

Climatology of the United States

No. 20

1971-2000

Station: GREENSBORO, AL

COOP ID: 013511

Climate Division: AL 6

NWS Call Sign:

Elevation: 220 Feet Lat: 32°42N Lon: 87°35W

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	56.1	35.3	45.7	83	1937	9	54.9	1974	-2	1985	21	35.3	1977	608	0	.0	.0	22.9	.4	13.1	@
Feb	61.4	38.5	50.0	87	1962	13	56.1	1990	7	1996	4	40.9	1978	423	1	.0	.0	23.6	.3	8.4	.0
Mar	69.9	44.4	57.2	91	1995	23	63.1	1997	10	1993	14	50.9	1971	263	21	.0	@	30.3	@	4.2	.0
Apr	77.1	50.6	63.9	95	1943	30	68.6	1981	28+	1992	3	59.9	1983	92	57	.0	.4	30.0	.0	.6	.0
May	83.9	59.8	71.9	98+	1996	24	76.5	1996	37+	1966	10	67.0	1976	15	228	.0	5.1	31.0	.0	.0	.0
Jun	90.4	67.4	78.9	105+	1954	29	82.7	1998	41	1966	1	74.2	1974	0	416	.4	18.4	30.0	.0	.0	.0
Jul	92.9	70.8	81.9	107+	1980	16	85.0	1993	56	1947	23	78.8	1971	0	523	2.0	24.6	31.0	.0	.0	.0
Aug	92.4	70.1	81.3	107	1943	26	85.8	1995	55	1956	22	78.4	1984	0	505	1.3	23.6	31.0	.0	.0	.0
Sep	87.4	64.8	76.1	104+	1954	5	80.6	1998	39	1967	30	72.3	1975	4	337	.1	12.0	30.0	.0	.0	.0
Oct	77.9	52.7	65.3	100+	1954	6	70.7	1984	27	1965	26	59.3	1987	100	110	.0	1.0	31.0	.0	.2	.0
Nov	67.6	43.8	55.7	98	1940	7	62.5	1985	12	1950	25	48.0	1976	295	15	.0	.0	29.2	.0	4.7	.0
Dec	59.2	37.8	48.5	82	1951	6	56.6	1984	2	1989	23	39.8	1989	521	9	.0	.0	25.7	.3	11.6	.0
Ann	76.4	53.0	64.7	107+	Jul 1980	16	85.8	Aug 1995	-2	Jan 1985	21	35.3	Jan 1977	2321	2222	3.8	85.1	345.7	1.0	42.8	@

+ 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: 1890-2001

(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: GREENSBORO, AL

COOP ID: 013511

Climate Division: AL 6

NWS Call Sign:

Elevation: 220 Feet Lat: 32°42N

Lon: 87°35W

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	6.12	5.62	5.58	1987	18	11.69	1972	1.31	1986	11.0	8.0	4.1	1.8	2.22	2.79	3.62	4.32	4.98	5.66	6.40	7.26	8.36	10.05	11.60
Feb	5.37	4.91	5.18	1961	21	12.72	1990	1.64	2000	8.1	6.2	3.8	1.9	1.64	2.15	2.91	3.56	4.20	4.86	5.58	6.44	7.54	9.26	10.85
Mar	6.51	5.65	7.30	1951	28	14.57	1976	2.37	1985	9.4	7.2	4.5	2.6	2.04	2.66	3.58	4.37	5.13	5.91	6.78	7.79	9.10	11.14	13.03
Apr	5.33	4.80	4.46	1956	5	12.37	1979	.59	1987	7.8	5.9	3.4	1.7	1.05	1.53	2.31	3.03	3.76	4.54	5.42	6.49	7.90	10.17	12.32
May	4.47	3.53	4.10	1930	18	10.30	1991	.81	1992	8.4	6.5	3.2	1.5	1.06	1.48	2.13	2.71	3.29	3.91	4.59	5.41	6.49	8.19	9.79
Jun	3.72	3.30	5.50	1970	3	10.25	1999	.66	1988	8.1	6.0	2.5	1.2	.80	1.14	1.69	2.18	2.68	3.21	3.80	4.52	5.46	6.97	8.39
Jul	5.38	5.08	3.90	1936	18	11.03	1985	1.19	2000	10.5	7.7	3.8	1.8	1.29	1.80	2.58	3.28	3.98	4.71	5.54	6.51	7.80	9.83	11.74
Aug	3.30	3.19	4.22	1961	31	7.01	1993	1.16	1989	7.4	5.3	2.4	1.1	1.00	1.31	1.78	2.19	2.58	2.98	3.43	3.96	4.64	5.70	6.68
Sep	3.93	3.68	4.79	1949	5	9.13	1974	.58	1984	7.5	5.5	2.4	1.1	.86	1.22	1.80	2.32	2.84	3.40	4.02	4.77	5.76	7.34	8.82
Oct	3.37	2.74	4.42	1959	21	10.00	1995	.20	1987	5.7	4.3	2.1	1.1	.38	.63	1.10	1.57	2.08	2.64	3.30	4.11	5.22	7.06	8.85
Nov	4.47	4.14	4.55	1929	12	14.70	1986	.75	1981	8.2	6.2	3.1	1.7	1.29	1.72	2.36	2.91	3.45	4.01	4.63	5.37	6.32	7.80	9.19
Dec	4.76	4.42	6.12	1942	28	13.36	1973	.37	1980	9.4	6.7	3.2	1.7	1.44	1.90	2.57	3.15	3.72	4.30	4.95	5.71	6.69	8.22	9.63
Ann	56.73	55.61	7.30	Mar 1951	28	14.70	Nov 1986	.20	Oct 1987	101.5	75.5	38.5	19.2	44.26	46.76	49.92	52.28	54.36	56.35	58.39	60.62	63.31	67.16	70.46

+ 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: 1890-2001

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

Complete documentation available from:
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Station: GREENSBORO, AL

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Climate Division: AL 6

NWS Call Sign:

Elevation: 220 Feet

Lat: 32°42N

Lon: 87°35W

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	.0	#	0	2.0	1987	22	3.2	1992	2	1992	18	#+	1996	.2	.1	.0	.0	.0	.1	.0	.0	.0
Feb	.0	.0	#	0	.5	1984	28	.5	1984	#	1999	23	#	1999	@	.0	.0	.0	.0	.0	.0	.0	.0
Mar	#	.0	#	0	#	1996	7	#+	1996	#	1996	7	#	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Apr	.1	.0	0	0	3.0	1987	3	3.0	1987	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	#	.0	0	0	#	1992	6	#+	1992	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.4	.0	N/A	N/A	3.0	Apr 1987	3	3.2	Jan 1992	2	Jan 1992	18	#+	Feb 1999	.2	.1	@	.0	.0	.1	.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

Complete documentation available from:

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NWS Call Sign:

Elevation: 220 Feet

Lat: 32° 42N

Lon: 87° 35W

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	4/17	4/14	4/10	4/08	4/05	4/01	3/29	3/24
32	4/11	4/04	3/30	3/26	3/23	3/19	3/15	3/10	3/04
28	3/28	3/20	3/14	3/09	3/04	2/27	2/22	2/17	2/08
24	3/17	3/08	3/02	2/24	2/19	2/13	2/08	2/01	1/23
20	3/05	2/24	2/17	2/11	2/05	1/30	1/23	1/14	0/00
16	2/19	2/10	2/03	1/27	1/20	1/10	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	10/16	10/20	10/24	10/26	10/29	11/01	11/03	11/07	11/11
32	10/29	11/03	11/07	11/10	11/13	11/16	11/19	11/22	11/28
28	11/02	11/10	11/15	11/20	11/25	11/29	12/04	12/10	12/18
24	11/18	11/27	12/03	12/09	12/14	12/19	12/25	1/01	1/10
20	11/30	12/10	12/19	12/25	1/01	1/08	1/16	1/27	0/00
16	12/16	12/29	1/08	1/18	1/29	2/13	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	216	212	208	204	200	196	191	185
32	259	251	244	239	234	229	224	218	209
28	302	289	280	272	265	258	250	241	228
24	331	317	309	302	296	289	282	275	264
20	>365	>365	357	338	327	317	309	299	287
16	>365	>365	>365	>365	>365	>365	346	333	319

* 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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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	608	423	263	92	15	0	0	0	4	100	295	521	2321
60	465	293	152	30	2	0	0	0	0	42	177	380	1541
57	385	222	101	11	0	0	0	0	0	21	123	303	1166
55	335	180	73	5	0	0	0	0	0	13	92	257	955
50	230	97	26	0	0	0	0	0	0	3	37	164	557
32	23	1	0	0	0	0	0	0	0	0	0	9	33

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	447	503	781	955	1236	1406	1546	1528	1324	1032	710	520	11988
55	46	38	141	271	523	716	833	815	634	332	112	55	4516
57	34	24	107	217	461	656	771	753	574	278	83	39	3997
60	21	11	64	145	370	566	678	660	484	206	47	22	3274
65	0	1	21	57	228	416	523	505	337	110	15	9	2222
70	0	0	5	13	115	268	368	350	202	46	2	0	1369

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	238	324	545	726	998	1176	1310	1289	1089	795	484	303	238	562	1107	1833	2831	4007	5317	6606	7695	8490	8974	9277
45	139	212	397	577	843	1026	1155	1134	939	640	341	187	139	351	748	1325	2168	3194	4349	5483	6422	7062	7403	7590
50	68	123	259	428	688	876	1000	979	789	485	218	106	68	191	450	878	1566	2442	3442	4421	5210	5695	5913	6019
55	29	60	153	285	533	726	845	824	639	335	124	55	29	89	242	527	1060	1786	2631	3455	4094	4429	4553	4608
60	9	26	75	165	378	576	690	669	490	204	58	23	9	35	110	275	653	1229	1919	2588	3078	3282	3340	3363
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	138	200	349	473	673	802	890	871	741	522	301	184	138	338	687	1160	1833	2635	3525	4396	5137	5659	5960	6144

(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.
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