

Climatology of the United States

No. 20

1971-2000

Station: JEFFERSON, OK

COOP ID: 344573

Climate Division: OK 2

NWS Call Sign:

Elevation: 1,045 Feet Lat: 36° 43N

Lon: 97° 47W

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	45.0	20.1	32.6	85	1911	31	40.3	1986	-20	1930	22	19.1	1979	1006	0	.0	.0	14.0	4.9	26.3	.7
Feb	51.8	24.6	38.2	92	1996	22	48.6	1976	-23	1905	13	25.0	1978	752	0	.0	@	17.1	3.0	19.1	.7
Mar	60.4	33.1	46.8	98	1940	31	52.7	1986	-4	1960	3	40.9	1984	566	0	.0	.1	26.2	.3	11.6	.0
Apr	70.3	43.4	56.9	102	1972	12	65.0	1981	17	1914	9	49.7	1983	267	23	@	.8	29.5	.0	2.7	.0
May	79.8	55.4	67.6	107	1934	31	73.4	1996	25	1909	1	62.6	1995	62	143	.2	4.3	31.0	.0	@	.0
Jun	90.3	64.7	77.5	114	1953	15	81.8	1990	43	1954	4	72.7	1982	3	377	3.3	19.1	30.0	.0	.0	.0
Jul	95.9	69.7	82.8	117	1936	18	88.8	1980	35	1899	28	80.1	1994	0	551	10.1	26.4	31.0	.0	.0	.0
Aug	94.5	67.4	81.0	118+	1936	11	86.7	2000	40	1903	10	74.0	1992	1	496	8.9	24.7	31.0	.0	.0	.0
Sep	86.0	58.9	72.5	111	1939	2	79.4	1998	18	1898	17	64.5	1974	26	249	2.1	12.4	30.0	.0	.2	.0
Oct	74.6	46.3	60.5	102+	1898	2	64.6	1973	11+	1917	30	54.2	1976	173	32	.0	1.8	30.7	.0	1.9	.0
Nov	58.9	33.1	46.0	89+	1945	6	53.2	1999	4	1940	13	40.6	1991	571	0	.0	.0	23.6	.3	11.9	.0
Dec	47.7	23.6	35.7	86	1955	24	40.1	1988	-16	1989	23	22.4	1983	910	0	.0	.0	15.3	2.9	23.8	.7
Ann	71.3	45.0	58.2	118+	Aug 1936	11	88.8	Jul 1980	-23	Feb 1905	13	19.1	Jan 1979	4337	1871	24.6	89.6	309.4	11.4	97.5	2.1

+ 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/normal/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1897-2001

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

055-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: JEFFERSON, OK

COOP ID: 344573

Climate Division: OK 2

NWS Call Sign:

Elevation: 1,045 Feet Lat: 36°43N

Lon: 97°47W

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	1.02	.84	1.50	1910	4	2.50	1999	.00+	1986	3.5	2.5	.7	.1	.00	.00	.24	.42	.59	.79	1.02	1.29	1.66	2.27	2.86
Feb	1.34	.86	3.09	1997	21	4.23	1987	.06	1988	3.9	2.9	.8	.3	.05	.12	.26	.44	.64	.89	1.20	1.60	2.17	3.16	4.16
Mar	3.02	2.41	3.50+	1974	10	10.23	1973	.05+	1972	6.5	4.8	2.0	.9	.20	.39	.77	1.18	1.65	2.19	2.84	3.66	4.82	6.77	8.70
Apr	3.16	2.98	4.48	1994	28	7.66	1994	.17	1996	7.1	5.5	2.0	.8	.57	.85	1.32	1.75	2.18	2.66	3.20	3.85	4.72	6.11	7.45
May	4.96	4.55	4.20	1977	21	14.36	1987	1.16	1996	8.9	7.4	3.4	1.5	1.02	1.47	2.20	2.87	3.54	4.25	5.06	6.03	7.31	9.37	11.31
Jun	4.31	3.71	4.83	1989	10	10.28	1989	.60	1990	7.8	6.0	3.2	1.1	1.02	1.42	2.05	2.61	3.17	3.77	4.43	5.22	6.26	7.90	9.45
Jul	3.45	3.46	4.00	1976	2	8.83	1979	.06	1983	5.7	4.6	2.2	1.2	.34	.59	1.06	1.54	2.06	2.65	3.34	4.21	5.40	7.39	9.33
Aug	3.06	2.33	5.88	1898	6	8.31	1992	.19	2000	6.2	4.8	1.9	1.0	.42	.67	1.11	1.54	1.98	2.47	3.04	3.74	4.68	6.22	7.70
Sep	3.39	2.86	6.10	1908	3	9.65	1987	.02	2000	6.4	5.0	2.2	1.0	.34	.59	1.05	1.53	2.04	2.62	3.29	4.14	5.30	7.23	9.11
Oct	3.20	2.29	10.00	1973	11	15.76	1998	.20	1975	5.2	4.0	1.8	.6	.15	.31	.68	1.10	1.60	2.18	2.90	3.84	5.16	7.42	9.70
Nov	2.31	2.07	4.90	1974	3	6.00	1974	.00	1989	4.6	3.6	1.5	.5	.13	.36	.71	1.05	1.41	1.81	2.28	2.85	3.63	4.91	6.15
Dec	1.39	.99	2.68	1944	4	4.35	1999	.00+	1977	4.1	3.0	.8	.3	.00	.15	.40	.62	.85	1.10	1.38	1.73	2.20	2.97	3.72
Ann	34.61	34.33	10.00	Oct 1973	11	15.76	Oct 1998	.00+	Nov 1989	69.9	54.1	22.5	9.3	23.69	25.77	28.46	30.51	32.34	34.11	35.95	37.99	40.47	44.09	47.23

+ 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: 1897-2001

(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: JEFFERSON, OK

COOP ID: 344573

Climate Division: OK 2

NWS Call Sign:

Elevation: 1,045 Feet

Lat: 36°43N

Lon: 97°47W

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	1.3	.0	#	0	6.0	1975	2	8.0	2000	9	1973	10	3	1979	.8	.8	.3	.1	.0	1.2	.7	.2	.0
Feb	3.7	1.0	1	0	14.5	1982	2	25.5	1982	16	1982	11	7	1982	.8	.8	.3	.2	@	2.0	1.2	.9	.6
Mar	.6	.0	#	0	4.0	1994	9	4.0	1994	18	1999	13	1	1999	.3	.3	.1	.0	.0	.1	.1	.0	.0
Apr	.2	.0	#	0	3.5	1973	8	4.5	1973	4	1973	9	#+	1997	.1	.1	@	.0	.0	.1	.1	.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	#	1993	30	#	1993	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.8	.0	#	0	5.0	1972	18	9.0	1972	5	1988	20	1	1988	.2	.2	.1	@	.0	.3	.2	@	.0
Dec	1.7	.0	#	0	6.0	1974	11	7.0	1974	8	1987	14	1+	2000	.7	.6	.2	@	.0	.6	.2	.1	.0
Ann	8.3	1.0	N/A	N/A	14.5	Feb 1982	2	25.5	Feb 1982	18	Mar 1999	13	7	Feb 1982	2.9	2.8	1.0	.3	@	4.3	2.5	1.2	.6

+ 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: JEFFERSON, OK

COOP ID: 344573

Climate Division: OK 2

NWS Call Sign:

Elevation: 1,045 Feet

Lat: 36° 43N

Lon: 97° 47W

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	5/07	5/02	4/29	4/26	4/23	4/20	4/18	4/14	4/10
32	4/24	4/20	4/17	4/14	4/12	4/09	4/07	4/03	3/30
28	4/12	4/08	4/05	4/03	3/31	3/29	3/27	3/24	3/20
24	4/05	3/30	3/26	3/22	3/18	3/15	3/11	3/06	2/28
20	3/28	3/21	3/16	3/11	3/07	3/03	2/27	2/22	2/15
16	3/17	3/08	3/02	2/25	2/21	2/16	2/11	2/05	1/28
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	9/26	10/02	10/05	10/09	10/12	10/15	10/18	10/22	10/27
32	9/29	10/06	10/11	10/15	10/19	10/23	10/27	11/01	11/08
28	10/17	10/23	10/28	11/01	11/05	11/09	11/13	11/18	11/25
24	10/25	11/01	11/07	11/11	11/16	11/20	11/24	11/30	12/07
20	11/02	11/10	11/16	11/21	11/25	11/30	12/05	12/11	12/19
16	11/12	11/20	11/26	12/02	12/07	12/12	12/17	12/23	1/01
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	189	183	178	175	171	167	163	159	152
32	214	205	199	194	190	185	180	174	166
28	241	233	227	223	218	213	209	203	195
24	266	258	252	246	242	237	231	225	217
20	292	282	275	268	262	256	250	243	232
16	323	311	302	295	288	282	274	266	254

* 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: JEFFERSON, OK

COOP ID: 344573

Climate Division: OK 2

NWS Call Sign:

Elevation: 1,045 Feet Lat: 36° 43N Lon: 97° 47W

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	1006	752	566	267	62	3	0	1	26	173	571	910	4337
60	851	622	415	158	21	0	0	0	7	77	424	755	3330
57	760	544	329	106	9	0	0	0	2	41	342	663	2796
55	699	494	275	78	5	0	0	0	0	25	290	603	2469
50	554	377	162	29	1	0	0	0	0	5	178	460	1766
32	147	95	7	0	0	0	0	0	0	0	9	92	350

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	164	268	464	746	1104	1364	1574	1518	1213	881	428	205	9929
55	3	24	19	134	396	674	861	805	523	193	19	3	3654
57	2	18	12	102	338	614	799	743	465	147	11	1	3252
60	0	12	4	63	257	524	706	650	380	90	3	0	2689
65	0	0	0	23	143	377	551	496	249	32	0	0	1871
70	0	0	0	6	64	241	396	347	145	7	0	0	1206

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	64	154	335	583	894	1157	1345	1301	1010	686	268	82	64	218	553	1136	2030	3187	4532	5833	6843	7529	7797	7879
45	22	84	214	435	739	1007	1190	1146	860	533	162	34	22	106	320	755	1494	2501	3691	4837	5697	6230	6392	6426
50	5	39	125	299	584	857	1035	991	710	390	90	10	5	44	169	468	1052	1909	2944	3935	4645	5035	5125	5135
55	0	13	60	187	431	707	880	836	564	251	40	3	0	13	73	260	691	1398	2278	3114	3678	3929	3969	3972
60	0	2	27	97	286	557	725	681	420	143	16	0	0	2	29	126	412	969	1694	2375	2795	2938	2954	2954
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	59	120	227	379	581	764	873	845	658	440	180	68	59	179	406	785	1366	2130	3003	3848	4506	4946	5126	5194

(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