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

COOP ID: 017304

Station: SCOTTSBORO, AL

Climate Division: AL 2

Lon: 86°03W

Elevation: 615 Feet Lat: 34°48N

									ŗ	Tempe	eratui	re (°F)									
	Mea	n (1)						Extr	emes				Days (1) emp 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	49.8	28.3	39.1	81	1949	11	48.5	1974	-10	1940	26	26.8	1977	805	0	.0	.0	15.9	1.9	20.2	.3
Feb	54.9	31.0	43.0	82	1989	15	49.6	1990	-8	1966	1	35.0	1980	618	0	.0	.0	18.8	.8	16.8	.0
Mar	63.8	38.3	51.1	90	1929	25	59.3	1989	8	1993	14	44.8	1971	441	8	.0	.0	27.3	.1	9.3	.0
Apr	72.3	45.1	58.7	92	1943	30	64.1	1981	23+	1992	3	54.7	1983	207	17	.0	.1	29.7	.0	2.5	.0
May	80.0	54.5	67.3	97	1941	29	73.7	1987	32	1971	4	62.1	1997	66	135	.0	1.8	31.0	.0	.1	.0
Jun	86.9	62.9	74.9	107+	1931	29	77.6+	1998	39	1956	3	71.1	1974	2	299	.2	9.9	30.0	.0	.0	.0
Jul	90.3	66.8	78.6	109	1930	13	81.8	1993	49+	1963	10	76.0+	1984	0	421	.6	18.4	31.0	.0	.0	.0
Aug	89.9	65.4	77.7	105+	1954	16	81.4	1983	46	1982	23	74.4	1992	0	392	.5	16.9	31.0	.0	.0	.0
Sep	84.3	58.6	71.5	105+	1954	6	76.1	1978	36+	1940	27	67.0	1975	21	215	.0	6.9	30.0	.0	.0	.0
Oct	74.3	45.6	60.0	96	1954	5	66.4	1984	20	1968	26	52.9	1988	207	50	.0	.3	30.9	.0	2.8	.0
Nov	63.2	37.1	50.2	85+	2000	2	58.8	1985	1	1950	25	41.5	1976	450	4	.0	.0	27.0	@	11.6	.0
Dec	53.6	30.5	42.1	80	1951	7	50.5	1971	-1	1983	25	32.7	1989	712	0	.0	.0	20.7	.8	18.8	.1
Ann	71.9	47.0	59.5	109	Jul 1930	13	81.8	Jul 1993	-10	Jan 1940	26	26.8	Jan 1977	3529	1541	1.3	54.3	323.3	3.6	82.1	.4

⁺ Also occurred on an earlier date(s)

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

NWS Call Sign:

Issue Date: February 2004 056-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1927-2001
- (3) Derived from 1971-2000 serially complete daily data

[@] Denotes mean number of days greater than 0 but less than .05

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

COOP ID: 017304

Station: SCOTTSBORO, AL

Climate Division: AL 2 NWS Call Sign: Elevation: 615 Feet Lat: 34°48N Lon: 86°03W

										Pı	recipi	tation	(incl	nes)												
	Me	ans/	P	recip	itatio	on Total						ays (3)	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												
	Medi	ans(1)				Extremes	3			п	aily Pre	сірітатіо	n	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	6.01	6.23	4.12	1937	2	10.92	1996	.84	1986	10.5	8.3	4.4	2.1	2.08	2.65	3.48	4.17	4.84	5.53	6.28	7.15	8.27	10.01	11.60		
Feb	5.22	4.69	4.10	1995	16	9.60	1990	.77	1978	8.6	6.9	3.7	2.0	1.81	2.30	3.02	3.62	4.20	4.80	5.45	6.20	7.17	8.67	10.06		
Mar	6.52	5.44	4.88	1973	16	16.48	1980	2.28	1982	10.6	8.6	4.4	2.0	2.18	2.80	3.71	4.47	5.21	5.97	6.81	7.78	9.03	10.96	12.74		
Apr	4.52	4.36	3.72	1963	29	9.57	2000	1.22	1976	8.5	6.9	3.1	1.3	1.53	1.96	2.58	3.11	3.62	4.14	4.71	5.38	6.23	7.56	8.78		
May	5.02	4.81	5.00	1997	3	9.81	1983	1.27	1992	8.9	6.9	3.6	1.5	1.85	2.32	3.00	3.56	4.10	4.65	5.25	5.95	6.84	8.20	9.46		
Jun	4.38	3.89	3.72	1941	29	9.08	1989	.65	1988	8.9	7.1	2.8	1.3	1.38	1.80	2.41	2.94	3.45	3.98	4.56	5.23	6.11	7.47	8.74		
Jul	4.53	4.85	3.43	1941	22	7.59	1984	1.32	1980	8.6	6.9	3.2	1.3	1.82	2.23	2.82	3.31	3.77	4.24	4.74	5.32	6.06	7.19	8.22		
Aug	3.43	2.94	4.39	2001	11	7.70	1985	.74	1999	6.7	4.7	1.9	.9	1.14	1.47	1.94	2.35	2.74	3.14	3.57	4.08	4.74	5.76	6.69		
Sep	4.81	4.55	4.92	1979	28	10.99	1977	.95	1984	7.6	6.1	3.1	1.6	.89	1.32	2.02	2.68	3.34	4.06	4.88	5.86	7.17	9.28	11.29		
Oct	3.61	2.75	4.70	1997	26	8.06	1984	.36	1991	6.3	5.1	2.4	1.1	.63	.95	1.48	1.97	2.48	3.02	3.65	4.40	5.41	7.04	8.59		
Nov	4.98	4.42	4.90	1927	17	11.43	1977	1.52	1971	8.5	6.6	3.1	1.9	1.87	2.34	3.01	3.56	4.09	4.63	5.21	5.89	6.75	8.08	9.30		
Dec	5.65	4.60	6.80	1990	23	14.73	1990	1.34	1980	9.6	8.0	3.9	1.6	1.75	2.29	3.08	3.77	4.43	5.12	5.87	6.76	7.91	9.69	11.34		
Ann	58.68	56.99	6.80	Dec 1990	23	16.48	Mar 1980	.36	Oct 1991	103.3	82.1	39.6	18.6	44.40	47.23	50.82	53.51	55.89	58.18	60.53	63.12	66.23	70.71	74.56		

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

[#] 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: 1927-2001

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

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

COOP ID: 017304

Station: SCOTTSBORO, AL

Climate Division: AL 2 NWS Call Sign: Elevation: 615 Feet Lat: 34°48N Lon: 86°03W

										Snov	w (inc	hes)											
						Sn	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ians (1)	1					Extre	mes (2)							ow Fa		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	1.0	.0	0	0	9.0	1988	6	9.0	1988	0	0	0	0	0	.2	.2	.1	.1	.0	.0	.0	.0	.0
Feb	.2	.0	#	0	2.0	1995	7	2.0	1995	1	1996	3	#	1996	.1	.1	.0	.0	.0	@	.0	.0	.0
Mar	1.0	.0	0	0	12.0	1993	13	12.0	1993	0	0	0	0	0	.2	.1	.1	.1	.1	.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	#	1995	5	#	1995	#	1995	5	#	1995	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	#	.0	#	0	#	1989	25	#+	1989	#	1996	20	#	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	2.2	.0	N/A	N/A	12.0	Mar 1993	13	12.0	Mar 1993	1	Feb 1996	3	#+	Dec 1996	.5	.4	.2	.2	.1	@	.0	.0	.0

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

[@] 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

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

COOP ID: 017304

Lon: 86°03W

Lat: 34°48N

Station: SCOTTSBORO, AL

Climate Division: AL 2 **NWS Call Sign:**

> Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 5/07 5/02 4/28 4/24 4/21 4/18 4/15 4/11 4/05 32 4/07 4/26 4/21 4/16 4/13 4/10 4/03 3/30 3/24 28 4/11 4/05 4/01 3/29 3/26 3/22 3/19 3/15 3/09 3/25 2/14 24 3/18 3/13 3/09 3/05 3/01 2/25 2/20 20 3/14 3/07 3/01 2/25 2/20 2/16 2/11 2/05 1/29 2/25 16 3/06 2/18 2/12 2/06 1/31 1/25 1/16 1/01 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 36 10/04 10/08 10/11 10/14 10/16 10/19 10/21 10/24 10/29 32 10/07 10/13 10/17 10/20 10/23 10/27 10/30 11/03 11/08 28 10/19 10/25 10/29 11/02 11/05 11/09 11/12 11/17 11/23 24 11/06 11/11 11/14 11/18 11/20 11/23 11/26 11/30 12/05 20 11/12 11/23 11/30 12/07 12/13 12/19 12/25 1/02 1/12 11/26 12/16 12/21 12/26 1/22 16 12/05 12/11 1/01 1/09 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 186 181 177 173 36 199 191 168 163 156 32 218 210 205 200 196 192 187 182 174 28 246 238 233 228 224 220 215 209 202 24 280 273 268 263 259 255 251 246 239 334 319 279 270 257 20 309 301 294 286 354 335

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

>365

16

Complete documentation available from:

300

Elevation: 615 Feet

291

279

316

308

324

^{*} Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

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

COOP ID: 017304

Station: SCOTTSBORO, AL

Climate Division: AL 2 NWS Call Sign: Elevation: 615 Feet Lat: 34°48N Lon: 86°03W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	805	618	441	207	66	2	0	0	21	207	450	712	3529		
60	653	479	304	102	21	0	0	0	5	115	315	565	2559		
57	567	399	233	59	9	0	0	0	2	74	242	478	2063		
55	509	348	192	38	5	0	0	0	1	53	199	422	1767		
50	373	228	108	9	0	0	0	0	0	19	112	295	1144		
32	61	13	2	0	0	0	0	0	0	0	2	35	113		

Base	Cooling Degree Days (1)														
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
32	279	319	592	800	1092	1287	1444	1415	1184	866	546	347	10171		
55	14	10	70	147	384	597	731	702	494	206	53	20	3428		
57	10	5	49	109	326	537	669	640	435	165	36	14	2995		
60	3	1	27	62	245	447	576	547	348	113	19	8	2396		
65	0	0	8	17	135	299	421	392	215	50	4	0	1541		
70	0	0	0	2	59	162	266	242	108	17	0	0	856		

										Gro	wing	Degre	e Uni	ts (2)														
Base	Growing Degree Units (Monthly)														Growing Degree Units (Accumulated Monthly)													
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec .													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
40	111	177	373	569	839	1055	1205	1175	953	623	329	162	111	288	661	1230	2069	3124	4329	5504	6457	7080	7409	7571				
45	56	99	243	425	684	905	1050	1020	803	471	213	83	56	155	398	823	1507	2412	3462	4482	5285	5756	5969	6052				
50	26	47	139	289	529	755	895	865	653	322	123	43	26	73	212	501	1030	1785	2680	3545	4198	4520	4643	4686				
55	4	19	69	171	377	605	740	710	503	198	57	17	4	23	92	263	640	1245	1985	2695	3198	3396	3453	3470				
60	0	1	29	88	242	456	585	555	359	102	20	2	0	1	30	118	360	816	1401	1956	2315	2417	2437	2439				
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)						
50/86	76	127	246	372	550	718	822	798	632	419	226	110	76	203	449	821	1371	2089	2911	3709	4341	4760	4986	5096				

(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

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

- c. Snow Tables
 - 1. Snow Climatology
 - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

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