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: MORRILTON, AR **COOP ID: 034938**

Climate Division: AR 5 **NWS Call Sign:** **Elevation: 340 Feet** **Lat: 35˚09N** **Lon: 92˚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	48.0	26.5	37.3	82	1952	1	44.3	1990	-7+	1942	8	26.0	1979	861	0	.0	.0	15.8	2.2	21.4	.1
Feb	54.4	30.1	42.3	88	1945	15	50.0	1976	-15	1951	2	30.4	1978	637	0	.0	.0	19.9	.9	15.3	.1
Mar	63.0	38.4	50.7	93	1974	31	56.5	1974	9	1943	3	44.6	1996	445	2	.0	.1	28.2	@	6.7	.0
Apr	71.9	46.2	59.1	96+	1965	9	65.5	1981	26	1987	4	53.4	1983	200	21	.0	.5	29.8	.0	1.2	.0
May	79.6	56.3	68.0	101	1926	29	71.8	1987	36+	1925	1	63.4	1976	48	138	.0	2.7	31.0	.0	.0	.0
Jun	87.3	64.7	76.0	109	1936	20	79.5	1998	47	1985	13	72.3	1974	1	331	.6	14.1	30.0	.0	.0	.0
Jul	92.7	68.9	80.8	115	1986	31	85.5	1980	49	1947	23	77.7	1989	0	489	4.5	24.6	31.0	.0	.0	.0
Aug	92.1	66.1	79.1	114	1936	10	84.6	1980	43	1986	29	74.0	1992	1	438	4.8	23.4	31.0	.0	.0	.0
Sep	85.1	59.3	72.2	109	2000	1	77.3+	1998	34+	1942	27	66.9	1974	19	234	1.2	11.1	30.0	.0	.0	.0
Oct	75.1	47.5	61.3	96+	1953	1	67.6	1971	23	1952	29	55.5	1987	161	46	.0	1.2	30.9	.0	1.4	.0
Nov	60.9	37.6	49.3	90	1927	2	54.5	1973	12	1976	29	43.0	1976	473	2	.0	.0	26.2	.0	9.0	.0
Dec	50.8	29.7	40.3	79+	1932	2	49.1	1984	-6	1983	25	26.1	1983	768	0	.0	.0	19.4	1.4	18.8	.3
Ann	71.7	47.6	59.7	115	Jul 1986	31	85.5	Jul 1980	-15	Feb 1951	2	26.0	Jan 1979	3614	1701	11.1	77.7	323.2	4.5	73.8	.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: 1919-2001

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

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: MORRILTON, AR **COOP ID: 034938**

Climate Division: AR 5 **NWS Call Sign:** **Elevation: 340 Feet** **Lat: 35˚09N** **Lon: 92˚46W**

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	3.36	3.03	4.54	1969	30	6.97	1990	.73	1986
Feb	3.30	2.98	3.70	1945	21	8.61	1989	.69	1972
Mar	4.48	4.06	4.00	1945	30	10.69	1975	1.64	1972
Apr	4.38	3.66	5.11	1995	11	10.61	1973	1.03	1989
May	5.23	5.01	5.93	1970	30	11.18	1990	1.40	1988
Jun	4.51	4.17	3.86	1935	17	8.50	1986	.69	1984
Jul	2.83	2.41	3.20	1979	18	6.97	1988	.49	1985
Aug	2.44	2.25	6.08	1957	13	5.83	1986	.00	2000
Sep	3.26	2.93	5.10	1965	22	9.56	1977	.50	1983
Oct	4.34	4.60	5.22	1930	7	15.52	1984	.50	1977
Nov	5.74	5.73	6.27	1985	27	10.38	1974	.70	1989
Dec	4.60	4.36	4.10	1931	30	11.16	1982	1.01	1981
Ann	48.47	47.31	6.27	Nov 1985	27	15.52	Oct 1984	.00	Aug 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	8.7	6.3	2.3	.6
Feb	7.6	5.2	2.3	.8
Mar	9.3	7.3	3.4	1.4
Apr	8.9	6.6	2.9	1.5
May	10.4	7.7	3.7	1.5
Jun	9.1	6.4	3.0	1.2
Jul	6.7	4.8	1.7	.7
Aug	6.5	4.4	1.7	.6
Sep	7.8	5.4	2.5	1.1
Oct	7.0	5.1	2.7	1.5
Nov	8.9	7.1	3.5	1.8
Dec	8.4	6.0	3.0	1.4
Ann	99.3	72.3	32.7	14.1

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	1.01	1.33	1.81	2.22	2.62	3.03	3.49	4.02	4.72	5.80	6.80
Feb	.89	1.21	1.68	2.10	2.51	2.94	3.42	3.98	4.71	5.86	6.94
Mar	1.69	2.10	2.70	3.20	3.68	4.16	4.69	5.29	6.07	7.26	8.35
Apr	1.18	1.60	2.23	2.79	3.33	3.90	4.53	5.28	6.26	7.79	9.22
May	1.73	2.22	2.95	3.57	4.17	4.78	5.46	6.24	7.26	8.83	10.28
Jun	1.52	1.95	2.57	3.10	3.61	4.13	4.71	5.37	6.23	7.56	8.78
Jul	.47	.72	1.13	1.52	1.92	2.35	2.85	3.45	4.25	5.56	6.81
Aug	.37	.70	1.11	1.45	1.79	2.14	2.54	3.00	3.61	4.58	5.48
Sep	.73	1.03	1.51	1.94	2.37	2.83	3.34	3.95	4.76	6.04	7.25
Oct	.67	1.04	1.66	2.26	2.88	3.56	4.34	5.30	6.58	8.66	10.65
Nov	1.47	2.01	2.85	3.58	4.31	5.07	5.92	6.93	8.25	10.33	12.28
Dec	1.42	1.86	2.51	3.07	3.61	4.17	4.79	5.51	6.45	7.91	9.26
Ann	36.47	38.84	41.86	44.12	46.12	48.05	50.03	52.20	54.83	58.61	61.86

\+ 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: 1919-2001
(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: MORRILTON, AR **COOP ID: 034938**

Climate Division: AR 5 **NWS Call Sign:** **Elevation: 340 Feet** **Lat: 35˚09N** **Lon: 92˚46W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	2.1	.0	#	#
Feb	1.2	.0	#	0
Mar	.6	.0	#	0
Apr	#	.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
Nov	.3	.0	#	0
Dec	.5	.0	#	0
Ann	4.7	.0	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	5.0	1978	12	9.7	1977	12	1988	9	2	1988
Feb	6.0	1978	18	7.0	1985	7	1985	2	1	1985
Mar	5.5	1975	14	5.5	1975	1	1994	9	#+	1999
Apr	#	1973	10	#	1973	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	#	1993	30	#	1993
Nov	4.0	1971	23	4.0	1971	4	1971	23	#+	2000
Dec	2.5	1990	27	3.5	1990	2	1990	27	#+	2000
Ann	6.0	Feb 1978	18	9.7	Jan 1977	12	Jan 1988	9	2	Jan 1988

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.9	.6	.3	.1	.0
Feb	.5	.4	.1	.1	.0
Mar	.2	.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	.2	.1	.1	.0	.0
Dec	.4	.1	.0	.0	.0
Ann	2.2	1.4	.5	.2	.0

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.3	.2	.1	.0
Feb	.6	.4	.3	.0
Mar	.1	.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	.1	.0	.0
Dec	.3	.0	.0	.0
Ann	1.4	.7	.4	.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: MORRILTON, AR **COOP ID: 034938**

Climate Division: AR 5 **NWS Call Sign:** **Elevation: 340 Feet** **Lat: 35˚09N** **Lon: 92˚46W**

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	4/25	4/20	4/17	4/14	4/11	4/08	4/05	4/01	3/28
32	4/16	4/11	4/07	4/04	4/01	3/29	3/26	3/22	3/17
28	4/02	3/27	3/22	3/18	3/15	3/11	3/07	3/03	2/25
24	3/18	3/12	3/07	3/03	2/27	2/23	2/19	2/14	2/08
20	3/08	3/01	2/24	2/20	2/16	2/12	2/07	2/02	1/26
16	3/05	2/21	2/13	2/06	1/30	1/23	1/16	1/07	12/24

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	10/10	10/14	10/17	10/21	10/24	10/29	11/03
32	10/16	10/21	10/25	10/28	10/31	11/03	11/06	11/10	11/15
28	10/21	10/27	11/01	11/05	11/09	11/12	11/16	11/21	11/27
24	11/06	11/12	11/17	11/21	11/25	11/29	12/03	12/08	12/14
20	11/14	11/22	11/28	12/03	12/08	12/13	12/18	12/23	1/01
16	11/20	12/02	12/11	12/18	12/25	1/01	1/08	1/18	2/01

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	214	206	199	194	189	184	179	172	164
32	236	228	222	217	213	208	203	198	190
28	267	257	250	244	238	232	226	219	209
24	299	289	282	276	270	265	259	252	242
20	323	312	304	298	293	287	282	275	266
16	>365	>365	348	335	325	316	307	297	283

***** 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: MORRILTON, AR **COOP ID: 034938**

Climate Division: AR 5 **NWS Call Sign:** **Elevation: 340 Feet** **Lat: 35˚09N** **Lon: 92˚46W**

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	861	637	445	200	48	1	0	1	19	161	473	768	3614
60	706	501	303	99	12	0	0	0	3	75	335	617	2651
57	620	423	227	57	4	0	0	0	1	42	259	531	2164
55	562	372	183	36	2	0	0	0	0	26	213	473	1867
50	421	256	97	8	0	0	0	0	0	6	122	340	1250
32	83	27	1	0	0	0	0	0	0	0	3	49	163

Base — Cooling Degree Days (1)

Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	245	314	582	812	1113	1320	1512	1460	1205	907	522	304	10296
55	11	16	51	158	402	630	799	747	515	221	42	15	3607
57	8	11	32	118	342	570	737	685	455	174	27	11	3170
60	0	5	15	70	257	480	644	592	368	114	13	4	2562
65	0	0	2	21	138	331	489	438	234	46	2	0	1701
70	0	0	0	4	56	191	334	293	127	12	0	0	1017

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	112	210	416	644	917	1118	1298	1250	1002	700	345	148	112	322	738	1382	2299	3417	4715	5965	6967	7667	8012	8160
45	56	118	283	496	762	968	1143	1095	852	546	226	73	56	174	457	953	1715	2683	3826	4921	5773	6319	6545	6618
50	25	55	173	351	607	818	988	940	702	397	136	36	25	80	253	604	1211	2029	3017	3957	4659	5056	5192	5228
55	4	22	91	226	455	668	833	785	552	261	65	16	4	26	117	343	798	1466	2299	3084	3636	3897	3962	3978
60	0	2	35	123	305	518	678	630	409	148	25	0	0	2	37	160	465	983	1661	2291	2700	2848	2873	2873
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	82	145	266	413	606	762	864	822	669	462	218	98	82	227	493	906	1512	2274	3138	3960	4629	5091	5309	5407

(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