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: DES ARC, AR 1971-2000 COOP ID: 031968

Climate Division: AR 6 NWS Call Sign: Elevation: 200 Feet Lat: 34°59N Lon: 91°30W

									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	47.0	29.6	38.3	80+	1950	26	45.6	1990	-5	1985	20	27.2	1979	828	0	.0	.0	13.9	3.5	19.1	.1
Feb	53.5	34.1	43.8	82	1962	13	51.3	1976	-4	1951	2	30.3	1978	594	1	.0	.0	18.8	1.7	11.3	.0
Mar	62.4	42.9	52.7	88	1963	31	57.7	1974	15+	1978	5	46.5	1996	393	9	.0	.0	27.3	@	4.2	.0
Apr	71.7	51.1	61.4	93	1987	21	66.6	1981	29	1975	4	55.3	1983	150	42	.0	.1	29.6	.0	.4	.0
May	80.4	60.5	70.5	98	1951	31	76.3	1987	37	1954	4	65.5	1976	35	203	.0	3.0	31.0	.0	.0	.0
Jun	88.3	68.4	78.4	105+	1954	29	83.2	1998	46	1956	2	72.7	1974	0	402	.5	15.2	30.0	.0	.0	.0
Jul	92.6	72.5	82.6	108+	1952	29	87.0	1980	55	1959	3	79.3	1972	0	543	2.5	23.8	31.0	.0	.0	.0
Aug	91.5	70.4	81.0	109	1986	1	85.6	2000	48	1956	22	75.8	1992	0	494	2.3	21.4	31.0	.0	.0	.0
Sep	84.4	62.4	73.4	104+	1951	1	77.6	1972	34	1949	30	66.7	1974	12	264	.4	8.9	30.0	.0	.0	.0
Oct	75.1	51.1	63.1	98	1953	1	69.0	1971	23	1952	29	57.3	1976	124	65	.0	.8	30.9	.0	.3	.0
Nov	61.0	41.6	51.3	87+	1950	1	56.8	1990	13	1950	25	45.0	1976	416	4	.0	.0	25.4	.1	4.9	.0
Dec	50.8	33.1	42.0	79+	1955	25	51.8	1984	-2	1989	23	31.8	2000	714	0	.0	.0	18.0	1.8	14.2	.1
Ann	71.6	51.5	61.5	109	Aug 1986	1	87.0	Jul 1980	-5	Jan 1985	20	27.2	Jan 1979	3266	2027	5.7	73.2	316.9	7.1	54.4	.2

⁺ 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

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

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										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recipi	itatio	n Total						ays (3)	Proba	ability th		nonthly/	annual j	precipita ated am	ount	ies (1)		less tha	ın the
	Medi	ans(1)				Extremes	3			D	aily Pre	cipitatio	n		Th	ese value	s were det	ermined	from the	incomplet	e gamma	distributi	on	ļ
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	3.61	3.39	4.06	1969	30	8.24	1994	.43	1986	8.5	6.0	2.4	.8	.79	1.12	1.65	2.13	2.61	3.12	3.70	4.39	5.29	6.74	8.10
Feb	3.90	3.35	4.48	1966	10	12.66	1989	1.36	1972	7.3	5.3	2.8	1.2	1.19	1.56	2.11	2.58	3.04	3.52	4.05	4.67	5.47	6.72	7.88
Mar	5.07	4.34	3.55	1950	26	9.97	1973	2.40	1982	9.9	7.7	3.6	1.6	2.07	2.54	3.19	3.73	4.24	4.76	5.31	5.96	6.77	8.01	9.14
Apr	5.83	5.12	6.37	1974	22	15.85	1973	1.12	1989	8.2	6.8	3.8	1.9	1.59	2.14	2.98	3.72	4.44	5.19	6.03	7.02	8.31	10.34	12.23
May	4.79	4.56	6.92	1955	27	13.00	1979	1.56	1992	8.8	7.0	3.2	1.4	1.68	2.13	2.79	3.34	3.87	4.41	5.01	5.70	6.58	7.94	9.19
Jun	3.90	3.54	4.41	1960	28	10.68	1974	.97	1988	8.2	5.9	2.5	1.3	1.18	1.55	2.10	2.58	3.04	3.52	4.05	4.67	5.48	6.73	7.89
Jul	3.10	2.38	4.62	1957	30	9.16	1979	.77	1976	6.3	4.9	2.1	.9	.70	.99	1.44	1.85	2.26	2.69	3.18	3.76	4.52	5.74	6.89
Aug	2.33	1.89	4.72	1950	24	7.13	1984	.00	2000	5.0	3.6	1.8	.6	.17	.41	.78	1.12	1.48	1.87	2.32	2.87	3.62	4.84	6.01
Sep	3.23	2.54	4.21	1965	11	8.64	1977	1.07	1985	6.6	5.1	2.2	.9	.75	1.05	1.52	1.95	2.37	2.81	3.32	3.91	4.70	5.95	7.12
Oct	3.75	3.38	4.62	1991	30	11.18	1984	.64	1978	5.8	4.6	2.4	1.0	.79	1.14	1.69	2.19	2.69	3.23	3.83	4.55	5.51	7.04	8.48
Nov	5.30	4.98	6.50	1988	19	13.70	1988	1.33	1999	8.1	6.5	3.4	1.6	1.63	2.13	2.88	3.52	4.15	4.80	5.51	6.34	7.43	9.11	10.67
Dec	4.63	4.06	5.50	1987	25	13.88	1987	.54	1981	8.3	6.3	2.7	1.3	1.03	1.46	2.14	2.75	3.36	4.01	4.74	5.62	6.77	8.61	10.34
Ann	49.44	47.74	6.92	May 1955	27	15.85	Apr 1973	.00	Aug 2000	91.0	69.7	32.9	14.5	35.04	37.82	41.39	44.09	46.50	48.82	51.22	53.88	57.10	61.78	65.82

⁺ 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 6 NWS Call Sign:

Elevation: 200 Feet Lat: 34°59N Lon: 91°30W

										Snov	v (incl	hes)											
						Sno	ow To	tals									Mea	n Nui	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1)	1					Extre	mes (2)							ow Fa					Depth esholo	
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	1.0	.0	#	0	12.0	1988	7	12.0	1988	3	1973	7	#	1973	.4	.3	.2	.1	.1	.1	.1	.0	.0
Feb	1.1	.0	#	0	8.0	1985	1	10.0	1985	#	1998	20	#	1998	.3	.2	.1	.1	.0	.0	.0	.0	.0
Mar	.4	.0	#	0	3.5	1971	3	3.5	1971	#	1998	11	#	1998	.1	.1	.1	.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	.2	.0	0	0	3.0	1971	23	3.0	1971	0	0	0	0	0	.1	.1	.1	.0	.0	.0	.0	.0	.0
Dec	.1	.0	#	0	.5	1988	28	.5	1988	1	1988	29	#+	1995	.1	.0	.0	.0	.0	.0	.0	.0	.0
Ann	2.8	.0	N/A	N/A	12.0	Jan 1988	7	12.0	Jan 1988	3	Jan 1973	7	#+	Mar 1998	1.0	.7	.5	.2	.1	.1	.1	.0	.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: 91°30W

Lat: 34°59N

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Climate Division: AR 6 NWS Call Sign:

Elevation: 200 Feet

				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 (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	4/16	4/12	4/08	4/06	4/03	3/31	3/29	3/25	3/21
32	4/11	4/04	3/31	3/27	3/23	3/19	3/15	3/11	3/04
28	3/25	3/18	3/12	3/08	3/04	2/27	2/23	2/18	2/10
24	3/09	3/02	2/24	2/20	2/15	2/11	2/07	2/01	1/25
20	3/06	2/24	2/17	2/10	2/04	1/29	1/23	1/15	1/05
16	2/24	2/14	2/07	1/31	1/25	1/18	1/09	12/24	0/00
			Fal	ll Freeze Da	tes (Month/I	Day)		•	
Tomn (F)		Pro	bability of ea	arlier date i	n fall (beginr	ning Aug 1) t	han indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/14	10/19	10/23	10/26	10/29	11/01	11/05	11/08	11/14
32	10/23	10/29	11/03	11/06	11/10	11/13	11/17	11/21	11/27
28	11/07	11/13	11/18	11/22	11/25	11/29	12/03	12/08	12/14
24	11/15	11/24	11/30	12/05	12/10	12/15	12/21	12/27	1/05
20	11/25	12/06	12/14	12/20	12/27	1/02	1/09	1/17	1/27
16	12/08	12/17	12/24	12/30	1/04	1/11	1/18	2/02	0/00
<u> </u>		•		Freeze F	ree Period	1	•	1	II.
To (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	230	223	217	213	209	204	200	194	187
32	258	249	242	236	231	226	220	213	204
28	295	285	278	272	266	260	254	247	237
24	328	316	308	301	295	289	282	275	264
20	>365	350	337	328	320	312	304	294	281
16	>365	>365	>365	>365	353	338	327	317	304

^{*} 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.

Complete documentation available from:

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				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	828	594	393	150	35	0	0	0	12	124	416	714	3266
60	675	464	258	67	9	0	0	0	2	52	282	567	2376
57	590	388	191	35	3	0	0	0	0	26	212	480	1925
55	532	340	153	20	1	0	0	0	0	15	171	424	1656
50	395	234	79	4	0	0	0	0	0	3	91	298	1104
32	73	25	1	0	0	0	0	0	0	0	1	37	137

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	268	356	640	882	1192	1392	1566	1517	1242	964	579	346	10944
55	14	27	79	213	480	702	853	804	552	267	59	20	4070
57	10	19	55	167	420	642	791	742	492	216	39	14	3607
60	2	11	29	109	333	552	698	649	404	148	20	8	2963
65	0	1	9	42	203	402	543	494	264	65	4	0	2027
70	0	0	0	11	105	257	388	342	148	20	0	0	1271

										Gro	wing]	Degre	e Uni	ts (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	122	221	429	670	962	1160	1320	1267	1009	729	376	174	122	343	772	1442	2404	3564	4884	6151	7160	7889	8265	8439
45	61 129 295 521 807 1010 1165 1112 859 575 254												61	190	485	1006	1813	2823	3988	5100	5959	6534	6788	6879
50	27 66 185 378 652 860 1010 957 709 423 151												27	93	278	656	1308	2168	3178	4135	4844	5267	5418	5466
55	12	28	100	246	498	710	855	802	559	285	78	16	12	40	140	386	884	1594	2449	3251	3810	4095	4173	4189
60	0	3	45	139	346	560	700	647	412	170	36	3	0	3	48	187	533	1093	1793	2440	2852	3022	3058	3061
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	50/86 68 130 248 412 644 799 897 861 675 464 214 9											94	68	198	446	858	1502	2301	3198	4059	4734	5198	5412	5506

(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