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: 226476

Lon: 90°31W

Station: OAKLEY EXP STA, MS

Climate Division: MS 7 NWS Call Sign:

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 55.6 33.8 44.7 80 +1972 25 51.5 1974 2 1985 21 34.2 1977 637 0 .0 .0 21.3 1.1 15.6 Jan 60.7 37.2 49.0 85 1986 21 55.4 1976 9 1996 4 38.4 1978 451 2 .0 .0 22.5 .6 10.3 0. Feb Mar 68.5 44.7 56.6 88+ 1974 30 61.9 1985 12 1996 51.5 1996 276 16 .0 .0 29.0 .0 3.6 0. 27+ 58.7 1997 Apr 75.5 51.1 63.3 91 +1987 22 69.3 1981 1987 4 112 61 .0. .2 30.0 .0 .6 .0 May 82.7 60.3 71.5 95+ 1977 31 75.5 1996 39 1992 7 66.3 1976 17 219 .0 3.2 31.0 .0 .0 .0 78.0 74.0 Jun 89.1 66.9 101 1978 29 81.2 1998 48+ 1984 1974 0 391 .1 16.0 30.0 .0 .0 .0 Jul 92.0 70.0 81.0 105 2000 18 84.7 55 1972 78.3 1994 497 1.0 24.0 31.0 0. 1998 0 .0 .0 1992 91.9 68.5 80.2 110 2000 31 85.4 2000 50 1989 10 76.8 0 470 1.3 22.7 31.0 .0 .0 .0 Aug 8 Sep 87.2 62.7 75.0 109 2000 1 80.9 1998 37 +1983 22 69.6 1974 306 .3 13.2 30.0 .0 .0 .0

20

30

23

23

57.6

45.8

38.7

34.2

1976

1976

1989

Jan

1977

116

328

553

2498

89

19

7

2077

27 +

17

1

1989

1976

1989

Dec

1989

52.0

50.3

42.2

36.1

64.2

54.7

47.4

63.8

78.0

67.2

58.6

75.6

Oct

Nov

Dec

Ann

96+

88

83

110

1998

1998

1982

Aug

2000

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

1

1

3

31

69.9

61.7

57.5

85.4

1984

1985

1984

Aug

2000

Issue Date: February 2004 045-A

(1) From the 1971-2000 Monthly Normals

.0

.0

.0

2.7

1.2

.0

.0

80.5

Elevation: 205 Feet Lat: 32°12N

(2) Derived from station's available digital record: 1948-2001

30.9

28.3

23.9

338.9

.0

@

.5

2.2

.7

6.4

13.3

50.5

.0

0.

.0

.0

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

⁺ Also occurred on an earlier date(s)

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

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Station: OAKLEY EXP STA, MS

Climate Division: MS 7 NWS Call Sign: Elevation: 205 Feet Lat: 32°12N Lon: 90°31W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total	s			M	ean N	Numb Oays (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										
		ans(1)				Extreme	S			Daily Precipitation				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	6.24	5.57	6.20	1979	20	14.30	1979	1.06	1986	11.7	7.9	4.1	1.9	1.60	2.19	3.09	3.89	4.68	5.51	6.44	7.53	8.96	11.22	13.34
Feb	4.80	4.13	4.95	1975	16	10.34	1987	1.28	2000	9.1	5.9	3.4	1.7	1.38	1.84	2.52	3.12	3.70	4.31	4.98	5.77	6.79	8.40	9.89
Mar	6.36	6.26	4.76	1991	29	15.52	1976	2.07	1978	9.7	7.1	4.2	2.2	2.55	3.14	3.97	4.65	5.29	5.95	6.66	7.48	8.51	10.10	11.54
Apr	5.94	4.40	6.42	1980	12	17.54	1991	1.09	1981	7.9	5.7	3.5	2.2	1.00	1.52	2.38	3.20	4.03	4.94	5.98	7.24	8.93	11.66	14.27
May	4.81	4.86	4.34	1967	22	10.41	1983	.10	1998	9.3	6.8	3.1	1.6	.62	1.00	1.69	2.36	3.07	3.85	4.76	5.88	7.40	9.89	12.30
Jun	4.67	4.28	4.18	1958	16	12.59	1987	1.03	1988	9.0	6.5	3.0	1.5	.97	1.40	2.09	2.71	3.34	4.01	4.77	5.68	6.88	8.80	10.62
Jul	3.84	3.15	7.20	2001	27	10.72	1989	.52	1997	9.3	6.4	2.8	.9	.98	1.34	1.90	2.39	2.88	3.39	3.96	4.64	5.53	6.93	8.24
Aug	3.77	3.16	4.55	1992	27	8.99	1992	.66	2000	7.9	5.5	2.2	1.2	.87	1.22	1.77	2.26	2.76	3.28	3.87	4.57	5.49	6.95	8.33
Sep	3.02	3.09	2.97	1974	26	5.72	1973	.62	1984	7.4	4.7	1.8	.8	.85	1.13	1.57	1.94	2.31	2.70	3.13	3.63	4.29	5.32	6.28
Oct	3.46	2.40	4.04	1984	21	11.18	1984	.09	1978	6.3	4.3	2.3	1.1	.30	.54	1.00	1.48	2.00	2.60	3.32	4.22	5.46	7.53	9.57
Nov	5.15	4.74	6.17	1964	28	10.49	1977	1.27	1981	8.7	6.3	3.5	1.7	1.56	2.05	2.78	3.41	4.02	4.66	5.35	6.17	7.23	8.89	10.42
Dec	5.39	4.60	4.80	1997	24	12.51	1982	.97	1980	10.2	7.0	3.5	1.6	1.76	2.27	3.03	3.67	4.28	4.92	5.62	6.43	7.48	9.11	10.62
Ann	57.45	57.10	7.20	Jul 2001	27	17.54	Apr 1991	.09	Oct 1978	106.5	74.1	37.4	18.4	43.53	46.29	49.79	52.42	54.74	56.97	59.26	61.78	64.81	69.18	72.93

⁺ 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: 1948-2001

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

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COOP ID: 226476

Station: OAKLEY EXP STA, MS

Climate Division: MS 7 NWS Call Sign: Elevation: 205 Feet Lat: 32°12N Lon: 90°31W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nui	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1)	1	Extremes (2)												Snow Fall >= Thresholds						n ds
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	4.5	1982	5	1982	14	#+	1982	.4	.2	.2	.0	.0	.2	.1	@	.0
Feb	.0	.0	#	0	.3	1985	1	.3+	1985	#	1989	7	#	1989	.1	.0	.0	.0	.0	.0	.0	.0	.0
Mar	#	.0	0	0	#	1978	4	#+	1978	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Apr	#	.0	0	0	#	1987	3	#	1987	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	.1	1976	29	.1	1976	#	1976	29	#	1976	.1	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.0	.0	#	0	.2	1973	21	.2	1973	#	1973	21	#	1973	.1	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.8	.0	N/A	N/A	4.5	Jan 1982	14	4.5	Jan 1982	5	Jan 1982	14	#+	Feb 1989	.7	.2	.2	.0	.0	.2	.1	@	.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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Lon: 90°31W

Lat: 32°12N

Elevation: 205 Feet

Station: OAKLEY EXP STA, MS

Climate Division: MS 7

NWS Call Sign:

				Freez	e Data									
			Spri	ng Freeze D	ates (Month/	Day)								
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated	(*)						
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	4/19	4/14	4/11	4/08	4/05	4/02	3/30	3/27	3/22					
32	4/10	4/04	3/30	3/26	3/23	3/19	3/15	3/11	3/05					
28	3/25	3/18	3/13	3/09	3/05	3/01	2/24	2/19	2/12					
24	3/10	3/02	2/24	2/19	2/14	2/09	2/04	1/29	1/21					
20	3/02	2/20	2/13	2/06	1/31	1/25	1/18	1/08	0/00					
16	2/16	2/05	1/26	1/17	1/06	0/00	0/00	0/00	0/00					
1		•	Fa	ll Freeze Da	tes (Month/D	ay)	•	•	1					
Tomp (E)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)													
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	3/22 3/05 2/12 1/21 0/00					
36	10/09	10/14	10/18	10/21	10/23	10/26	10/29	11/02	11/07					
32	10/21	10/27	10/31	11/03	11/06	11/10	11/13	11/17	11/23					
28	11/01	11/07	11/11	11/15	11/18	11/22	11/26	11/30	12/06					
24	11/09	11/19	11/26	12/01	12/07	12/13	12/19	12/26	1/04					
20	11/20	12/03	12/11	12/19	12/26	1/03	1/12	1/24	0/00					
16	12/13	12/23	1/01	1/09	1/20	0/00	0/00	0/00	0/00					
1		•	•	Freeze F	ree Period	•	•	•	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	217	211	207	204	201	197	194	190	184					
32	256	246	239	233	228	222	216	209	200					
28	285	276	269	263	258	253	247	240	231					
24	327	314	306	299	293	287	280	272	262					
20	>365	>365	>365	340	326	316	307	297	285					
16	>365	>365	>365	>365	>365	>365	>365	341	316					

^{*} 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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	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	637	451	276	112	17	0	0	0	8	116	328	553	2498		
60	491	323	159	43	3	0	0	0	1	51	211	410	1692		
57	409	252	106	20	1	0	0	0	0	27	155	330	1300		
55	358	209	77	11	0	0	0	0	0	17	123	282	1077		
50	246	124	27	1	0	0	0	0	0	4	59	182	643		
32	26	3	0	0	0	0	0	0	0	0	0	11	40		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	419	478	763	940	1225	1381	1520	1493	1288	996	681	488	11672
55	38	40	126	260	512	691	807	780	598	299	114	46	4311
57	27	26	93	209	451	631	745	718	538	248	86	32	3804
60	17	14	53	143	360	541	652	625	449	179	52	18	3103
65	0	2	16	61	219	391	497	470	306	89	19	7	2077
70	0	0	2	17	109	244	342	316	181	34	5	0	1250

	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	228	316	537	717	994	1156	1290	1260	1062	759	459	284	228	544	1081	1798	2792	3948	5238	6498	7560	8319	8778	9062	
45	141	207	392	568	839	1006	1135	1105	912	604	330	179	141	348	740	1308	2147	3153	4288	5393	6305	6909	7239	7418	
50	79	129	268	423	684	856	980	950	762	454	215	108	79	208	476	899	1583	2439	3419	4369	5131	5585	5800	5908	
55	40	63	155	285	529	706	825	795	612	310	129	58	40	103	258	543	1072	1778	2603	3398	4010	4320	4449	4507	
60	14	24	80	170	377	556	670	640	464	193	63	28	14	38	118	288	665	1221	1891	2531	2995	3188	3251	3279	
Base		•	•	Gro	wing De	gree Unit	s for Co	rn (Mont	thly)	•	•	•			Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)			
50/86	146	201	336	460	675	798	882	854	716	506	300	184	146	347	683	1143	1818	2616	3498	4352	5068	5574	5874	6058	

(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