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: 413063

Station: FALFURRIAS, TX

Climate Division: TX 9

NWS Call Sign:

Elevation: 120 Feet Lat: 27°13N Lon: 98°08W

	Onth Daily Max Daily Max Mean Highest Daily(2) Year Day Mean Lowest Daily(2) Year Daily(2) Heating Mean Cooling Search >=																				
	Mea	n (1)						Extr	emes						•		Mean	Numb	er of I	Days (3))
Month			Mean	-	Year	Day	Month(1)	Year		Year	Day	Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0
Jan	67.6	43.9	55.8	96+	1972	23	63.1	2000	9	1962	12	48.5	1977	321	36	.0	.4	27.5	.1	4.0	.0
Feb	72.0	47.2	59.6	102	1940	28	67.4	2000	15	1951	3	51.4	1978	192	40	.0	.9	26.6	.1	2.0	.0
Mar	79.3	54.1	66.7	105+	1954	31	72.4	2000	17	1917	5	61.0	1987	60	113	.2	3.3	30.9	.0	.5	.0
Apr	85.1	60.5	72.8	110+	1963	10	78.4	1999	30	1920	5	67.6	1987	10	243	.4	9.1	30.0	.0	.0	.0
May	89.9	68.1	79.0	110	1925	24	83.9	1998	43	1925	1	74.2	1972	1	436	1.4	17.9	31.0	.0	.0	.0
Jun	94.4	72.3	83.4	115	1998	16	90.4	1998	51	1919	4	79.9	1972	0	551	3.5	25.4	30.0	.0	.0	.0
Jul	97.0	73.2	85.1	112	1925	15	90.0	1998	60+	1915	26	81.5	1976	0	624	9.1	29.0	31.0	.0	.0	.0
Aug	97.0	72.6	84.8	112	1925	13	88.6	1997	60+	1972	29	81.6	1972	0	614	9.5	29.0	31.0	.0	.0	.0
Sep	92.4	69.7	81.1	111+	2000	7	83.8	1982	43	1909	29	76.2	1974	0	482	2.4	22.0	30.0	.0	.0	.0
Oct	85.5	61.7	73.6	101+	1937	6	76.7	1984	28+	1993	31	65.7	1976	7	273	.2	10.3	30.9	.0	@	.0
Nov	76.5	53.1	64.8	97+	1931	11	71.3	1994	20	1911	30	56.0	1976	121	115	.0	1.4	29.4	.0	.7	.0
Dec	69.5	46.1	57.8	97	1972	6	66.0	1984	13	1989	24	47.3	1989	261	37	.0	.3	28.9	.2	2.7	.0
Ann	83.9	60.2	72.0	115	Jun 1998	16	90.4	Jun 1998	9	Jan 1962	12	47.3	Dec 1989	973	3564	26.7	149.0	357.2	.4	9.9	.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 103-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1907-2001
- (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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Station: FALFURRIAS, TX

COOP ID: 413063

Climate Division: TX 9 NWS Call Sign: Elevation: 120 Feet Lat: 27°13N Lon: 98°08W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	on Total						ays (3)	Proba	ability th		nonthly/	annual _I indic	orecipita ated am	ount			less tha	n the
	Medi	ans(1)				Extremes	•			ս	aily Pre	приацо	n		Th	ese value	s were det	ermined i	from the i	incomplet	e gamma	distributi	ion	
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	1.12	.81	4.76	1958	5	3.82	1992	.00	1996	5.5	2.8	.6	.2	.05	.15	.32	.48	.66	.86	1.09	1.38	1.77	2.42	3.06
Feb	1.56	1.09	3.78	1982	19	6.23	1982	.00+	1996	5.1	2.8	.9	.4	.00	.05	.23	.45	.70	1.01	1.39	1.88	2.58	3.79	5.00
Mar	.86	.63	2.70	1925	23	2.75	1994	.00+	1989	3.7	1.8	.6	.3	.00	.00	.10	.22	.37	.54	.76	1.04	1.44	2.13	2.83
Apr	1.48	.95	3.98	1946	22	5.43	1979	.00+	1984	4.4	2.5	.9	.3	.00	.04	.21	.41	.65	.94	1.30	1.77	2.45	3.61	4.79
May	2.95	2.67	5.01	2000	3	7.11	1997	.00	1998	5.8	3.8	2.2	.8	.32	.68	1.17	1.59	2.03	2.49	3.01	3.64	4.47	5.81	7.08
Jun	3.25	1.82	4.42	1962	2	12.98	1973	.00	1980	6.2	4.4	2.0	1.1	.08	.28	.70	1.16	1.68	2.28	3.02	3.95	5.26	7.48	9.69
Jul	1.84	1.14	4.52	1934	26	11.57	1976	.00+	1996	4.5	2.7	1.1	.5	.00	.04	.21	.45	.74	1.10	1.57	2.17	3.06	4.61	6.18
Aug	2.91	1.83	7.36	1980	10	12.87	1980	.00	1997	5.3	3.5	1.4	1.0	.03	.14	.45	.82	1.28	1.83	2.53	3.46	4.79	7.10	9.44
Sep	3.84	3.08	10.00	1967	20	12.93	1973	.49	1982	7.2	5.2	2.2	.9	.67	1.01	1.57	2.09	2.63	3.21	3.87	4.68	5.75	7.48	9.14
Oct	3.22	2.25	4.80	1942	5	8.92	2000	.00	1989	5.5	3.5	2.0	1.2	.17	.47	.96	1.43	1.94	2.50	3.15	3.96	5.07	6.89	8.66
Nov	1.31	1.11	3.61	1922	7	5.23	1976	.00+	1994	4.1	2.4	.9	.2	.00	.13	.36	.57	.79	1.02	1.30	1.63	2.09	2.85	3.58
Dec	1.08	.54	2.65	1918	18	4.50	1986	.08	1977	4.7	2.3	.6	.2	.04	.09	.20	.34	.51	.71	.96	1.28	1.75	2.56	3.37
Ann	25.42	24.83	10.00	Sep 1967	20	12.98	Jun 1973	.00+	May 1998	62.0	37.7	15.4	7.1	14.22	16.19	18.82	20.88	22.77	24.63	26.59	28.79	31.53	35.59	39.19

⁺ 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: 1907-2001

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

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COOP ID: 413063

Station: FALFURRIAS, TX

Climate Division: TX 9 NWS Call Sign:

Elevation: 120 Feet Lat: 27°13N Lon: 98°08W

										Snov	w (inc	hes)											
		Median Mean Median Snow Fall Snow Depth Snow Depth Snow Depth .0 0 <t< th=""><th>Mea</th><th>ın Nu</th><th>mber</th><th>of Da</th><th>ys (1)</th><th></th><th></th></t<>															Mea	ın Nu	mber	of Da	ys (1)		
	Mean	s/Medi	ans (1))					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.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	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.0	.0	N/A	N/A	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.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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Elevation: 120 Feet Lat: 27°13N Lon: 98°08W

				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	3/27	3/17	3/09	3/03	2/25	2/20	2/13	2/06	1/27
32	3/18	3/04	2/22	2/14	2/06	1/29	1/20	1/09	12/24
28	2/20	2/09	1/31	1/24	1/16	1/09	12/31	12/17	0/00
24	2/01	1/18	1/05	12/17	0/00	0/00	0/00	0/00	0/00
20	12/27	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
			Fal	ll Freeze Da	tes (Month/D	Day)			
Tomp (F)		Pro	bability of e	arlier date ii	n fall (beginn	ning Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	11/07	11/14	11/20	11/24	11/28	12/02	12/06	12/11	12/18
32	11/19	11/27	12/03	12/08	12/13	12/18	12/24	12/31	1/10
28	12/02	12/12	12/20	12/26	1/02	1/09	1/17	1/29	0/00
24	12/23	1/03	1/15	0/00	0/00	0/00	0/00	0/00	0/00
20	1/02	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
•			•	Freeze F	ree Period		•		1
Town (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	311	298	289	282	275	268	260	251	239
32	364	341	329	319	311	302	294	283	269
28	>365	>365	>365	359	347	339	332	324	314
24	>365	>365	>365	>365	>365	>365	>365	>365	350
20	>365	>365	>365	>365	>365	>365	>365	>365	>365
16	>365	>365	>365	>365	>365	>365	>365	>365	>365

^{*} 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

Complete do

Complete documentation available from:

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Climate Division: TX 9 NWS Call Sign: Elevation: 120 Feet Lat: 27°13N Lon: 98°08W

				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	321	192	60	10	1	0	0	0	0	7	121	261	973
60	213	109	17	0	0	0	0	0	0	1	59	159	558
57	161	70	6	0	0	0	0	0	0	0	34	111	382
55	130	49	3	0	0	0	0	0	0	0	23	83	288
50	64	18	0	0	0	0	0	0	0	0	7	33	122
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	738	772	1076	1223	1458	1541	1647	1637	1472	1290	984	800	14638
55	154	177	366	533	745	851	934	924	782	577	317	169	6529
57	124	142	307	473	683	791	872	862	722	515	268	135	5894
60	82	97	225	383	590	701	779	769	632	423	203	90	4974
65	36	40	113	243	436	551	624	614	482	273	115	37	3564
70	14	13	41	128	290	401	469	459	332	142	52	13	2354

										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													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	510	583	841	993	1221	1312	1408	1401	1239	1053	754	570	510	1093	1934	2927	4148	5460	6868	8269	9508	10561	11315	11885
45	367 446 686 843 1066 1162 1253 1246 1089 899 607											420	367	813	1499	2342	3408	4570	5823	7069	8158	9057	9664	10084
50												292	248	567	1105	1798	2709	3721	4819	5910	6849	7594	8059	8351
55	151	204	388	545	756	862	943	936	789	590	332	187	151	355	743	1288	2044	2906	3849	4785	5574	6164	6496	6683
60	76	117	255	398	601	712	788	781	639	438	215	104	76	193	448	846	1447	2159	2947	3728	4367	4805	5020	5124
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	/86 319 371 553 662 832 886 929 921 837 710 493 35												319	690	1243	1905	2737	3623	4552	5473	6310	7020	7513	7871

(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