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: CHARLESTON 1 N, MS **COOP ID: 221606**

Climate Division: MS 1 **NWS Call Sign:** **Elevation: 240 Feet** **Lat: 34˚01N** **Lon: 90˚03W**

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	50.1	29.5	39.8	81	1952	1	46.9	1990	-8	1966	30	28.7	1977	782	0	.0	.0	16.8	2.4	18.6	@
Feb	56.2	33.1	44.7	82	1962	27	52.6	1976	5+	1996	3	33.0	1978	570	0	.0	.0	19.6	1.2	13.5	.0
Mar	65.0	41.3	53.2	88+	1963	31	57.7	2000	13	1996	9	47.5	1971	375	7	.0	.0	28.5	.1	6.0	.0
Apr	73.8	49.3	61.6	90+	1951	28	68.7	1981	26+	1989	10	56.0	1983	151	47	.0	.2	29.7	.0	1.1	.0
May	80.8	58.7	69.8	99	1977	31	74.4	1987	37	1976	4	64.8	1971	38	185	.0	2.8	31.0	.0	.0	.0
Jun	87.6	66.3	77.0	105	1954	29	80.8	1977	43	1982	6	71.1	1982	2	359	.2	13.9	30.0	.0	.0	.0
Jul	91.4	70.5	81.0	105+	1980	14	84.6	1980	52+	1967	15	78.1	1972	0	494	1.0	23.0	31.0	.0	.0	.0
Aug	90.7	68.5	79.6	106	2000	31	84.0	2000	45+	1956	22	74.5	1992	0	452	.7	20.9	31.0	.0	.0	.0
Sep	85.2	61.6	73.4	105	1951	1	78.4	1998	35+	1956	28	67.9	1974	10	262	.4	10.6	30.0	.0	.0	.0
Oct	75.3	49.2	62.3	97	1953	1	67.1	1998	20+	1952	29	57.2	1976	143	58	.0	1.0	30.9	.0	.9	.0
Nov	63.0	40.2	51.6	88	1955	15	57.7	1985	12+	1976	30	42.6	1976	410	8	.0	.0	26.6	.1	7.3	.0
Dec	53.7	32.6	43.2	83	1982	3	52.7	1984	-4	1963	24	33.0	1989	678	0	.0	.0	20.7	1.1	16.1	.1
Ann	72.7	50.1	61.4	106	Aug 2000	31	84.6	Jul 1980	-8	Jan 1966	30	28.7	Jan 1977	3159	1872	2.3	72.4	325.8	4.9	63.5	.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/normals/usnormals.html

(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

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: CHARLESTON 1 N, MS **COOP ID: 221606**

Climate Division: MS 1 **NWS Call Sign:** **Elevation: 240 Feet** **Lat: 34°01N** **Lon: 90°03W**

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	5.39	5.79	4.00	1951	3	13.25	1974	.58	1986
Feb	4.64	3.91	5.93	1991	19	12.41	1991	.94	1994
Mar	6.02	5.60	4.10	1955	21	13.86	1980	1.48	1982
Apr	5.82	5.29	5.28	1991	29	18.31	1991	1.16	1981
May	5.50	4.72	3.46	1962	30	13.17	1974	.67	1977
Jun	5.13	4.38	6.50	1980	24	11.73	1992	.00	1988
Jul	4.40	3.91	3.73	1958	26	12.78	1989	.00	1993
Aug	3.27	2.75	6.11	2001	11	7.34	1975	.00	2000
Sep	3.23	2.95	4.07	1958	21	8.68	1980	.30	1998
Oct	3.03	2.86	3.16	1970	13	9.94	1984	.22	2000
Nov	5.81	5.17	7.23	2001	29	14.01	1973	1.69+	1981
Dec	5.47	4.06	5.40	1982	4	19.05	1982	.63	1980
Ann	57.71	55.72	7.23	Nov 2001	29	19.05	Dec 1982	.00+	Aug 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	9.6	8.0	3.8	1.6
Feb	7.4	6.0	3.0	1.5
Mar	9.8	7.6	3.7	1.9
Apr	8.0	6.6	3.5	2.1
May	9.5	7.2	3.4	1.7
Jun	8.2	6.5	3.2	1.7
Jul	7.8	6.0	3.2	1.6
Aug	6.7	5.0	2.3	1.2
Sep	6.9	5.1	2.1	1.0
Oct	5.7	4.3	2.4	.9
Nov	8.6	6.7	3.6	2.1
Dec	8.8	7.1	3.5	1.7
Ann	97.0	76.1	37.7	19.0

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	1.34	1.84	2.63	3.33	4.02	4.74	5.55	6.52	7.78	9.77	11.64
Feb	1.03	1.45	2.13	2.75	3.36	4.02	4.75	5.63	6.79	8.64	10.38
Mar	2.16	2.72	3.54	4.23	4.89	5.56	6.29	7.14	8.23	9.92	11.46
Apr	1.43	1.98	2.83	3.58	4.33	5.12	6.00	7.04	8.41	10.58	12.61
May	1.22	1.73	2.54	3.27	3.99	4.77	5.64	6.67	8.04	10.22	12.27
Jun	1.18	1.91	2.76	3.43	4.07	4.71	5.42	6.24	7.30	8.94	10.45
Jul	1.05	1.68	2.41	2.98	3.52	4.07	4.66	5.35	6.24	7.62	8.88
Aug	.70	1.17	1.71	2.15	2.56	2.99	3.45	4.00	4.69	5.78	6.79
Sep	.49	.76	1.23	1.68	2.14	2.65	3.23	3.95	4.91	6.47	7.96
Oct	.56	.83	1.27	1.68	2.10	2.56	3.07	3.70	4.53	5.87	7.14
Nov	1.59	2.14	2.97	3.71	4.43	5.18	6.01	7.00	8.29	10.30	12.19
Dec	1.34	1.85	2.65	3.36	4.06	4.80	5.63	6.62	7.91	9.95	11.87
Ann	40.15	43.52	47.85	51.15	54.09	56.94	59.89	63.15	67.12	72.88	77.88

\+ 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: 1948-2001
(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: CHARLESTON 1 N, MS **COOP ID: 221606**

Climate Division: MS 1 **NWS Call Sign:** **Elevation: 240 Feet** **Lat: 34°01N** **Lon: 90°03W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	.2	.0	#	0
Feb	.6	.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
Dec	#	.0	0	0
Ann	.9	.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	2.0	1977	18	2.0	1994	7	2000	28	#+	2000
Feb	4.8	1971	8	4.8	1971	3	1980	10	#+	1996
Mar	2.0	1971	3	2.0	1971	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	.5	1976	29	.5	1976	1	1976	29	#	1976
Dec	#	1980	27	#	1980	0	0	0	0	0
Ann	4.8	Feb 1971	8	4.8	Feb 1971	7	Jan 2000	28	#+	Jan 2000

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.2	.2	.0	.0	.0
Feb	.2	.2	.1	.0	.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	.1	.0	.0	.0	.0
Dec	.0	.0	.0	.0	.0
Ann	.6	.5	.1	.0	.0

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.0	.0	.0	.0
Feb	.2	.1	.0	.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	.1	.0	.0	.0
Dec	.0	.0	.0	.0
Ann	.3	.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

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: CHARLESTON 1 N, MS **COOP ID: 221606**

Climate Division: MS 1 **NWS Call Sign:** **Elevation: 240 Feet** **Lat: 34˚01N** **Lon: 90˚03W**

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	4/21	4/17	4/14	4/12	4/10	4/08	4/06	4/03	3/30
32	4/13	4/08	4/05	4/02	3/31	3/28	3/25	3/22	3/17
28	4/01	3/24	3/19	3/15	3/10	3/06	3/02	2/24	2/17
24	3/13	3/07	3/02	2/26	2/23	2/19	2/15	2/10	2/04
20	3/10	3/01	2/23	2/18	2/13	2/08	2/02	1/27	1/16
16	2/26	2/16	2/09	2/03	1/27	1/21	1/13	1/01	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	10/06	10/11	10/15	10/18	10/21	10/24	10/27	10/31	11/05
32	10/17	10/22	10/26	10/29	11/02	11/05	11/08	11/12	11/17
28	10/31	11/06	11/10	11/14	11/17	11/20	11/24	11/28	12/04
24	11/10	11/17	11/22	11/27	12/01	12/05	12/09	12/14	12/21
20	11/20	11/29	12/06	12/11	12/17	12/22	12/28	1/05	1/16
16	12/03	12/13	12/20	12/27	1/02	1/09	1/16	1/28	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	212	205	201	197	193	190	186	181	175
32	237	229	224	220	215	211	206	201	194
28	276	268	261	256	251	246	240	234	225
24	306	297	291	285	280	275	270	264	255
20	>365	333	320	311	304	297	290	282	271
16	>365	>365	>365	359	340	329	320	310	298

***** 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: CHARLESTON 1 N, MS **COOP ID: 221606**

Climate Division: MS 1 **NWS Call Sign:** **Elevation: 240 Feet** **Lat: 34˚01N** **Lon: 90˚03W**

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	782	570	375	151	38	2	0	0	10	143	410	678	3159
60	635	441	238	69	10	0	0	0	1	65	277	535	2271
57	548	365	171	37	4	0	0	0	0	36	209	450	1820
55	491	317	134	22	1	0	0	0	0	22	170	396	1553
50	359	214	62	4	0	0	0	0	0	5	92	276	1012
32	61	20	0	0	0	0	0	0	0	0	2	33	116

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	303	374	655	886	1170	1348	1517	1475	1242	938	589	378	10875
55	19	27	76	218	458	658	804	762	552	247	68	28	3917
57	14	19	51	173	398	598	742	700	492	199	47	19	3452
60	8	11	26	115	312	508	649	607	403	135	25	11	2810
65	0	0	7	47	185	359	494	452	262	58	8	0	1872
70	0	0	0	13	91	220	339	300	142	17	0	0	1122

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	144	231	445	652	941	1132	1287	1232	1019	710	388	200	144	375	820	1472	2413	3545	4832	6064	7083	7793	8181	8381
45	82	141	309	507	786	982	1132	1077	869	557	266	116	82	223	532	1039	1825	2807	3939	5016	5885	6442	6708	6824
50	41	76	198	365	631	832	977	922	719	407	164	62	41	117	315	680	1311	2143	3120	4042	4761	5168	5332	5394
55	16	33	107	242	476	682	822	767	569	269	92	26	16	49	156	398	874	1556	2378	3145	3714	3983	4075	4101
60	2	7	47	136	328	532	667	612	421	154	42	6	2	9	56	192	520	1052	1719	2331	2752	2906	2948	2954
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	92	148	273	417	626	774	878	836	684	463	241	126	92	240	513	930	1556	2330	3208	4044	4728	5191	5432	5558

(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