U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: JEFFERSON CITY WTR PL, MO **COOP ID: 234271**

Climate Division: MO 3 **NWS Call Sign:** **Elevation: 670 Feet** **Lat: 38˚35N** **Lon: 92˚11W**

Temperature (˚F)

Mean (1)				Extremes										Degree Days (1) Base Temp 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	38.6	17.7	28.2	79+	1967	23	39.1	1990	-20+	1963	28	14.1	1977	1142	0	.0	.0	6.9	10.1	27.8	2.9
Feb	45.1	22.2	33.7	89	1930	24	41.8	1999	-13+	1996	4	21.4	1978	878	0	.0	.0	10.9	5.9	23.1	1.6
Mar	55.9	31.7	43.8	97	1929	24	49.0	1991	-16	1960	5	37.0	1984	658	0	.0	.0	20.7	1.1	17.2	.2
Apr	66.6	41.9	54.3	96	1929	4	61.3	1981	13	1920	5	45.4	1983	336	14	.0	.3	27.4	.0	4.2	.0
May	75.3	52.1	63.7	102+	1934	31	69.6	1991	24	1961	2	56.5	1983	133	93	.0	.8	30.9	.0	.2	.0
Jun	83.9	61.4	72.7	105+	1936	28	76.2	1991	38	1972	1	67.3	1982	11	240	.2	6.7	30.0	.0	.0	.0
Jul	89.4	66.3	77.9	112+	1954	14	84.9	1980	42	1967	14	74.0	1971	0	398	1.7	16.9	31.0	.0	.0	.0
Aug	88.3	64.1	76.2	111+	1934	10	81.8	1980	41	1950	21	70.6	1992	6	353	1.4	14.2	31.0	.0	.0	.0
Sep	80.4	55.0	67.7	107	1939	3	74.0	1998	29	1949	30	60.1	1974	65	146	.1	5.6	30.0	.0	.2	.0
Oct	69.5	43.3	56.4	96	1939	7	61.9	1971	14	1987	22	48.5	1987	285	17	.0	.5	30.1	.0	3.8	.0
Nov	54.8	32.6	43.7	87+	1931	15	53.6	1999	1+	1950	25	37.1	1976	639	0	.0	.0	18.8	.9	15.2	.0
Dec	42.8	22.4	32.6	79	1949	11	38.6	1971	-21+	1989	24	18.5	1983	1005	0	.0	.0	9.5	6.1	25.7	1.4
Ann	65.9	42.6	54.2	112+	Jul 1954	14	84.9	Jul 1980	-21+	Dec 1989	24	14.1	Jan 1977	5158	1261	3.4	45.0	277.2	24.1	117.4	6.1

\+ Also occurred on an earlier date(s)

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

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

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1918-2001

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

Issue Date: February 2004

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: JEFFERSON CITY WTR PL, MO **COOP ID: 234271**

Climate Division: MO 3 **NWS Call Sign:** **Elevation: 670 Feet** **Lat: 38˚35N** **Lon: 92˚11W**

Precipitation (inches)

Precipitation Totals

Month	Means/Medians(1) Mean	Means/Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	1.65	1.23	2.90	1938	24	4.15	1995	.05	1986
Feb	2.02	1.78	2.80	2000	18	5.23	1985	.00	1987
Mar	3.19	2.83	4.00	1922	10	10.54	1973	.78	1971
Apr	3.71	3.21	3.67	1970	30	12.33	1994	.71	2000
May	4.85	4.47	4.24	1943	18	10.23	1990	1.92	1980
Jun	4.11	3.47	3.84	1965	3	11.21	1998	.53	1988
Jul	3.71	3.75	7.41	1993	7	13.38	1993	.22	1975
Aug	3.46	3.03	5.55	1993	12	9.20	1982	.08	1973
Sep	3.46	2.67	3.30+	1993	23	12.83	1993	.45	1976
Oct	3.31	2.87	5.65	1941	5	7.69	1986	.77	1992
Nov	3.53	3.21	4.55	1948	2	9.86	1992	.55	1989
Dec	2.59	2.15	3.80	1942	27	8.04	1982	.34	1996
Ann	39.59	37.48	7.41	Jul 1993	7	13.38	Jul 1993	.00	Feb 1987

Mean Number of Days (3)

Month	Daily Precipitation >= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	6.8	4.2	1.0	.3
Feb	6.6	3.9	1.3	.4
Mar	8.9	6.2	2.2	.9
Apr	10.2	7.3	2.6	1.1
May	10.7	7.8	3.1	1.2
Jun	9.1	6.5	2.5	1.3
Jul	8.1	5.6	2.3	1.0
Aug	7.2	4.8	2.2	1.1
Sep	7.5	5.2	2.5	1.2
Oct	8.3	5.6	2.4	.9
Nov	8.8	6.1	2.7	1.0
Dec	7.2	4.3	1.7	.7
Ann	99.4	67.5	26.5	11.1

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
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.14	.25	.47	.70	.95	1.24	1.58	2.00	2.60	3.58	4.55
Feb	.08	.25	.54	.83	1.15	1.51	1.94	2.48	3.21	4.44	5.64
Mar	.83	1.13	1.59	2.00	2.40	2.83	3.30	3.86	4.59	5.73	6.81
Apr	1.11	1.47	1.99	2.45	2.89	3.35	3.85	4.45	5.22	6.42	7.53
May	1.76	2.21	2.87	3.42	3.94	4.48	5.07	5.75	6.61	7.95	9.18
Jun	.71	1.07	1.67	2.23	2.81	3.43	4.15	5.01	6.16	8.03	9.81
Jul	.46	.76	1.28	1.80	2.35	2.95	3.66	4.53	5.71	7.65	9.53
Aug	.51	.80	1.30	1.78	2.28	2.82	3.45	4.23	5.26	6.96	8.58
Sep	.51	.80	1.29	1.77	2.27	2.82	3.45	4.22	5.26	6.96	8.59
Oct	1.01	1.33	1.80	2.20	2.59	3.00	3.44	3.97	4.64	5.70	6.67
Nov	.71	1.03	1.55	2.02	2.50	3.02	3.60	4.30	5.22	6.70	8.10
Dec	.51	.75	1.13	1.47	1.83	2.21	2.63	3.15	3.83	4.93	5.97
Ann	25.68	28.27	31.65	34.25	36.58	38.85	41.22	43.85	47.07	51.79	55.92

+ Also occurred on an earlier date(s)
# 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: 1918-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: JEFFERSON CITY WTR PL, MO **COOP ID: 234271**

Climate Division: MO 3 **NWS Call Sign:** **Elevation: 670 Feet** **Lat: 38°35N** **Lon: 92°11W**

Snow (inches)

Snow Totals

Means/Medians (1)

Extremes (2)

Mean Number of Days (1)

Snow Fall >= Thresholds

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	5.2	1.8	1	#	14.0	1995	19	19.0+	1995	10	1979	31	6	1977	2.8	2.0	.5	.2	@	5.6	3.7	3.1	.1
Feb	4.3	2.3	1	0	8.8	1993	25	22.8	1993	10	1979	10	6	1979	1.8	1.1	.5	.2	.0	3.8	2.6	1.6	.2
Mar	1.7	.0	#	0	8.5	1990	24	9.6	1978	7	1978	4	2	1978	.7	.4	.3	.1	.0	.2	.1	.1	.0
Apr	.2	.0	#	0	2.5	1973	9	2.5	1973	3	1980	14	#+	1996	.1	.1	.0	.0	.0	.0	.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	1.0	.0	#	0	7.0	1975	26	7.0	1975	7	1975	27	1	1975	.5	.2	.2	@	.0	.4	.3	.1	.0
Dec	2.4	1.5	#	#	6.0	1987	14	7.3	1990	5+	2000	14	1+	2000	1.5	.9	.3	@	.0	1.6	.6	.1	.0
Ann	14.8	5.6	N/A	N/A	14.0	Jan 1995	19	22.8	Feb 1993	10+	Feb 1979	10	6+	Feb 1979	7.4	4.7	1.8	.5	@	11.6	7.3	5.0	.3

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

@ 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

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: JEFFERSON CITY WTR PL, MO **COOP ID: 234271**

Climate Division: MO 3 **NWS Call Sign:** **Elevation: 670 Feet** **Lat: 38˚35N** **Lon: 92˚11W**

Freeze Data

Spring Freeze Dates (Month/Day)

Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/10	5/04	4/30	4/27	4/24	4/21	4/18	4/14	4/08
32	4/28	4/23	4/19	4/16	4/13	4/09	4/06	4/02	3/28
28	4/19	4/14	4/10	4/07	4/04	3/31	3/28	3/24	3/19
24	4/08	4/02	3/28	3/25	3/21	3/17	3/13	3/09	3/02
20	4/06	3/28	3/22	3/16	3/11	3/06	3/01	2/23	2/14
16	3/23	3/15	3/08	3/03	2/26	2/21	2/16	2/10	2/01

Fall Freeze Dates (Month/Day)

Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/22	9/27	10/01	10/04	10/07	10/10	10/13	10/17	10/22
32	10/01	10/07	10/11	10/15	10/18	10/22	10/26	10/30	11/05
28	10/18	10/24	10/29	11/02	11/06	11/09	11/13	11/18	11/25
24	10/25	10/31	11/05	11/09	11/13	11/17	11/21	11/26	12/02
20	11/03	11/09	11/14	11/18	11/22	11/26	11/30	12/05	12/12
16	11/08	11/15	11/21	11/25	11/29	12/03	12/08	12/13	12/20

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	186	179	174	169	165	161	157	152	145
32	214	205	199	193	188	183	178	171	162
28	244	234	227	221	215	210	203	196	186
24	266	256	249	242	236	231	224	217	207
20	290	278	269	262	255	248	241	232	221
16	312	299	290	283	275	268	261	252	239

***** 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.

Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: JEFFERSON CITY WTR PL, MO **COOP ID: 234271**

Climate Division: MO 3 **NWS Call Sign:** **Elevation: 670 Feet** **Lat: 38˚35N** **Lon: 92˚11W**

Degree Days to Selected Base Temperatures (˚F)

Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1142	878	658	336	133	11	0	6	65	285	639	1005	5158
60	987	738	506	215	64	2	0	1	22	168	494	850	4047
57	894	660	420	155	37	0	0	0	10	112	412	760	3460
55	833	608	364	121	24	0	0	0	5	83	359	702	3099
50	690	479	239	55	7	0	0	0	0	33	241	559	2303
32	253	141	19	0	0	0	0	0	0	0	23	167	603

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	134	188	383	668	982	1220	1421	1370	1071	755	373	185	8750
55	1	10	16	99	293	530	708	657	386	125	19	7	2851
57	0	6	10	73	244	470	646	595	331	92	13	2	2482
60	0	0	2	43	178	381	553	503	253	55	5	0	1973
65	0	0	0	14	93	240	398	353	146	17	0	0	1261
70	0	0	0	3	37	123	248	218	70	3	0	0	702

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	37	86	221	457	752	996	1189	1132	848	525	205	54	37	123	344	801	1553	2549	3738	4870	5718	6243	6448	6502
45	7	44	137	321	597	846	1034	977	698	377	120	23	7	51	188	509	1106	1952	2986	3963	4661	5038	5158	5181
50	3	20	75	206	444	696	879	822	549	250	65	7	3	23	98	304	748	1444	2323	3145	3694	3944	4009	4016
55	0	6	36	121	299	546	724	667	407	148	28	1	0	6	42	163	462	1008	1732	2399	2806	2954	2982	2983
60	0	1	14	60	174	397	569	512	278	72	6	0	0	1	15	75	249	646	1215	1727	2005	2077	2083	2083
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	28	73	156	289	468	670	804	763	549	335	131	43	28	101	257	546	1014	1684	2488	3251	3800	4135	4266	4309

(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

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

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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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