## 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: 013160

 ${\bf Station:\ GAINESVILLE\ LOCK,\ AL}$ 

Climate Division: AL 6 NWS Call Sign: Elevation: 125 Feet Lat: 32°50N Lon: 88°08W

									ŗ	Tempe	eratui	re (°F)									
	Mea	<b>n</b> (1)						Extr	emes						Days (1) emp 65		Mean	Numb	er of I	Days (3)	
Month	Daily Max	Daily Min	Mean	Daily(2) 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	54.0	32.4	43.2	81	1982	20	51.7	1974	-2+	1985	22	32.4	1977	676	0	.0	.0	19.9	1.0	16.9	.1
Feb	59.2	35.1	47.2	87	1962	14	54.5	1990	9+	1996	6	37.6	1978	500	0	.0	.0	21.6	.5	11.6	.0
Mar	67.4	42.1	54.8	88+	1967	13	60.1	1997	15	1980	3	48.9	1971	329	12	.0	.0	29.1	.1	3.8	.0
Apr	74.7	48.5	61.6	92+	1987	28	67.9	1999	29	1987	1	57.0	1983	142	40	.0	.2	30.0	.0	.4	.0
May	81.9	58.1	70.0	97	1977	31	74.2	1987	38	1986	5	64.2	1976	35	190	.0	2.9	31.0	.0	.0	.0
Jun	88.4	66.0	77.2	101	1977	24	81.8	1998	42	1984	1	73.1	1974	0	367	.2	13.0	30.0	.0	.0	.0
Jul	91.4	70.2	80.8	105+	1980	15	83.8	1980	55	1967	15	76.9	1972	0	490	1.1	21.3	31.0	.0	.0	.0
Aug	90.9	69.7	80.3	103+	2000	30	83.5	1980	55	1986	30	76.6	1973	0	475	.9	20.2	31.0	.0	.0	.0
Sep	86.0	63.7	74.9	102	1980	10	80.6	1980	38	1967	30	70.6	1974	6	302	.2	10.0	30.0	.0	.0	.0
Oct	76.3	50.6	63.5	94	1981	1	68.4	1984	30+	2001	29	58.4	1976	118	70	.0	.6	30.9	.0	.2	.0
Nov	65.9	41.3	53.6	87	1961	1	60.0	1978	17+	1976	30	45.2	1976	353	12	.0	.0	28.2	.0	6.9	.0
Dec	57.1	35.0	46.1	83	1978	4	54.4	1971	2	1989	24	37.2	1989	589	1	.0	.0	23.2	.5	14.9	.0
Ann	74.4	51.1	62.8	105+	Jul 1980	15	83.8	Jul 1980	-2+	Jan 1985	22	32.4	Jan 1977	2748	1959	2.4	68.2	335.9	2.1	54.7	.1

<sup>+</sup> 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

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

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**COOP ID: 013160** 

Station: GAINESVILLE LOCK, AL

Climate Division: AL 6 NWS Call Sign: Elevation: 125 Feet Lat: 32°50N Lon: 88°08W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	n Total						ays (3	)	Proba	bility th		nonthly/	annual j	precipita ated am	ount	ies (1)		less tha	ın the
	Medi	ans(1)				Extremes	8			լ և	aily Pre	cipitatio	n		Th	ese value	s were det	ermined	from the i	incomplet	e gamma	distributi	on	
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	5.79	5.87	3.40	1963	20	10.80	1998	1.30	1981	11.5	8.3	3.9	1.8	1.94	2.49	3.29	3.97	4.63	5.30	6.04	6.90	8.00	9.71	11.29
Feb	4.83	4.99	5.36	1990	16	11.00	1983	1.55	2000	8.9	6.2	3.2	1.8	1.59	2.05	2.72	3.29	3.84	4.41	5.03	5.76	6.70	8.15	9.49
Mar	6.61	5.97	5.12	1951	29	17.26	1976	1.57	1985	10.1	7.4	4.1	2.3	1.78	2.41	3.36	4.20	5.02	5.88	6.83	7.96	9.44	11.75	13.91
Apr	5.37	4.16	7.55	1979	13	18.41	1979	.34	1976	8.3	5.9	3.3	2.0	.68	1.10	1.86	2.61	3.40	4.28	5.30	6.56	8.26	11.06	13.77
May	4.43	3.64	5.12	1978	1	12.17	1978	.12	2000	9.1	6.3	3.0	1.4	.55	.90	1.52	2.14	2.80	3.52	4.37	5.42	6.84	9.17	11.43
Jun	4.07	3.36	3.49	1987	13	9.56	1983	.61	1988	8.8	6.2	3.0	1.2	1.03	1.42	2.01	2.53	3.05	3.60	4.20	4.92	5.87	7.35	8.75
Jul	3.93	3.75	4.39	1997	22	8.34	1998	1.18	1974	10.2	6.8	2.8	1.0	1.25	1.62	2.17	2.65	3.10	3.58	4.10	4.71	5.49	6.71	7.84
Aug	2.91	2.68	4.12	1970	10	8.11	1992	.37	1990	7.9	5.4	1.8	.6	.76	1.04	1.46	1.83	2.20	2.58	3.01	3.51	4.18	5.22	6.19
Sep	3.61	3.25	4.26	1949	5	11.85	1974	.26	1984	7.5	4.9	2.0	1.2	.65	.97	1.50	2.00	2.50	3.04	3.66	4.41	5.40	7.00	8.53
Oct	3.15	2.73	3.86	1977	25	8.83	1985	.03	1987	6.1	4.1	1.9	1.0	.20	.38	.77	1.20	1.68	2.25	2.94	3.81	5.04	7.12	9.18
Nov	4.51	4.82	3.58	2001	28	10.24	1986	.93	1998	9.1	6.4	3.1	1.6	1.27	1.70	2.35	2.91	3.46	4.03	4.67	5.42	6.40	7.93	9.35
Dec	4.81	4.61	4.77	1973	26	11.36	1982	.73	1980	10.2	6.7	3.3	1.5	1.58	2.03	2.70	3.27	3.82	4.39	5.01	5.74	6.68	8.13	9.47
Ann	54.02	52.82	7.55	Apr 1979	13	18.41	Apr 1979	.03	Oct 1987	107.7	74.6	35.4	17.4	38.18	41.24	45.16	48.14	50.79	53.35	56.00	58.93	62.48	67.64	72.11

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

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

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

# Climatography of the United States No. 20 1971-2000

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**COOP ID: 013160** 

Station: GAINESVILLE LOCK, AL

Climate Division: AL 6 NWS Call Sign:

Elevation: 125 Feet Lat: 32°50N Lon: 88°08W

										Snov	w (incl	hes)											
			Median         Mean         Median         Snow Fall         Snow Fall         Snow Depth         Snow Depth         Snow Depth           .0         #         0         5.0         1978         20         5.0+         1978         5+         1982         14         1         198           .0         #         0         .5         1978         1         .5         1978         1         1978         1         #+         199           .0         #         0         .3         1980         2         .3         1980         #         1980         2         #         198           .0         0         0         0         0         0         0         0         0         0         0         0           .0         0         0         0         0         0         0         0         0         0         0         0         0														Mea	n Nu	mber	of Da	<b>ys</b> (1)		
	Mean	s/Medi	ians (1)						Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean		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	.6	.0	#	0	5.0	1978	20	5.0+	1978	5+	1982	14	1	1982	.2	.2	.1	.1	.0	.2	.1	@	.0
Feb	.0	.0	#	0	.5	1978	1	.5	1978	1	1978	1	#+	1996	.1	.0	.0	.0	.0	.1	.0	.0	.0
Mar	.0	.0	#	0	.3	1980	2	.3	1980	#	1980	2	#	1980	.1	.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	#	1976	29	#	1976	#	1976	29	#	1976	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.1	.0	#	0	.8	1973	21	.8	1973	1	1973	21	#+	1978	.1	.0	.0	.0	.0	@	.0	.0	.0
Ann	.7	.0	N/A	N/A	5.0	Jan 1978	20	5.0+	Jan 1978	5+	Jan 1982	14	1	Jan 1982	.5	.2	.1	.1	.0	.3	.1	@	.0

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

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

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

## Climatography of the United States No. 20 1971-2000

**Elevation: 125 Feet** 

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**COOP ID: 013160** 

Lon: 88°08W

Lat: 32°50N

**Station: GAINESVILLE LOCK, AL** 

Climate Division: AL 6 NWS Call Sign:

				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 (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	4/15	4/11	4/07	4/05	4/02	3/30	3/27	3/24	3/19
32	4/06	3/31	3/26	3/22	3/19	3/15	3/11	3/06	2/28
28	3/16	3/09	3/04	2/28	2/24	2/20	2/16	2/11	2/04
24	3/13	3/04	2/26	2/21	2/16	2/11	2/05	1/30	1/21
20	3/03	2/21	2/14	2/08	2/03	1/28	1/21	1/13	12/29
16	2/14	2/05	1/28	1/21	1/12	12/28	0/00	0/00	0/00
•		•	Fal	l Freeze Da	tes (Month/D	ay)	1		•
Town (F)		Pro	bability of e	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/12	10/17	10/20	10/24	10/26	10/29	11/01	11/05	11/10
32	10/30	11/03	11/06	11/09	11/11	11/13	11/16	11/19	11/23
28	11/05	11/12	11/16	11/20	11/24	11/28	12/02	12/06	12/13
24	11/21	11/29	12/06	12/11	12/16	12/21	12/26	1/01	1/10
20	12/03	12/14	12/22	12/29	1/05	1/12	1/19	1/29	2/16
16	12/15	12/25	1/02	1/09	1/18	2/02	0/00	0/00	0/00
				Freeze F	ree Period				
Temp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	223	217	213	210	207	204	200	196	190
32	261	252	246	241	237	232	227	221	213
28	300	290	284	278	273	267	261	255	245
24	335	322	313	307	300	294	288	280	269
20	>365	>365	357	339	329	321	314	305	294
16	>365	>365	>365	>365	>365	>365	>365	339	322

<sup>\*</sup> 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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**COOP ID: 013160** 

Station: GAINESVILLE LOCK, AL

Climate Division: AL 6 NWS Call Sign: Elevation: 125 Feet Lat: 32°50N Lon: 88°08W

				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	676	500	329	142	35	0	0	0	6	118	353	589	2748
60	533	368	203	60	9	0	0	0	0	50	228	446	1897
57	448	291	143	29	3	0	0	0	0	25	167	364	1470
55	394	244	110	17	1	0	0	0	0	15	133	312	1226
50	274	146	47	3	0	0	0	0	0	3	65	204	742
32	31	4	0	0	0	0	0	0	0	0	0	14	49

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	378	428	706	888	1178	1356	1513	1498	1286	976	648	449	11304
55	28	24	103	214	466	666	800	785	596	277	91	34	4084
57	20	15	74	167	406	606	738	723	536	226	66	24	3601
60	12	8	41	108	318	516	645	630	447	157	37	13	2932
65	0	0	12	40	190	367	490	475	302	70	12	1	1959
70	0	0	1	9	93	222	335	320	174	23	1	0	1178

										Gro	wing l	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (M	Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Do													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	191	273	487	674	953	1134	1277	1258	1050	739	425	249	191	464	951	1625	2578	3712	4989	6247	7297	8036	8461	8710
45												150	111	280	626	1150	1948	2932	4054	5157	6057	6642	6936	7086
50	56	96	223	380	643	834	967	948	750	432	184	82	56	152	375	755	1398	2232	3199	4147	4897	5329	5513	5595
55	25	45	126	248	488	684	812	793	600	288	104	42	25	70	196	444	932	1616	2428	3221	3821	4109	4213	4255
60	4	15	57	135	335	534	657	638	452	168	47	18	4	19	76	211	546	1080	1737	2375	2827	2995	3042	3060
Base	ase Growing Degree Units for Corn (Monthly)											Growing Degree Units for Corn (Accumulated Monthly)												
50/86													121	298	607	1038	1674	2459	3339	4203	4919	5395	5666	5820

(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