## 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: 060973

**Station: BURLINGTON, CT** 

**Climate Division: CT 2** 

**NWS Call Sign:** 

Elevation: 510 Feet Lat: 41°48N Lon: 72°56W

	Onth         Daily Max         Daily Max         Daily Min         Mean Mean         Highest Daily(2)         Year Mean         Day Month(1) Mean         Year Day Month(1) Mean         <																				
	Mea	<b>n</b> (1)						Extr	emes						•		Mean	Numb	er of I	Days (3)	
Month			Mean	Highest Daily(2)  Highest Day  Month Mea				Year		Year	Day	Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0
Jan	35.2	14.1	24.7	64+	1966	1	34.0	1990	-18	1984	22	15.2	1982	1251	0	.0	.0	2.6	12.7	29.6	3.6
Feb	37.7	16.1	26.9	70	1985	25	35.1	1998	-13	1971	1	17.1	1979	1067	0	.0	.0	3.2	9.2	26.5	2.0
Mar	46.6	24.9	35.8	83	1998	29	41.1	2000	-6	1967	19	29.2	1984	907	0	.0	.0	10.6	2.8	25.0	.2
Apr	58.1	35.3	46.7	93	1976	20	50.3	1994	13	1969	1	41.8	1975	549	0	.0	.1	23.4	.2	11.7	.0
May	69.6	45.7	57.7	95+	1962	20	63.0	1991	26	1966	11	54.4+	1974	240	12	.0	.5	30.6	.0	.6	.0
Jun	77.8	54.6	66.2	97	1966	28	70.8	1999	27	1972	11	61.7	1985	57	92	.0	1.6	30.0	.0	@	.0
Jul	82.7	59.7	71.2	100+	1991	21	75.3	1999	40+	1995	3	65.5	2000	8	200	.1	3.6	31.0	.0	.0	.0
Aug	80.6	58.1	69.4	98	1975	3	72.6	1988	35	1965	30	66.0	2000	17	152	.0	1.8	31.0	.0	.0	.0
Sep	72.9	50.2	61.6	95	1983	12	65.9	1999	24	1991	22	58.0	1975	130	26	.0	.5	30.0	.0	.4	.0
Oct	62.1	38.4	50.3	88	1963	8	56.3	1990	19	1988	31	46.2	1987	458	1	.0	.0	28.9	.0	8.1	.0
Nov	51.1	30.9	41.0	80	1982	3	45.9	1999	1	1987	22	36.7+	1976	720	0	.0	.0	15.9	.8	19.3	.0
Dec	39.9	21.0	30.5	75	1998	8	38.2	1998	-13	1980	26	18.3	1989	1071	0	.0	.0	5.1	7.5	27.9	.9
Ann	59.5	37.4	48.5	100+	Jul 1991	21	75.3	Jul 1999	-18	Jan 1984	22	15.2	Jan 1982	6475	483	.1	8.1	242.3	33.2	149.1	6.7

<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 002-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1937-2001
- (3) Derived from 1971-2000 serially complete daily data

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

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Station: BURLINGTON, CT

Climate Division: CT 2 NWS Call Sign: Elevation: 510 Feet Lat: 41°48N Lon: 72°56W

										Pı	recipi	tation	(incl	hes)										
	Me	ans/	P	recip	itatio	on Total						ays (3	3)	Proba	ability th		nonthly/	annual j	precipita ated an	babilit ation will nount vs Probal	ll be equ		less tha	an the
	Medi	ians(1)				Extremes	8			1	aily Pre	cipitatio	n		Th	ese value	s were de	termined	from the	incomplet	e gamma	distributi	ion	
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	4.12	3.39	1940	14	12.11	1979	.56	1981	10.2	6.9	2.9	1.3	.85	1.24	1.87	2.45	3.03	3.66	4.38	5.23	6.37	8.19	9.93
Feb	3.30	3.13	2.84	1981	21	10.26	1981	.38	1987	8.7	6.3	2.3	.8	.92	1.23	1.70	2.12	2.52	2.95	3.42	3.97	4.69	5.82	6.88
Mar	4.61	3.95	4.79	1980	22	10.85	1983	.50	1981	10.5	7.3	3.0	1.3	1.43	1.87	2.52	3.08	3.62	4.18	4.80	5.52	6.46	7.92	9.27
Apr	4.39	3.78	3.63	1945	26	11.48	1983	.66	1999	10.8	7.3	2.7	1.3	1.21	1.62	2.25	2.81	3.35	3.91	4.54	5.28	6.25	7.76	9.18
May	4.65	4.00	3.60	1984	30	12.58	1984	.71	1993	11.4	7.8	3.1	1.1	1.31	1.75	2.42	3.00	3.56	4.16	4.82	5.59	6.60	8.18	9.65
Jun	4.20	3.72	6.13	1982	6	12.80	1982	.19	1999	10.2	6.2	2.5	1.4	.50	.82	1.41	2.00	2.62	3.32	4.13	5.13	6.50	8.74	10.93
Jul	4.31	4.23	3.85	1998	1	8.40	1996	1.63	1983	9.7	6.8	2.8	1.0	1.69	2.09	2.66	3.13	3.57	4.02	4.51	5.08	5.80	6.90	7.90
Aug	4.67	4.13	12.77	1955	19	10.99	1990	.74	1981	9.7	7.1	2.7	1.1	1.19	1.63	2.31	2.91	3.50	4.12	4.82	5.64	6.71	8.40	9.99
Sep	4.80	3.84	7.77	1999	17	14.91	1999	.79	1986	9.2	6.4	2.9	1.5	.90	1.33	2.03	2.68	3.34	4.06	4.87	5.84	7.14	9.23	11.21
Oct	4.47	4.01	4.71	1996	20	11.67	1995	1.03	1978	8.3	5.9	2.8	1.4	1.03	1.44	2.10	2.68	3.27	3.89	4.58	5.41	6.51	8.24	9.87
Nov	4.58	4.50	4.40	1992	23	10.21	1988	.36	1976	9.5	6.2	3.2	1.5	1.42	1.86	2.50	3.06	3.59	4.15	4.76	5.48	6.41	7.85	9.19
Dec	3.99	3.85	4.20	1948	31	9.77	1973	.82	1980	10.2	6.6	2.8	1.2	1.05	1.43	2.01	2.52	3.02	3.54	4.12	4.82	5.72	7.14	8.46
Ann	52.27	49.42	12.77	Aug 1955	19	14.91	Sep 1999	.19	Jun 1999	118.4	80.8	33.7	14.9	39.74	42.23	45.38	47.74	49.83	51.83	53.89	56.15	58.87	62.79	66.15

<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: 1937-2001

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Station: BURLINGTON, CT

Climate Division: CT 2 NWS Call Sign:

COOP ID: 060973 Elevation: 510 Feet Lat: 41°48N Lon: 72°56W

										Snov	v (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Da	<b>ys</b> (1)		
	Mean	s/Medi	ans (1)	)					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Snow Depth Depth Mean Median Mean Median				Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	9.8	9.6	1	0	15.0	1983	16	25.0	1978	13	1994	19	9	1994	2.2	1.8	1.0	.6	.1	-9.9	-9.9	-9.9	-9.9
Feb	8.5	5.1	2	0	20.0	1983	12	29.5	1983	18	1972	26	10	1994	2.2	1.7	.9	.4	.1	-9.9	-9.9	-9.9	-9.9
Mar	4.4	1.0	1	0	7.0	1984	29	23.5	1984	18	1994	4	6+	1994	1.6	1.4	.8	.4	.0	-9.9	-9.9	-9.9	-9.9
Apr	.6	.0	0	0	8.0	1971	7	8.0	1971	0	0	0	0	0	.3	.2	.1	.1	.0	.0	.0	.0	.0
May	.0	.0	0	0	.5	1977	9	.5	1977	0	0	0	0	0	@	.0	.0	.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	.2	.0	0	0	3.5	1979	11	3.5	1979	0	0	0	0	0	@	@	@	.0	.0	.0	.0	.0	.0
Nov	1.0	.0	#	0	6.5	1980	18	7.0	1987	15	1971	26	1	1971	.3	.2	.1	.1	.0	.1	.0	.0	.0
Dec	3.3	4.0	1	0	7.0	1975	21	7.0	1974	14	1992	14	6	1978	1.9	1.4	.7	.1	.0	-9.9	-9.9	-9.9	-9.9
Ann	27.8	19.7	N/A	N/A	20.0	Feb 1983	12	29.5	Feb 1983	18+	Mar 1994	4	10	Feb 1994	8.5	6.7	3.6	1.7	.2	-9.9	-9.9	-9.9	-9.9

<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

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**COOP ID: 060973** 

**Station: BURLINGTON, CT** 

Climate Division: CT 2 NWS Call Sign:

Elevation: 510 Feet Lat: 41°48N Lon: 72°56W

				Freez	ze Data									
			Spri	ng Freeze D	ates (Month	/Day)								
Probability of later date in spring (thru Jul 31) than indicated (*)   10   20   30   40   50   60   70   80   90     36   5/26   5/21   5/17   5/14   5/11   5/09   5/06   5/02   4/27     32   5/18   5/12   5/07   5/04   4/30   4/27   4/23   4/19   4/13     28   5/04   4/29   4/25   4/21   4/18   4/15   4/11   4/07   4/02     24   4/17   4/12   4/09   4/06   4/04   4/01   3/30   3/26   3/22     20   4/08   4/03   3/31   3/28   3/26   3/23   3/21   3/18   3/13     16   4/01   3/27   3/23   3/20   3/17   3/15   3/11   3/08   3/03     36   4/19   9/22   9/25   9/27   9/28   9/30   1/002   1/005   1/008     32   9/26   9/30   1/004   1/007   1/010   1/012   1/015   1/019   1/024     28   1/003   1/09   1/013   1/017   1/020   1/023   1/027   1/031   1/106     29   1/031   1/106   1/11   1/15   1/19   1/123   1/127   1/201   1/208     16   1/17   1/22   1/126   1/30   1/203   1/206   1/210   1/214   1/219     Temp (F)														
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	5/26	5/21	5/17	5/14	5/11	5/09	5/06	5/02	4/27					
32	5/18	5/12	5/07	5/04	4/30	4/27	4/23	4/19	4/13					
28	5/04	4/29	4/25	4/21	4/18	4/15	4/11	4/07	4/02					
24	4/17	4/12	4/09	4/06	4/04	4/01	3/30	3/26	3/22					
20	4/08	4/03	3/31	3/28	3/26	3/23	3/21	3/18	3/13					
16	4/01	3/27	3/23	3/20	3/17	3/15	3/11	3/08	3/03					
<u>'</u>		1	Fal	l Freeze Da	tes (Month/I	Day)	1	•	1					
T (E)		Pro	bability of ea	arlier date i	n fall (beginr	ning Aug 1) t	han indicate	ed(*)						
temp (F)	.10								.90					
36	9/19	9/22	9/25	9/27	9/28	9/30	10/02	10/05	10/08					
32	9/26	9/30	10/04	10/07	10/10	10/12	10/15	10/19	10/24					
28	10/03	10/09	10/13	10/17	10/20	10/23	10/27	10/31	11/06					
24	10/19	10/26	10/30	11/03	11/07	11/10	11/14	11/19	11/25					
20	10/31	11/06	11/11	11/15	11/19	11/23	11/27	12/01	12/08					
16	11/17	11/22	11/26	11/30	12/03	12/06	12/10	12/14	12/19					
				Freeze F	ree Period		•							
Tomas (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)	)						
temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	154	149	145	142	139	136	133	130	125					
32	185	177	171	166	161	157	152	146	138					
28	210	201	195	189	184	179	174	168	159					
24	242	233	227	221	216	211	205	199	190					
20	263	254	248	242	237	232	227	220	212					
16	285	276	270	265	260	255	250	243	235					

<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:

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Climate Division: CT 2 NWS Call Sign: Elevation: 510 Feet Lat: 41°48N Lon: 72°56W

				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	1251	1067	907	549	240	57	8	17	130	458	720	1071	6475
60	1096	927	752	400	123	14	0	1	47	311	570	916	5157
57	1003	843	659	313	72	4	0	0	21	231	480	823	4449
55	941	787	597	258	47	2	0	0	11	183	421	761	4008
50	786	647	443	141	11	0	0	0	1	90	280	608	3007
32	289	197	56	1	0	0	0	0	0	0	12	169	724

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	61	55	173	442	795	1025	1215	1158	886	566	282	121	6779
55	0	0	0	10	129	337	502	445	207	36	1	0	1667
57	0	0	0	4	92	279	440	383	157	22	0	0	1377
60	0	0	0	1	50	199	347	291	93	8	0	0	989
65	0	0	0	0	12	92	200	152	26	1	0	0	483
70	0	0	0	0	2	28	85	56	3	0	0	0	174

										Gro	wing ]	Degre	e Uni	ts (2)										
Base	Base Growing Degree Units (Monthly)  Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Growing Degree Units (Accumulated Monthly)										
														Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	6 10 62 226 555 787 972 913 652 329 115 0 1 25 121 403 637 817 758 502 198 55													16	78	304	859	1646	2618	3531	4183	4512	4627	4648
45	0 1 25 121 403 637 817 758 502 198 55												0	1	26	147	550	1187	2004	2762	3264	3462	3517	3521
50	0	0	8	57	257	487	662	603	352	98	22	0	0	0	8	65	322	809	1471	2074	2426	2524	2546	2546
55	0	0	4	25	142	345	507	449	220	42	5	0	0	0	4	29	171	516	1023	1472	1692	1734	1739	1739
60	0	0	1	7	66	208	354	298	121	13	1	0	0	0	1	8	74	282	636	934	1055	1068	1069	1069
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	<b>0/86</b> 2 8 49 143 325 499 645 600 397 202 70 1											12	2	10	59	202	527	1026	1671	2271	2668	2870	2940	2952

(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