## 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: HATTIESBURG 5 SW, MS 1971-2000 COOP ID: 223887

Climate Division: MS 9 NWS Call Sign: Elevation: 385 Feet Lat: 31°15N Lon: 89°20W

									r	Гетр	eratur	re (°F)											
	Mea	<b>n</b> (1)						Extr	emes					Degree Base To	Days (1) emp 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	59.7	36.0	47.9	84+	1949	10	57.8	1974	4	1985	21	38.0	1977	543	0	.0	.0	24.4	.3	12.3	.0		
Feb	64.1	38.9	51.5	85+	1948	28	57.4	1990	7	1951	3	41.5	1978	383	6	.0	.0	24.2	.2	7.9	.0		
Mar	71.4	46.2	58.8	89+	1954	31	63.9	1997	17	1980	3	53.4	1996	219	27	.0	.0	30.1	.0	2.2	.0		
Apr	77.6	53.0	65.3	94	1955	29	70.4	1981	31+	1950	7	61.2	1993	70	79	.0	.2	30.0	.0	.3	.0		
May	84.2	61.4	72.8	104	1951	31	76.6	2000	40+	1971	4	68.7	1976	6	247	.0	3.7	31.0	.0	.0	.0		
Jun	89.9	68.1	79.0	106	1963	14	82.6	1998	49+	1956	3	76.0	1983	0	421	.0	16.6	30.0	.0	.0	.0		
Jul	92.1	71.3	81.7	105	2000	17	84.2	2000	57	1953	11	77.5	1989	0	517	.5	23.8	31.0	.0	.0	.0		
Aug	92.2	70.8	81.5	106	1951	30	84.2+	1999	55	1952	28	78.9	1992	0	511	.5	23.7	31.0	.0	.0	.0		
Sep	88.2	65.6	76.9	102	1997	21	81.1	1972	43	1949	30	73.2	1975	1	358	.1	13.0	30.0	.0	.0	.0		
Oct	79.8	53.0	66.4	97	1954	6	72.5	1984	23	1952	30	60.6	1976	78	120	.0	1.5	31.0	.0	@	.0		
Nov	70.1	44.8	57.5	90	1998	1	65.0	1985	18+	1950	12	49.3	1976	256	30	.0	@	29.3	.0	3.4	.0		
Dec	62.3	38.2	50.3	84	1951	7	59.0	1984	4	1989	23	41.2	1989	468	11	.0	.0	26.3	.1	10.8	.0		
Ann	77.6	53.9	65.8	106+	Jun 1963	14	84.2+	Jul 2000	4+	Dec 1989	23	38.0	Jan 1977	2024	2327	1.1	82.5	348.3	.6	36.9	.0		

<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 024-A

- (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

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

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										Pı	ecipi	tation	(incl	nes)												
	Mea	ans/	P	recipi	tatio	n Total					of D	Jumbo Pays (3	)	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												
	Medi	ans(1)		-	-	Lattenies			-		uny 110	cipitatio		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	7.04	6.35	9.85	1999	30	13.65	1999	1.00	1981	12.4	8.3	4.2	2.1	2.22	2.88	3.88	4.73	5.55	6.40	7.33	8.42	9.83	12.03	14.07		
Feb	5.07	5.38	7.02	1961	18	9.27	1979	.72	2000	9.2	6.3	3.8	1.8	1.39	1.87	2.60	3.24	3.87	4.53	5.25	6.11	7.23	8.99	10.63		
Mar	6.31	6.60	4.43	1974	27	11.35	1973	2.49	1997	9.9	7.3	4.3	2.0	2.85	3.40	4.18	4.81	5.39	5.98	6.61	7.34	8.25	9.62	10.87		
Apr	5.57	5.06	10.68	1983	7	17.50	1983	.63	1999	8.0	5.5	3.0	1.8	.74	1.20	1.99	2.77	3.58	4.48	5.52	6.81	8.54	11.38	14.12		
May	5.29	4.89	6.70	1990	13	11.60	1990	.52	1998	8.8	6.3	3.1	1.6	.58	.98	1.72	2.45	3.24	4.13	5.17	6.46	8.22	11.13	13.96		
Jun	4.34	3.88	5.11	2001	11	10.45	1975	.70	1979	10.0	6.4	2.7	1.3	1.28	1.70	2.32	2.85	3.37	3.91	4.51	5.21	6.12	7.54	8.86		
Jul	5.64	5.12	3.42	1982	9	14.52	1979	1.57	2000	12.1	8.5	3.8	1.8	1.94	2.48	3.25	3.91	4.54	5.18	5.89	6.71	7.76	9.39	10.89		
Aug	4.84	5.02	4.22	1987	7	13.03	1987	.19	1976	10.3	7.2	3.1	1.3	.77	1.18	1.88	2.55	3.24	4.00	4.86	5.92	7.33	9.62	11.82		
Sep	4.26	4.01	7.78	1998	28	14.41	1998	.32	1984	8.8	5.7	2.6	1.2	.60	.95	1.56	2.16	2.77	3.46	4.24	5.21	6.51	8.63	10.67		
Oct	3.57	3.19	4.04	1985	1	13.74	1985	.00	1978	6.1	4.4	2.0	1.1	.12	.40	.90	1.41	1.98	2.63	3.40	4.37	5.72	7.96	10.18		
Nov	5.29	5.18	5.92	1948	27	12.61	1986	1.34	1981	9.5	6.5	3.5	1.8	1.51	2.01	2.77	3.43	4.07	4.74	5.48	6.36	7.49	9.27	10.93		
Dec	5.25	4.81	4.48	1983	28	14.26	1971	1.57	1980	10.4	7.0	3.2	1.5	1.89	2.38	3.09	3.69	4.26	4.85	5.49	6.23	7.17	8.63	9.97		
Ann	62.47	62.12	10.68	Apr 1983	7	17.50	Apr 1983	.00	Oct 1978	115.5	79.4	39.3	19.3	47.43	50.41	54.20	57.04	59.55	61.97	64.44	67.16	70.44	75.16	79.21		

<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

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**COOP ID: 223887** 

**Station: HATTIESBURG 5 SW, MS** 

Climate Division: MS 9 NWS Call Sign: Elevation: 385 Feet Lat: 31°15N Lon: 89°20W

										Snov	w (inc	hes)													
						Sn	ow To	tals							Mean Number of Days (1)										
	Mean	s/Medi	ans (1)	)					Extre	mes (2)				ow Fa		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	.2	.0	#	0	3.0	1977	31	3.0	1977	3	1977	31	#+	1992	.1	.1	@	.0	.0	.1	@	.0	.0		
Feb	.1	.0	#	0	2.5	1973	9	2.5	1973	2	1973	9	#	1973	.1	.1	.0	.0	.0	@	.0	.0	.0		
Mar	.2	.0	0	0	4.0	1993	13	4.0	1993	0	0	0	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	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	.1	1973	21	.1	1973	0	0	0	0	0	@	.0	.0	.0	.0	.0	.0	.0	.0		
Ann	.5	.0	N/A	N/A	4.0	Mar 1993	13	4.0	Mar 1993	3	Jan 1977	31	#+	Jan 1992	.2	.2	@	.0	.0	.1	@	.0	.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

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**COOP ID: 223887** 

Lon: 89°20W

Lat: 31°15N

Elevation: 385 Feet

Station: HATTIESBURG 5 SW, MS

16

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**NWS Call Sign:** Climate Division: MS 9

> Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(\*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 4/11 4/07 4/03 3/31 3/29 3/26 3/23 3/20 3/15 32 3/04 3/31 3/25 3/20 3/16 3/12 3/08 2/28 2/2128 3/11 3/05 2/28 2/25 2/21 2/17 2/13 2/09 2/02 2/24 1/05 24 3/04 2/17 2/12 2/07 2/01 1/26 1/19 20 2/20 2/10 2/01 1/25 1/16 1/06 0/00 0/00 0/00 16 1/20 1/10 12/29 0/00 0/00 0/00 0/00 0/00 0/00 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(\*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 36 10/16 10/22 10/26 10/30 11/03 11/06 11/10 11/15 11/21 32 11/05 11/10 11/13 11/16 11/19 11/22 11/25 11/28 12/03 28 11/07 11/17 11/25 12/01 12/07 12/13 12/19 12/27 1/06 24 11/28 12/08 12/16 12/23 12/30 1/05 1/13 1/22 2/09 20 12/10 12/22 1/01 1/09 1/19 1/31 0/00 0/00 0/00 1/05 0/00 16 12/26 1/15 0/00 0/00 0/00 0/00 0/00 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 243 235 228 223 218 214 208 202 194 36 32 274 266 260 256 251 246 242 236 228 28 320 307 299 293 286 280 274 267 256 24 >365 >365 343 331 321 313 304 295 282 342 20 >365 >365 >365 >365 >365 >365 326 309

>365

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

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360

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<sup>\*</sup> Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

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	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	543	383	219	70	6	0	0	0	1	78	256	468	2024		
60	404	257	117	19	0	0	0	0	0	29	154	332	1312		
57	328	192	72	7	0	0	0	0	0	14	106	260	979		
55	283	155	49	3	0	0	0	0	0	8	79	218	795		
50	189	81	15	0	0	0	0	0	0	1	32	133	451		
32	15	0	0	0	0	0	0	0	0	0	0	5	20		

Base	Cooling Degree Days (1)														
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
32	507	547	831	999	1265	1411	1540	1534	1347	1065	764	570	12380		
55	62	58	167	312	552	721	827	821	657	360	153	71	4761		
57	46	38	128	256	490	661	765	759	597	304	120	50	4214		
60	28	20	80	178	397	571	672	666	507	226	78	29	3452		
65	0	6	27	79	247	421	517	511	358	120	30	11	2327		
70	0	0	6	22	121	271	362	356	217	49	10	0	1414		

										Gro	wing 1	Degre	e Uni	ts (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	290	367	600	761	1022	1171	1299	1286	1110	819	533	346	290	657	1257	2018	3040	4211	5510	6796	7906	8725	9258	9604				
45	182	249	451	612	867	1021	1144	1131	960	664	391	225	182	431	882	1494	2361	3382	4526	5657	6617	7281	7672	7897				
50	103	152	310	464	712	871	989	976	810	510	265	141	103	255	565	1029	1741	2612	3601	4577	5387	5897	6162	6303				
55	52	83	192	326	557	721	834	821	660	360	160	76	52	135	327	653	1210	1931	2765	3586	4246	4606	4766	4842				
60	20	40	102	198	404	571	679	666	510	226	82	34	20	60	162	360	764	1335	2014	2680	3190	3416	3498	3532				
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)	•					
50/86	<b>86</b> 180 232 377 498 698 815 896 887 761 544 338 21											218	180	412	789	1287	1985	2800	3696	4583	5344	5888	6226	6444				

(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