

Climatology of the United States

No. 20

1971-2000

Station: CARTHAGE 3 SW, MS

COOP ID: 221489

Climate Division: MS 5

NWS Call Sign:

Elevation: 370 Feet

Lat: 32°44N

Lon: 89°33W

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	55.0	32.6	43.8	81+	1972	14	52.4	1974	-5	1962	12	33.0	1977	663	0	.0	.0	20.9	1.4	17.4	.1
Feb	60.1	35.5	47.8	86	1996	24	54.4	1990	-1	1960	14	37.8	1978	482	0	.0	.0	22.3	.6	12.7	.0
Mar	68.3	43.2	55.8	89	1995	23	61.0	1974	13	1980	3	50.1	1996	302	15	.0	.0	29.1	.0	5.7	.0
Apr	75.5	49.3	62.4	94	1987	22	68.2	1981	26+	1987	4	57.6	1993	126	48	.0	.2	30.0	.0	.9	.0
May	82.4	58.5	70.5	97+	1964	26	74.5	1987	38+	1960	13	65.7	1976	23	191	.0	2.8	31.0	.0	.0	.0
Jun	89.0	65.7	77.4	104	1963	14	80.4	1998	44	1984	1	74.0	1974	0	371	.1	15.8	30.0	.0	.0	.0
Jul	92.1	69.4	80.8	104+	1962	13	83.9	1980	51	1967	15	78.5	1994	0	489	.8	23.7	31.0	.0	.0	.0
Aug	91.8	68.2	80.0	106	2000	30	83.0	1980	52	1956	23	76.0	1992	0	466	1.1	23.0	31.0	.0	.0	.0
Sep	87.0	62.3	74.7	104+	1980	11	81.7	1980	36	1967	30	70.6+	1981	11	301	.5	12.5	30.0	.0	.0	.0
Oct	77.3	49.3	63.3	95	1963	13	69.1	1984	26	1957	28	57.9+	1987	129	74	.0	1.1	30.9	.0	1.1	.0
Nov	66.9	41.2	54.1	87+	1955	13	61.7	1985	15	1959	30	45.9	1976	344	15	.0	.0	28.1	.1	8.4	.0
Dec	58.0	34.8	46.4	82+	1956	7	55.8	1984	1+	1989	23	37.2	1989	584	6	.0	.0	23.6	.5	15.7	.0
Ann	75.3	50.8	63.1	106	Aug 2000	30	83.9	Jul 1980	-5	Jan 1962	12	33.0	Jan 1977	2664	1976	2.5	79.1	337.9	2.6	61.9	.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: 1955-2001

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

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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: CARTHAGE 3 SW, MS

COOP ID: 221489

Climate Division: MS 5

NWS Call Sign:

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Lon: 89°33W

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	5.96	5.77	6.17	1979	20	14.69	1974	1.11	1986	11.8	8.8	4.1	1.8	1.76	2.32	3.17	3.91	4.62	5.37	6.19	7.16	8.41	10.37	12.19
Feb	4.89	4.72	6.42	1983	10	13.02	1983	1.69	1986	9.1	6.4	3.4	1.7	1.45	1.92	2.62	3.22	3.80	4.41	5.08	5.87	6.90	8.49	9.98
Mar	6.13	5.92	3.44	1994	28	16.82	1976	1.90	1982	10.2	7.6	4.2	2.2	2.29	2.86	3.68	4.37	5.02	5.69	6.41	7.25	8.32	9.96	11.46
Apr	5.83	5.22	6.50	1979	13	16.59	1991	1.33	1976	8.3	6.1	3.5	2.2	1.32	1.86	2.71	3.48	4.25	5.07	5.98	7.08	8.52	10.81	12.98
May	5.39	5.20	3.49	1968	26	10.49	1983	1.01	2000	9.8	7.4	3.5	1.7	1.12	1.62	2.41	3.13	3.85	4.63	5.51	6.56	7.95	10.17	12.27
Jun	3.44	3.31	2.42	1961	20	7.31	1989	.39	1988	9.1	5.9	2.2	1.0	.95	1.27	1.77	2.20	2.63	3.07	3.56	4.14	4.90	6.09	7.20
Jul	4.44	4.16	3.47	1965	25	10.05	1975	.38	2000	11.0	7.7	3.0	1.3	1.16	1.58	2.22	2.79	3.35	3.93	4.59	5.36	6.36	7.95	9.44
Aug	3.61	3.33	4.10	1975	1	8.91	1975	1.61	1987	8.4	5.6	2.5	.9	1.42	1.75	2.23	2.62	2.99	3.37	3.78	4.25	4.86	5.78	6.62
Sep	3.49	2.97	3.20	2000	13	9.13	1979	.00	1984	7.7	5.0	2.2	1.2	.50	.95	1.54	2.03	2.52	3.03	3.61	4.29	5.18	6.61	7.95
Oct	3.36	2.66	4.27	1975	17	8.74	1985	.19	1987	6.4	4.3	2.1	1.1	.36	.62	1.08	1.55	2.06	2.62	3.28	4.10	5.23	7.08	8.89
Nov	5.28	4.89	4.70	2000	9	10.12	1983	1.22	1971	9.1	6.6	3.9	1.7	1.56	2.06	2.81	3.46	4.09	4.75	5.48	6.34	7.45	9.18	10.79
Dec	5.44	4.64	5.74	1982	4	13.89	1982	1.51	1980	10.6	7.5	3.3	1.8	1.78	2.29	3.05	3.70	4.32	4.96	5.67	6.49	7.55	9.19	10.71
Ann	57.26	56.86	6.50	Apr 1979	13	16.82	Mar 1976	.00	Sep 1984	111.5	78.9	37.9	18.6	40.55	43.78	47.92	51.07	53.86	56.56	59.36	62.44	66.19	71.63	76.33

+ 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: 1955-2001

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

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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	.8	.0	#	0	4.5	1982	14	10.0	1977	4	1977	31	1	1977	.4	.3	.1	.0	.0	.3	.1	.0	.0
Feb	.0	.0	#	0	.5	1978	21	.5	1978	#+	1989	8	#+	1989	.1	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	#	0	.8	1978	10	.8	1978	#+	1983	24	#+	1983	.1	.0	.0	.0	.0	.0	.0	.0	.0
Apr	.1	.0	#	0	1.0	1987	3	1.0	1987	1	1987	3	#	1987	.1	.1	.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	#	1976	29	#+	1976	#	1976	30	#	1976	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.0	.0	#	0	.5	1973	21	.5	1973	#	1973	21	#	1973	.1	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.9	.0	N/A	N/A	4.5	Jan 1982	14	10.0	Jan 1977	4	Jan 1977	31	1	Jan 1977	.8	.4	.1	.0	.0	.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:

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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	4/21	4/17	4/14	4/11	4/08	4/06	4/03	3/31	3/26
32	4/13	4/08	4/04	4/01	3/29	3/26	3/23	3/19	3/14
28	3/26	3/20	3/16	3/13	3/09	3/06	3/03	2/26	2/21
24	3/12	3/05	2/28	2/24	2/20	2/16	2/11	2/06	1/30
20	3/07	2/25	2/18	2/12	2/06	2/01	1/26	1/18	1/06
16	2/26	2/16	2/08	2/01	1/24	1/15	12/30	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	10/06	10/11	10/15	10/18	10/21	10/24	10/27	10/30	11/05
32	10/16	10/22	10/26	10/30	11/02	11/06	11/10	11/14	11/20
28	10/28	11/04	11/08	11/12	11/16	11/20	11/24	11/29	12/05
24	11/12	11/19	11/25	11/29	12/03	12/08	12/12	12/17	12/25
20	11/23	12/03	12/11	12/18	12/24	12/30	1/06	1/14	1/26
16	12/05	12/18	12/28	1/06	1/16	1/27	2/17	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	215	208	203	199	195	191	186	182	175
32	240	232	227	222	218	213	209	203	195
28	280	270	263	257	251	245	239	232	222
24	311	303	296	291	286	281	276	270	261
20	>365	349	332	322	314	307	300	292	281
16	>365	>365	>365	>365	>365	349	329	317	303

* 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

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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	663	482	302	126	23	0	0	0	11	129	344	584	2664
60	518	350	181	51	4	0	0	0	2	57	223	439	1825
57	435	275	125	24	1	0	0	0	0	31	164	358	1413
55	382	229	93	13	0	0	0	0	0	18	131	309	1175
50	267	136	37	2	0	0	0	0	0	4	64	204	714
32	32	4	0	0	0	0	0	0	0	0	0	16	52

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	398	446	736	912	1191	1361	1512	1489	1279	969	661	461	11415
55	35	28	116	235	478	671	799	776	589	274	101	41	4143
57	26	18	85	186	417	611	737	714	530	224	75	29	3652
60	16	9	48	123	328	521	644	621	442	158	43	17	2970
65	0	0	15	48	191	371	489	466	301	74	15	6	1976
70	0	0	2	12	88	225	334	312	179	27	3	0	1182

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	204	278	500	680	948	1128	1267	1249	1045	727	427	255	204	482	982	1662	2610	3738	5005	6254	7299	8026	8453	8708
45	122	179	359	531	793	978	1112	1094	895	573	305	156	122	301	660	1191	1984	2962	4074	5168	6063	6636	6941	7097
50	63	102	234	387	638	828	957	939	745	421	192	97	63	165	399	786	1424	2252	3209	4148	4893	5314	5506	5603
55	33	52	137	251	483	678	802	784	595	282	110	49	33	85	222	473	956	1634	2436	3220	3815	4097	4207	4256
60	10	18	65	143	333	528	647	629	447	164	55	23	10	28	93	236	569	1097	1744	2373	2820	2984	3039	3062
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	140	189	322	444	639	769	864	844	704	488	290	170	140	329	651	1095	1734	2503	3367	4211	4915	5403	5693	5863

(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