	16	29	29	28	23	Feb 13
DEGREE DAYS													
Heating Base 65°F	1397	1264	1000	566	330	49	42	19	142	383	884	1134	7210
Cooling Base 65°F	0	0	0	0	35	136	81	196	14	0	0	0	462
SOLAR RADIATION (W/m²)													
	26.7	72.9	148.4	158.7	217.4	231.0	170.3	184.0	134.8	75.6	51.2	31.9	125.2
NUMBER OF DAYS													
Sunrise to Sunset													
-Clear	2	5	13	7	9	10	5	9	6	6	4	5	81
-Partly Cloudy	4	8	5	11	10	14	10	15	13	10	10	10	120
-Cloudy	25	15	13	12	12	6	15	7	11	15	16	16	163
Precipitation													
.01 inches or more	18	14	10	14	14	12	19	14	12	17	18	20	182
Snow, Ice pellets													
1.0 inches or more	7	8	1	3	0	0	0	0	0	0	2	5	26
Thunderstorms	0	0	1	0	1	5	2	3	3	1	0	0	16
Heavy Fog, visibility													
¼ mile or less	1	0	0	0	0	0	1	1	0	1	0	0	4
TEMPERATURE:													
-Maximum													
90°F and above	0	0	0	0	0	3	0	1	0	0	0	0	4
32°F and below	27	21	10	1	0	0	0	0	0	0	5	11	75
-Minimum													
32°F and below	31	27	24	9	3	0	0	0	0	5	20	29	148
0°F and below	6	4	1	0	0	0	0	0	0	0	0	0	11
PRESSURE													
Average													
-Monthly	29.981	30.057	30.057	29.837	30.001	29.886	29.919	29.971	29.933	29.941	29.997	29.956	29.961
Extremes													
-Highest	30.52	30.52	30.54	30.28	30.37	30.32	30.19	30.26	30.32	30.38	30.50	30.68	30.68
-Date	1	18	21	3	20	24	13	28	20	6	20	15	Dec 15
-Lowest	29.14	29.44	29.31	29.17	29.51	29.39	29.65	29.65	29.63	29.33	29.43	29.21	29.14
-Date	17	23	29	30	1	21	30	30	6	31	26	11	Jan 17
RELATIVE HUMIDITY (%)													
Average													
-Monthly	85.3	76.5	63.1	69.0	67.4	75.6	85.9	85.6	86.6	89.0	80.8	80.6	78.8
Local Time													
Hour 00	88	81	68	74	78	86	92	93	93	93	84	82	84
Hour 06	88	82	72	82	83	89	95	95	94	95	87	84	87
Hour 12	80	66	56	62	55	64	77	75	77	81	72	75	70
Hour 18	85	77	56	59	54	66	77	78	82	89	80	82	74
PRECIPITATION													
Water Equivalent													
-Total	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
-Greatest (24 hrs)	0.00	0.00	0.71	1.19	0.90	0.87	1.23	0.83	1.31	2.18	0.97	0.00	2.18
-Date	1	1	26	29-30	5	18-19	17-18	11-12	8	30-31	12-13	1	Oct 30-31
Snow, Ice pellets													
-Total	22.9	27.1	2.9	9.3	T	0.0	0.0	0.0	0.0	0.0	7.7	14.6	84.5
-Greatest (day)	5.0	11.6	1.3	3.8	T	0.0	0.0	0.0	0.0	0.0	5.0	4.3	11.6
-Date	2	2	3	21	1						26	18	Feb 2
WIND													
Resultant													
-Direction	234	228	218	250	239	202	212	194	199	215	209	210	218
-Speed	0.8	1.5	3.0	1.6	1.3	1.4	0.5	0.6	0.9	0.7	2.2	2.3	1.4
Average Speed	1.7	2.6	4.9	2.6	2.0	1.7	0.8	0.9	1.2	1.2	3.0	3.5	2.2
Maximum Two-minute													
Average													
-Direction	W	W	WSW	W	WSW	S	WSW	WSW	S	SW	W	WSW	WSW
-Speed	13	20	21	17	14	12	12	13	11	14	16	22	22
-Date	28	16	29	22	11	21	20	11	15	16	1	17	Dec 17
Peak Gust													
-Direction	W	S	SSE	W	W	S	SSE	WSW	S	SW	SSE	W	W
-Speed	26	35	38	30	28	26	25	24	30	28	32	39	39
-Date	28	27	30	23	11	21	25	11	15	16	17	17	Dec 17

MEANS AND EXTREMES*

Westford

Latitude: 44° 37' 38" N Longitude: 73° 02' 29" 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	26.4	30.9	39.9	51.0	66.3	75.6	81.2	78.9	66.7	55.1	41.3	33.7	53.9
-Daily Minimum	10.5	13.0	21.8	32.1	44.0	52.4	58.4	56.9	46.5	38.4	26.2	18.0	34.9
-Monthly	18.5	22.0	30.9	41.5	55.2	64.0	69.8	67.9	56.6	46.7	33.8	25.9	44.4
-Monthly Dew Point	14.5	15.9	21.3	30.5	43.5	55.5	62.6	61.6	52.2	41.4	28.0	21.3	37.4
Extremes													
-Record Highest	57.3	65.7	71.2	75.9	91.8	91.7	93.5	90.8	89.0	79.6	71.2	62.1	93.5
-Year	2018	2018	2021	2021	2020	2020	2018	2018	2018	2018	2020	2020	Jul 2018
-Record Lowest	-19.2	-12.0	-1.5	15.1	28.1	33.2	46.4	43.1	0.0	0.0	-2.7	-6.7	-19.2
-Year	2018	2020	2021	2018	2020	2020	2019	2018	2019	2019	2018	2019	Jan 2018
MEAN DEGREE DAYS													
Heating Base 65°F	1435	1208	1050	695	318	99	15	28	221	537	928	1202	7734
Cooling Base 65°F	0	0	0	0	25	80	163	126	27	1	0	0	421
MEAN SOLAR RADIATION	23.7	54.3	100.8	115.6	153.0	169.3	154.9	187.4	142.2	72.3	41.5	31.1	103.8
MEAN NUMBER OF DAYS													
Sunrise to Sunset													
-Clear	2.3	3.8	6.5	3.8	4.8	6.8	5.3	8.8	5.5	4.3	2.8	2.8	57.0
-Partly Cloudy	4.8	5.8	5.8	7.5	8.0	9.0	11.8	14.3	12.0	9.0	7.0	10.3	105.0
-Cloudy	16.3	11.5	10.5	11.0	10.5	6.8	6.0	6.5	8.3	15.3	20.3	17.8	140.5
Precipitation ≥ .01"													
Snow, Ice plts. ≥ 1.0"	13.5	9.8	10.8	17.5	14.8	14.3	13.5	16.3	11.5	17.8	18.3	18.0	175.8
Thunderstorms	6.5	4.3	1.5	1.0	0.3	0.0	0.0	0.0	0.0	0.0	4.3	4.8	22.5
Heavy Fog, vis. ≤ ¼ mi	0.0	0.3	0.5	0.0	1.8	3.3	3.5	5.3	1.8	0.8	0.0	0.0	17.0
	0.3	0.3	0.3	0.8	1.0	0.5	0.3	0.5	0.0	0.3	0.8	0.5	5.3
TEMPERATURE:													
-Maximum													
90°F and above	0.0	0.0	0.0	0.0	0.5	1.8	2.3	0.8	0.0	0.0	0.0	0.0	5.3
32°F and below	22.0	15.8	8.5	0.8	0.0	0.0	0.0	0.0	1.0	0.8	7.0	14.3	70.0
-Minimum													
32°F and below	30.0	26.8	25.8	16.5	3.5	0.0	0.0	0.0	2.0	8.0	21.8	28.3	162.5
0°F and below	8.5	4.8	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.3	2.0	17.5
PRESSURE													
Average													
-Monthly	30.029	30.051	30.017	29.874	29.948	29.877	29.913	29.923	30.034	29.153	30.010	29.987	29.901
Extremes													
-Record Highest	30.83	30.81	30.75	30.49	30.46	30.45	30.31	30.34	30.62	30.50	30.62	30.72	30.83
-Year	2018	2018	2020	2019	2019	2020	2018	2019	2020	2020	2018	2019	Jan 2018
-Record Lowest	29.14	28.90	29.20	29.01	29.37	29.39	29.41	29.28	0.00	0.00	29.16	28.92	0.00
-Year	2021	2020	2020	2020	2018	2021	2020	2020	2019	2019	2019	2019	Sep 2019
RELATIVE HUMIDITY (%)													
Average													
-Monthly	82.8	76.6	69.4	69.3	68.3	76.3	80.6	83.7	79.8	81.4	79.7	81.4	77.4
-Local Time													
Hour 00	64	60	54	56	59	65	68	92	86	89	83	83	72
Hour 06	65	61	57	59	62	69	71	95	86	90	85	85	74
Hour 12	59	51	45	45	44	49	54	71	71	74	73	75	59
Hour 18	63	57	45	44	43	48	54	75	77	82	79	82	63
PRECIPITATION													
Water Equivalent													
-Mean	2.95	1.97	1.81	3.80	3.96	3.47	3.69	4.60	3.24	6.40	4.31	2.48	42.68
-Maximum Monthly	5.28	2.85	2.49	5.20	6.22	4.20	4.84	6.88	3.72	9.55	5.45	3.68	9.55
-Year	2019	2019	2019	2018	2019	2019	2021	2020	2021	2019	2018	2018	Oct 2019
-Minimum Monthly	0.00	0.00	0.85	2.13	2.08	2.67	1.51	2.68	2.44	3.69	2.50	1.36	0.00
-Year			2018	2020	2021	2020	2018	2018	2019	2020	2020	2020	
-Greatest (24 hrs)	0.00	0.00	0.71	1.19	2.53	1.11	1.85	2.51	2.53	3.08	1.56	0.15	3.08
-Year			2021	2021	2020	2019	2019	2020	2020	2019	2019	2020	Oct 2019
Snow, Ice pellets													
-Mean	23.6	16.3	6.7	3.0	0.8	0.0	0.0	0.0	0.0	T	13.7	12.4	76.5
-Maximum Monthly	47.8	27.1	19.2	9.3	3.0	0.0	0.0	0.0	0.0	T	27.5	14.6	47.8
-Year	2019	2021	2019	2021	2020					2018	2018	2019	Jan 2019
-Minimum Monthly	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	9.9	0.0
-Year										2020	2018	2018	
-Greatest (day)	12.0	15.0	7.0	3.8	2.5	0.0	0.0	0.0	0.0	T	9.0	4.3	15.0
-Year	2019	2020	2019	2021	2020					2018	2018	2021	Feb 2020
WIND													
Resultant													
-Direction	224	224	217	247	239	209	211	212	203	210	208	208	218
-Speed	0.9	1.4	2.1	1.6	1.3	0.9	0.5	0.5	0.8	1.1	2.3	2.2	1.3
Average Speed	1.6	2.0	2.7	2.2	1.6	0.8	0.5	0.6	1.0	1.9	3.2	3.1	1.8
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	W	SSE	N	N	WNW	WSW	SW	S	SSE	SW	S	WNW
-Speed	41	41	38	38	41	44	30	30	37	37	41	40	44
-Year	2020	2019	2021	2018	2018	2020	2019	2020	2019	2020	2019	2020	Jun 2020

* Length of record: January 2018 to December 2021

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

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							

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

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							

Westford

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

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
22 Penny Ln Westford, VT	2001		44° 37' 38"N	73° 02' 29"W	850	22	5	5	5	5	5

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.