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: 011694

Station: CLANTON, AL

Climate Division: AL 3

NWS Call Sign:

Elevation: 610 Feet Lat: 32°49N Lon: 86°39W

	nth Daily Max Mean Min Mean Min Highest Daily(2) Year Mean Lowest Daily(2) Year Day Month(1) Mean Year Day Month(1) Mean Year Day Month(1) Mean Year Mean Heating Mean Cooling Series >=																				
	Mea	n (1)						Extr	emes						•		Mean	Numb	er of I	Days (3)	
Month		Daily Max Min Mean Highest Daily(2) Year Day Month(1) Mean Vear Daily(2) Year Day Month(1) Mean Paily(2) Year Day Month(1) Mean Mean Daily(2) Year Day Month(1) Mean Daily(2) Year Day Month(1) Mean Daily(2) Year Day Month(1) Mean Daily(2) Mean Day Mean				Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0						
Jan	53.5	32.0	42.8	84	1949	12	53.5	1974	-4	1985	21	32.1	1977	692	0	.0	.0	20.6	.8	17.7	.1
Feb	58.6	34.6	46.6	84	1962	14	53.1	1990	5	1996	5	37.7	1978	515	0	.0	.0	21.7	.3	13.0	.0
Mar	67.2	41.8	54.5	93	1929	25	60.5	1997	10	1993	14	49.4	1971	337	13	.0	.0	29.3	.1	5.5	.0
Apr	74.7	47.9	61.3	93+	1943	30	66.3	1999	26	1940	13	56.8	1983	143	31	.0	.1	29.9	.0	.9	.0
May	81.3	57.1	69.2	99+	1945	31	73.0	2000	33	1960	13	63.8	1976	32	163	.0	2.2	31.0	.0	.0	.0
Jun	87.3	64.7	76.0	106	1936	19	79.5	1981	42	1956	3	72.6	1974	0	331	.2	11.5	30.0	.0	.0	.0
Jul	89.8	68.6	79.2	108+	1952	26	81.8	1995	53	1967	15	76.2	1975	0	440	.6	18.8	31.0	.0	.0	.0
Aug	89.1	67.4	78.3	105	1935	8	83.0	1995	51	1957	24	75.2	1992	0	410	.7	17.9	31.0	.0	.0	.0
Sep	84.3	61.6	73.0	101+	1980	16	77.0	1972	36	1967	30	69.4	1975	9	248	.1	7.8	30.0	.0	.0	.0
Oct	74.9	49.1	62.0	98	1954	6	68.2	1984	24+	1957	29	56.5	1987	157	64	.0	.4	30.9	.0	.5	.0
Nov	65.2	40.7	53.0	88	1935	1	60.7	1985	8	1950	25	44.8	1976	369	9	.0	.0	28.4	.0	7.4	.0
Dec	56.1	34.3	45.2	80+	1978	9	55.0	1971	2	1962	13	36.3	1989	613	1	.0	.0	23.6	.4	15.2	.0
Ann	73.5	50.0	61.8	108+	Jul 1952	26	83.0	Aug 1995	-4	Jan 1985	21	32.1	Jan 1977	2867	1710	1.6	58.7	337.4	1.6	60.2	.1

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 018-A

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

⁽¹⁾ From the 1971-2000 Monthly Normals

⁽²⁾ Derived from station's available digital record: 1920-2001

⁽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: 011694

Station: CLANTON, AL

Climate Division: AL 3 NWS Call Sign: Elevation: 610 Feet Lat: 32°49N Lon: 86°39W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total						ays (3	3)	Proba	ability th		nonthly/	annual j	precipita ated an	babilit ation wi nount vs Proba	ll be equ		less tha	an the
	Medi	ans(1)				Extremes	\$			ь	aily Pre	стрпацю	n		Th	ese value	s were de	termined	from the	incomplet	e gamma	distribut	ion	
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	5.98	6.36	4.64	1936	19	13.48	1972	1.15	1986	9.8	8.1	4.2	1.7	2.11	2.68	3.49	4.18	4.84	5.51	6.25	7.10	8.20	9.88	11.44
Feb	5.48	5.39	4.87	1936	4	10.22	1998	2.27	2000	8.0	6.9	3.8	2.0	2.18	2.68	3.40	3.99	4.55	5.13	5.74	6.45	7.36	8.74	10.00
Mar	6.96	6.04	6.85	1979	4	15.88	1976	2.27	1985	9.0	7.8	4.3	2.5	2.09	2.75	3.74	4.59	5.42	6.29	7.24	8.35	9.80	12.05	14.15
Apr	5.43	4.36	9.00	1938	8	22.00	1979	.12	1986	6.5	5.6	3.2	1.8	.76	1.21	1.99	2.75	3.53	4.40	5.41	6.64	8.30	11.01	13.63
May	4.36	3.87	3.75	1946	20	13.26	1991	.57	1977	8.6	7.2	2.7	1.2	1.10	1.51	2.15	2.71	3.26	3.85	4.50	5.27	6.29	7.88	9.38
Jun	4.16	3.76	7.82	1991	26	11.82	1991	.69	1988	8.6	7.1	3.0	1.4	1.21	1.61	2.20	2.71	3.22	3.74	4.31	4.99	5.87	7.25	8.53
Jul	5.76	5.57	7.14	1940	4	13.97	1971	1.29	1995	10.6	8.6	3.7	1.6	1.45	1.99	2.83	3.58	4.31	5.08	5.94	6.97	8.31	10.42	12.40
Aug	3.73	3.36	6.75	1970	26	7.98	1974	.45	1990	7.9	6.2	2.1	1.1	.76	1.09	1.64	2.14	2.65	3.19	3.80	4.53	5.50	7.06	8.53
Sep	4.66	3.66	5.20	1979	28	10.30	1979	.37	1990	6.1	5.2	2.5	1.7	.76	1.16	1.84	2.48	3.14	3.86	4.69	5.69	7.04	9.22	11.31
Oct	3.14	3.18	6.30	1995	5	10.32	1995	.00	1978	5.2	4.1	2.1	1.0	.37	.75	1.28	1.73	2.19	2.67	3.22	3.88	4.75	6.14	7.46
Nov	4.96	4.31	5.50	1929	12	17.37	1986	.80	1981	7.4	6.3	3.2	1.6	1.22	1.69	2.41	3.06	3.69	4.36	5.11	6.01	7.17	9.02	10.75
Dec	4.96	4.90	5.10	1961	12	10.03	1983	2.20	1980	8.5	6.9	3.4	1.4	2.25	2.68	3.29	3.78	4.24	4.71	5.20	5.77	6.48	7.56	8.53
Ann	59.58	57.40	9.00	Apr 1938	8	22.00	Apr 1979	.00	Oct 1978	96.2	80.0	38.2	19.0	42.95	46.19	50.33	53.47	56.25	58.94	61.71	64.77	68.47	73.84	78.47

⁺ 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: 1920-2001

⁽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: 011694

Station: CLANTON, AL

Climate Division: AL 3 NWS Call Sign:

Elevation: 610 Feet Lat: 32°49N Lon: 86°39W

		Fall lean Fall Median Depth Median Depth Median Daily Snow Fall Year Fall Day Snow Fall Year Fall Day Snow Depth Snow Depth Year Snow Depth Snow Depth Year Snow Depth Snow Depth Year Snow Depth Snow Depth Snow Depth Year Snow Depth Snow Depth Snow Depth Snow Depth Year Snow Depth Sno																					
		Same Same															Mea	n Nu	mber	of Da	ys (1)		
	Mean	s/Medi	ans (1))					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	.4	.0	#	0	4.0	1977	31	6.0	1977	4	1977	31	#	1977	.2	.2	.1	.0	.0	@	@	.0	.0
Feb	#	.0	#	0	#	1985	11	#+	1985	#	1971	13	#	1971	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.8	.0	#	0	10.0	1993	13	10.0	1993	3	1983	24	#	1983	.2	.2	.1	.1	.1	@	@	.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	.0	.0	0	0	.5	1980	27	.5	1980	0	0	0	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Ann	1.2	.0	N/A	N/A	10.0	Mar 1993	13	10.0	Mar 1993	4	Jan 1977	31	#+	Mar 1983	.5	.4	.2	.1	.1	@	@	.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: 011694

Station: CLANTON, AL

Climate Division: AL 3

NWS Call Sign:

Elevation: 610 Feet

Lat: 32°49N Lon: 86°39W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month	(Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	an indicated	(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	4/27	4/21	4/17	4/14	4/11	4/08	4/04	3/31	3/26
32	4/14	4/09	4/06	4/03	3/31	3/28	3/25	3/21	3/16
28	3/29	3/22	3/17	3/12	3/08	3/04	2/28	2/23	2/16
24	3/10	3/03	2/26	2/22	2/18	2/14	2/10	2/05	1/30
20	3/06	2/26	2/20	2/14	2/10	2/05	1/30	1/24	1/13
16	2/26	2/16	2/08	2/02	1/26	1/19	1/10	12/25	0/00
			Fa	l Freeze Da	tes (Month/D	Day)			
Tomp (F)		Pro	bability of e	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/06	10/12	10/15	10/18	10/21	10/24	10/28	10/31	11/06
32	10/23	10/28	10/31	11/03	11/06	11/09	11/12	11/16	11/20
28	11/04	11/10	11/14	11/17	11/21	11/24	11/27	12/02	12/07
24	11/17	11/26	12/03	12/09	12/14	12/19	12/25	12/31	1/10
20	11/27	12/08	12/17	12/24	12/31	1/07	1/15	1/24	2/07
16	12/11	12/23	12/31	1/08	1/15	1/23	2/02	2/21	0/00
<u>.</u>				Freeze F	ree Period				
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	212	205	201	197	193	189	185	181	174
32	240	233	228	224	220	216	212	207	200
28	281	273	267	262	257	252	247	241	232
24	323	313	306	301	296	291	286	280	272
20	>365	358	338	327	319	311	302	293	281
16	>365	>365	>365	>365	>365	345	333	321	307

^{*} 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.

Complete documentation available from:

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: 011694

Station: CLANTON, AL

Climate Division: AL 3 NWS Call Sign: Elevation: 610 Feet Lat: 32°49N Lon: 86°39W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	692	515	337	143	32	0	0	0	9	157	369	613	2867
60	548	377	210	59	7	0	0	0	1	77	239	471	1989
57	463	300	150	29	2	0	0	0	0	45	175	389	1553
55	409	251	116	16	0	0	0	0	0	29	138	337	1296
50	289	147	51	3	0	0	0	0	0	8	67	226	791
32	38	3	0	0	0	0	0	0	0	0	0	20	61

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	372	412	699	878	1154	1320	1463	1433	1229	931	629	431	10951
55	30	16	102	204	441	630	750	720	539	247	78	34	3791
57	21	10	74	157	381	570	688	658	479	201	54	24	3317
60	13	3	41	97	292	480	595	565	390	140	29	14	2659
65	0	0	13	31	163	331	440	410	248	64	9	1	1710
70	0	0	2	6	71	187	285	256	127	22	0	0	956

										Gro	wing	Degre	e Uni	ts (2)										
Base														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	100 100 100 100 100 100 100 100 100 100													432	905	1559	2480	3578	4815	6027	7041	7750	8168	8404
45	5 98 152 333 505 766 948 1082 1057 864 554 284												98	250	583	1088	1854	2802	3884	4941	5805	6359	6643	6783
50	98 152 333 505 766 948 1082 1057 864 554 284 1 47 82 211 361 611 798 927 902 714 403 175												47	129	340	701	1312	2110	3037	3939	4653	5056	5231	5307
55	22	36	114	228	457	648	772	747	564	262	95	36	22	58	172	400	857	1505	2277	3024	3588	3850	3945	3981
60	0	12	51	121	305	498	617	592	414	145	41	13	0	12	63	184	489	987	1604	2196	2610	2755	2796	2809
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)			
50/86	0/86 111 166 303 420 613 753 849 830 685 462 277 15											151	111	277	580	1000	1613	2366	3215	4045	4730	5192	5469	5620

(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