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: DUMAS, AR 1971-2000 COOP ID: 032148

Climate Division: AR 9 NWS Call Sign: Elevation: 163 Feet Lat: 33°53N Lon: 91°32W

									r	Гетр	eratur	re (°F)									
	Mea	n (1)						Extr	emes					Degree Base To	Days (1) emp 65		Mean	Numb	er of I	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	51.2	33.2	42.2	82+	1943	23	49.4	1990	-5	1962	12	32.2	1977	706	0	.0	.0	18.7	2.1	15.2	.0
Feb	57.8	37.4	47.6	87	1935	21	55.3	1976	1	1949	1	36.1	1978	490	4	.0	.0	21.5	.8	9.6	.0
Mar	66.7	45.0	55.9	90	1955	12	61.5	1974	12	1943	3	50.1	1996	300	15	.0	.0	29.3	@	2.6	.0
Apr	75.5	52.5	64.0	95+	1987	20	69.6	1981	27	1936	3	57.4	1983	107	75	.0	.6	29.9	.0	.1	.0
May	82.9	61.5	72.2	101+	1934	31	76.4	1987	40+	1931	7	67.1	1976	15	239	.0	4.5	31.0	.0	.0	.0
Jun	89.8	68.8	79.3	110	1936	20	82.4	1998	48+	1930	1	75.5	1974	0	429	.1	17.9	30.0	.0	.0	.0
Jul	92.7	71.8	82.3	111	1930	29	86.0	1980	51	1930	17	78.6	1984	0	534	1.9	24.1	31.0	.0	.0	.0
Aug	91.6	70.0	80.8	112	1936	10	85.0	2000	50	1946	31	76.8	1992	0	489	1.3	21.8	31.0	.0	.0	.0
Sep	85.5	63.5	74.5	107	1936	11	79.0	1998	34	1942	29	69.1	1974	7	292	.2	9.9	30.0	.0	.0	.0
Oct	75.9	52.4	64.2	98	1931	10	69.4	1971	26	1952	29	58.2	1976	101	75	.0	.7	31.0	.0	.1	.0
Nov	63.2	43.7	53.5	90+	1937	1	58.5	1985	12	1938	27	46.2	1976	354	7	.0	.0	27.3	.0	3.9	.0
Dec	54.0	36.2	45.1	84	1939	7	55.0	1984	-2	1963	24	34.8	1983	617	0	.0	.0	21.5	1.0	12.1	.0
Ann	73.9	53.0	63.5	112	Aug 1936	10	86.0	Jul 1980	-5	Jan 1962	12	32.2	Jan 1977	2697	2159	3.5	79.5	332.2	3.9	43.6	.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 025-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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Climate Division: AR 9 NWS Call Sign: Elevation: 163 Feet Lat: 33°53N Lon: 91°32W

										Pı	recipi	tation	(incl	nes)										
	Medi Medi		P	recipi	itatio	on Total					ean N of D	ays (3)	Proba		M	nonthly/	annual j indic	precipita ated am	babilit ation will nount vs Probal incomplet	ll be equ	els		ın the
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	4.86	4.57	5.54	1935	20	12.08	1999	.61	1986	8.9	6.8	3.1	1.6	1.22	1.67	2.38	3.01	3.63	4.28	5.01	5.87	7.00	8.79	10.47
Feb	4.35	3.87	5.25	1990	3	11.65	1990	.66+	1999	7.2	5.6	3.0	1.5	1.02	1.43	2.06	2.63	3.20	3.80	4.47	5.27	6.32	7.99	9.56
Mar	5.40							1982	8.9	7.0	3.9	1.8	1.79	2.30	3.05	3.69	4.30	4.94	5.63	6.44	7.48	9.09	10.58	
Apr	5.00	4.16	.16 5.45 1997 5 18.67 1991 .77 198						1987	7.7	6.3	3.1	1.7	.95	1.40	2.14	2.81	3.50	4.24	5.08	6.09	7.43	9.59	11.64
May	4.53	4.54	4.86	1953	4	10.12	1979	.54	1988	8.6	6.6	3.3	1.4	1.24	1.67	2.32	2.89	3.45	4.04	4.69	5.46	6.46	8.03	9.50
Jun	3.66	2.95	6.50	1992	3	12.27	1989	.82	1985	7.1	5.6	2.4	1.1	.78	1.11	1.65	2.14	2.63	3.15	3.74	4.45	5.39	6.88	8.29
Jul	3.79	3.68	5.07	1936	2	9.85	1989	.38	1990	6.7	5.3	2.6	1.3	.79	1.14	1.69	2.20	2.71	3.25	3.87	4.61	5.58	7.14	8.61
Aug	2.94	2.19	4.84	1993	6	10.28	1984	.00	2000	5.6	4.0	1.9	.9	.05	.20	.55	.95	1.42	1.98	2.66	3.55	4.80	6.95	9.11
Sep	3.46	3.33	5.28	1980	28	8.40	1980	.16	1986	5.8	4.3	2.3	1.1	.75	1.07	1.58	2.04	2.50	2.99	3.54	4.20	5.07	6.46	7.77
Oct	4.16	3.41	8.78	1985	19	14.87	1985	.49	2000	6.4	4.7	2.4	1.5	.57	.91	1.50	2.08	2.69	3.36	4.13	5.09	6.37	8.47	10.50
Nov	5.15	4.77	6.35	2000	24	12.09	2000	1.70	1981	8.1	6.0	3.6	1.7	1.50	1.99	2.73	3.37	3.99	4.63	5.35	6.19	7.27	8.98	10.56
Dec	4.84	4.03	5.20	1931	13	13.63	1982	.79	1980	8.0	6.4	3.4	1.6	.99	1.44	2.15	2.80	3.45	4.15	4.94	5.89	7.15	9.16	11.06
Ann	52.14	49.69	8.78	Oct 1985	19	18.67	Apr 1991	.00	Aug 2000	89.0	68.6	35.0	17.2	36.05	39.13	43.10	46.12	48.82	51.43	54.13	57.13	60.77	66.06	70.66

⁺ 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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Station: DUMAS, AR

Climate Division: AR 9 NWS Call Sign:

Elevation: 163 Feet

Lat: 33°53N

Lon: 91°32W

COOP ID: 032148

										Snov	w (inc	hes)											
						Sn	ow To	tals									Mea	n Nu	mber	of Da	ys (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	1.9	.0	#	0	6.0	1985	3	7.5	1985	6	1985	5	1	1988	.9	.6	.4	.1	.0	1.3	.6	.2	.0
Feb	.6	.0	#	0	4.0	1980	9	4.0	1980	3	1988	12	#+	1988	.4	.2	.1	.0	.0	.3	.1	.0	.0
Mar	.1	.0	0	0	1.0	1971	3	1.0	1971	0	0	0	0	0	.1	.1	.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	#	1976	28	#+	1976	#	1976	28	#	1976	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.3	.0	#	0	4.0	1983	16	5.0	1983	4	1983	16	1	1983	.1	.1	.1	.0	.0	.4	.1	.0	.0
Ann	2.9	.0	N/A	N/A	6.0	Jan 1985	3	7.5	Jan 1985	6	Jan 1985	5	1+	Jan 1988	1.5	1.0	.6	.1	.0	2.0	.8	.2	.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

Temp (F)

36

32

28

24

20

16

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COOP ID: 032148

Lon: 91°32W

Lat: 33°53N

Station: DUMAS, AR Climate Division: AR 9

NWS Call Sign:

.20

4/11

3/24

3/12

3/02

2/14

1/30

.10

4/15

3/31

3/20

3/11

2/24

2/07

Elevation: 163 Feet

	Freeze	e Data				
Spri	ng Freeze Da	ates (Month/	Day)			
lity of	later date in	spring (thr	u Jul 31) tha	n indicated(*	ķ)	
0	.40	.50	.60	.70	.80	.90
08	4/05	4/03	3/31	3/28	3/25	3/21
20	3/16	3/13	3/09	3/05	3/01	2/23
)7	3/02	2/26	2/22	2/17	2/12	2/05
24	2/19	2/14	2/09	2/03	1/28	1/19
)7	2/01	1/26	1/19	1/10	12/26	0/00
23	1/16	1/09	12/30	0/00	0/00	0/00
Fal	l Freeze Dat	es (Month/D	ay)	<u>'</u>		•
y of ea	arlier date in	fall (beginn	ing Aug 1) t	han indicated	d(*)	
0	.40	.50	.60	.70	.80	.90
28	10/31	11/03	11/06	11/09	11/12	11/17

Probability of ea Temp (F) .20 .30 .10 36 10/19 10/24 10/28 32 10/27 11/02 11/06 11/09 11/13 11/16 11/19 11/24 11/29 28 11/08 11/14 11/18 11/22 11/25 11/28 12/02 12/06 12/12 24 11/18 11/27 12/03 12/09 12/14 12/19 12/25 12/31 1/09 20 12/05 12/13 12/19 12/24 12/29 1/03 1/10 1/23 0/00 12/20 12/27 1/02 1/08 1/14 0/00 0/00 16 1/26 0/00 Franza Fran Pariod

	P. I. 124 Cl. at 1 to 1															
Temp (F)		Probability of longer than indicated freeze free period (Days)														
Temp (1')	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	230	225	220	217	213	210	207	202	196							
32	270	261	255	249	244	239	234	228	219							
28	300	290	283	277	271	265	259	252	242							
24	335	322	314	307	301	294	288	280	270							
20	>365	>365	>365	361	341	329	319	309	296							
16	>365	>365	>365	>365	>365	>365	359	344	329							

^{*} 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.

Probability of

.30

4/08

3/20

3/07

2/24

2/07

1/23

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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	706	490	300	107	15	0	0	0	7	101	354	617	2697		
60	560	361	180	42	3	0	0	0	1	38	224	474	1883		
57	474	289	125	20	0	0	0	0	0	17	161	390	1476		
55	419	246	94	11	0	0	0	0	0	9	125	337	1241		
50	293	155	38	2	0	0	0	0	0	1	58	225	772		
32	35	8	0	0	0	0	0	0	0	0	0	18	61		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	352	445	738	959	1247	1419	1557	1512	1275	997	643	424	11568
55	23	39	119	280	534	729	844	799	585	293	78	31	4354
57	16	27	88	229	472	669	782	737	525	239	54	21	3859
60	9	15	50	161	381	579	689	644	435	167	27	12	3169
65	0	4	15	75	239	429	534	489	292	75	7	0	2159
70	0	0	2	25	123	280	379	335	167	24	0	0	1335

	Growing Degree Units (2)																							
Base					Growin	g Degree	Units (M	(Ionthly)					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	300 200 100 100 100 100 100 100 100 100 1												183	470	981	1713	2719	3910	5231	6508	7559	8328	8756	8987
45	5 100 185 369 582 851 1041 1166 1122 901 614 291 13											135	100	285	654	1236	2087	3128	4294	5416	6317	6931	7222	7357
50	51	102	241	436	696	891	1011	967	751	462	185	70	51	153	394	830	1526	2417	3428	4395	5146	5608	5793	5863
55	21	51	139	296	541	741	856	812	601	313	98	31	21	72	211	507	1048	1789	2645	3457	4058	4371	4469	4500
60	1	19	68	178	391	591	701	657	453	190	47	7	1	20	88	266	657	1248	1949	2606	3059	3249	3296	3303
Base	se Growing Degree Units for Corn (Monthly)											Growing Degree Units for Corn (Accumulated Monthly)												
50/86	86 107 172 308 465 686 822 900 869 713 492 250											128	107	279	587	1052	1738	2560	3460	4329	5042	5534	5784	5912

(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