

Climatology of the United States

No. 20

1971-2000

Station: GAINESVILLE, GA

COOP ID: 093621

Climate Division: GA 2

NWS Call Sign:

Elevation: 1,170 Feet Lat: 34° 18N Lon: 83° 52W

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	51.6	31.4	41.5	79	1949	11	51.4	1974	-8+	1985	21	30.5	1977	728	0	.0	.0	16.5	1.5	17.3	.1
Feb	56.4	33.5	45.0	79+	1951	14	50.8	1990	1	1958	17	37.0	1978	562	0	.0	.0	18.8	.8	13.6	.0
Mar	64.6	40.3	52.5	87	1963	31	59.1	1997	7	1943	4	45.5	1971	395	6	.0	.0	27.5	.1	6.0	.0
Apr	73.0	47.1	60.1	93	1986	28	65.4	1981	22	1942	1	56.0	1983	174	24	.0	@	29.7	.0	.8	.0
May	79.1	55.8	67.5	98	1941	29	71.8	1998	33+	1941	14	63.8	1976	53	129	.0	.3	31.0	.0	.0	.0
Jun	85.7	63.7	74.7	107	1952	27	78.6	1998	42	1956	3	70.5	1972	2	294	.0	5.3	30.0	.0	.0	.0
Jul	89.3	68.1	78.7	107+	1952	29	83.7	1993	49	1937	1	75.2	1979	0	424	.4	11.6	31.0	.0	.0	.0
Aug	87.8	67.2	77.5	102+	1957	13	80.8	1983	49	1931	13	74.3	1992	0	387	.2	7.8	31.0	.0	.0	.0
Sep	82.1	61.3	71.7	102	1957	2	75.6	1998	34	1967	30	69.0	1974	10	210	.0	1.9	30.0	.0	.0	.0
Oct	73.0	49.8	61.4	96+	1954	5	68.0	1984	25+	1954	31	56.1	1987	163	50	.0	.0	30.9	.0	.3	.0
Nov	63.7	41.6	52.7	86	1935	2	61.4	1985	4	1950	25	45.8	1976	378	7	.0	.0	27.4	.0	5.6	.0
Dec	54.7	34.4	44.6	78	1998	7	52.1	1984	-1	1983	25	35.2	2000	634	0	.0	.0	20.2	.6	13.9	@
Ann	71.8	49.5	60.7	107+	Jul 1952	29	83.7	Jul 1993	-8+	Jan 1985	21	30.5	Jan 1977	3099	1531	.6	26.9	324.0	3.0	57.5	.1

+ 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: 1930-2001

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

038-A

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No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: GAINESVILLE, GA

COOP ID: 093621

Climate Division: GA 2

NWS Call Sign:

Elevation: 1,170 Feet Lat: 34°18N

Lon: 83°52W

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	6.04	5.77	4.15	1964	25	10.89	1974	1.16	1981	11.2	8.6	4.1	1.9	2.41	2.97	3.76	4.41	5.03	5.65	6.33	7.11	8.11	9.63	11.01
Feb	5.03	5.21	4.45	1961	21	10.00	1998	.70	1978	9.0	6.9	3.7	1.7	1.58	2.06	2.76	3.37	3.96	4.56	5.23	6.01	7.02	8.60	10.05
Mar	6.14	5.33	5.33	1964	26	15.47	1980	1.29	1985	10.7	8.7	3.7	2.0	1.76	2.34	3.22	3.99	4.73	5.51	6.37	7.39	8.70	10.76	12.68
Apr	4.06	3.46	4.15	1963	30	12.01	1979	.81	1976	8.3	6.5	2.9	1.2	.95	1.33	1.93	2.46	2.98	3.54	4.17	4.92	5.90	7.46	8.92
May	4.33	4.22	4.00	1942	12	10.07	1976	.79	1988	9.3	7.2	2.9	1.2	1.46	1.87	2.47	2.98	3.46	3.97	4.52	5.16	5.99	7.27	8.45
Jun	3.82	3.14	4.62	1980	24	10.10	1989	.50	1988	9.2	6.3	2.4	.9	.68	1.02	1.58	2.10	2.63	3.21	3.86	4.66	5.71	7.42	9.04
Jul	4.14	4.17	3.92	1949	15	9.54	1984	.65	1983	9.8	7.0	2.8	1.0	.83	1.21	1.81	2.37	2.93	3.53	4.22	5.04	6.12	7.86	9.51
Aug	3.97	3.63	5.62	1969	16	9.44	1992	1.02	1972	8.8	6.3	2.4	1.0	1.02	1.40	1.97	2.48	2.98	3.51	4.10	4.80	5.71	7.15	8.49
Sep	4.40	4.62	5.73	1973	14	10.43	1975	.13	1978	8.3	6.2	2.8	1.0	.62	.98	1.61	2.22	2.86	3.56	4.38	5.37	6.72	8.91	11.03
Oct	3.92	3.55	4.40	1977	9	10.74	1977	.12	2000	6.3	4.8	2.2	1.2	.44	.73	1.28	1.83	2.41	3.07	3.84	4.79	6.09	8.24	10.33
Nov	4.36	3.72	4.12	1977	5	9.00	1977	1.82	1981	9.1	6.7	2.9	1.5	1.80	2.20	2.76	3.22	3.66	4.10	4.57	5.12	5.81	6.86	7.82
Dec	4.54	4.37	4.27	1983	6	13.73	1983	.69	1980	10.4	7.6	3.1	1.2	1.17	1.60	2.26	2.84	3.41	4.01	4.68	5.48	6.52	8.15	9.68
Ann	54.75	57.41	5.73	Sep 1973	14	15.47	Mar 1980	.12	Oct 2000	110.4	82.8	35.9	15.8	40.93	43.66	47.12	49.73	52.04	54.26	56.54	59.05	62.08	66.45	70.21

+ 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: 1930-2001

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

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Station: GAINESVILLE, GA

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Climate Division: GA 2

NWS Call Sign:

Elevation: 1,170 Feet

Lat: 34° 18N

Lon: 83° 52W

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	1.5	.0	#	0	8.0	1987	22	8.0	1987	3	1973	8	#+	1996	.5	.4	.2	.1	.0	.0	.0	.0	.0
Feb	.6	.0	#	0	3.1	1980	6	3.1	1980	3	1980	6	#+	1996	.2	.2	.1	.0	.0	@	@	.0	.0
Mar	.2	.0	#	0	4.5	1993	14	4.5	1993	4	1971	26	#+	1996	.1	.1	.1	.0	.0	.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	#	1975	23	#	1975	#	1975	23	#	1975	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.2	.0	#	0	3.5	2000	19	3.5	2000	1	1989	10	#+	1997	.1	.1	.1	.0	.0	.0	.0	.0	.0
Ann	2.5	.0	N/A	N/A	8.0	Jan 1987	22	8.0	Jan 1987	4	Mar 1971	26	#+	Dec 1997	.9	.8	.5	.1	.0	.1	.1	.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

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NWS Call Sign:

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Lat: 34° 18N

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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	4/29	4/23	4/19	4/16	4/12	4/09	4/05	4/01	3/26
32	4/18	4/11	4/06	4/02	3/29	3/25	3/20	3/15	3/08
28	4/05	3/29	3/24	3/20	3/16	3/12	3/07	3/02	2/23
24	3/13	3/06	2/28	2/24	2/19	2/15	2/10	2/05	1/28
20	3/10	3/01	2/23	2/17	2/12	2/07	2/01	1/26	1/17
16	3/02	2/22	2/15	2/10	2/04	1/29	1/22	1/12	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	10/12	10/17	10/21	10/25	10/28	11/01	11/04	11/08	11/14
32	10/26	11/01	11/05	11/08	11/12	11/15	11/18	11/22	11/28
28	11/02	11/10	11/16	11/21	11/26	11/30	12/05	12/11	12/19
24	11/23	12/02	12/09	12/14	12/19	12/24	12/29	1/05	1/14
20	12/03	12/11	12/16	12/21	12/26	12/31	1/04	1/10	1/18
16	12/11	12/22	12/31	1/08	1/15	1/23	2/02	2/16	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	224	215	209	203	198	193	188	182	173
32	253	244	238	232	227	222	217	210	201
28	286	275	267	261	254	248	241	233	222
24	338	324	315	308	301	294	287	278	267
20	351	335	326	319	313	307	301	293	283
16	>365	>365	>365	345	334	326	319	312	302

* 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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Elevation: 1,170 Feet Lat: 34°18N Lon: 83°52W

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	728	562	395	174	53	2	0	0	10	163	378	634	3099
60	581	423	258	80	14	0	0	0	1	80	248	488	2173
57	494	344	188	42	5	0	0	0	0	46	182	402	1703
55	438	293	149	25	2	0	0	0	0	30	145	348	1430
50	309	179	71	5	0	0	0	0	0	8	71	229	872
32	39	5	0	0	0	0	0	0	0	0	0	17	61

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	334	367	634	841	1099	1281	1447	1410	1190	910	619	406	10538
55	19	11	70	176	388	591	734	697	500	227	74	24	3511
57	14	6	47	133	329	531	672	635	440	181	51	16	3055
60	8	1	24	81	245	441	579	542	351	122	27	9	2430
65	0	0	6	24	129	294	424	387	210	50	7	0	1531
70	0	0	0	4	52	160	273	234	95	14	0	0	832

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	128	192	386	589	835	1022	1179	1143	937	647	372	186	128	320	706	1295	2130	3152	4331	5474	6411	7058	7430	7616
45	59	106	258	441	680	872	1024	988	787	492	246	96	59	165	423	864	1544	2416	3440	4428	5215	5707	5953	6049
50	27	49	150	303	527	722	869	833	637	342	139	42	27	76	226	529	1056	1778	2647	3480	4117	4459	4598	4640
55	2	16	70	184	374	572	714	678	487	207	66	15	2	18	88	272	646	1218	1932	2610	3097	3304	3370	3385
60	0	0	25	92	231	422	559	523	341	102	21	2	0	0	25	117	348	770	1329	1852	2193	2295	2316	2318
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	71	121	233	367	540	702	820	801	629	392	212	100	71	192	425	792	1332	2034	2854	3655	4284	4676	4888	4988

(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