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: 032930

Lon: 94°27W

Station: GRAVETTE, AR

Climate Division: AR 1 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 46.4 24.1 35.3 77 1952 44.8 1990 -15 1984 19 23.1 1979 922 0 .0 .0 13.3 4.7 23.1 1.2 Jan 53.1 28.8 41.0 88 1996 22 50.4 1976 -14 1996 4 29.2 1978 673 0 .0 .0 16.9 2.6 17.0 .6 Feb Mar 62.5 37.2 49.9 90 1995 22 54.3 1974 -14 1948 12 43.3 1975 472 .0 @ 26.2 .3 9.9 0. 45.7 92 52.1 1983 23 Apr 72.0 58.9 1987 18 64.8 1981 16 1957 13 208 .0. .1 29.2 .0 2.7 0. May 78.8 53.9 66.4 99 1953 28 71.8 1987 27 1963 1 61.3 1976 79 121 .0 .5 31.0 .0 .1 .0 74.2 1952 30 78.3 40 69.7 86.6 61.7 103 1994 1964 1 1974 7 281 .1 6.9 30.0 .0 .0 .0 Jun Jul 92.5 65.6 79.1 113 1954 13 85.5 1980 44 1971 31 75.4 1989 434 1.9 20.0 31.0 .0 0 .0 .0 3 92.1 64.1 78.1 107 +1956 16 84.1 1980 44 1989 8 72.7 1992 410 2.3 18.8 31.0 .0 .0 .0 Aug 28 45 .5 .2 Sep 84.0 57.1 70.6 108 2000 2 77.9 1998 1984 30 62.3 1974 210 7.0 30.0 .0 .0 31 54.0 Oct 73.3 46.9 60.1 97 1953 1 64.0 1973 15 1993 1976 183 31 .0 .2 30.7 .0 2.0 .0 59.3 36.7 48.0 84+ 1950 57.4 1999 4+ 1959 17 41.0 1972 514 4 .0 .0 23.7 10.4 0. Nov 1 .4 Dec 49.6 27.6 38.6 77+ 1948 15 45.2 1984 -16 1989 23 24.3 1983 817 0 .0 .0 16.1 2.8 20.3 .6 Jul Jul Dec Jan 70.9 45.8 58.4 113 1954 13 85.5 1980 1989 23 23.1 1979 3923 1515 4.8 53.5 309.1 10.8 85.7 2.4 -16 Ann

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

Issue Date: February 2004 034-A

(1) From the 1971-2000 Monthly Normals

Elevation: 1,260 Feet Lat: 36°26N

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

COOP ID: 032930

Climate Division: AR 1 NWS Call Sign: Elevation: 1,260 Feet Lat: 36°26N Lon: 94°27W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total						ays (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)				Extremes	3			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	2.25	1.88	2.78	1969	29	5.88	1973	.01	1986	7.4	4.2	1.4	.6	.24	.41	.72	1.03	1.37	1.75	2.19	2.74	3.50	4.74	5.96
Feb	2.47	2.27	3.06	1997	21	6.43	1997	.32	1991	7.7	4.5	1.7	.6	.52	.75	1.11	1.44	1.77	2.12	2.52	3.00	3.62	4.63	5.58
Mar	4.22	4.11	3.48	1990	14	10.09	1973	.78	1992	9.5	6.9	2.8	1.4	1.17	1.57	2.17	2.70	3.22	3.77	4.37	5.08	6.00	7.45	8.80
Apr	4.44	4.00	4.74	1970	30	9.05	1983	.26	1989	9.5	6.6	2.9	1.6	1.03	1.44	2.09	2.67	3.25	3.87	4.56	5.38	6.46	8.17	9.78
May	5.38	5.63	4.80	1950	10	8.64	1990	1.44	1994	11.3	7.7	4.1	1.6	2.21	2.70	3.40	3.97	4.51	5.05	5.64	6.32	7.18	8.49	9.68
Jun	5.09	5.14	4.08	1948	23	9.21	2000	.73	1991	9.1	6.7	3.4	1.5	1.39	1.87	2.60	3.24	3.88	4.54	5.27	6.13	7.26	9.03	10.68
Jul	3.18	2.61	5.52	1975	27	10.04	1972	.32	1974	6.8	4.6	1.8	.8	.44	.70	1.16	1.60	2.06	2.57	3.16	3.89	4.86	6.46	8.00
Aug	3.18	2.98	3.85	1952	22	6.55	1974	.00	2000	7.2	4.8	2.4	.7	.71	1.16	1.69	2.11	2.51	2.92	3.36	3.88	4.55	5.59	6.54
Sep	4.86	4.43	5.90	1986	30	13.85	1986	.30	1979	8.6	5.9	3.0	1.5	.75	1.17	1.87	2.54	3.24	4.00	4.87	5.94	7.37	9.69	11.92
Oct	3.81	3.35	4.97	1998	5	8.93	1984	.72	1977	8.2	5.3	2.7	1.2	.88	1.24	1.79	2.29	2.79	3.32	3.92	4.62	5.55	7.03	8.42
Nov	4.81	4.79	6.03	1973	24	9.42+	1994	.36	1989	8.9	6.2	3.2	1.6	1.09	1.54	2.24	2.87	3.51	4.18	4.93	5.83	7.01	8.89	10.66
Dec	3.46	2.90	3.63	1984	13	10.00	1984	.47	1989	8.4	4.5	2.2	1.2	.60	.90	1.40	1.88	2.36	2.89	3.49	4.22	5.19	6.77	8.27
Ann	47.15	46.13	6.03	Nov 1973	24	13.85	Sep 1986	.00	Aug 2000	102.6	67.9	31.6	14.3	33.32	35.99	39.41	42.01	44.32	46.56	48.87	51.43	54.53	59.03	62.93

⁺ 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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Climate Division: AR 1 NWS Call Sign: Elevation: 1,260 Feet Lat: 36°26N Lon: 94°27W

										Snov	w (incl	nes)												
						Sno	ow To	tals							Mean Number of Days (1)									
	Mean	s/Medi	ans (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	4.8	1.4	1	1	11.0	1996	2	26.0	1979	10	1996	2	4	1979	1.9	1.6	.6	.3	@	4.9	2.7	1.3	.0	
Feb	4.4	2.2	1	#	16.0	1975	23	16.5+	1978	16	1975	23	3	1978	1.7	1.2	.4	.1	.1	3.2	2.2	.8	@	
Mar	2.0	.0	#	0	14.2	1994	8	16.6	1994	15	1989	6	2	1989	.7	.6	.3	.2	@	.6	.4	.3	.2	
Apr	#	.0	#	0	#	1996	6	#+	1996	#	1996	6	#	1996	.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	.1	.0	#	0	1.5	1993	30	1.5	1993	1	1993	30	#	1993	@	@	.0	.0	.0	@	.0	.0	.0	
Nov	.9	.0	#	0	5.0	1971	23	5.0	1971	4	1975	26	#+	2000	.4	.3	.2	@	.0	.5	.2	.0	.0	
Dec	2.6	1.0	#	#	11.2	2000	13	11.2	2000	9	2000	13	3	2000	1.7	1.2	.3	.1	@	3.0	1.5	.3	.0	
Ann	14.8	4.6	N/A	N/A	16.0	Feb 1975	23	26.0	Jan 1979	16	Feb 1975	23	4	Jan 1979	6.4	4.9	1.8	.7	.1	12.2	7.0	2.7	.2	

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

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[@] 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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				Freez	e 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((*)							
Temp (1)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	5/11	5/06	5/03	4/29	4/27	4/24	4/21	4/17	4/12						
32	5/01	4/25	4/21	4/17	4/14	4/11	4/08	4/04	3/29						
28	4/16	4/11	4/08	4/05	4/02	3/30	3/28	3/24	3/19						
24	4/04	3/30	3/26	3/22	3/19	3/16	3/13	3/09	3/03						
20	3/27	3/20	3/15	3/10	3/06	3/02	2/26	2/21	2/14						
16	3/17	3/08	3/03	2/26	2/21	2/16	2/11	2/06	1/29						
			Fa	ll Freeze Da	tes (Month/L	Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	9/21	9/26	9/30	10/03	10/06	10/09	10/12	10/15	10/20						
32	9/26	10/03	10/08	10/12	10/15	10/19	10/23	10/28	11/03						
28	10/10	10/16	10/21	10/25	10/29	11/02	11/07	11/12	11/18						
24	10/27	11/02	11/07	11/11	11/14	11/18	11/22	11/26	12/03						
20	11/02	11/09	11/14	11/19	11/23	11/28	12/02	12/08	12/15						
16	11/13	11/20	11/25	11/29	12/03	12/07	12/12	12/17	12/24						
				Freeze F	ree Period										
Temp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)								
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	181	174	169	165	161	158	153	149	142						
32	207	199	193	188	183	179	174	168	159						
28	230	223	218	214	210	205	201	196	189						
24	265	256	250	244	239	235	229	223	214						
20	287	278	272	266	261	256	251	245	236						
16	315	304	297	290	284	278	272	264	254						

^{*} 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	922	673	472	208	79	7	0	3	45	183	514	817	3923		
60	768	542	328	107	27	1	0	0	15	85	376	666	2915		
57	682	464	249	63	12	0	0	0	6	47	300	580	2403		
55	624	413	203	41	7	0	0	0	3	30	254	523	2098		
50	482	299	111	10	0	0	0	0	0	7	159	388	1456		
32	123	49	3	0	0	0	0	0	0	0	10	74	259		

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	224	301	555	805	1065	1264	1457	1430	1156	871	490	280	9898
55	12	21	42	155	359	574	744	717	469	188	44	16	3341
57	9	15	26	117	302	514	682	655	412	143	30	11	2916
60	1	9	12	71	224	425	589	562	330	88	16	4	2331
65	0	0	1	23	121	281	434	410	210	31	4	0	1515
70	0	0	0	5	50	156	284	267	119	7	0	0	888

	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 S												Sep	Oct	Nov	Dec									
40	83	168	349	573	823	1030	1214	1186	919	631	290	117	83	251	600	1173	1996	3026	4240	5426	6345	6976	7266	7383
45	38	98	229	429	668	880	1059	1031	769	479	183	60	38	136	365	794	1462	2342	3401	4432	5201	5680	5863	5923
50	11	49	135	296	513	730	904	876	620	336	103	27	11	60	195	491	1004	1734	2638	3514	4134	4470	4573	4600
55	3	18	70	179	362	580	749	721	472	211	55	9	3	21	91	270	632	1212	1961	2682	3154	3365	3420	3429
60	0	4	31	94	225	430	594	566	336	111	19	0	0	4	35	129	354	784	1378	1944	2280	2391	2410	2410
Base				Gro	wing De	gree Unit	s for Co	rn (Mont	hly)						Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	57	111	224	366	537	704	809	792	607	402	174	74	57	168	392	758	1295	1999	2808	3600	4207	4609	4783	4857

(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