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: 221865

Station: COLUMBIA, MS

Climate Division: MS 8

NWS Call Sign:

Elevation: 155 Feet Lat: 31°15N Lon: 89°50W

	Ionth Max Daily Max Mean Min Mean Min Highest Daily(2) Year Mean Lowest Daily(2) Year Day Month(1) Mean Year Mean Month(1) Mean Year Mean Heating Mean Cooling Society >= <t< th=""><th></th></t<>																				
	Mea	n (1)						Extr	emes						•		Mean	Numb	er of I	Days (3)	
Month	Daily Max Min Mean Highest Daily(2) Year Day Month(1) Mean Mean Day Month(1) Mean Mean Mean Mean Month(1) Mean Mean Mean Mean Mean Mean Mean Mean			Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0								
Jan	58.8	36.7	47.8	85	1950	26	56.9	1974	4+	1982	11	38.7	1977	547	0	.0	.0	25.5	.2	12.2	.0
Feb	63.2	39.7	51.5	86+	1932	9	57.6	1990	11+	1951	3	42.6	1978	382	2	.0	.0	25.1	.2	7.9	.0
Mar	70.6	47.0	58.8	90+	1935	27	64.1	1974	16	1980	3	53.3	1983	221	30	.0	@	30.3	.0	2.4	.0
Apr	76.8	53.1	65.0	95	1943	30	71.1	1981	23	1940	13	60.4	1983	80	79	.0	.3	30.0	.0	.3	.0
May	84.0	62.0	73.0	101+	1951	30	76.7	2000	39	1971	4	69.0	1976	6	253	.0	6.1	31.0	.0	.0	.0
Jun	90.0	68.4	79.2	108+	1930	26	83.2	1998	46	1984	1	76.6	1976	0	426	.3	20.0	30.0	.0	.0	.0
Jul	91.9	71.3	81.6	107+	1930	11	83.9	1980	53	1967	15	78.6	1972	0	515	1.2	25.4	31.0	.0	.0	.0
Aug	91.8	70.6	81.2	107+	1935	8	84.6	1999	54	1967	12	77.7	1992	0	502	1.3	25.3	31.0	.0	.0	.0
Sep	87.2	65.3	76.3	102+	1980	10	80.2	1980	36	1967	30	72.3	1975	1	339	.2	14.6	30.0	.0	.0	.0
Oct	78.8	53.1	66.0	98+	1931	5	72.3	1984	26	1952	30	60.0	1987	82	111	.0	2.0	31.0	.0	.2	.0
Nov	68.9	44.9	56.9	91	1984	1	64.3	1985	19+	1938	28	49.0	1976	271	28	.0	@	29.4	.0	4.0	.0
Dec	61.2	38.7	50.0	85	1933	16	58.8	1984	5+	1989	23	40.8	1989	476	11	.0	.0	27.0	.1	11.0	.0
Ann	76.9	54.2	65.6	108+	Jun 1930	26	84.6	Aug 1999	4+	Jan 1982	11	38.7	Jan 1977	2066	2296	3.0	93.7	351.3	.5	38.0	.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 013-A

[@] Denotes mean number of days greater than 0 but less than .05

⁽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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										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total	s			M	ean N	Numb Oays (3		Proba	ability th		nonthly/	annual j	precipita ated an		ll be equ		eless tha	an the
		ans(1)				Extremes	5			D	aily Pre	cipitatio	n		Th		•		-	incomplet	•		ion	
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	7.12	6.52	6.95	1999	30	12.81	1990	1.07	1981	12.2	8.4	4.1	2.3	2.43	3.11	4.09	4.92	5.72	6.54	7.44	8.48	9.82	11.90	13.81
Feb	5.41	4.52	8.62	1961	22	10.84	1987	1.51	2000	9.0	6.5	3.6	2.1	1.54	2.06	2.83	3.51	4.16	4.85	5.61	6.50	7.66	9.48	11.18
Mar	6.51	6.02	5.46	1964	15	17.45	1980	2.53	1978	9.9	7.5	4.1	2.3	2.69	3.28	4.12	4.81	5.46	6.12	6.82	7.64	8.67	10.25	11.68
Apr	5.93	5.22	13.70	1983	7	21.79	1983	.86	1999	7.8	5.5	3.0	2.1	.94	1.45	2.31	3.13	3.98	4.90	5.96	7.25	8.97	11.78	14.46
May	5.58	5.11	6.02	1980	17	13.11	1991	.87	1977	9.2	6.9	3.5	1.8	1.20	1.72	2.54	3.28	4.02	4.81	5.71	6.78	8.19	10.44	12.57
Jun	4.93	4.21	8.26	1997	18	12.71	1997	.83	1979	10.3	6.9	3.4	1.4	1.22	1.68	2.40	3.04	3.67	4.33	5.08	5.96	7.12	8.95	10.67
Jul	5.55	5.17	4.62	1993	13	11.92	1993	1.52	2000	12.5	9.1	3.7	1.7	1.98	2.50	3.26	3.89	4.50	5.12	5.80	6.58	7.59	9.14	10.57
Aug	4.56	3.69	12.20	1987	13	17.98	1987	.51	1990	10.5	6.7	2.7	1.3	.63	1.00	1.65	2.29	2.95	3.68	4.53	5.57	6.97	9.26	11.47
Sep	4.13	3.03	7.25	1947	20	8.58	1974	.94	1984	8.4	5.7	2.9	1.2	1.08	1.47	2.06	2.59	3.11	3.66	4.26	4.98	5.92	7.40	8.78
Oct	3.47	2.85	6.88	1934	10	10.17	1985	.00	1978	6.0	4.2	2.2	1.2	.21	.55	1.09	1.60	2.14	2.74	3.43	4.29	5.44	7.34	9.18
Nov	4.93	5.09	6.25	1961	14	9.68	1992	1.15	1985	9.1	6.4	3.5	1.9	1.72	2.18	2.86	3.43	3.98	4.54	5.15	5.86	6.78	8.19	9.49
Dec	5.81	5.01	5.27	1973	26	14.14	1971	2.16	1984	10.6	7.6	3.8	1.8	2.13	2.68	3.46	4.12	4.74	5.38	6.07	6.88	7.91	9.50	10.95
Ann	63.93	63.80	13.70	Apr 1983	7	21.79	Apr 1983	.00	Oct 1978	115.5	81.4	40.5	21.1	46.49	49.89	54.24	57.53	60.44	63.25	66.15	69.35	73.22	78.82	83.64

⁺ 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: 1930-2001

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Climate Division: MS 8 NWS Call Sign: Elevation: 155 Feet Lat: 31°15N Lon: 89°50W

										Snov	w (incl	hes)											
		Fall Depth Median Medi															Mea	n Nui	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1)	1					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Snow Depth Depth Depth Snow Depth Snow Pear Day Snow Snow Pear Sno								Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	.3	.0	#	0	4.0	1977	31	4.5	1977	3	1977	31	#+	1993	.2	.1	.1	.0	.0	.1	@	0.	.0
Feb	#	.0	0	0	#	1988	6	#	1988	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.2	.0	#	0	3.0	1993	13	3.0	1993	3	1993	13	#	1993	.1	.1	.1	.0	.0	@	@	.0	.0
Apr	#	.0	#	0	#	1987	3	#	1987	#	1987	3	#	1987	.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	.0	.0	0	0	.5	1993	23	.5	1993	0	0	0	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.5	.0	N/A	N/A	4.0	Jan 1977	31	4.5	Jan 1977	3+	Mar 1993	13	#+	Mar 1993	.4	.2	.2	.0	.0	.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

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gn: Elevation: 155 Feet Lat: 31°15N

				Freez	ze Data				
			Spri	ng Freeze D	ates (Month	/Day)			
Temp (F)		P	robability of	later date i	n spring (thr	ru Jul 31) tha	n indicated((*)	
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	4/14	4/08	4/04	4/01	3/28	3/25	3/21	3/17	3/11
32	3/31	3/25	3/20	3/16	3/13	3/09	3/05	3/01	2/23
28	3/17	3/10	3/05	2/28	2/24	2/20	2/16	2/11	2/04
24	3/05	2/25	2/18	2/13	2/08	2/03	1/28	1/22	1/11
20	2/21	2/11	2/03	1/26	1/18	1/07	0/00	0/00	0/00
16	1/31	1/20	1/09	12/24	0/00	0/00	0/00	0/00	0/00
1		1	Fal	ll Freeze Da	tes (Month/D	Day)		1	•
Tomm (F)		Pro	bability of ea	arlier date i	n fall (beginn	ning Aug 1) t	han indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/16	10/22	10/26	10/30	11/02	11/06	11/09	11/14	11/20
32	10/30	11/05	11/09	11/13	11/16	11/20	11/23	11/28	12/03
28	11/02	11/12	11/19	11/25	12/01	12/07	12/13	12/21	12/31
24	11/27	12/08	12/16	12/22	12/28	1/04	1/11	1/19	2/01
20	12/08	12/18	12/27	1/03	1/12	1/22	0/00	0/00	0/00
16	12/29	1/12	1/26	0/00	0/00	0/00	0/00	0/00	0/00
		1		Freeze F	ree Period	1		1	
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	244	235	229	223	218	213	207	201	192
32	271	263	257	252	248	243	238	232	224
28	308	297	289	283	277	271	265	258	249
24	>365	351	334	324	317	310	303	295	284
20	>365	>365	>365	>365	>365	351	330	317	303
16	>365	>365	>365	>365	>365	>365	>365	>365	348

^{*} 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.

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				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree 1	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	547	382	221	80	6	0	0	0	1	82	271	476	2066
60	408	255	120	25	0	0	0	0	0	31	167	339	1345
57	333	187	74	10	0	0	0	0	0	15	118	266	1003
55	287	149	51	5	0	0	0	0	0	8	90	224	814
50	193	74	16	0	0	0	0	0	0	2	38	137	460
32	16	0	0	0	0	0	0	0	0	0	0	5	21

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	504	544	832	989	1270	1416	1538	1525	1328	1053	747	562	12308
55	62	49	170	304	557	726	825	812	638	348	147	68	4706
57	46	31	132	249	495	666	763	750	578	292	115	48	4165
60	28	15	84	174	402	576	670	657	488	215	74	28	3411
65	0	2	30	79	253	426	515	502	339	111	28	11	2296
70	0	0	8	23	127	277	360	347	199	43	9	0	1393

	Growing Degree Units (Monthly)																							
Base														Growing Degree Units (Accumulated Monthly)										
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	308	385	621	775	1040	1195	1306	1300	1118	834	536	369	308	693	1314	2089	3129	4324	5630	6930	8048	8882	9418	9787
45	5 194 261 471 625 885 1045 1151 1145 968 679 396												194	455	926	1551	2436	3481	4632	5777	6745	7424	7820	8066
50												147	113	277	605	1083	1813	2708	3704	4694	5512	6036	6306	6453
55	59	92	208	336	575	745	841	835	668	375	162	86	59	151	359	695	1270	2015	2856	3691	4359	4734	4896	4982
60	24	39	113	206	420	595	686	680	518	238	86	41	24	63	176	382	802	1397	2083	2763	3281	3519	3605	3646
Base	se Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)	•		
50/86	10/86 199 248 394 509 711 818 895 880 762 556 351 23											238	199	447	841	1350	2061	2879	3774	4654	5416	5972	6323	6561

(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