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: BRADFORDSVILLE, KY 1971-2000 COOP ID: 150940

Climate Division: KY 2 NWS Call Sign: Elevation: 660 Feet Lat: 37°29N Lon: 85°09W

			Temperature (°F) Extremes																				
	Mea	n (1)						Extr	emes						Days (1) emp 65		Mean Number of Days (3)						
Month	Daily Max	Daily Min	Mean	Highest Daily(2)	Year	Day	Highest Month(1) Mean	Year	Lowest Daily(2)	Year	Day	Lowest Month(1) Mean	Year	Heating	Cooling	Max >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0		
Jan	42.7	23.0	32.9	75	1999	23	41.9	1990	-30	1963	24	17.4	1977	997	0	.0	.0	9.2	6.8	24.1	2.2		
Feb	48.2	25.5	36.9	82	1996	24	44.5	1990	-14+	1996	5	23.2	1978	789	0	.0	.0	13.0	3.9	20.9	1.1		
Mar	58.0	33.0	45.5	85	1963	31	54.0	1973	-7	1980	3	39.1	1996	605	0	.0	.0	23.1	.6	16.8	.1		
Apr	67.9	40.8	54.4	90+	1989	28	60.0	1981	19	1982	7	49.0	1997	325	6	.0	.1	28.2	.0	7.1	.0		
May	76.4	50.6	63.5	95	1962	19	70.0	1991	27	1971	4	58.5	1997	139	92	.0	.5	30.9	.0	.5	.0		
Jun	84.3	60.1	72.2	100+	1988	26	75.1	1984	32	1966	1	68.4	1982	8	224	.1	6.2	30.0	.0	.0	.0		
Jul	88.2	64.7	76.5	105	1988	10	79.9	1993	44	1968	5	73.5	1996	0	354	.4	13.4	31.0	.0	.0	.0		
Aug	87.1	62.5	74.8	105+	1988	18	79.7	1995	38+	1986	30	71.2	1992	3	306	.2	10.3	31.0	.0	.0	.0		
Sep	81.3	54.8	68.1	99	1999	5	72.8	1998	32+	1993	30	63.8	1974	50	141	.0	4.4	30.0	.0	.1	.0		
Oct	70.4	42.0	56.2	90	1971	1	63.3	1984	19+	1976	29	49.6	1976	300	27	.0	@	30.4	.0	6.1	.0		
Nov	58.0	34.2	46.1	84+	1987	3	54.6	1985	-1	1976	30	36.6	1976	567	1	.0	.0	21.8	.2	14.4	@		
Dec	47.2	27.0	37.1	78+	1982	5	46.2	1971	-17	1989	23	24.5	1989	865	0	.0	.0	13.1	3.7	21.9	.7		
Ann	67.5	43.2	55.4	105+	Aug 1988	18	79.9	Jul 1993	-30	Jan 1963	24	17.4	Jan 1977	4648	1151	.7	34.9	291.7	15.2	111.9	4.1		

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 011-A

[@] Denotes mean number of days greater than 0 but less than .05

⁽¹⁾ From the 1971-2000 Monthly Normals

⁽²⁾ Derived from station's available digital record: 1962-2001

⁽³⁾ Derived from 1971-2000 serially complete daily data

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COOP ID: 150940

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Climate Division: KY 2 NWS Call Sign: Elevation: 660 Feet Lat: 37°29N Lon: 85°09W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recipi	itatio	on Total					ean N of D	ays (3	5)	Proba	ability th		nonthly/	annual j	precipita ated am	babilit ation wi nount vs Proba	ll be equ		less tha	ın the
	Medi	ans(1)				Extremes	•			"	any Fie	стриацо	11		Th	ese value	s were det	ermined	from the i	incomplet	e gamma	distributi	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	4.18	4.48	2.73	1974	10	8.35	1974	.72	1986	12.0	7.3	2.9	1.1	1.23	1.63	2.23	2.74	3.24	3.76	4.34	5.01	5.89	7.26	8.53
Feb	4.11	3.95	4.22	1989	14	13.89	1989	1.27	1978	11.2	6.8	2.8	1.1	1.31	1.70	2.28	2.77	3.25	3.74	4.28	4.91	5.72	6.99	8.16
Mar	5.22	4.54	4.07	1997	2	14.16	1997	1.35	1971	12.9	8.3	3.7	1.2	1.75	2.24	2.96	3.58	4.17	4.78	5.44	6.22	7.21	8.76	10.19
Apr	4.46	3.97	4.60	1970	28	12.80	1972	.83	1976	12.4	8.1	3.1	1.1	1.34	1.77	2.40	2.94	3.47	4.02	4.63	5.34	6.27	7.71	9.04
May	5.36	4.69	3.17	1984	7	13.59	1983	2.11	1977	12.3	8.6	3.7	1.3	1.90	2.40	3.13	3.75	4.34	4.94	5.60	6.36	7.35	8.86	10.25
Jun	4.65	4.22	3.09	1989	13	11.14	1998	1.24	1984	11.3	8.0	3.5	1.2	1.67	2.11	2.74	3.27	3.78	4.30	4.86	5.52	6.36	7.65	8.84
Jul	4.66	4.09	3.88	1971	19	11.78	1971	.93	1999	10.4	6.7	2.6	1.4	1.23	1.67	2.35	2.94	3.52	4.13	4.82	5.62	6.67	8.33	9.87
Aug	3.79	2.82	2.87	1977	14	10.11+	1977	.65	1972	9.2	6.3	2.6	1.0	.98	1.34	1.89	2.38	2.85	3.35	3.91	4.57	5.44	6.80	8.07
Sep	3.85	3.18	4.31	1982	2	10.33	1979	.80	1978	8.9	5.3	2.6	1.1	.95	1.32	1.88	2.38	2.87	3.39	3.97	4.66	5.56	6.99	8.32
Oct	3.13	3.22	2.66	1983	23	6.01	1983	.34	1987	8.9	5.6	2.1	.9	.72	1.01	1.47	1.88	2.29	2.72	3.21	3.79	4.56	5.78	6.92
Nov	4.06	3.64	3.25	1988	20	9.75	1973	.94	1976	10.9	7.2	2.6	.9	1.21	1.59	2.17	2.67	3.16	3.66	4.22	4.88	5.72	7.05	8.28
Dec	4.78	4.47	4.01	1978	9	14.35	1978	1.27	1976	12.5	7.6	3.1	1.4	1.36	1.82	2.50	3.10	3.68	4.28	4.95	5.74	6.77	8.38	9.88
Ann	52.25	53.13	4.60	Apr 1970	28	14.35	Dec 1978	.34	Oct 1987	132.9	85.8	35.3	13.7	38.04	40.81	44.35	47.03	49.40	51.68	54.04	56.64	59.79	64.34	68.26

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

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

[#] Denotes amounts of a trace

[@] Denotes mean number of days greater than 0 but less than .05

^{**} Statistics not computed because less than six years out of thirty had measurable precipitation

⁽¹⁾ From the 1971-2000 Monthly Normals

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COOP ID: 150940

Station: BRADFORDSVILLE, KY

Climate Division: KY 2 NWS Call Sign:

Elevation: 660 Feet Lat: 37°29N Lon: 85°09W

										Snov	w (incl	hes)											
		Median Mean Median Snow Fall Snow Depth Snow Depth Snow Depth 3.4 1 # 7.5 1994 17 17.0 1978 12 1978 20 4 197 3.7 1 # 9.7 1998 5 21.3 1998 14 1998 6 4 199 1.1 # # 4.1 1995 8 6.5+ 1993 6 1993 14 2 197 .0 # 0 1.0 1982 8 1.3 1987 1 1982 8 #+ 200															Mea	ın Nu	mber	of Day	ys (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	4.9	3.4	1	#	7.5	1994	17	17.0	1978	12	1978	20	4	1978	3.8	1.4	.6	.1	.0	5.3	2.3	.8	.1
Feb	5.4	3.7	1	#	9.7	1998	5	21.3	1998	14	1998	6	4	1998	3.6	1.7	.5	.3	.0	3.7	1.3	1.0	.1
Mar	2.0	1.1	#	#	4.1	1995	8	6.5+	1993	6	1993	14	2	1978	1.8	.7	.2	.0	.0	1.2	.6	.2	.0
Apr	.1	.0	#	0	1.0	1982	8	1.3	1987	1	1982	8	#+	2000	.2	.1	.0	.0	.0	@	.0	.0	.0
May	#	.0	#	0	#	1989	8	#	1989	#	1998	21	#	1998	.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	.0	.0	0	0	.5	1989	21	.5	1989	0	0	0	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.4	.1	#	0	4.0	1977	28	5.5	1977	4	1977	28	#+	2000	.6	.1	@	.0	.0	.2	@	.0	.0
Dec	2.0	1.5	#	#	5.0	1984	6	8.1	2000	4+	2000	3	1+	2000	2.4	.7	.1	@	.0	1.8	.3	.0	.0
Ann	14.8	9.8	N/A	N/A	9.7	Feb 1998	5	21.3	Feb 1998	14	Feb 1998	6	4+	Feb 1998	12.5	4.7	1.4	.4	.0	12.2	4.5	2.0	.2

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

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

[@] Denotes mean number of days greater than 0 but less than .05

^{-9/-9.9} represents missing values Annual statistics for Mean/Median snow depths are not appropriate

⁽¹⁾ Derived from Snow Climatology and 1971-2000 daily data

⁽²⁾ Derived from 1971-2000 daily data

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COOP ID: 150940

Lon: 85°09W

Lat: 37°29N

Elevation: 660 Feet

Station: BRADFORDSVILLE, KY

Climate Division: KY 2 NWS Call Sign:

NWS Call Sign:

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	(Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated((*)	
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/19	5/15	5/11	5/08	5/06	5/03	4/30	4/27	4/22
32	5/10	5/05	4/30	4/27	4/24	4/21	4/17	4/13	4/07
28	4/23	4/19	4/16	4/13	4/10	4/08	4/05	4/02	3/28
24	4/12	4/07	4/03	3/31	3/28	3/25	3/22	3/18	3/13
20	4/01	3/25	3/20	3/15	3/11	3/06	3/02	2/25	2/17
16	3/19	3/12	3/07	3/02	2/26	2/22	2/18	2/13	2/06
1		-	Fal	l Freeze Da	tes (Month/D	ay)	1	1	•
To (E)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/26	9/30	10/02	10/04	10/06	10/08	10/10	10/13	10/16
32	9/30	10/05	10/08	10/11	10/14	10/17	10/20	10/24	10/29
28	10/10	10/16	10/19	10/22	10/25	10/28	10/31	11/04	11/09
24	10/22	10/28	11/01	11/05	11/08	11/11	11/15	11/19	11/25
20	11/02	11/09	11/14	11/18	11/22	11/26	12/01	12/06	12/13
16	11/14	11/21	11/26	11/30	12/04	12/08	12/13	12/18	12/25
1				Freeze F	ree Period		•		•
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	170	164	160	156	153	150	146	142	136
32	195	188	182	177	173	168	164	158	150
28	215	209	204	201	197	194	190	186	180
24	243	236	232	228	224	220	216	211	205
20	278	271	265	260	256	251	247	241	234
16	305	296	290	285	280	276	271	265	256

^{*} 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.

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				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree 1	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	997	789	605	325	139	8	0	3	50	300	567	865	4648
60	842	649	457	195	68	1	0	0	15	188	424	710	3549
57	758	567	371	132	39	0	0	0	6	134	343	627	2977
55	699	517	317	97	25	0	0	0	3	104	291	569	2622
50	556	388	201	35	7	0	0	0	0	48	182	431	1848
32	176	76	11	0	0	0	0	0	0	0	8	99	370

Base															
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
32	202	211	429	671	976	1206	1377	1327	1081	750	431	257	8918		
55	12	8	22	78	289	516	664	614	394	141	24	14	2776		
57	9	2	14	53	240	456	602	552	337	109	16	10	2400		
60	0	0	6	26	176	367	509	459	256	70	7	0	1876		
65	0	0	0	6	92	224	354	306	141	27	1	0	1151		
70	0	0	0	1	37	103	204	168	60	8	0	0	581		

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (N	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	62	101	240	443	735	975	1134	1089	851	518	246	98	62	163	403	846	1581	2556	3690	4779	5630	6148	6394	6492
45	32	51	146	314	581	825	979	934	701	371	153	52	32	83	229	543	1124	1949	2928	3862	4563	4934	5087	5139
50	15	27	82	199	427	675	824	779	551	243	90	26	15	42	124	323	750	1425	2249	3028	3579	3822	3912	3938
55	0	7	40	112	290	525	669	624	404	141	46	8	0	7	47	159	449	974	1643	2267	2671	2812	2858	2866
60	0	0	16	54	171	377	514	469	270	67	15	0	0	0	16	70	241	618	1132	1601	1871	1938	1953	1953
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)	•	
50/86	/ 86 42 77 170 298 479 650 773 735 560 351 166											66	42	119	289	587	1066	1716	2489	3224	3784	4135	4301	4367

(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