

Climatology of the United States

No. 20

1971-2000

Station: CHATOM, AL

COOP ID: 011566

Climate Division: AL 7

NWS Call Sign:

Elevation: 285 Feet Lat: 31° 28N Lon: 88° 15W

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	60.4	36.5	48.5	83+	1957	31	60.4	1974	1	1982	12	39.4	1977	526	0	.0	.0	25.9	.1	13.3	.0
Feb	65.1	39.3	52.2	88	1977	26	58.4	1990	8	1951	3	44.4	1978	363	5	.0	.0	25.9	.1	8.9	.0
Mar	72.7	45.3	59.0	92	1982	17	65.0	1997	14	1993	14	53.2	1993	218	32	.0	.1	30.5	@	3.5	.0
Apr	79.0	50.9	65.0	93+	1999	24	71.3	1999	27	1962	3	56.3	1993	91	89	.0	.7	30.0	.0	.7	.0
May	85.3	59.7	72.5	105	1964	21	76.8	2000	36	1960	13	67.7	1993	10	243	.1	6.8	31.0	.0	.0	.0
Jun	90.6	66.1	78.4	106	1954	28	83.0	1998	42	1956	3	74.1	1993	0	400	.5	17.9	30.0	.0	.0	.0
Jul	92.6	69.0	80.8	107+	1952	25	84.4	2000	55	1967	15	76.0	1992	0	489	1.5	24.7	31.0	.0	.0	.0
Aug	92.4	68.4	80.4	106	1954	30	85.5	1996	49	1992	30	75.2	1992	0	476	.6	24.1	31.0	.0	.0	.0
Sep	87.9	63.7	75.8	103+	1954	10	81.2	1980	36+	1984	30	70.4	1975	3	328	.1	14.4	30.0	.0	.0	.0
Oct	79.6	51.9	65.8	100	1954	5	70.4	1985	20	1952	30	59.6	1992	80	102	.0	1.8	31.0	.0	.4	.0
Nov	70.2	44.1	57.2	88	1971	1	64.3	1985	14	1984	29	49.8	1976	263	27	.0	.0	29.2	.0	5.5	.0
Dec	62.5	37.9	50.2	87	1951	7	60.5	1971	4	1983	25	40.9	1989	470	10	.0	.0	27.4	.1	11.8	.0
Ann	78.2	52.7	65.5	107+	Jul 1952	25	85.5	Aug 1996	1	Jan 1982	12	39.4	Jan 1977	2024	2201	2.8	90.5	352.9	.3	44.1	.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/normals/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1949-2001

(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: CHATOM, AL

COOP ID: 011566

Climate Division: AL 7

NWS Call Sign:

Elevation: 285 Feet Lat: 31°28N

Lon: 88°15W

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	6.87	6.07	6.10	1999	30	14.35	1990	.97	1981	8.3	7.0	4.0	2.3	1.82	2.47	3.47	4.34	5.20	6.10	7.10	8.28	9.83	12.26	14.53
Feb	5.84	5.50	6.48	1961	18	13.19	1983	1.27	2000	6.9	5.9	3.8	2.1	1.65	2.20	3.04	3.77	4.49	5.23	6.06	7.03	8.30	10.28	12.13
Mar	6.88	7.13	4.80	1990	16	13.88	1980	2.45	1978	7.8	6.9	4.3	2.5	3.07	3.68	4.53	5.23	5.87	6.52	7.22	8.02	9.03	10.55	11.93
Apr	5.22	4.84	6.75	1954	16	12.54	1979	.93	1987	6.0	5.4	3.1	1.7	1.06	1.54	2.30	3.00	3.71	4.46	5.32	6.34	7.70	9.88	11.94
May	5.44	4.88	4.45	1984	3	17.37	1991	1.03	1985	7.2	6.2	3.5	1.7	1.15	1.65	2.45	3.17	3.90	4.68	5.56	6.62	8.01	10.23	12.34
Jun	4.60	4.48	5.85	1978	8	8.82	1983	.34	1988	8.0	6.5	3.1	1.4	1.22	1.65	2.32	2.90	3.48	4.08	4.75	5.55	6.58	8.21	9.73
Jul	5.83	5.28	9.99	1956	8	12.80	1994	.35	1987	9.3	8.0	3.8	2.0	1.46	2.01	2.86	3.61	4.36	5.14	6.02	7.05	8.41	10.56	12.57
Aug	4.52	4.58	5.35	1995	4	8.82	1975	1.04	1972	8.0	6.5	3.0	1.4	1.46	1.89	2.52	3.06	3.58	4.12	4.71	5.40	6.29	7.67	8.95
Sep	4.77	3.59	10.30	1998	29	24.07	1998	.34	1997	6.8	5.6	2.8	1.5	.65	1.04	1.72	2.39	3.08	3.85	4.74	5.83	7.31	9.72	12.05
Oct	3.29	3.08	4.95	1993	30	11.79	1985	.00+	1987	4.1	3.7	2.2	1.3	.00	.44	1.07	1.60	2.12	2.70	3.35	4.11	5.16	6.85	8.48
Nov	5.12	4.49	4.69	1957	14	13.53	1992	.80	1981	6.9	6.1	3.2	2.2	1.26	1.74	2.49	3.15	3.81	4.50	5.28	6.20	7.41	9.32	11.11
Dec	5.54	5.11	6.13	1961	10	10.95	1971	1.50	1980	7.0	6.0	3.4	2.1	2.18	2.69	3.42	4.03	4.60	5.18	5.81	6.53	7.45	8.87	10.16
Ann	63.92	62.24	10.30	Sep 1998	29	24.07	Sep 1998	.00+	Oct 1987	86.3	73.8	40.2	22.2	47.18	50.47	54.66	57.83	60.62	63.32	66.09	69.15	72.84	78.18	82.77

+ 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: 1949-2001

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

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Station: CHATOM, AL

COOP ID: 011566

Climate Division: AL 7

NWS Call Sign:

Elevation: 285 Feet

Lat: 31°28N

Lon: 88°15W

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	#	1979	21	#+	1979	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	#	.0	0	0	#	1987	6	#+	1987	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.2	.0	#	0	5.0	1993	13	5.0	1993	5	1993	13	#	1993	@	@	@	@	.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	2.0	1993	23	2.0	1993	0	0	0	0	0	@	@	.0	.0	.0	.0	.0	.0	.0
Ann	.3	.0	N/A	N/A	5.0	Mar 1993	13	5.0	Mar 1993	5	Mar 1993	13	#	Mar 1993	@	@	@	@	.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

Complete documentation available from:

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NWS Call Sign:

Elevation: 285 Feet

Lat: 31°28N

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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	4/20	4/15	4/12	4/09	4/07	4/04	4/01	3/29	3/25
32	4/15	4/09	4/04	3/31	3/28	3/24	3/20	3/16	3/09
28	3/26	3/18	3/12	3/07	3/02	2/25	2/20	2/14	2/06
24	3/19	3/07	2/27	2/20	2/13	2/06	1/30	1/22	1/10
20	3/03	2/22	2/16	2/10	2/04	1/30	1/24	1/16	1/01
16	2/19	2/09	2/01	1/24	1/16	1/03	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	10/06	10/13	10/18	10/22	10/25	10/29	11/02	11/07	11/13
32	10/21	10/28	11/02	11/06	11/10	11/14	11/18	11/23	11/30
28	11/06	11/12	11/16	11/20	11/24	11/27	12/01	12/05	12/12
24	11/15	11/23	11/30	12/05	12/10	12/14	12/20	12/26	1/03
20	11/28	12/10	12/19	12/26	1/02	1/09	1/17	1/27	2/15
16	12/14	12/28	1/08	1/18	1/29	2/15	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	223	215	210	205	201	196	192	186	179
32	253	244	237	232	227	221	216	209	200
28	296	286	278	272	266	260	254	246	236
24	340	321	310	302	295	288	281	273	261
20	>365	>365	353	334	323	315	306	297	285
16	>365	>365	>365	>365	>365	>365	351	329	312

* 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:

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Climate Division: AL 7 NWS Call Sign: Elevation: 285 Feet Lat: 31°28N Lon: 88°15W

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	526	363	218	91	10	0	0	0	3	80	263	470	2024
60	393	236	118	33	1	0	0	0	0	29	159	332	1301
57	320	172	73	15	0	0	0	0	0	13	111	259	963
55	276	136	49	8	0	0	0	0	0	7	83	217	776
50	186	66	15	1	0	0	0	0	0	1	34	131	434
32	16	0	0	0	0	0	0	0	0	0	0	4	20

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	526	566	837	989	1256	1390	1512	1499	1314	1045	755	568	12257
55	73	58	173	307	543	700	799	786	624	339	148	67	4617
57	55	38	135	254	481	640	737	724	564	283	115	47	4073
60	34	18	87	182	389	550	644	631	474	206	74	27	3316
65	0	5	32	89	243	400	489	476	328	102	27	10	2201
70	0	0	8	31	122	256	334	322	194	37	8	0	1312

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	297	371	596	753	1014	1141	1270	1249	1084	804	507	341	297	668	1264	2017	3031	4172	5442	6691	7775	8579	9086	9427
45	186	254	444	603	859	991	1115	1094	934	649	370	220	186	440	884	1487	2346	3337	4452	5546	6480	7129	7499	7719
50	104	156	307	454	704	841	960	939	784	495	243	134	104	260	567	1021	1725	2566	3526	4465	5249	5744	5987	6121
55	53	82	187	315	549	691	805	784	634	346	144	73	53	135	322	637	1186	1877	2682	3466	4100	4446	4590	4663
60	21	34	93	187	394	541	650	629	484	208	73	32	21	55	148	335	729	1270	1920	2549	3033	3241	3314	3346
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	196	248	394	504	680	773	858	841	734	531	335	230	196	444	838	1342	2022	2795	3653	4494	5228	5759	6094	6324

(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.

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| <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 |
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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