U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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

Station: OPELIKA, AL **COOP ID: 016129**

Climate Division: AL 5 **NWS Call Sign:** **Elevation: 640 Feet** **Lat: 32˚40N** **Lon: 85˚27W**

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	55.2	33.2	44.2	80	1975	30	57.0	1974	-7+	1985	22	34.1	1977	648	0	.0	.0	22.1	.5	17.4	.1
Feb	59.8	35.5	47.7	84	1980	24	53.7	1990	5+	1996	5	40.1	1978	486	0	.0	.0	22.7	.3	12.9	.0
Mar	67.8	42.0	54.9	89	1974	11	61.4	1997	12	1980	3	49.4	1971	326	13	.0	.0	29.5	.1	6.3	.0
Apr	74.8	47.4	61.1	91+	1987	23	65.7	1981	25+	1987	2	56.6	1993	145	29	.0	.2	29.8	.0	1.3	.0
May	81.5	56.2	68.9	97	1960	22	72.7	1987	33	1976	4	63.7	1976	39	159	.0	2.0	31.0	.0	.0	.0
Jun	87.6	64.2	75.9	101+	1985	7	80.0	1981	37	1984	2	72.6	1997	1	328	.2	10.4	30.0	.0	.0	.0
Jul	90.2	68.0	79.1	103+	1980	14	82.2	1986	48+	1958	2	76.0	1971	0	437	.4	18.0	31.0	.0	.0	.0
Aug	89.4	67.2	78.3	101+	1995	17	81.5	1987	52	1957	23	76.2	1994	0	411	.3	15.5	31.0	.0	.0	.0
Sep	84.7	61.9	73.3	99+	1980	16	77.1	1980	36	1967	30	69.8	1975	6	254	.0	6.6	30.0	.0	.0	.0
Oct	75.7	49.9	62.8	91+	1986	1	69.6	1984	26+	2001	29	56.9	1987	132	64	.0	.2	31.0	.0	.7	.0
Nov	66.9	41.7	54.3	88	1961	1	62.3	1985	6	1998	10	47.0	1976	333	12	.0	.0	29.0	.0	6.9	.0
Dec	58.0	35.3	46.7	81	1971	17	55.0	1971	1	1962	13	38.5	1989	571	1	.0	.0	24.6	.2	13.7	.0
Ann	74.3	50.2	62.3	103+	Jul 1980	14	82.2	Jul 1986	-7+	Jan 1985	22	34.1	Jan 1977	2687	1708	.9	52.9	341.7	1.1	59.2	.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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1957-2001

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

Issue Date: February 2004

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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

Station: OPELIKA, AL **COOP ID: 016129**

Climate Division: AL 5 **NWS Call Sign:** **Elevation: 640 Feet** **Lat: 32˚40N** **Lon: 85˚27W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	5.60	5.58	3.40	2000	10	9.51	1974	2.37	1986
Feb	5.24	4.78	6.30	1961	25	9.63	1971	1.21	1991
Mar	6.94	6.12	6.33	1990	17	13.94	1980	1.53	1982
Apr	4.76	3.90	5.90	1981	1	11.72	1975	.33	1986
May	3.63	3.19	3.28	1969	15	9.41	1980	.88	1992
Jun	4.30	3.17	4.50	1963	19	14.28	1999	.35	1977
Jul	5.87	5.31	5.50	1988	3	14.61	1994	1.38	1983
Aug	3.53	3.76	3.75	1970	24	6.25	1977	1.30+	1979
Sep	3.82	3.64	4.07	1966	13	7.57	1988	.11	1978
Oct	3.23	2.64	6.80	1965	1	15.41	1995	.00	1978
Nov	4.35	3.68	3.84	1986	17	12.83	1986	1.39	1981
Dec	5.22	4.56	4.45	1972	21	11.36	1972	1.91	1979
Ann	56.49	54.38	6.80	Oct 1965	1	15.41	Oct 1995	.00	Oct 1978

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	11.2	8.6	3.7	1.7
Feb	9.0	6.4	3.7	2.0
Mar	10.8	7.9	4.3	2.3
Apr	7.4	5.7	2.9	1.6
May	7.8	5.8	2.4	1.0
Jun	9.6	7.0	3.0	1.3
Jul	10.8	7.9	3.8	1.6
Aug	9.3	6.3	2.2	.9
Sep	6.9	5.1	2.3	.9
Oct	6.4	4.0	1.9	1.0
Nov	7.9	5.6	3.0	1.5
Dec	9.3	6.8	3.2	1.6
Ann	106.4	77.1	36.4	17.4

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
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	2.64	3.12	3.79	4.33	4.83	5.34	5.87	6.48	7.25	8.41	9.45
Feb	1.53	2.03	2.78	3.43	4.06	4.72	5.44	6.30	7.41	9.15	10.76
Mar	2.61	3.26	4.19	4.96	5.69	6.44	7.26	8.20	9.40	11.24	12.93
Apr	.85	1.27	1.97	2.62	3.28	4.00	4.82	5.81	7.13	9.25	11.28
May	.97	1.31	1.84	2.30	2.75	3.22	3.75	4.38	5.19	6.47	7.66
Jun	.77	1.15	1.77	2.36	2.96	3.61	4.35	5.25	6.44	8.37	10.21
Jul	1.68	2.23	3.08	3.81	4.52	5.26	6.09	7.06	8.32	10.29	12.13
Aug	1.47	1.79	2.25	2.62	2.97	3.32	3.70	4.14	4.69	5.54	6.31
Sep	.71	1.05	1.61	2.13	2.66	3.23	3.88	4.66	5.70	7.37	8.96
Oct	.19	.50	1.00	1.47	1.97	2.53	3.18	3.98	5.06	6.85	8.58
Nov	1.49	1.90	2.50	3.01	3.49	4.00	4.54	5.18	6.00	7.27	8.43
Dec	1.99	2.48	3.17	3.75	4.30	4.86	5.47	6.17	7.06	8.44	9.69
Ann	42.47	45.25	48.77	51.42	53.76	56.01	58.32	60.87	63.94	68.36	72.16

\+ 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: 1957-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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

Station: OPELIKA, AL **COOP ID: 016129**

Climate Division: AL 5 **NWS Call Sign:** **Elevation: 640 Feet** **Lat: 32°40N** **Lon: 85°27W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	.3	.0	#	0
Feb	.4	.0	#	0
Mar	.1	.0	0	0
Apr	.0	.0	0	0
May	.0	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.0	.0	0	0
Nov	.0	.0	0	0
Dec	#	.0	#	0
Ann	.8	.0	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	4.3	1977	31	5.3	1977	#	2000	1	#	2000
Feb	8.6	1973	10	8.6	1973	9	1973	10	1	1973
Mar	2.0	1983	25	2.0	1983	0	0	0	0	0
Apr	.0	0	0	.0	0	0	0	0	0	0
May	.0	0	0	.0	0	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	.0	0	0	.0	0	0	0	0	0	0
Nov	.0	0	0	.0	0	0	0	0	0	0
Dec	#	1996	20	#+	1996	#	1996	20	#	1996
Ann	8.6	Feb 1973	10	8.6	Feb 1973	9	Feb 1973	10	1	Feb 1973

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.1	.1	.1	.0	.0
Feb	.1	.1	.1	.1	.0
Mar	.1	.1	.0	.0	.0
Apr	.0	.0	.0	.0	.0
May	.0	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.0	.0	.0	.0	.0
Nov	.0	.0	.0	.0	.0
Dec	.0	.0	.0	.0	.0
Ann	.3	.3	.2	.1	.0

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.0	.0	.0	.0
Feb	.1	.1	@	.0
Mar	.0	.0	.0	.0
Apr	.0	.0	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	.0	.0	.0	.0
Dec	.0	.0	.0	.0
Ann	.1	.1	@	.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

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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

Station: OPELIKA, AL **COOP ID: 016129**

Climate Division: AL 5 **NWS Call Sign:** **Elevation: 640 Feet** **Lat: 32˚40N** **Lon: 85˚27W**

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	5/02	4/27	4/24	4/21	4/18	4/15	4/12	4/08	4/03
32	4/16	4/10	4/06	4/02	3/30	3/27	3/23	3/19	3/13
28	4/05	3/28	3/22	3/17	3/13	3/08	3/03	2/25	2/17
24	3/12	3/05	2/28	2/24	2/20	2/17	2/13	2/08	2/01
20	3/06	2/25	2/19	2/13	2/08	2/03	1/29	1/22	1/13
16	2/20	2/12	2/05	1/30	1/23	1/15	1/01	0/00	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	10/08	10/14	10/18	10/21	10/25	10/28	10/31	11/04	11/10
32	10/16	10/23	10/27	10/31	11/04	11/08	11/12	11/17	11/23
28	10/28	11/07	11/14	11/20	11/26	12/02	12/08	12/15	12/25
24	11/17	11/27	12/04	12/10	12/15	12/21	12/27	1/03	1/13
20	11/29	12/09	12/16	12/23	12/28	1/03	1/09	1/16	1/27
16	12/19	12/29	1/06	1/12	1/20	1/29	2/13	0/00	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	211	203	198	193	189	185	180	175	167
32	246	237	230	224	219	213	207	200	191
28	288	276	267	261	254	248	242	234	224
24	323	312	306	300	295	290	284	278	269
20	>365	341	331	324	317	311	305	297	287
16	>365	>365	>365	>365	>365	363	344	329	313

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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

Station: OPELIKA, AL **COOP ID: 016129**

Climate Division: AL 5 **NWS Call Sign:** **Elevation: 640 Feet** **Lat: 32˚40N** **Lon: 85˚27W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	648	486	326	145	39	1	0	0	6	132	333	571	2687
60	503	348	201	59	9	0	0	0	1	59	210	428	1818
57	419	271	142	28	3	0	0	0	0	31	152	346	1392
55	366	221	108	15	1	0	0	0	0	19	118	296	1144
50	251	120	45	2	0	0	0	0	0	4	54	190	666
32	25	1	0	0	0	0	0	0	0	0	0	11	37

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	404	439	709	874	1143	1318	1460	1434	1238	955	669	465	11108
55	32	16	105	199	431	628	747	721	548	261	97	36	3821
57	23	9	76	152	371	568	685	659	488	211	70	25	3337
60	13	2	42	93	284	478	592	566	399	146	39	14	2668
65	0	0	13	29	159	328	437	411	254	64	12	1	1708
70	0	0	2	4	70	187	282	256	128	19	2	0	950

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	200	261	463	635	896	1084	1224	1203	1013	719	433	246	200	461	924	1559	2455	3539	4763	5966	6979	7698	8131	8377
45	111	160	322	486	741	934	1069	1048	863	564	296	143	111	271	593	1079	1820	2754	3823	4871	5734	6298	6594	6737
50	52	85	198	342	586	784	914	893	713	412	182	72	52	137	335	677	1263	2047	2961	3854	4567	4979	5161	5233
55	23	38	108	211	431	634	759	738	563	272	98	38	23	61	169	380	811	1445	2204	2942	3505	3777	3875	3913
60	1	13	43	108	281	485	604	583	415	153	42	12	1	14	57	165	446	931	1535	2118	2533	2686	2728	2740
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	128	177	302	418	594	743	843	829	691	471	285	162	128	305	607	1025	1619	2362	3205	4034	4725	5196	5481	5643

(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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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