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: 092783

Station: DOUGLAS, GA

Climate Division: GA 8

NWS Call Sign:

Elevation: 225 Feet Lat: 31°31N Lon: 82°51W

	Max VIII Daily(2) Mean Daily(2) Mean Mean Mean Mean Mean 100 90 50 32 32 Jan 60.0 36.2 48.1 84 1950 28 62.8 1974 1+ 1985 21 38.2 1977 539 0 .0 .0 26.1 .1 12.1 Feb 64.1 38.4 51.3 87 1989 17 56.7 1990 6 1966 1 41.1 1978 392 6 .0 .0 25.7 .1 8.3 Mar 72.1 45.2 58.7 90+ 1974 11 65.9 1997 18+ 1980 4 53.7 1971 227 28 .0 @ 30.6 @ 2.4																				
	Mea	n (1)						Extr	emes						•		Mean	Numb	er of I	Days (3)	
Month		Daily Mean Highest Daily(2) Year Day Month(1) Year Daily(2) Year Mean Year Daily(2) Year				Day	Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0					
Jan	60.0	36.2	48.1	84	1950	28	62.8	1974	1+	1985	21	38.2	1977	539	0	.0	.0	26.1	.1	12.1	.0
Feb	64.1	38.4	51.3	87	1989	17	56.7	1990	6	1966	1	41.1	1978	392	6	.0	.0	25.7	.1	8.3	.0
Mar	72.1	45.2	58.7	90+	1974	11	65.9	1997	18+	1980	4	53.7	1971	227	28	.0	@	30.6	@	2.4	.0
Apr	79.0	51.0	65.0	97	1986	27	70.9	1999	29	1987	1	59.7	1993	78	78	.0	1.9	30.0	.0	.1	.0
May	86.0	59.3	72.7	99+	2001	19	77.2	1998	40	1958	8	68.7+	1992	8	245	.0	9.6	31.0	.0	.0	.0
Jun	91.0	66.2	78.6	104+	1985	5	83.9	1998	51+	1991	8	75.3	1972	0	408	1.1	21.2	30.0	.0	.0	.0
Jul	92.8	69.7	81.3	106	1986	20	84.4	1998	57	1967	16	78.0	1975	0	504	1.4	26.7	31.0	.0	.0	.0
Aug	91.4	68.7	80.1	105	1999	1	84.1	1999	56	1986	29	77.3	1992	0	468	.7	24.6	31.0	.0	.0	.0
Sep	87.7	64.5	76.1	103	1990	9	79.4	1980	37	1967	30	73.2	1976	1	333	.1	15.1	30.0	.0	.0	.0
Oct	79.2	53.2	66.2	97	1951	5	72.5	1985	30	1952	30	59.1	1987	94	131	.0	1.7	31.0	.0	.1	.0
Nov	70.7	44.7	57.7	88+	2000	8	66.6	1985	16	1950	25	49.8	1976	257	38	.0	.0	29.8	.0	3.9	.0
Dec	62.3	38.0	50.2	83+	2001	6	59.9	1971	8+	1962	14	41.2	1989	472	11	.0	.0	27.4	.1	10.2	.0
Ann	78.0	52.9	65.5	106	Jul 1986	20	84.4	Jul 1998	1+	Jan 1985	21	38.2	Jan 1977	2068	2250	3.3	100.8	353.6	.3	37.1	.0

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 029-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1948-2001
- (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: 092783

Station: DOUGLAS, GA

Climate Division: GA 8 NWS Call Sign: Elevation: 225 Feet Lat: 31°31N Lon: 82°51W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total						ays (3)	Proba	bility th		nonthly/	annual j	precipita ated am	ount	ies (1)		less tha	in the
	Medi	ans(1)				Extremes	8			ս	aily Pre	cipitatio	n		Th	ese value	s were det	ermined	from the i	incomplet	te gamma	distributi	on	ļ
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	5.17	4.78	4.26	1975	13	17.40	1991	.94	1989	8.1	7.7	3.3	1.7	1.48	1.97	2.71	3.36	3.98	4.64	5.36	6.22	7.32	9.06	10.67
Feb	4.19	4.22	8.08	1961	19	8.45	1986	1.00	1991	6.4	5.8	2.9	1.5	1.10	1.50	2.10	2.64	3.16	3.72	4.33	5.06	6.01	7.50	8.90
Mar	4.96	4.33	5.72	1959	6	11.57	1980	1.24	1979	7.6	7.1	3.4	1.4	1.44	1.91	2.61	3.23	3.83	4.45	5.14	5.95	7.01	8.66	10.19
Apr	3.46	2.89	4.28	1984	22	10.26	1973	.37	1986	5.3	4.8	2.2	1.0	.43	.71	1.20	1.68	2.19	2.76	3.42	4.23	5.34	7.15	8.91
May	3.26	2.99	8.00	1969	19	12.11	1976	.41	2000	6.6	5.8	2.3	.9	.70	1.00	1.47	1.91	2.34	2.81	3.33	3.96	4.79	6.11	7.36
Jun	4.96	4.67	4.11	1958	21	15.09	1973	1.18	1979	8.5	7.7	3.3	1.5	1.42	1.89	2.60	3.22	3.82	4.45	5.14	5.96	7.02	8.69	10.23
Jul	6.12	5.21	3.95	1992	21	13.36	1975	1.39	1980	10.2	9.4	4.3	2.1	2.25	2.82	3.65	4.34	5.00	5.67	6.40	7.25	8.33	10.00	11.53
Aug	5.94	5.76	4.64	1949	28	12.05	1985	2.14	1984	9.8	9.1	4.2	1.9	2.63	3.16	3.90	4.50	5.06	5.62	6.23	6.93	7.80	9.13	10.33
Sep	4.19	3.86	3.98	2001	1	9.48	2000	.08	1981	7.0	6.1	2.6	1.4	.41	.71	1.28	1.87	2.50	3.21	4.06	5.11	6.56	8.96	11.32
Oct	3.03	2.05	4.45	1996	8	11.15	1994	.00	1987	4.4	4.1	1.6	.8	.08	.29	.70	1.14	1.62	2.18	2.85	3.70	4.89	6.88	8.86
Nov	2.82	2.61	2.35	1997	13	8.29	1997	.33	1998	5.1	4.6	2.2	.8	.50	.75	1.16	1.54	1.94	2.37	2.85	3.44	4.23	5.49	6.70
Dec	3.93	3.93	6.20	1964	4	8.89	1997	.73	1984	6.2	5.8	2.6	1.4	1.12	1.50	2.06	2.55	3.03	3.53	4.08	4.73	5.58	6.90	8.13
Ann	52.03	50.52	8.08	Feb 1961	19	17.40	Jan 1991	.00	Oct 1987	85.2	78.0	34.9	16.4	38.97	41.55	44.83	47.30	49.48	51.58	53.74	56.11	58.97	63.10	66.65

⁺ 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: 1948-2001

⁽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: 092783

Station: DOUGLAS, GA

Climate Division: GA 8 NWS Call Sign:

Elevation: 225 Feet Lat: 31°31N Lon: 82°51W

		Fall Depth Depth Snow Year																					
						Sno	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Depth	Depth	Daily	Year	Day	Monthly	Year	Daily	Year	Day	Monthly Mean	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	#	.0	#	0	#	2000	28	#+	2000	#	2000	28	#	2000	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.1	.0	0	0	3.0	1973	10	3.0	1973	3	1973	10	1	1973	@	@	@	.0	.0	.0	.0	.0	.0
Mar	#	.0	#	0	#	1980	3	#	1980	#	1996	6	#	1996	.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	2.5	1989	22	3.3	1989	3	1989	23	#+	2000	.1	@	.0	.0	.0	.1	.1	.0	.0
Ann	.2	.0	N/A	N/A	3.0	Feb 1973	10	3.3	Dec 1989	3+	Dec 1989	23	1	Feb 1973	.1	@	@	.0	.0	.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: 092783

Station: DOUGLAS, GA

Climate Division: GA 8 NWS Call Sign:

Elevation: 225 Feet

Lat: 31°31N Lon: 82°51W

				Freez	e Data								
			Spri	ng Freeze D	ates (Month/	/Day)							
Probability of later date in spring (thru Jul 31) than indicated(*) 10 20 3.0 4.0 5.0 6.0 7.0 8.0 7.0 2.													
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	4/13	4/06	4/02	3/29	3/25	3/21	3/17	3/12	3/06				
32	3/26	3/20	3/16	3/13	3/10	3/06	3/03	2/27	2/21				
28	3/11	3/04	2/27	2/22	2/18	2/14	2/10	2/05	1/29				
24	3/03	2/22	2/16	2/11	2/06	1/31	1/26	1/18	1/04				
20	2/25	2/14	2/05	1/28	1/19	1/08	0/00	0/00	0/00				
16	1/28	1/15	12/29	0/00	0/00	0/00	0/00	0/00	0/00				
			Fal	ll Freeze Da	tes (Month/D	Day)			•				
Tomp (F)		Pro	bability of e	arlier date i	n fall (beginr	ning Aug 1) t	han indicate	ed(*)					
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	10/20	10/27	11/01	11/05	11/09	11/12	11/17	11/21	11/28				
32	11/02	11/08	11/12	11/16	11/19	11/23	11/26	12/01	12/06				
28	11/11	11/19	11/25	11/30	12/05	12/09	12/14	12/20	12/28				
24	11/26	12/07	12/16	12/23	12/29	1/05	1/13	1/22	2/09				
20	12/19	1/02	1/12	1/22	2/01	2/15	0/00	0/00	0/00				
16	1/02	1/17	2/06	0/00	0/00	0/00	0/00	0/00	0/00				
•			•	Freeze F	ree Period	1		1	1				
To (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)						
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	258	248	240	234	228	222	216	208	198				
32	279	270	264	259	254	249	244	237	229				
28	321	310	302	295	288	282	275	267	256				
24	>365	>365	343	330	321	313	306	297	286				
20	>365	>365	>365	>365	>365	>365	350	331	317				
16	>365	>365	>365	>365	>365	>365	>365	>365	>365				

^{*} 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: 092783

Station: DOUGLAS, GA

Climate Division: GA 8 NWS Call Sign: Elevation: 225 Feet Lat: 31°31N Lon: 82°51W

				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	539	392	227	78	8	0	0	0	1	94	257	472	2068
60	406	265	125	24	1	0	0	0	0	41	158	335	1355
57	334	200	79	9	0	0	0	0	0	22	111	263	1018
55	290	163	55	4	0	0	0	0	0	14	84	222	832
50	200	88	18	0	0	0	0	0	0	4	35	136	481
32	20	1	0	0	0	0	0	0	0	0	0	5	26

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	518	540	825	990	1260	1398	1527	1491	1322	1059	771	567	12268
55	76	57	167	305	547	708	814	778	632	360	165	71	4680
57	57	39	129	249	485	648	752	716	572	306	132	50	4135
60	37	20	82	174	393	558	659	623	482	232	89	29	3378
65	0	6	28	78	245	408	504	468	333	131	38	11	2250
70	0	0	7	22	123	260	349	313	192	59	14	0	1339

										Gro	wing]	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (N	(Ionthly)								Growi	ng Degre	ee Units (Accumu	lated Mo	onthly)			
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	304	364	599	767	1026	1172	1296	1264	1101	830	548	356	304	668	1267	2034	3060	4232	5528	6792	7893	8723	9271	9627
45													192	434	879	1496	2367	3389	4530	5639	6590	7265	7668	7901
50	192 242 445 617 871 1022 1141 1109 951 675 403 109 147 308 467 716 872 986 954 801 520 272											135	109	256	564	1031	1747	2619	3605	4559	5360	5880	6152	6287
55	54	76	185	323	562	722	831	799	651	368	167	71	54	130	315	638	1200	1922	2753	3552	4203	4571	4738	4809
60	21	31	92	198	407	572	676	644	501	234	83	33	21	52	144	342	749	1321	1997	2641	3142	3376	3459	3492
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	cumulate	d Month	ly)		
50/86)/86 196 242 386 497 683 787 866 853 746 548 360 23												196	438	824	1321	2004	2791	3657	4510	5256	5804	6164	6397

(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.

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