

# Climatography of the United States

No. 20

1971-2000

Station: BLUE MOUNTAIN DAM, AR

COOP ID: 030798

Climate Division: AR 4

NWS Call Sign:

Elevation: 426 Feet

Lat: 35°07N

Lon: 93°39W

## 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	49.5	26.8	38.2	77+	1975	28	45.8	1990	-3	1977	11	26.2	1979	832	0	.0	.0	13.8	3.1	22.3	.2
Feb	56.0	30.7	43.4	82	1982	24	50.8	1976	3	1981	11	31.9	1978	607	0	.0	.0	18.5	1.5	15.9	.0
Mar	64.3	39.5	51.9	92+	1967	12	56.9	1985	11	1996	9	45.8	1996	412	6	.0	.1	26.8	.1	7.3	.0
Apr	73.5	47.4	60.5	95	1987	21	67.5	1981	26+	1987	4	55.3	1993	172	37	.0	.5	29.5	.0	1.4	.0
May	80.6	56.9	68.8	97	2000	24	73.4	1987	37	1992	7	63.9	1976	45	162	.0	2.0	31.0	.0	.0	.0
Jun	88.9	64.6	76.8	104	1980	29	80.6	1977	44	1969	3	72.3	1974	2	354	.4	13.1	30.0	.0	.0	.0
Jul	94.7	68.9	81.8	111	1986	31	87.1	1980	50+	1967	15	77.7	1989	0	520	4.7	23.6	31.0	.0	.0	.0
Aug	94.4	67.4	80.9	112	1986	1	88.0	1980	48+	1967	13	74.8	1992	1	495	5.7	22.1	31.0	.0	.0	.0
Sep	86.4	60.7	73.6	109+	2000	1	79.5	1998	35	1967	29	67.8	1974	16	273	.9	9.7	30.0	.0	.0	.0
Oct	75.7	48.9	62.3	96	1998	1	67.7	1971	22	1993	31	57.1	1993	142	58	.0	1.0	30.7	.0	1.1	.0
Nov	62.2	38.2	50.2	84	1978	5	57.1	1999	12	1970	24	43.8	1976	449	4	.0	.0	24.5	@	8.7	.0
Dec	52.6	29.8	41.2	80+	1998	6	49.8	1984	-3	1989	23	30.2	1983	738	0	.0	.0	16.9	1.8	19.1	.1
Ann	73.2	48.3	60.8	112	Aug 1986	1	88.0	Aug 1980	-3+	Dec 1989	23	26.2	Jan 1979	3416	1909	11.7	72.1	313.7	6.5	75.8	.3

+ 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](http://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

011-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: BLUE MOUNTAIN DAM, AR**

**COOP ID: 030798**

**Climate Division: AR 4**

**NWS Call Sign:**

**Elevation: 426 Feet Lat: 35°07N**

**Lon: 93°39W**

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	2.96	2.55	4.48	1998	5	8.39	1998	.82	1983	8.6	5.6	1.9	.5	.79	1.07	1.50	1.88	2.24	2.63	3.06	3.57	4.23	5.26	6.23
Feb	3.06	2.82	3.36	1989	15	7.64	1989	.76	1972	7.6	5.0	2.2	1.0	.84	1.13	1.57	1.96	2.33	2.73	3.17	3.69	4.36	5.42	6.41
Mar	4.56	4.17	3.25	1973	25	11.78	1973	1.33	1971	9.9	7.0	3.5	1.3	1.60	2.03	2.65	3.18	3.69	4.20	4.77	5.42	6.27	7.57	8.76
Apr	4.09	3.70	5.20	1970	19	9.90	1973	.68	1987	9.1	6.0	2.5	1.3	1.01	1.39	1.99	2.52	3.04	3.59	4.21	4.94	5.90	7.42	8.84
May	5.56	5.38	6.15	1990	3	15.97	1990	1.13	1997	11.0	7.7	3.8	1.8	1.68	2.21	3.00	3.68	4.34	5.03	5.78	6.67	7.81	9.60	11.26
Jun	3.84	3.48	3.22	1969	21	8.57	1975	.17	1984	9.2	6.4	2.5	1.2	.72	1.06	1.63	2.15	2.68	3.25	3.89	4.68	5.71	7.38	8.97
Jul	3.31	3.28	3.08	1978	14	6.54	1994	.66	1976	7.6	5.2	2.1	1.0	.85	1.17	1.65	2.07	2.49	2.93	3.42	4.00	4.76	5.96	7.08
Aug	2.58	2.32	2.33	1967	10	7.49	1986	.01	1980	7.8	4.8	1.7	.6	.35	.56	.93	1.29	1.67	2.08	2.56	3.16	3.95	5.26	6.52
Sep	3.71	3.64	3.22	1977	6	7.19	1977	.33	1982	8.9	6.0	2.3	1.2	.79	1.13	1.68	2.17	2.67	3.19	3.79	4.50	5.44	6.94	8.36
Oct	3.92	2.90	4.57	1991	29	17.57	1984	.51	1989	8.2	5.4	2.3	1.1	.50	.81	1.37	1.92	2.49	3.13	3.88	4.79	6.04	8.07	10.04
Nov	5.10	4.57	5.09	1985	27	11.97	1996	.81	1989	9.1	6.3	3.3	1.8	1.10	1.57	2.32	2.99	3.67	4.40	5.21	6.19	7.48	9.53	11.47
Dec	4.33	4.16	8.25	1982	3	11.87	1982	.49	1981	8.4	5.6	3.0	1.3	1.01	1.41	2.04	2.61	3.18	3.78	4.45	5.25	6.31	7.98	9.55
Ann	47.02	45.39	8.25	Dec 1982	3	17.57	Oct 1984	.01	Aug 1980	105.4	71.0	31.1	14.1	32.93	35.64	39.12	41.77	44.13	46.41	48.77	51.39	54.56	59.17	63.16

+ 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](http://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](http://www.ncdc.noaa.gov)

Station: BLUE MOUNTAIN DAM, AR

COOP ID: 030798

Climate Division: AR 4

NWS Call Sign:

Elevation: 426 Feet

Lat: 35°07N

Lon: 93°39W

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	2.8	.4	#	#	12.0	1988	7	13.4	1988	12	1988	9	2	1988	1.6	.7	.3	.1	@	2.4	1.2	.6	.1
Feb	1.5	.3	#	#	6.0	1997	13	7.2	1985	7	1985	3	2	1985	1.1	.5	.2	.1	.0	1.3	.7	.3	.0
Mar	.2	.0	#	0	2.5	1984	10	2.5	1984	2	1971	25	#+	1989	.2	.1	.0	.0	.0	.1	.0	.0	.0
Apr	.0	.0	0	0	.1	1971	7	.1	1971	0	0	0	0	0	@	.0	.0	.0	.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	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.3	.0	#	0	4.0	1971	23	4.0	1971	4	1971	23	#+	1976	.2	.1	.1	.0	.0	.1	.1	.0	.0
Dec	.8	.0	#	0	8.0	1975	25	8.0	1975	8	1975	25	1+	2000	.4	.2	.1	@	.0	1.1	.3	.1	.0
Ann	5.6	.7	N/A	N/A	12.0	Jan 1988	7	13.4	Jan 1988	12	Jan 1988	9	2+	Jan 1988	3.5	1.6	.7	.2	@	5.0	2.3	1.0	.1

+ 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](http://www.ncdc.noaa.gov/oa/climate/normals/usnormals.html)

# Climatography of the United States

## No. 20 1971-2000

**Station: BLUE MOUNTAIN DAM, AR**

**COOP ID: 030798**

**Climate Division: AR 4**

**NWS Call Sign:**

**Elevation: 426 Feet**

**Lat: 35°07N**

**Lon: 93°39W**

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	4/23	4/19	4/16	4/14	4/12	4/09	4/07	4/04	3/31
32	4/17	4/12	4/09	4/05	4/02	3/31	3/27	3/24	3/19
28	4/04	3/29	3/24	3/20	3/17	3/13	3/09	3/04	2/26
24	3/17	3/10	3/05	2/28	2/24	2/20	2/16	2/11	2/03
20	3/10	3/01	2/22	2/16	2/10	2/05	1/30	1/23	1/13
16	3/01	2/19	2/13	2/06	2/01	1/25	1/18	1/07	0/00
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	10/05	10/10	10/13	10/17	10/20	10/23	10/26	10/29	11/04
32	10/17	10/23	10/27	10/30	11/03	11/06	11/10	11/14	11/19
28	11/02	11/07	11/10	11/13	11/15	11/18	11/21	11/24	11/29
24	11/06	11/13	11/18	11/23	11/27	12/01	12/05	12/11	12/18
20	11/16	11/24	11/30	12/05	12/09	12/14	12/19	12/25	1/02
16	11/28	12/08	12/16	12/22	12/29	1/04	1/12	1/24	0/00
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	209	202	198	194	190	187	183	178	172
32	238	229	223	218	214	209	204	198	189
28	268	259	253	248	243	238	233	227	218
24	304	294	287	281	275	269	263	256	246
20	339	324	315	307	300	293	285	277	265
16	>365	>365	>365	356	336	323	311	298	282

\* 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](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

**Climatography  
of the United States  
No. 20  
1971-2000**

**Station: BLUE MOUNTAIN DAM, AR**

**COOP ID: 030798**

**Climate Division: AR 4      NWS Call Sign:      Elevation: 426 Feet    Lat: 35°07N    Lon: 93°39W**

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	832	607	412	172	45	2	0	1	16	142	449	738	3416
60	679	477	273	83	12	0	0	0	3	64	313	587	2491
57	593	400	202	46	5	0	0	0	0	35	241	501	2023
55	535	351	161	29	2	0	0	0	0	21	198	444	1741
50	396	243	82	7	0	0	0	0	0	5	112	312	1157
32	71	27	1	0	0	0	0	0	0	0	3	38	140

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	262	344	618	854	1139	1342	1543	1517	1247	939	548	323	10676
55	13	24	66	193	428	652	830	804	557	248	54	16	3885
57	9	17	44	151	369	592	768	742	497	199	36	11	3435
60	1	10	22	98	284	502	675	649	410	135	19	4	2809
65	0	0	6	37	162	354	520	495	273	58	4	0	1909
70	0	0	0	9	74	214	365	349	159	18	0	0	1188

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	100	190	385	617	887	1094	1283	1255	992	670	323	131	100	290	675	1292	2179	3273	4556	5811	6803	7473	7796	7927
45	46	108	259	471	732	944	1128	1100	842	519	209	66	46	154	413	884	1616	2560	3688	4788	5630	6149	6358	6424
50	19	55	155	331	578	794	973	945	692	372	120	31	19	74	229	560	1138	1932	2905	3850	4542	4914	5034	5065
55	4	21	85	207	425	644	818	790	544	241	61	10	4	25	110	317	742	1386	2204	2994	3538	3779	3840	3850
60	0	1	33	110	276	494	663	635	400	134	25	1	0	1	34	144	420	914	1577	2212	2612	2746	2771	2772
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	70	131	243	389	580	742	850	831	657	429	196	88	70	201	444	833	1413	2155	3005	3836	4493	4922	5118	5206

(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](http://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](http://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.

- 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/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)