

Climatography of the United States

No. 20

1971-2000

Station: ARNETT, OK

COOP ID: 340332

Climate Division: OK 1

NWS Call Sign:

Elevation: 2,445 Feet Lat: 36°08N

Lon: 99°46W

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	44.7	20.0	32.4	85	1986	21	40.6	1986	-12	1959	4	19.9	1979	1011	0	.0	.0	13.5	6.2	28.8	1.0
Feb	50.7	24.7	37.7	88+	1962	12	46.3	1976	-9+	1989	3	25.4	1978	765	0	.0	.0	16.0	4.2	21.6	.5
Mar	58.9	32.6	45.8	93	1989	11	50.5	1986	-6	1948	11	39.9	1998	596	0	.0	.2	23.6	1.1	14.5	.0
Apr	68.8	41.7	55.3	98	1989	24	62.0	1981	18+	1997	12	49.4	1983	309	17	.0	.7	28.0	.1	3.7	.0
May	76.5	52.1	64.3	102	1953	23	70.0	1996	28	1954	2	59.5	1995	102	80	.1	2.7	30.8	.0	.1	.0
Jun	85.5	61.7	73.6	110+	1980	28	78.6	1990	43	1964	1	68.5	1982	13	271	1.0	10.8	30.0	.0	.0	.0
Jul	91.5	66.3	78.9	109+	1954	14	85.1	1980	52+	1970	21	76.0	1987	0	432	3.6	21.7	31.0	.0	.0	.0
Aug	90.3	64.9	77.6	110	1951	7	83.1	1983	49	1956	20	71.8	1992	2	393	2.8	19.8	31.0	.0	.0	.0
Sep	82.0	56.6	69.3	105	2000	5	77.0	1998	30	1985	30	62.2	1974	48	178	.8	9.0	29.8	.0	.1	.0
Oct	71.3	44.7	58.0	99	1979	9	63.0	1979	14	1993	31	51.6	1976	234	17	.0	1.0	30.0	.1	2.4	.0
Nov	56.8	32.1	44.5	88	1980	9	53.1	1999	5	1975	26	37.1	1972	617	0	.0	.0	21.4	.9	15.4	.0
Dec	46.8	23.2	35.0	87	1955	25	40.4	1994	-11	1989	23	21.8	1983	931	0	.0	.0	14.2	4.7	27.1	.9
Ann	68.7	43.4	56.0	110+	Jun 1980	28	85.1	Jul 1980	-12	Jan 1959	4	19.9	Jan 1979	4628	1388	8.3	65.9	299.3	17.3	113.7	2.4

+ 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

Issue Date: February 2004

(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

008-A

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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: ARNETT, OK

COOP ID: 340332

Climate Division: OK 1

NWS Call Sign:

Elevation: 2,445 Feet Lat: 36°08N

Lon: 99°46W

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	.63	.53	1.00	2001	28	1.83	1999	.00+	1986	3.8	1.8	.3	.0	.00	.04	.14	.24	.34	.46	.60	.77	1.02	1.42	1.82
Feb	.95	.75	1.69	1964	4	3.07	1987	.00	1991	4.7	2.2	.5	.1	.01	.06	.18	.30	.45	.63	.86	1.14	1.55	2.25	2.95
Mar	1.95	1.80	2.23	2000	23	5.44	1973	.00	1971	5.9	3.7	1.4	.6	.06	.20	.47	.75	1.07	1.42	1.85	2.39	3.14	4.39	5.63
Apr	2.23	1.59	2.37	1957	20	6.63	1997	.00	1996	6.9	4.2	1.6	.5	.18	.42	.78	1.10	1.44	1.81	2.23	2.75	3.45	4.58	5.66
May	4.54	3.83	4.09	1977	21	11.32	1982	.28	1984	9.1	6.1	2.8	1.6	.86	1.27	1.94	2.55	3.17	3.85	4.61	5.53	6.75	8.71	10.57
Jun	3.50	3.24	4.38	1983	11	8.47	1989	.24	1998	8.1	5.7	2.3	1.0	.61	.91	1.42	1.90	2.39	2.93	3.53	4.27	5.25	6.84	8.36
Jul	2.08	1.84	3.05	1971	1	7.72	1996	.02	1974	5.9	3.9	1.2	.6	.23	.39	.68	.98	1.29	1.63	2.04	2.55	3.23	4.37	5.47
Aug	2.41	1.90	3.55	1978	28	8.74	1977	.16	2000	6.5	4.2	1.5	.7	.26	.44	.77	1.11	1.47	1.87	2.34	2.94	3.74	5.08	6.38
Sep	2.47	2.88	2.46	1989	13	5.35	1989	.00	2000	6.8	3.9	2.0	.7	.09	.28	.62	.98	1.37	1.82	2.35	3.03	3.95	5.50	7.03
Oct	2.15	1.45	5.55	2000	25	11.30	2000	.00	1999	4.7	2.9	1.2	.5	.02	.10	.31	.59	.92	1.33	1.86	2.55	3.54	5.28	7.05
Nov	1.44	.99	2.69	1986	4	3.44	1981	.00+	1999	5.1	2.9	.7	.3	.00	.13	.38	.60	.84	1.10	1.41	1.78	2.30	3.14	3.97
Dec	1.01	.74	1.87	1973	4	3.53	1984	.00	1976	3.9	2.0	.6	.2	.03	.10	.24	.38	.54	.73	.95	1.24	1.63	2.30	2.96
Ann	25.36	25.24	5.55	Oct 2000	25	11.32	May 1982	.00+	Sep 2000	71.4	43.5	16.1	6.8	17.93	19.36	21.20	22.60	23.84	25.04	26.28	27.65	29.32	31.73	33.82

+ 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:
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Station: ARNETT, OK

COOP ID: 340332

Climate Division: OK 1

NWS Call Sign:

Elevation: 2,445 Feet

Lat: 36°08N

Lon: 99°46W

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	.7	.0	#	#	5.6	1993	10	5.6	1993	12	1988	10	3	1988	1.0	.6	.2	.1	.0	1.8	.5	.2	.0
Feb	3.2	.2	#	#	14.0	1971	22	22.0	1971	20	1971	23	3	1971	1.0	.7	.3	.2	@	1.7	1.0	.4	.1
Mar	1.1	.0	#	#	6.0	1998	19	7.8	1998	9	1994	9	1	1994	.6	.3	.1	@	.0	.3	.1	.0	.0
Apr	.3	.0	#	0	7.0	1973	8	7.0	1973	7	1973	8	1	1973	.1	@	@	@	.0	.1	.1	.1	.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	.2	1976	30	.2	1976	#+	1997	26	#+	1997	@	.0	.0	.0	.0	.0	.0	.0	.0
Nov	2.2	.0	#	#	12.0	1992	25	21.0	1972	12	1992	25	2	1992	.8	.6	.2	.1	@	.8	.5	.4	.1
Dec	1.9	.1	#	#	12.1	1999	5	12.1	1999	10+	1999	5	2	1992	.9	.4	.1	.1	@	1.2	.3	.2	@
Ann	9.4	.3	N/A	N/A	14.0	Feb 1971	22	22.0	Feb 1971	20	Feb 1971	23	3+	Jan 1988	4.4	2.6	.9	.5	@	5.9	2.5	1.3	.2

+ 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:

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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	5/06	5/01	4/28	4/25	4/23	4/20	4/17	4/14	4/09
32	4/23	4/19	4/16	4/14	4/11	4/09	4/06	4/03	3/30
28	4/13	4/09	4/06	4/03	4/01	3/29	3/27	3/24	3/19
24	4/08	4/02	3/28	3/25	3/21	3/18	3/14	3/10	3/04
20	4/03	3/27	3/22	3/17	3/13	3/09	3/04	2/27	2/19
16	3/22	3/14	3/08	3/02	2/25	2/20	2/15	2/09	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	9/26	10/01	10/05	10/08	10/11	10/14	10/17	10/20	10/25
32	10/09	10/14	10/18	10/21	10/24	10/27	10/31	11/04	11/09
28	10/22	10/27	10/30	11/02	11/05	11/08	11/11	11/15	11/20
24	10/27	11/03	11/08	11/12	11/16	11/20	11/25	11/30	12/07
20	11/02	11/09	11/15	11/20	11/24	11/29	12/03	12/09	12/17
16	11/13	11/20	11/25	11/29	12/03	12/07	12/12	12/17	12/24
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	190	183	178	174	170	167	162	158	151
32	214	208	203	199	195	191	187	183	176
28	238	231	226	222	218	214	210	205	198
24	266	257	250	244	239	234	228	221	212
20	284	274	267	261	256	250	244	237	227
16	311	301	293	286	280	274	268	260	249

* 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

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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	1011	765	596	309	102	13	0	2	48	234	617	931	4628
60	856	631	443	193	39	2	0	0	15	121	471	776	3547
57	764	553	357	136	19	0	0	0	6	72	388	683	2978
55	703	501	301	105	10	0	0	0	3	49	335	622	2629
50	557	379	180	45	2	0	0	0	0	14	218	476	1871
32	147	87	6	0	0	0	0	0	0	0	15	92	347

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	159	246	433	697	1001	1248	1455	1414	1120	806	389	184	9152
55	2	16	14	112	298	558	742	701	433	142	18	1	3037
57	1	12	9	84	245	498	680	639	376	103	11	0	2658
60	0	6	2	50	173	410	587	546	295	59	4	0	2132
65	0	0	0	17	80	271	432	393	178	17	0	0	1388
70	0	0	0	4	27	155	281	249	92	3	0	0	811

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	50	123	265	493	782	1040	1240	1197	905	585	218	67	50	173	438	931	1713	2753	3993	5190	6095	6680	6898	6965
45	17	63	161	355	627	890	1085	1042	755	436	126	28	17	80	241	596	1223	2113	3198	4240	4995	5431	5557	5585
50	1	25	87	232	474	740	930	887	607	302	64	7	1	26	113	345	819	1559	2489	3376	3983	4285	4349	4356
55	0	5	40	132	330	590	775	732	465	182	24	0	0	5	45	177	507	1097	1872	2604	3069	3251	3275	3275
60	0	0	10	65	197	441	620	577	330	91	4	0	0	0	10	75	272	713	1333	1910	2240	2331	2335	2335
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	63	111	190	316	488	687	820	790	584	365	156	75	63	174	364	680	1168	1855	2675	3465	4049	4414	4570	4645

(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