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: PERRY, OK **COOP ID: 347012**

Climate Division: OK 2 **NWS Call Sign:** **Elevation: 1,025 Feet** **Lat: 36˚17N** **Lon: 97˚17W**

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	46.0	22.3	34.2	81	1986	20	42.8	1989	-9	1949	30	21.5	1979	957	0	.0	.0	15.2	4.6	24.1	.5
Feb	52.7	27.1	39.9	91	1996	22	49.8	1976	-12	1996	4	26.0	1978	707	0	.0	@	18.0	2.7	17.3	.4
Mar	62.1	35.3	48.7	95	1955	14	53.8	1974	1+	1948	11	42.8	1996	506	1	.0	.1	26.4	.4	9.4	.0
Apr	71.8	45.7	58.8	102	1972	12	66.4	1981	18	1989	11	51.4	1983	216	29	.1	.7	29.6	.0	1.5	.0
May	80.2	56.9	68.6	103+	1985	30	74.6	1996	32	1954	3	63.7	1976	53	163	.1	3.7	31.0	.0	.0	.0
Jun	88.6	65.9	77.3	109+	1953	15	82.2	1990	45	1954	4	72.0	1989	4	370	1.1	15.6	30.0	.0	.0	.0
Jul	94.7	70.8	82.8	114+	1954	14	89.3	1980	52+	1952	8	79.5	1989	0	550	6.8	25.6	31.0	.0	.0	.0
Aug	93.8	69.0	81.4	110+	1951	6	88.0	2000	48	1986	29	74.6	1992	2	509	7.4	24.7	31.0	.0	.0	.0
Sep	85.4	60.6	73.0	109+	2000	4	81.9	1998	30	1984	30	65.0	1974	27	267	1.5	11.9	30.0	.0	@	.0
Oct	74.8	48.4	61.6	99	1951	3	65.4	1973	17	1993	31	56.2	1976	148	42	.0	1.3	30.7	.0	1.0	.0
Nov	59.7	35.7	47.7	88	1980	8	57.8	1999	9	1959	17	42.1	1976	521	1	.0	.0	24.2	.2	9.6	.0
Dec	48.6	26.2	37.4	86	1955	24	42.5	1999	-18+	1989	15	21.8	1983	855	0	.0	.0	16.9	2.8	20.6	.6
Ann	71.5	47.0	59.3	114+	Jul 1954	14	89.3	Jul 1980	-18+	Dec 1989	15	21.5	Jan 1979	3996	1932	17.0	83.6	314.0	10.7	83.5	1.5

\+ 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: 1948-2001

(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: PERRY, OK

COOP ID: 347012

Climate Division: OK 2 **NWS Call Sign:** **Elevation: 1,025 Feet** **Lat: 36˚17N** **Lon: 97˚17W**

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	1.12	.99	2.05	1971	3	3.08	1973	.00+	1986
Feb	1.70	1.30	2.60	1997	21	4.72	1997	.15	1991
Mar	2.87	2.67	3.98	1967	26	7.40	1973	.00	1971
Apr	3.39	3.07	4.64	1994	28	12.04	1994	.17	1989
May	5.36	5.32	5.35	1955	9	11.91	1977	1.36	1996
Jun	4.23	3.88	3.35	1958	25	9.14	1995	.82	1976
Jul	3.06	2.83	4.94	1960	4	6.41	1996	.00	1980
Aug	3.20	2.82	5.17	1992	4	9.88	1992	.00	2000
Sep	4.24	3.40	7.03	1986	29	14.41	1986	.00	2000
Oct	3.05	2.64	4.01	1998	5	9.16	1998	.51	1995
Nov	2.43	2.48	4.02	1998	1	6.34	1998	.04+	1995
Dec	1.79	1.56	2.27	1991	20	5.69	1999	.14	1981
Ann	36.44	35.35	7.03	Sep 1986	29	14.41	Sep 1986	.00+	Sep 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	4.7	2.5	.7	.2
Feb	5.2	3.4	1.1	.5
Mar	7.2	5.0	1.9	.8
Apr	7.1	4.9	2.2	.9
May	9.4	7.3	3.6	1.7
Jun	7.4	5.7	2.9	1.3
Jul	5.9	4.3	2.3	1.1
Aug	6.7	4.6	1.8	1.0
Sep	6.3	5.0	2.6	1.5
Oct	5.6	4.0	1.8	.8
Nov	5.1	3.8	1.6	.7
Dec	5.0	3.2	1.1	.6
Ann	75.6	53.7	23.6	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	.00	.08	.26	.43	.62	.83	1.07	1.38	1.80	2.51	3.21
Feb	.17	.29	.52	.76	1.02	1.30	1.64	2.07	2.65	3.61	4.56
Mar	.42	.79	1.28	1.68	2.08	2.50	2.97	3.53	4.27	5.43	6.52
Apr	.56	.86	1.35	1.82	2.30	2.82	3.42	4.14	5.11	6.68	8.18
May	1.48	1.99	2.76	3.44	4.10	4.79	5.55	6.46	7.63	9.48	11.20
Jun	1.06	1.46	2.08	2.62	3.16	3.73	4.36	5.12	6.10	7.66	9.12
Jul	.22	.54	1.02	1.47	1.94	2.46	3.05	3.78	4.76	6.36	7.90
Aug	.49	.91	1.45	1.90	2.34	2.80	3.32	3.93	4.73	6.00	7.20
Sep	.36	.84	1.53	2.15	2.79	3.48	4.27	5.24	6.53	8.62	10.62
Oct	.53	.80	1.25	1.67	2.09	2.56	3.09	3.73	4.58	5.96	7.27
Nov	.15	.29	.59	.91	1.29	1.73	2.26	2.94	3.89	5.51	7.11
Dec	.17	.30	.54	.79	1.06	1.37	1.73	2.18	2.81	3.84	4.85
Ann	26.20	28.19	30.74	32.67	34.38	36.03	37.74	39.63	41.91	45.22	48.07

\+ 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: 1948-2001
(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: PERRY, OK **COOP ID: 347012**

Climate Division: OK 2 **NWS Call Sign:** **Elevation: 1,025 Feet** **Lat: 36°17N** **Lon: 97°17W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	1.4	.3	#	0
Feb	2.2	1.0	#	0
Mar	.7	.0	#	0
Apr	.0	.0	0	0
May	.0	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.0	.0	0	0
Nov	.4	.0	#	0
Dec	1.0	.0	#	0
Ann	5.7	1.3	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	4.0	1973	7	5.5	1984	6+	2000	28	3	1974
Feb	8.0	1982	3	11.5	1982	6	1971	22	1	1971
Mar	8.0	1994	9	8.8	1994	2+	2000	11	#+	2000
Apr	.0	0	0	.0	0	0	0	0	0	0
May	.0	0	0	.0	0	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	.0	0	0	.0	0	0	0	0	0	0
Nov	7.0	1988	20	7.0	1988	3+	2000	8	#+	2000
Dec	4.0	1984	4	4.5	1983	6	2000	14	2	2000
Ann	8.0+	Mar 1994	9	11.5	Feb 1982	6+	Dec 2000	14	3	Jan 1974

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.9	.8	.3	.0	.0
Feb	.9	.7	.3	.1	.0
Mar	.3	.2	@	@	.0
Apr	.0	.0	.0	.0	.0
May	.0	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.0	.0	.0	.0	.0
Nov	.1	.1	@	@	.0
Dec	.5	.5	@	.0	.0
Ann	2.7	2.3	.6	.1	.0

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.6	.3	.1	.0
Feb	.6	.2	.1	.0
Mar	.2	.0	.0	.0
Apr	.0	.0	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	.1	.0	.0	.0
Dec	.0	.0	.0	.0
Ann	1.5	.5	.2	.0

+ 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: PERRY, OK **COOP ID: 347012**

Climate Division: OK 2 **NWS Call Sign:** **Elevation: 1,025 Feet** **Lat: 36˚17N** **Lon: 97˚17W**

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	4/29	4/25	4/22	4/19	4/16	4/14	4/11	4/08	4/04
32	4/15	4/11	4/08	4/05	4/03	3/31	3/29	3/26	3/21
28	4/10	4/04	3/31	3/28	3/24	3/21	3/17	3/13	3/08
24	4/01	3/26	3/21	3/17	3/13	3/10	3/06	3/01	2/23
20	3/27	3/19	3/13	3/07	3/03	2/26	2/20	2/14	2/06
16	3/12	3/04	2/26	2/21	2/17	2/12	2/07	2/01	1/22

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	10/01	10/08	10/12	10/16	10/19	10/23	10/27	10/31	11/06
32	10/11	10/17	10/22	10/25	10/29	11/01	11/05	11/09	11/15
28	10/23	10/29	11/02	11/06	11/09	11/12	11/16	11/20	11/26
24	11/04	11/10	11/14	11/18	11/22	11/25	11/29	12/03	12/10
20	11/10	11/17	11/22	11/27	12/01	12/06	12/10	12/16	12/23
16	11/19	11/29	12/07	12/13	12/20	12/26	1/02	1/10	1/23

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	207	200	194	189	185	181	176	171	163
32	230	223	217	213	208	204	199	194	186
28	249	242	237	233	229	225	221	216	209
24	277	268	262	257	253	248	243	237	229
20	306	294	286	279	273	266	260	251	240
16	>365	330	318	309	302	295	287	279	267

***** 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: PERRY, OK **COOP ID: 347012**

Climate Division: OK 2 **NWS Call Sign:** **Elevation: 1,025 Feet** **Lat: 36˚17N** **Lon: 97˚17W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	957	707	506	216	53	4	0	2	27	148	521	855	3996
60	802	576	361	116	16	0	0	0	8	62	382	705	3028
57	710	499	280	72	6	0	0	0	3	32	304	618	2524
55	651	450	232	49	3	0	0	0	0	18	257	561	2221
50	508	337	134	15	0	0	0	0	0	4	160	424	1582
32	126	73	5	0	0	0	0	0	0	0	10	94	308

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	192	294	524	803	1133	1357	1573	1530	1230	917	480	261	10294
55	4	27	37	162	423	667	860	817	540	222	37	16	3812
57	2	20	23	125	365	607	798	755	483	173	24	11	3386
60	0	13	11	79	282	517	705	662	398	110	12	5	2794
65	0	0	1	29	163	370	550	509	267	42	1	0	1932
70	0	0	0	7	78	235	395	360	163	11	0	0	1249

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	83	181	379	626	913	1142	1338	1310	1026	717	306	114	83	264	643	1269	2182	3324	4662	5972	6998	7715	8021	8135
45	34	106	258	482	758	992	1183	1155	876	563	197	53	34	140	398	880	1638	2630	3813	4968	5844	6407	6604	6657
50	9	54	156	343	603	842	1028	1000	726	414	110	18	9	63	219	562	1165	2007	3035	4035	4761	5175	5285	5303
55	1	22	85	217	450	692	873	845	577	277	54	5	1	23	108	325	775	1467	2340	3185	3762	4039	4093	4098
60	0	6	44	118	304	542	718	690	434	162	22	1	0	6	50	168	472	1014	1732	2422	2856	3018	3040	3041
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	70	132	251	400	603	772	886	864	681	459	194	80	70	202	453	853	1456	2228	3114	3978	4659	5118	5312	5392

(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