### Climatography of the United States No. 20 1971-2000

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

COOP ID: 198367

Station: TAUNTON, MA

**Climate Division: MA 3** 

**NWS Call Sign:** 

Elevation: 20 Feet Lat: 41°54N Lon: 71°04W

	Month         Daily Max         Daily Min         Mean         Highest Daily(2)         Year         Day         Month(1) Mean         Year Day         Month(1) Mean         Year Day         Month(1) Mean         Year Day         Month(1) Mean         Year Mean         Heating Mean         Cooling Series         >=         >=         >=         <=																				
	Mea	<b>n</b> (1)						Extr	emes						•		Mean	Numb	er of D	Days (3)	
Month			Mean	Mean Highest Daily(2) Year Day Month(1) Year Daily(2) Year Mean Vear Daily(2) Year						Day	Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0	
Jan	37.0	17.8	27.4	65+	1995	16	35.4	1990	-21+	1957	18	17.0	1981	1167	0	.0	.0	3.9	9.9	28.6	2.2
Feb	39.0	19.7	29.4	69	1976	25	36.5	1998	-14	1967	13	20.3	1979	999	0	.0	.0	4.4	7.0	25.2	1.2
Mar	47.5	28.5	38.0	86	1977	30	42.4	1977	-8	1967	19	33.2	1984	838	0	.0	.0	12.7	1.3	22.4	@
Apr	58.0	37.1	47.6	94	1990	29	52.4	1976	14	1982	7	42.9	1972	522	0	.0	.2	24.6	.1	10.8	.0
May	69.2	46.8	58.0	96+	1987	31	62.5	1991	23	1974	5	54.4	1974	226	9	.0	.7	30.6	.0	1.5	.0
Jun	77.8	55.9	66.9	99	1952	26	70.6	1999	33	1972	12	62.6	1985	39	95	.0	2.0	30.0	.0	.0	.0
Jul	83.0	61.4	72.2	100+	1949	4	76.3	1994	40	1973	25	69.2	1992	2	225	.1	4.5	31.0	.0	.0	.0
Aug	81.3	60.5	70.9	102	1975	2	74.6	1988	32	1965	31	66.8	1982	6	190	@	3.0	31.0	.0	.0	.0
Sep	73.7	52.0	62.9	98	1953	2	67.0	1999	25	1951	30	59.1	1978	102	38	.0	.4	30.0	.0	.5	.0
Oct	62.5	40.4	51.5	86+	1949	10	57.0	1971	17	1966	31	46.5	1974	422	1	.0	.0	29.6	.0	7.9	.0
Nov	52.0	32.7	42.4	80	1950	2	47.7	1999	5	1989	25	37.3	1976	680	0	.0	.0	17.6	.3	17.5	.0
Dec	41.6	23.4	32.5	76	1998	8	38.5	1998	-15	1963	31	18.9	1989	1009	0	.0	.0	6.7	4.9	26.5	.4
Ann	60.2	39.7	50.0	102	Aug 1975	2	76.3	Jul 1994	-21+	Jan 1957	18	17.0	Jan 1981	6012	558	.1	10.8	252.1	23.5	140.9	3.8

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Issue Date: February 2004 023-A

- (2) Derived from station's available digital record: 1948-2001
- (3) Derived from 1971-2000 serially complete daily data

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>(1)</sup> From the 1971-2000 Monthly Normals

## Climatography of the United States No. 20 1971-2000

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

**COOP ID: 198367** 

**Station: TAUNTON, MA** 

**Climate Division: MA 3** 

NWS Call Sign: Elevation: 20 Feet Lat: 41°54N Lon: 71°04W

										Pı	ecipit	tation	(incl	nes)										
			P	recipi	itatio	on Total	s			M	ean N	lumbo		Proba	ability th		nonthly/	annual j	precipita ated an	nount	ll be equ		less tha	ın the
	Medi					Extremes	i			D	aily Pred	cipitatio	n		Th		•		•		bility Leve te gamma		on	
Month	Mean	Med- ian	Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year	>= 0.01	>= 0.10	>= 0.50	>= 1.00	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	4.30	3.99	3.25	1986	26	8.66	1979	1.29	1981	10.6	7.1	3.0	1.4	1.28	1.69	2.30	2.83	3.34	3.88	4.47	5.16	6.05	7.45	8.75
Feb	3.63	3.33	3.40	1979	26	7.01	1984	.81	1987	9.0	6.2	2.5	.7	1.24	1.59	2.09	2.51	2.92	3.33	3.79	4.32	5.00	6.06	7.03
Mar	4.42	3.85	3.43	1988	27	9.61	1983	.57	1981	10.4	7.4	3.3	1.1	1.43	1.85	2.47	3.00	3.51	4.03	4.61	5.28	6.15	7.50	8.75
Apr	4.12	3.69	3.40	1997	1	8.65	1987	1.35	1999	10.8	7.0	2.9	1.3	1.44	1.83	2.39	2.87	3.33	3.79	4.31	4.90	5.67	6.85	7.93
May	3.91	3.40	5.49	1984	31	8.90	1984	.87	1992	11.0	7.3	2.6	.9	1.18	1.56	2.11	2.59	3.05	3.53	4.06	4.68	5.49	6.74	7.91
Jun	3.41	3.07	4.56	1998	14	11.27	1998	.14	1999	9.8	5.9	2.3	.9	.47	.75	1.24	1.71	2.21	2.76	3.39	4.17	5.22	6.94	8.60
Jul	3.95	3.54	4.67	1990	25	8.04	1990	1.54	1995	8.8	5.7	2.4	1.1	1.75	2.10	2.59	2.99	3.36	3.74	4.14	4.60	5.18	6.06	6.85
Aug	3.97	3.77	6.17	1955	19	8.83	1976	1.36	1999	9.0	6.5	2.7	1.1	1.40	1.78	2.32	2.77	3.21	3.66	4.14	4.71	5.44	6.56	7.59
Sep	4.03	3.75	4.03	1961	21	8.99	1987	.66	1997	8.9	6.1	2.6	1.3	.84	1.21	1.80	2.34	2.88	3.46	4.12	4.90	5.94	7.60	9.17
Oct	3.93	3.50	3.96	1996	21	9.10	1996	.93	1994	8.6	6.1	2.8	1.2	1.47	1.83	2.36	2.80	3.22	3.64	4.11	4.64	5.33	6.38	7.34
Nov	4.48	4.15	3.83	1953	23	8.19	1988	1.00	1976	10.1	7.1	3.2	1.3	1.31	1.73	2.37	2.93	3.47	4.03	4.65	5.38	6.32	7.80	9.18
Dec	4.19	3.51	3.29	1973	17	9.46	1992	.72	1989	11.2	7.8	2.8	.9	.92	1.30	1.92	2.48	3.03	3.63	4.29	5.09	6.14	7.82	9.41
Ann	48.34	46.79	6.17	Aug 1955	19	11.27	Jun 1998	.14	Jun 1999	118.2	80.2	33.1	13.2	36.03	38.46	41.54	43.87	45.92	47.90	49.93	52.17	54.87	58.77	62.12

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

# Climatography of the United States No. 20 1971-2000

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

Station: TAUNTON, MA

Climate Division: MA 3 NWS Call Sign:

**Elevation: 20 Feet** 

Lat: 41°54N

Lon: 71°04W

**COOP ID: 198367** 

										Snov	w (incl	hes)											
		Same   Same															Mea	n Nu	mber	of Day	<b>ys</b> (1)		
	Mean	s/Medi	ans (1)	)					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	10.1	6.8	3	1	17.0	1996	9	29.5	1996	27	1996	11	11	1996	3.6	2.9	1.2	.4	.1	11.5	8.4	4.7	.6
Feb	8.2	6.3	3	2	21.5	1978	6	38.5	1978	38	1978	7	23	1978	3.3	2.3	1.0	.5	.1	10.4	5.8	3.2	1.3
Mar	4.0	1.2	1	#	8.0	1976	9	15.3	1993	23	1978	7	16	1978	1.6	1.3	.6	.2	.0	3.1	1.7	1.2	.8
Apr	1.2	.0	#	0	17.0	1997	1	17.0	1997	17	1997	1	2	1997	.5	.3	.1	.1	@	.5	.3	.1	.1
May	.1	.0	#	0	2.0	1977	9	2.0	1977	2	1977	9	#	1977	@	@	.0	.0	.0	@	.0	.0	.0
Jun	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jul	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Aug	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.1	.0	0	0	3.0	1979	10	3.0	1979	0	0	0	0	0	@	@	@	.0	.0	.0	.0	.0	.0
Nov	1.3	.0	#	0	11.0	1987	11	11.0	1987	8	1989	24	1	1989	.5	.3	.1	.1	@	.4	.2	.1	.0
Dec	5.2	3.3	1	#	14.0	1981	6	17.0	1981	15	1981	7	6	1981	2.0	1.5	.7	.3	.1	4.4	2.3	1.4	.3
Ann	30.2	17.6	N/A	N/A	21.5	Feb 1978	6	38.5	Feb 1978	38	Feb 1978	7	23	Feb 1978	11.5	8.6	3.7	1.6	.3	30.3	18.7	10.7	3.1

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

## Climatography of the United States No. 20 1971-2000

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

**COOP ID: 198367** 

Station: TAUNTON, MA

**Climate Division: MA 3** 

**NWS Call Sign:** 

Elevation: 20 Feet

Lat: 41°54N Lon: 71°04W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month	/Day)			
Temp (F)		P	robability of	later date i	n spring (thr	ru Jul 31) tha	n indicated(	(*)	
Temp (I')	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/05	5/30	5/25	5/22	5/18	5/15	5/11	5/07	5/01
32	5/19	5/14	5/11	5/08	5/05	5/02	4/29	4/26	4/21
28	5/04	4/30	4/27	4/24	4/22	4/19	4/16	4/13	4/09
24	4/22	4/17	4/13	4/10	4/06	4/03	3/31	3/27	3/22
20	4/03	3/30	3/27	3/24	3/22	3/20	3/17	3/14	3/10
16	3/27	3/22	3/19	3/16	3/13	3/10	3/07	3/03	2/26
<u>.</u>			Fal	ll Freeze Da	tes (Month/I	Day)			
Tomp (F)		Pro	bability of ea	arlier date ii	n fall (beginn	ning Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/10	9/14	9/17	9/20	9/22	9/25	9/27	10/01	10/05
32	9/21	9/26	9/29	10/02	10/05	10/08	10/11	10/15	10/20
28	10/05	10/10	10/14	10/17	10/20	10/23	10/26	10/30	11/04
24	10/16	10/23	10/27	10/31	11/04	11/07	11/11	11/16	11/22
20	10/29	11/05	11/10	11/15	11/19	11/23	11/27	12/02	12/09
16	11/17	11/22	11/26	11/29	12/02	12/06	12/09	12/13	12/18
				Freeze F	ree Period		•	•	•
Town (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	148	141	135	131	126	122	118	112	105
32	174	167	161	157	152	148	144	138	131
28	203	195	190	185	180	176	171	166	158
24	239	229	222	216	210	205	199	192	182
20	268	259	252	246	241	236	230	223	214
16	286	279	273	268	264	260	255	249	242

<sup>\*</sup> Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

Complete documentation available from:

## Climatography of the United States No. 20 1971-2000

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

Station: TAUNTON, MA

Climate Division: MA 3 NWS Call Sign: Elevation: 20 Feet Lat: 41°54N Lon: 71°04W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1167	999	838	522	226	39	2	6	102	422	680	1009	6012
60	1012	859	683	373	108	6	0	0	33	277	530	854	4735
57	919	775	590	287	59	1	0	0	14	200	440	761	4046
55	857	719	528	232	36	0	0	0	7	156	382	699	3616
50	702	579	375	117	7	0	0	0	1	71	246	550	2648
32	230	158	29	0	0	0	0	0	0	0	9	133	559

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	86	83	214	468	806	1046	1246	1207	926	603	320	148	7153
55	0	0	0	10	129	357	533	494	242	45	2	0	1812
57	0	0	0	4	90	298	471	432	189	28	1	0	1513
60	0	0	0	1	46	213	378	339	119	11	0	0	1107
65	0	0	0	0	9	95	225	190	38	1	0	0	558
70	0	0	0	0	1	26	96	73	5	0	0	0	201

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (M	(Ionthly)								Growi	ng Degre	ee Units (	Accumu	lated Mo	nthly)			
	Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   Nov   Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	16	19	74	231	546	798	989	948	671	354	143	35	16	35	109	340	886	1684	2673	3621	4292	4646	4789	4824
45	4 2 33 124 394 648 834 793 521 219 71											9	4	6	39	163	557	1205	2039	2832	3353	3572	3643	3652
50	0 0 7 58 254 498 679 638 374 117 31											0	0	0	7	65	319	817	1496	2134	2508	2625	2656	2656
55	0	0	3	19	133	349	524	483	239	51	8	0	0	0	3	22	155	504	1028	1511	1750	1801	1809	1809
60	0	0	0	7	60	216	369	332	131	16	1	0	0	0	0	7	67	283	652	984	1115	1131	1132	1132
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	<b>)/86</b> 11 11 50 146 326 510 665 634 427 215 78 2											24	11	22	72	218	544	1054	1719	2353	2780	2995	3073	3097

(1) Derived from the 1971-2000 Monthly Normals

(2) Derived from 1971-2000 serially complete daily data

Note: For corn, temperatures below 50 are set to 50, and temperatures above 86 are set to 86

### Notes

- a. The monthly means are simple arithmetic averages computed by summing the monthly values for the period 1971-2000 and dividing by thirty. Prior to averaging, the data are adjusted if necessary to compensate for data quality issues, station moves or changes in station reporting practices. Missing months are replaced by estimates based on neighboring stations.
- b. The median is defined as the middle value in an ordered set of values. The median is being provided for the snow and precipitation elements because the mean can be a misleading value for precipitation normals.
  - c. Only observed validated values were used to select the extreme daily values.
  - d. Extreme monthly temperature/precipitation means were selected from the monthly normals data.

Monthly snow extremes were calculated from daily values quality controlled to be consistent with the Snow Climatology.

e. Degree Days were derived using the same techniques as the 1971-2000 normals.

Compete documentation for the 1971-2000 Normals is available on the internet from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

f. Mean "number of days statistics" for temperature and precipitation were calculated from a serially complete daily data set .

Documentation of the serially complete data set is available from the link below:

g. Snowfall and snow depth statistics were derived from the Snow Climatology.

Documentation for the Snow Climatology project is available from the link under references.

### **Data Sources for Tables**

Several different data sources were used to create the Clim20 climate summaries. In some cases the daily extremes appear inconsistent with the monthly extremes and or the mean number of days statistics. For example, a high daily extreme value may not be reflected in the highest monthly value or the mean number of days threshold that is less than and equal to the extreme value. Some of these difference are caused by different periods of record. Daily extremes are derived from the station's entire period of record while the serial data and normals data were are for the 1971-2000 period. Therefore extremes observed before 1971 would not be included in the 1971-2000 normals or the 1971-2000 serial daily data set. Inconsistencies can also occur when monthly values are adjusted to reflect the current observing conditions or were replaced during the 1971-2000 Monthly Normals processing and are not reconciled with the Summary of the Day data.

- a. Temperature/ Precipitation Tables
  - 1. 1971-2000 Monthly Normals
  - 2. Cooperative Summary of the Day
  - 3. National Weather Service station records
  - 4. 1971-2000 serially complete daily data

- c. Snow Tables
  - 1. Snow Climatology
  - 2. Cooperative Summary of the Day
- d. Freeze Data Table

1971-2000 serially complete daily data

- b. Degree Day Table
  - 1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals
  - 2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data

### References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normals.html

U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normals/usnormalsprods.html

Snow Climatology Project Description, www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html

Eischeid, J. K., P. Pasteris, H. F. Diaz, M. Plantico, and N. Lott, 2000: Creating a serially complete, national daily time series of temperature and precipitation for the Western United States. J. Appl. Meteorol., 39, 1580-1591,

www1.ncdc.noaa.gov/pub/data/special/ serialcomplete\_jam\_0900.pdf