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: 154208

Station: JAMESTOWN WWTP, KY

Climate Division: KY 2 NWS Call Sign: Elevation: 890 Feet Lat: 37°01N Lon: 85°04W

									r	Tempe	eratur	re (°F)											
	Mea	n (1)						Extr	emes					Degree Base To	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	43.0	25.6	34.3	74	1972	25	43.6	1990	-22	1994	19	18.3	1977	953	0	.0	.0	10.0	6.5	23.5	1.3		
Feb	47.9	27.6	37.8	76+	2000	26	45.2	1990	-8+	1996	5	25.1	1978	763	0	.0	.0	13.1	4.4	19.1	.3		
Mar	57.9	35.7	46.8	89	1983	5	53.1	1973	-1	1980	3	40.7	1996	566	1	.0	.0	23.1	.6	12.5	@		
Apr	67.6	43.2	55.4	90+	1995	17	62.1	1981	20	1982	7	46.3	1997	303	15	.0	.1	28.2	.0	4.2	.0		
May	76.0	52.3	64.2	90	1987	30	70.0	1987	30	1976	4	57.3	1997	126	99	.0	@	30.9	.0	.1	.0		
Jun	84.1	61.2	72.7	100	1988	26	78.3	1971	41+	1972	23	68.5	1992	10	240	@	5.2	30.0	.0	.0	.0		
Jul	87.7	65.9	76.8	103	1980	17	81.4	1993	48	1972	7	73.6	1976	0	365	.3	10.8	31.0	.0	.0	.0		
Aug	86.6	64.2	75.4	101+	1988	19	80.3	1980	44	1986	29	71.4	1992	3	324	.2	8.3	31.0	.0	.0	.0		
Sep	80.9	57.1	69.0	97	1995	1	73.4	1971	34	2001	26	65.2	1993	38	159	.0	2.8	30.0	.0	.0	.0		
Oct	70.1	45.3	57.7	87+	1986	4	64.9	1971	22	2001	28	51.6	1976	259	33	.0	.0	30.3	.0	2.9	.0		
Nov	58.4	36.8	47.6	86	1987	1	55.5	1985	7	1976	30	39.7	1976	522	1	.0	.0	21.9	.2	11.5	.0		
Dec	47.9	29.7	38.8	79	1982	4	47.5	1984	-14	1989	22	27.6	1989	813	0	.0	.0	13.7	3.6	20.0	.3		
Ann	67.3	45.4	56.4	103	Jul 1980	17	81.4	Jul 1993	-22	Jan 1994	19	18.3	Jan 1977	4356	1237	.5	27.2	293.2	15.3	93.8	1.9		

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 029-A

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

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

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COOP ID: 154208

Station: JAMESTOWN WWTP, KY

Climate Division: KY 2 NWS Call Sign: Elevation: 890 Feet Lat: 37°01N Lon: 85°04W

										Pı	recipi	tation	(incl	ies)												
	Mea	ans/	P	recipi	itatio	on Total						ays (3)	Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount Monthly/Annual Precipitation vs Probability Levels												
	Medi	ans(1)				Extremes	•			D	aily Pre	приано	11	These values were determined from the incomplete gamma distribution												
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	4.26	3.82	2.70	1972	28	9.48	1972	.66	1986	11.3	8.2	3.0	1.1	1.24	1.64	2.25	2.78	3.29	3.83	4.42	5.12	6.02	7.43	8.74		
Feb	4.19	3.53	2.90	1989	21	9.85	1989	1.24	1978	9.9	7.1	2.9	.9	1.51	1.90	2.47	2.95	3.41	3.87	4.38	4.97	5.73	6.89	7.96		
Mar	4.95	4.70	3.67	1976	21	13.36	1975	2.02	1983	12.1	9.1	3.3	1.1	1.99	2.45	3.09	3.62	4.12	4.63	5.18	5.82	6.62	7.85	8.97		
Apr	4.23	4.19	2.90	1998	16	8.40	1998	.19	1997	11.3	8.0	3.1	.9	.95	1.34	1.96	2.52	3.08	3.67	4.34	5.13	6.18	7.85	9.42		
May	5.37	5.07	5.38	1984	7	11.41	1984	1.91	1988	11.6	9.0	3.5	1.5	2.32	2.80	3.48	4.03	4.55	5.07	5.63	6.28	7.09	8.33	9.45		
Jun	4.43	3.99	2.37	1974	2	11.16	1976	.96	1988	10.0	7.3	3.2	1.1	1.15	1.56	2.21	2.78	3.33	3.92	4.58	5.35	6.36	7.96	9.46		
Jul	4.50	4.79	3.04	1977	25	10.97	1971	.34	1993	10.1	7.1	2.6	1.1	.80	1.19	1.85	2.47	3.09	3.78	4.55	5.49	6.75	8.77	10.70		
Aug	4.26	4.12	4.90	1975	19	8.86	1975	.66	1995	8.3	6.2	2.7	1.1	1.15	1.56	2.17	2.71	3.24	3.79	4.41	5.13	6.08	7.57	8.95		
Sep	4.04	3.77	8.20	1982	2	11.58	1982	.43	1998	8.3	6.4	2.5	1.1	.73	1.09	1.68	2.23	2.79	3.40	4.09	4.93	6.05	7.84	9.56		
Oct	3.34	2.92	2.75	1989	17	8.76	1984	.40	1987	7.4	5.6	2.3	.9	.74	1.05	1.54	1.98	2.43	2.90	3.43	4.06	4.89	6.22	7.47		
Nov	4.33	4.22	3.80	1986	9	10.19	1986	.71	1976	10.2	7.5	3.1	.8	1.41	1.82	2.42	2.94	3.43	3.95	4.51	5.17	6.01	7.33	8.55		
Dec	5.13	4.64	4.57	1978	8	17.64	1978	1.59	1985	11.6	7.8	3.3	1.5	1.61	2.09	2.82	3.44	4.04	4.66	5.34	6.15	7.18	8.79	10.28		
Ann	53.03	53.32	8.20	Sep 1982	2	17.64	Dec 1978	.19	Apr 1997	122.1	89.3	35.5	13.1	38.50	41.34	44.96	47.71	50.14	52.48	54.90	57.57	60.79	65.47	69.50		

⁺ 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

⁽²⁾ Derived from station's available digital record: 1971-2001

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

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COOP ID: 154208

Station: JAMESTOWN WWTP, KY

Climate Division: KY 2 NWS Call Sign:

Elevation: 890 Feet Lat: 37°01N Lon: 85°04W

	Snow (inches)																									
						Sn	ow To	tals							Mean Number of Days (1)											
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa	Snow Depth >= Thresholds								
Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth 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	1.2	.7	#	#	10.0	1994	18	10.0	1994	10	1996	6	1+	1996	.8	.6	.1	.1	.0	-9.9	-9.9	-9.9	-9.9			
Feb	1.7	1.5	#	#	6.0	1985	2	6.0	1985	12	1986	15	2	1985	.9	.8	.1	.1	.0	.9	.0	.0	.0			
Mar	1.3	.0	#	0	8.0	1993	14	13.0	1993	12	1993	14	1	1993	.4	.3	.1	.1	.0	.5	.2	.1	.1			
Apr	.2	.0	#	0	2.2	1971	7	2.2	1971	2	1983	18	#+	1996	.1	.1	.0	.0	.0	.1	.0	.0	.0			
May	.0	.0	0	0	.0	0	0	.0	0	0	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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
Nov	.3	.0	#	0	4.0	1977	27	4.0	1977	4	1977	27	#+	1977	.2	.1	@	.0	.0	.2	.1	.0	.0			
Dec	.4	.0	#	0	1.5	1988	9	1.5	1988	2+	1988	9	#+	1988	.4	.1	.0	.0	.0	.4	.0	.0	.0			
Ann	5.1	2.2	N/A	N/A	10.0	Jan 1994	18	13.0	Mar 1993	12+	Mar 1993	14	2	Feb 1985	2.8	2.0	.3	.3	.0	-9.9	-9.9	-9.9	-9.9			

⁺ 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: 154208

Lon: 85°04W

Lat: 37°01N

Station: JAMESTOWN WWTP, KY

Climate Division: KY 2 NWS Call Sign:

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 5/18 5/12 5/08 5/04 5/01 4/28 4/24 4/20 4/14 32 4/24 4/12 4/28 4/20 4/17 4/15 4/09 4/06 4/01 28 4/20 4/14 4/10 4/06 4/03 3/30 3/27 3/22 3/16 4/03 24 4/08 3/30 3/27 3/23 3/20 3/17 3/13 3/07 20 3/25 3/18 3/14 3/09 3/06 3/02 2/21 2/15 2/26 3/04 2/25 16 3/10 2/28 2/21 2/18 2/14 2/10 2/05 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 36 9/30 10/04 10/06 10/08 10/11 10/13 10/15 10/18 10/21 32 10/09 10/14 10/17 10/21 10/24 10/27 10/30 11/03 11/08 28 10/18 10/24 10/28 10/31 11/03 11/07 11/10 11/14 11/20 24 10/29 11/04 11/08 11/12 11/15 11/19 11/22 11/26 12/02 20 11/08 11/15 11/20 11/24 11/28 12/02 12/06 12/11 12/18 11/24 11/30 12/09 12/13 12/17 12/21 12/25 16 12/05 1/01 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 174 170 162 158 154 149 143 36 181 166 32 211 204 199 195 191 187 183 179 172 28 239 230 224 219 214 209 204 189 198 24 259 251 245 241 236 231 227 221 213 277 272 267 257 250 242 20 292 283 262

298

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

303

Derived from 1971-2000 serially complete daily data

309

317

16

Complete documentation available from:

284

Elevation: 890 Feet

278

270

294

289

^{*} Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

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COOP ID: 154208

Station: JAMESTOWN WWTP, KY

Climate Division: KY 2 NWS Call Sign: Elevation: 890 Feet Lat: 37°01N Lon: 85°04W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	953	763	566	303	126	10	0	3	38	259	522	813	4356		
60	803	623	420	185	59	2	0	0	10	154	380	664	3300		
57	716	542	337	129	33	0	0	0	4	105	300	576	2742		
55	658	491	286	98	21	0	0	0	2	78	250	518	2402		
50	519	363	179	40	6	0	0	0	0	32	148	383	1670		
32	158	64	8	0	0	0	0	0	0	0	4	74	308		

Base	Cooling Degree Days (1)														
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
32	229	224	467	702	996	1220	1388	1345	1111	797	473	284	9236		
55	16	8	32	110	304	530	675	632	423	163	29	16	2938		
57	12	3	21	81	254	470	613	570	365	127	18	11	2545		
60	5	0	11	47	187	381	520	477	281	83	9	7	2008		
65	0	0	1	15	99	240	365	324	159	33	1	0	1237		
70	0	0	0	3	41	122	215	185	71	10	0	0	647		

Growing Degree Units (2)																												
Base	Growing Degree Units (Monthly)														Growing Degree Units (Accumulated Monthly)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
40	71	116	272	482	748	983	1137	1099	872	544	270	118	71	187	459	941	1689	2672	3809	4908	5780	6324	6594	6712				
45	34	63	174	347	593	833	982	944	722	394	172	64	34	97	271	618	1211	2044	3026	3970	4692	5086	5258	5322				
50	17	28	96	228	441	683	827	789	572	263	99	31	17	45	141	369	810	1493	2320	3109	3681	3944	4043	4074				
55	2	6	45	133	299	533	672	634	425	150	48	7	2	8	53	186	485	1018	1690	2324	2749	2899	2947	2954				
60	0	0	18	68	174	385	517	479	285	68	16	1	0	0	18	86	260	645	1162	1641	1926	1994	2010	2011				
Base		•	•	Gro	wing De	gree Unit	s for Co	rn (Mont	thly)	•	•				Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)						
50/86	42	77	170	299	471	665	787	758	575	336	161	65	42	119	289	588	1059	1724	2511	3269	3844	4180	4341	4406				

(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