

Climatology of the United States

No. 20

1971-2000

Station: CORDELL, OK

COOP ID: 342125

Climate Division: OK 4

NWS Call Sign:

Elevation: 1,540 Feet Lat: 35° 17N

Lon: 98° 59W

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	.0	.0	.0	84	1952	25	.0	0	-5	1966	23	.0	0	0	0	.0	.0	16.7	3.7	26.0	.1
Feb	.0	.0	.0	86+	1962	11	.0	0	-2	1951	1	.0	0	0	0	.0	.0	19.1	2.1	17.6	.2
Mar	.0	.0	.0	96	1971	27	.0+	0	4+	1948	12	.0	0	0	0	.0	.1	27.8	.1	8.8	.0
Apr	.0	.0	.0	101	1972	12	.0	0	20	1975	3	.0	0	0	0	@	.6	29.5	.0	1.6	.0
May	.0	.0	.0	104+	1966	22	.0	0	32	1960	1	.0	0	0	0	.3	5.0	31.0	.0	@	.0
Jun	.0	.0	.0	114	1953	14	.0	0	48	1954	4	.0	0	0	0	2.7	18.0	30.0	.0	.0	.0
Jul	.0	.0	.0	113	1954	25	.0	0	52	1970	23	.0	0	0	0	9.2	27.2	31.0	.0	.0	.0
Aug	.0	.0	.0	112	1964	6	.0	0	50	1962	26	.0	0	0	0	7.2	24.6	31.0	.0	.0	.0
Sep	.0	.0	.0	109+	1951	1	.0	0	36+	1972	30	.0	0	0	0	1.3	12.1	30.0	.0	.0	.0
Oct	.0	.0	.0	100	2000	4	.0	0	22	2000	10	.0	0	0	0	@	1.1	30.7	.0	.7	.0
Nov	.0	.0	.0	87	1952	1	.0	0	11	1976	28	.0	0	0	0	.0	.0	24.9	.2	9.5	.0
Dec	.0	.0	.0	90	1955	24	.0	0	0	1950	7	.0	0	0	0	.0	.0	17.5	2.1	23.5	.3
Ann	.0	.0	.0	114	Jun 1953	14	-99.9	0	-5	Jan 1966	23	99.9	0	0	0	20.7	88.7	319.2	8.2	87.7	.6

+ 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: 1948-2001

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

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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: CORDELL, OK

COOP ID: 342125

Climate Division: OK 4

NWS Call Sign:

Elevation: 1,540 Feet Lat: 35°17N

Lon: 98°59W

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	1.01	.83	2.10	1982	30	3.12	1973	.00+	1996	3.8	2.0	.8	.2	.00	.00	.24	.41	.59	.78	1.00	1.28	1.63	2.23	2.82
Feb	1.17	.94	1.97	1964	4	3.74	1997	.00+	1995	3.7	2.7	.7	.2	.00	.07	.25	.43	.62	.85	1.11	1.44	1.91	2.68	3.45
Mar	2.31	2.19	3.08	1988	3	6.80	1973	.00	1971	5.5	3.6	1.7	.6	.06	.21	.51	.84	1.21	1.64	2.16	2.82	3.74	5.31	6.86
Apr	2.49	1.93	3.83	1993	29	8.92	1997	.00	1989	5.7	4.1	1.7	.7	.10	.30	.66	1.02	1.41	1.86	2.39	3.05	3.97	5.49	6.99
May	4.75	4.02	4.51	1982	17	14.73	1982	.43	1988	8.3	6.3	2.9	1.7	.70	1.10	1.78	2.44	3.13	3.88	4.74	5.80	7.23	9.55	11.79
Jun	4.14	3.54	4.35	1995	4	10.15	1989	.70	1998	7.3	6.0	2.7	1.3	.82	1.19	1.80	2.36	2.92	3.52	4.21	5.03	6.13	7.88	9.54
Jul	2.05	1.61	3.70	1975	24	7.16	1992	.00	1980	4.6	3.5	1.2	.6	.05	.18	.44	.73	1.05	1.44	1.90	2.49	3.31	4.71	6.10
Aug	3.05	2.84	4.35	1961	19	12.37	1996	.00	2000	6.1	4.6	1.9	.9	.11	.35	.79	1.23	1.71	2.26	2.92	3.74	4.88	6.77	8.64
Sep	3.19	2.95	4.05	1973	4	11.02	1986	.10	1984	5.7	4.1	2.0	1.0	.11	.25	.59	1.00	1.49	2.08	2.82	3.80	5.19	7.60	10.04
Oct	2.74	1.89	4.81	1983	20	9.32	1983	.00	1992	5.0	4.0	1.8	.9	.17	.44	.87	1.27	1.70	2.17	2.71	3.38	4.28	5.77	7.20
Nov	1.78	1.51	2.96	1964	5	5.81	1992	.00+	1995	4.8	3.2	1.1	.5	.00	.18	.49	.77	1.06	1.39	1.76	2.21	2.84	3.86	4.85
Dec	1.22	.76	1.88	1953	3	4.46	1991	.00	1976	4.1	2.7	.9	.2	.03	.10	.26	.43	.63	.86	1.13	1.49	1.98	2.82	3.66
Ann	29.90	30.50	4.81	Oct 1983	20	14.73	May 1982	.00+	Aug 2000	64.6	46.8	19.4	8.8	18.58	20.66	23.38	25.49	27.39	29.25	31.19	33.36	36.03	39.95	43.39

+ 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

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Station: CORDELL, OK

COOP ID: 342125

Climate Division: OK 4

NWS Call Sign:

Elevation: 1,540 Feet

Lat: 35° 17N

Lon: 98° 59W

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	3.1	1.5	1	#	8.0	1987	18	14.1	1973	14	1988	11	7	1988	1.4	1.2	.3	.2	.0	3.2	1.3	.4	.0
Feb	2.7	2.0	#	#	6.0	1975	16	13.6	1978	8	1978	9	3	1978	1.2	.9	.4	.1	.0	2.4	1.1	.5	.0
Mar	.6	.0	#	0	5.5	1994	9	6.5	1994	6	1994	9	#+	1999	.5	.4	@	@	.0	.3	.1	@	.0
Apr	.1	.0	#	0	2.5	1973	8	3.0	1973	3	1973	8	#+	1979	.1	@	.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	1	1991	31	#+	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.6	.0	#	0	4.0	1988	20	5.0	1972	4	1988	20	#+	2000	.3	.3	.1	.0	.0	.3	@	.0	.0
Dec	2.3	1.0	#	#	6.0	1971	3	13.0	1987	7	2000	28	2	2000	1.0	.8	.3	.1	.0	1.5	.6	.3	.0
Ann	9.4	4.5	N/A	N/A	8.0	Jan 1987	18	14.1	Jan 1973	14	Jan 1988	11	7	Jan 1988	4.5	3.6	1.1	.4	.0	7.7	3.1	1.2	.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:

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Elevation: 1,540 Feet

Lat: 35° 17N

Lon: 98° 59W

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	4/26	4/22	4/19	4/16	4/14	4/11	4/09	4/06	4/01
32	4/20	4/15	4/11	4/07	4/04	4/01	3/29	3/25	3/19
28	4/09	4/03	3/30	3/27	3/23	3/20	3/17	3/13	3/07
24	3/31	3/23	3/17	3/12	3/07	3/03	2/26	2/20	2/12
20	3/24	3/14	3/07	3/01	2/24	2/18	2/13	2/06	1/27
16	3/10	3/01	2/23	2/17	2/12	2/07	2/02	1/27	1/18
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	9/30	10/06	10/11	10/15	10/18	10/22	10/26	10/30	11/05
32	10/18	10/24	10/28	10/31	11/04	11/07	11/11	11/15	11/20
28	10/24	10/30	11/03	11/07	11/11	11/14	11/18	11/22	11/28
24	10/30	11/07	11/13	11/18	11/22	11/27	12/02	12/08	12/16
20	11/11	11/19	11/24	11/29	12/03	12/07	12/12	12/17	12/25
16	11/18	11/28	12/06	12/12	12/18	12/24	12/30	1/07	1/17
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	208	200	195	191	187	183	178	173	166
32	238	229	223	218	213	208	202	196	188
28	253	246	240	236	232	227	223	217	210
24	294	282	274	266	259	252	245	236	224
20	318	305	296	289	281	274	267	257	245
16	346	328	318	311	304	298	291	283	272

* 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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Elevation: 1,540 Feet Lat: 35° 17N Lon: 98° 59W

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	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	73	173	371	592	918	1158	1351	1301	1012	699	288	99	73	246	617	1209	2127	3285	4636	5937	6949	7648	7936	8035
45	28	92	240	444	763	1008	1196	1146	862	544	179	39	28	120	360	804	1567	2575	3771	4917	5779	6323	6502	6541
50	4	41	137	310	608	858	1041	991	712	395	97	8	4	45	182	492	1100	1958	2999	3990	4702	5097	5194	5202
55	0	12	64	188	453	708	886	836	566	259	38	0	0	12	76	264	717	1425	2311	3147	3713	3972	4010	4010
60	0	1	23	95	306	558	731	681	422	143	10	0	0	1	24	119	425	983	1714	2395	2817	2960	2970	2970
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	71	135	246	375	598	770	881	847	663	437	183	79	71	206	452	827	1425	2195	3076	3923	4586	5023	5206	5285

(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/normal/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