

Climatology of the United States

No. 20

1971-2000

Station: JACKSON, MO

COOP ID: 234226

Climate Division: MO 5

NWS Call Sign:

Elevation: 440 Feet

Lat: 37° 23N

Lon: 89° 40W

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	41.9	23.3	32.6	76	1970	28	44.0	1989	-26	1930	18	18.9	1977	1005	0	.0	.0	8.4	6.9	24.3	1.3
Feb	48.6	28.1	38.4	79	1962	13	46.0	1976	-24	1951	2	24.9	1978	746	0	.0	.0	14.0	3.1	18.1	.5
Mar	59.5	36.9	48.2	87	1935	23	54.3	1973	-2	1943	3	41.3	1984	522	2	.0	.0	24.9	.4	11.8	@
Apr	70.5	45.9	58.2	92	1989	27	65.4	1981	21+	1990	7	51.8	1983	229	25	.0	.2	29.3	.0	3.2	.0
May	79.5	55.4	67.5	99	1934	31	73.0	1991	31+	1961	2	62.6	1976	73	149	.0	2.4	31.0	.0	@	.0
Jun	87.7	64.0	75.9	108	1952	30	78.9	1998	39	1930	1	71.6	1974	1	327	.2	12.6	30.0	.0	.0	.0
Jul	91.5	68.2	79.9	112	1934	24	84.2	1993	44	1947	23	75.5	1984	0	461	1.5	20.6	31.0	.0	.0	.0
Aug	89.8	65.9	77.9	111+	1936	27	83.5	1980	40	1986	29	73.2	1986	2	400	1.1	16.2	31.0	.0	.0	.0
Sep	82.7	58.1	70.4	104	1953	1	75.9	1998	31	1942	29	64.9	1974	29	192	.1	5.9	30.0	.0	.1	.0
Oct	72.3	46.4	59.4	96+	1953	2	65.8	1971	18	1952	29	52.8	1987	208	32	.0	.2	30.7	.0	2.9	.0
Nov	57.4	37.3	47.4	87	1987	4	53.3	1999	-6	1950	25	39.2	1976	531	1	.0	.0	21.8	.2	11.0	.0
Dec	45.5	27.8	36.7	75	1951	31	45.1	1971	-16	1989	22	24.0	1983	879	0	.0	.0	11.2	3.4	20.4	.5
Ann	68.9	46.4	57.7	112	Jul 1934	24	84.2	Jul 1993	-26	Jan 1930	18	18.9	Jan 1977	4225	1589	2.9	58.1	293.3	14.0	91.8	2.3

+ 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/normal/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1930-2001

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

044-A

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: JACKSON, MO

COOP ID: 234226

Climate Division: MO 5

NWS Call Sign:

Elevation: 440 Feet Lat: 37°23N

Lon: 89°40W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels 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	3.26	3.31	5.43	1937	14	11.16	1982	.33	1986	10.0	5.8	2.1	.8	.73	1.04	1.51	1.94	2.37	2.83	3.35	3.96	4.77	6.05	7.27
Feb	3.38	2.63	4.30	1945	26	8.41	1989	1.09	1996	8.7	5.4	2.4	1.0	1.07	1.39	1.87	2.27	2.67	3.07	3.52	4.04	4.71	5.76	6.72
Mar	4.77	4.30	5.46	1964	9	10.95	1977	1.16	1971	11.6	7.4	3.4	1.3	1.58	2.03	2.69	3.26	3.80	4.36	4.97	5.68	6.60	8.03	9.34
Apr	4.76	3.92	3.80	1950	3	12.84	1983	1.29	1988	11.6	7.5	3.1	1.2	1.26	1.71	2.40	3.01	3.60	4.23	4.92	5.75	6.82	8.51	10.09
May	4.87	4.56	4.54	1997	31	11.88	1973	.90	1994	11.5	7.7	3.5	1.4	1.36	1.82	2.52	3.13	3.73	4.35	5.04	5.86	6.92	8.58	10.13
Jun	4.10	3.52	6.03	1958	11	9.51	1989	.93	1988	9.4	6.2	2.6	1.1	1.17	1.56	2.15	2.66	3.16	3.68	4.25	4.93	5.81	7.19	8.47
Jul	3.79	3.75	4.94	1958	16	9.69	1972	.05	1974	8.2	5.9	2.6	1.2	.74	1.09	1.64	2.15	2.67	3.23	3.86	4.62	5.63	7.24	8.77
Aug	3.31	3.60	4.78	1952	12	6.55	1981	.34	1996	7.6	5.4	2.4	.7	.66	.96	1.44	1.89	2.34	2.82	3.37	4.03	4.89	6.29	7.61
Sep	3.44	3.01	4.75	1945	21	9.25	1993	.22	1981	7.9	5.4	2.2	1.1	.49	.78	1.27	1.75	2.25	2.79	3.43	4.20	5.25	6.95	8.59
Oct	3.24	2.93	3.53	1969	11	9.63	1984	.38	1971	7.8	5.4	2.4	.9	.79	1.10	1.57	1.99	2.40	2.84	3.34	3.92	4.68	5.89	7.03
Nov	4.81	4.91	4.94	1934	21	10.55	1994	.32	1999	9.9	6.9	3.4	1.4	.97	1.40	2.11	2.75	3.40	4.10	4.90	5.85	7.11	9.12	11.04
Dec	4.19	3.40	3.15	1932	30	13.68	1982	.70	1980	10.4	6.5	2.8	1.1	.89	1.27	1.88	2.44	3.00	3.60	4.28	5.09	6.16	7.86	9.48
Ann	47.92	46.94	6.03	Jun 1958	11	13.68	Dec 1982	.05	Jul 1974	114.6	75.5	32.9	13.2	34.87	37.42	40.67	43.12	45.30	47.40	49.57	51.96	54.85	59.03	62.63

+ 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: 1930-2001

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

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

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: JACKSON, MO

COOP ID: 234226

Climate Division: MO 5

NWS Call Sign:

Elevation: 440 Feet

Lat: 37°23N

Lon: 89°40W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										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	2.8	.0	1	0	7.5	1979	27	21.4	1979	10	1978	16	5	1985	1.3	.9	.3	.1	.0	.1	.0	.0	.0
Feb	4.4	.4	#	0	24.0	1979	25	27.9	1979	12	1993	16	1	1993	.9	.6	.3	.1	.1	.3	.2	.1	.1
Mar	1.8	.0	#	0	9.8	1994	9	12.0	1999	7	1994	10	4	1978	.4	.3	.2	.1	.0	.2	.1	.1	.0
Apr	.0	.0	#	0	1.0	1971	5	1.0	1971	1	1971	5	#+	1980	@	@	.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	.1	.0	0	0	2.5	1993	30	2.5	1993	0	0	0	0	0	@	@	.0	.0	.0	.0	.0	.0	.0
Nov	.5	.0	#	0	7.5	1980	27	9.0	1980	1	1995	15	#+	1995	.2	.2	@	@	.0	.1	.0	.0	.0
Dec	1.2	.0	#	#	7.0	1973	20	10.5	1973	8	1990	27	1+	2000	.5	.3	.2	.1	.0	.2	.2	.1	.0
Ann	10.8	.4	N/A	N/A	24.0	Feb 1979	25	27.9	Feb 1979	12	Feb 1993	16	5	Jan 1985	3.3	2.3	1.0	.4	.1	1.0	.5	.3	.1

+ 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

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

Station: JACKSON, MO

COOP ID: 234226

Climate Division: MO 5

NWS Call Sign:

Elevation: 440 Feet

Lat: 37°23N

Lon: 89°40W

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	5/09	5/04	4/30	4/27	4/24	4/21	4/17	4/14	4/08
32	4/26	4/21	4/17	4/14	4/12	4/09	4/06	4/02	3/28
28	4/14	4/09	4/06	4/03	3/31	3/28	3/25	3/22	3/17
24	4/07	4/02	3/29	3/26	3/23	3/20	3/17	3/13	3/08
20	3/24	3/18	3/13	3/10	3/06	3/03	2/27	2/23	2/17
16	3/14	3/06	3/01	2/25	2/21	2/17	2/12	2/07	1/31
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	9/27	10/01	10/03	10/06	10/08	10/10	10/12	10/15	10/18
32	10/02	10/07	10/11	10/14	10/17	10/19	10/22	10/26	10/31
28	10/18	10/23	10/27	10/31	11/03	11/06	11/09	11/13	11/18
24	10/27	11/02	11/06	11/10	11/13	11/17	11/21	11/25	12/01
20	11/07	11/14	11/18	11/23	11/27	11/30	12/05	12/10	12/16
16	11/17	11/24	11/30	12/04	12/09	12/13	12/18	12/23	12/31
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	187	180	175	170	166	162	158	153	145
32	209	202	196	192	187	183	178	173	165
28	235	228	224	220	216	212	208	203	197
24	257	249	244	239	235	231	226	220	213
20	288	280	274	269	265	260	255	249	241
16	321	310	303	296	290	284	278	270	260

* 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/normal/usnormals.html

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

Station: JACKSON, MO

COOP ID: 234226

Climate Division: MO 5

NWS Call Sign:

Elevation: 440 Feet

Lat: 37° 23N

Lon: 89° 40W

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	1005	746	522	229	73	1	0	2	29	208	531	879	4225
60	850	610	379	125	27	0	0	0	7	109	391	725	3223
57	766	532	299	79	13	0	0	0	2	67	312	641	2711
55	707	480	251	55	8	0	0	0	1	46	264	582	2394
50	564	357	152	17	1	0	0	0	0	14	163	444	1712
32	180	71	7	0	0	0	0	0	0	0	8	105	371

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	198	249	510	787	1099	1316	1484	1422	1153	847	468	249	9782
55	12	14	41	151	394	626	771	709	463	180	34	14	3409
57	9	10	27	115	337	566	709	647	405	139	22	10	2996
60	0	3	14	72	258	476	616	554	319	88	11	2	2413
65	0	0	2	25	149	327	461	400	192	32	1	0	1589
70	0	0	0	6	70	187	306	256	96	8	0	0	929

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	52	118	296	556	859	1083	1245	1182	923	608	261	86	52	170	466	1022	1881	2964	4209	5391	6314	6922	7183	7269
45	23	62	186	410	704	933	1090	1027	773	457	162	42	23	85	271	681	1385	2318	3408	4435	5208	5665	5827	5869
50	7	23	104	280	549	783	935	872	623	314	91	16	7	30	134	414	963	1746	2681	3553	4176	4490	4581	4597
55	1	7	50	166	397	633	780	717	478	195	43	4	1	8	58	224	621	1254	2034	2751	3229	3424	3467	3471
60	0	0	17	90	253	483	625	562	332	102	16	0	0	0	17	107	360	843	1468	2030	2362	2464	2480	2480
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	34	74	186	354	563	735	845	804	613	395	153	45	34	108	294	648	1211	1946	2791	3595	4208	4603	4756	4801

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normal/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 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.

- | | |
|---|---|
| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

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