

# Climatology of the United States

No. 20

1971-2000

Station: BEATRICE, AL

COOP ID: 010616

Climate Division: AL 7

NWS Call Sign:

Elevation: 178 Feet Lat: 31°43N Lon: 87°13W

## 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	59.3	36.7	48.0	81	1999	22	57.8	1974	4+	1985	22	36.6	1977	541	0	.0	.0	24.5	.3	14.8	.0
Feb	63.8	39.3	51.6	85	1989	16	58.0	1990	7	1996	5	41.4	1978	380	3	.0	.0	24.6	.2	11.2	.0
Mar	72.1	46.1	59.1	87	1973	15	65.3	1997	18	1996	10	52.8	1983	223	40	.0	.0	30.1	.0	3.5	.0
Apr	78.0	50.3	64.2	94	1987	22	68.6	1999	27	1987	1	58.9	1983	87	62	.0	.3	29.9	.0	.6	.0
May	84.1	59.8	72.0	97	2000	27	77.5	1975	38	1997	5	68.5	1988	13	228	.0	3.4	31.0	.0	.0	.0
Jun	89.7	66.9	78.3	103	1985	6	82.6	1998	46	2000	7	74.5	1983	0	399	.3	16.1	30.0	.0	.0	.0
Jul	91.8	69.7	80.8	105+	2000	21	83.2	1980	55	1972	11	78.1	1985	0	488	.7	23.6	31.0	.0	.0	.0
Aug	91.3	69.4	80.4	102	2000	19	83.0	1995	52	1969	29	77.3	1992	0	476	.4	21.8	31.0	.0	.0	.0
Sep	87.2	65.2	76.2	100	1990	5	80.3	1980	36+	1967	30	73.0	1983	2	338	@	11.6	30.0	.0	.0	.0
Oct	78.9	52.5	65.7	94	1990	8	72.5	1984	27+	1968	29	60.6	1980	89	112	.0	1.1	31.0	.0	.4	.0
Nov	70.6	45.0	57.8	88	2000	1	64.0	1978	14	1970	25	50.5	1976	247	32	.0	.0	29.4	.0	5.4	.0
Dec	62.3	39.0	50.7	85	1982	2	59.1	1984	5	1989	24	42.4	1989	459	14	.0	.0	27.1	.2	11.2	.0
Ann	77.4	53.3	65.4	105+	Jul 2000	21	83.2	Jul 1980	4+	Jan 1985	22	36.6	Jan 1977	2041	2192	1.4	77.9	349.6	.7	47.1	.0

+ 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: 1948-2000

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

009-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: BEATRICE, AL**

**COOP ID: 010616**

**Climate Division: AL 7**

**NWS Call Sign:**

**Elevation: 178 Feet Lat: 31°43N**

**Lon: 87°13W**

**Precipitation (inches)**

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	6.13	5.47	4.56	1996	27	12.16	1991	1.26	1981	9.5	8.0	4.3	2.2	2.34	2.91	3.73	4.41	5.05	5.70	6.41	7.24	8.28	9.89	11.36
Feb	5.20	4.86	4.85	1982	3	9.26	1990	1.77	1999	7.8	6.5	3.7	1.6	2.07	2.55	3.23	3.79	4.32	4.86	5.44	6.12	6.97	8.28	9.47
Mar	6.78	6.83	11.50	1972	2	14.52	1972	1.50	1982	8.5	7.0	3.8	2.1	2.26	2.90	3.84	4.64	5.41	6.20	7.07	8.08	9.38	11.40	13.26
Apr	4.30	3.31	3.70	1979	4	10.79	1983	.50	1987	6.9	5.6	3.2	1.6	.86	1.25	1.88	2.46	3.04	3.67	4.38	5.24	6.37	8.18	9.90
May	4.18	3.84	5.30	1983	20	10.73	1978	.75	1998	7.5	5.4	2.6	1.5	1.05	1.44	2.05	2.59	3.12	3.69	4.31	5.06	6.03	7.57	9.01
Jun	4.91	5.03	3.91	1992	13	10.43	1989	1.59	1998	9.3	6.8	3.4	1.4	1.46	1.93	2.63	3.23	3.82	4.43	5.10	5.89	6.92	8.52	10.01
Jul	5.39	5.30	4.49	1991	7	10.78	1979	1.03	2000	10.5	7.2	2.8	1.2	1.82	2.33	3.08	3.71	4.32	4.94	5.63	6.42	7.45	9.03	10.50
Aug	3.57	3.85	3.90	1982	1	7.61	1974	.76	1989	8.0	6.3	2.9	1.2	1.20	1.54	2.04	2.46	2.86	3.27	3.73	4.25	4.93	5.99	6.96
Sep	4.31	3.67	6.86	1998	29	14.74	1998	.00	1984	7.5	5.7	2.8	1.3	.82	1.41	2.14	2.73	3.30	3.88	4.53	5.29	6.27	7.80	9.24
Oct	2.20	1.73	3.53	1997	26	7.10	1984	.00+	1978	4.0	3.2	1.5	.8	.00	.15	.48	.82	1.19	1.61	2.10	2.71	3.57	5.00	6.41
Nov	4.60	4.64	8.25	1948	27	9.25	1992	.35	1981	7.4	5.8	3.3	1.6	.86	1.27	1.94	2.57	3.20	3.89	4.67	5.61	6.85	8.86	10.78
Dec	4.79	4.22	5.52	1996	1	10.35	1972	1.69	1980	8.1	5.7	2.9	1.8	1.83	2.28	2.92	3.45	3.95	4.46	5.01	5.66	6.47	7.73	8.87
Ann	56.36	56.06	11.50	Mar 1972	2	14.74	Sep 1998	.00+	Sep 1984	95.0	73.2	37.2	18.3	43.01	45.67	49.03	51.56	53.78	55.92	58.12	60.53	63.44	67.62	71.20

+ 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: 1948-2000

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

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**NWS Call Sign:**

**Elevation: 178 Feet**

**Lat: 31°43N**

**Lon: 87°13W**

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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	#	.0	#	0	#	1971	8	#	1971	#	1971	8	#	1971	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Apr	.0	.0	0	0	.0	0	0	.0	0	0	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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.1	.0	0	0	2.3	1996	19	2.3	1996	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
Ann	.1	.0	N/A	N/A	2.3	Dec 1996	19	2.3	Dec 1996	#	Feb 1971	8	#	Feb 1971	.1	.1	.0	.0	.0	.0	.0	.0	.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

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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	4/22	4/15	4/11	4/07	4/03	3/30	3/26	3/21	3/15
32	4/13	4/05	3/30	3/25	3/20	3/15	3/10	3/04	2/24
28	3/25	3/18	3/12	3/08	3/03	2/27	2/22	2/17	2/10
24	3/05	2/27	2/22	2/18	2/15	2/11	2/07	2/02	1/27
20	2/27	2/18	2/12	2/06	2/01	1/27	1/21	1/14	1/03
16	2/06	1/29	1/22	1/15	1/05	0/00	0/00	0/00	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	10/15	10/20	10/24	10/27	10/30	11/01	11/04	11/08	11/13
32	10/26	11/01	11/05	11/09	11/13	11/16	11/20	11/24	12/01
28	11/08	11/15	11/20	11/25	11/29	12/03	12/08	12/13	12/20
24	11/18	11/29	12/06	12/12	12/18	12/24	12/30	1/06	1/16
20	11/29	12/10	12/18	12/25	1/01	1/08	1/15	1/24	2/07
16	12/21	1/01	1/09	1/19	1/31	0/00	0/00	0/00	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	235	226	219	214	209	204	198	192	183
32	274	261	252	244	237	230	222	213	200
28	303	292	284	277	270	263	256	248	237
24	334	320	313	307	302	297	292	286	278
20	>365	>365	355	341	331	322	313	302	289
16	>365	>365	>365	>365	>365	>365	>365	>365	347

\* 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	541	380	223	87	13	0	0	0	2	89	247	459	2041
60	405	254	127	27	1	0	0	0	0	35	148	325	1322
57	331	187	82	11	0	0	0	0	0	17	101	255	984
55	286	149	58	5	0	0	0	0	0	10	75	215	798
50	195	75	20	0	0	0	0	0	0	2	30	132	454
32	18	0	0	0	0	0	0	0	0	0	0	6	24

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	514	547	840	965	1238	1389	1511	1499	1326	1046	775	583	12233
55	69	52	185	280	525	699	798	786	636	343	160	80	4613
57	52	34	147	226	463	639	736	724	576	288	126	58	4069
60	33	16	99	152	371	549	643	631	486	213	83	35	3311
65	0	3	40	62	228	399	488	476	338	112	32	14	2192
70	0	0	13	15	113	251	333	321	198	45	11	1	1301

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	260	319	563	726	992	1157	1277	1254	1082	784	502	332	260	579	1142	1868	2860	4017	5294	6548	7630	8414	8916	9248
45	151	206	413	576	837	1007	1122	1099	932	629	362	210	151	357	770	1346	2183	3190	4312	5411	6343	6972	7334	7544
50	81	121	277	426	682	857	967	944	782	475	242	125	81	202	479	905	1587	2444	3411	4355	5137	5612	5854	5979
55	36	58	161	289	527	707	812	789	632	330	139	65	36	94	255	544	1071	1778	2590	3379	4011	4341	4480	4545
60	10	22	76	164	375	557	657	634	483	198	69	28	10	32	108	272	647	1204	1861	2495	2978	3176	3245	3273
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	169	216	359	473	675	791	868	865	737	525	334	214	169	385	744	1217	1892	2683	3551	4416	5153	5678	6012	6226

(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:  
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## 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.

- |   |   |
|---|---|
| <ol style="list-style-type: none"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## 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)