

Climatography of the United States No. 20

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: CORNUDAS SERVICE STN, TX

1971-2000

COOP ID: 412012

Climate Division: TX 5

NWS Call Sign:

Elevation: 4,480 Feet Lat: 31°47N

Lon: 105°28W

Temperature (° F)																					
Mean (1)				Extremes										Degree Days (1) Base Temp 65		Mean Number of 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	58.3	25.8	42.1	78+	1974	21	46.3	1993	-5	1963	13	37.9	1979	711	0	.0	.0	26.3	.2	25.7	.0
Feb	64.0	28.8	46.4	87	1972	21	51.0	1995	-8	1985	2	42.8	1973	521	0	.0	.0	26.5	.3	19.7	.1
Mar	71.4	33.8	52.6	92	1967	28	58.1	1972	7+	1971	3	47.8	1987	386	2	.0	.1	30.8	.0	13.3	.0
Apr	79.2	40.0	59.6	99	1965	22	64.3	2000	17	1975	3	51.9	1983	196	35	.0	1.7	29.8	@	4.8	.0
May	87.3	49.8	68.6	103+	1969	21	74.8	1996	23	1967	2	63.3	1975	46	156	.3	11.9	31.0	.0	.2	.0
Jun	95.1	59.0	77.1	112	1978	25	82.8	1994	41	1983	7	73.5	1983	1	363	6.8	25.5	30.0	.0	.0	.0
Jul	94.2	63.4	78.8	109	1964	3	82.7	1980	50	1988	22	75.0	1991	0	429	5.1	25.3	31.0	.0	.0	.0
Aug	91.7	61.7	76.7	109	1969	16	81.2	1977	49+	1973	26	73.6+	1990	0	362	1.4	22.0	31.0	.0	.0	.0
Sep	87.0	55.2	71.1	102+	1992	6	76.4	1977	35	1975	23	67.0	1974	18	200	.3	12.8	30.0	.0	.0	.0
Oct	78.4	43.7	61.1	98	1965	9	64.2	1992	20+	1993	31	56.8	1980	150	29	.0	1.7	30.8	.0	1.9	.0
Nov	66.6	31.9	49.3	87	1973	12	53.1+	1999	-6	1976	29	42.6	1976	472	1	.0	.0	28.7	.1	16.0	.1
Dec	58.6	25.9	42.3	79+	1971	25	48.0	1977	-4	1987	15	38.2	1982	706	0	.0	.0	26.0	.3	25.4	.1
Ann	77.7	43.3	60.5	112	Jun 1978	25	82.8	Jun 1994	-8	Feb 1985	2	37.9	Jan 1979	3207	1577	13.9	101.0	351.9	.9	107.0	.3

+ Also occurred on an earlier date(s)

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

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

Issue Date: February 2004

(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

076-A

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Station: CORNUDAS SERVICE STN, TX

COOP ID: 412012

Climate Division: TX 5

NWS Call Sign:

Elevation: 4,480 Feet Lat: 31°47N

Lon: 105°28W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels 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	.57	.37	2.05	1992	18	3.79	1992	.00+	2000	3.0	1.5	.2	.1	.00	.00	.02	.09	.18	.31	.47	.68	.98	1.52	2.08
Feb	.34	.15	.95	2001	14	1.64	1973	.00+	2000	1.7	1.1	.2	.0	.00	.00	.00	.00	.06	.14	.25	.39	.60	.97	1.35
Mar	.20	.10	1.25	1998	6	1.25	1998	.00+	2000	1.4	.6	.1	.1	.00	.00	.00	.01	.05	.09	.16	.23	.35	.55	.74
Apr	.24	.00	1.30	1977	14	1.36	1977	.00+	2000	1.3	.7	.1	@	.00	.00	.00	.00	.00	.00	.13	.29	.48	.76	1.04
May	.62	.43	1.50	1992	23	3.26	1992	.00+	1996	2.3	1.7	.3	.1	.00	.00	.07	.17	.29	.42	.57	.77	1.05	1.52	1.99
Jun	1.12	.54	4.77	1978	29	4.85	1978	.00+	1998	2.8	2.0	.7	.2	.00	.00	.03	.16	.34	.58	.89	1.30	1.91	2.98	4.10
Jul	1.90	1.69	2.00	1982	31	4.81	1991	.03	2000	5.8	3.9	1.2	.4	.23	.38	.65	.91	1.20	1.51	1.87	2.33	2.94	3.95	4.93
Aug	1.93	1.69	2.40	1989	26	6.05	1989	.21	1995	5.9	4.1	1.4	.3	.37	.55	.83	1.09	1.36	1.64	1.96	2.35	2.87	3.69	4.48
Sep	1.88	1.39	3.30	1974	23	8.15	1974	.00+	2000	5.5	3.6	1.3	.4	.00	.08	.34	.61	.92	1.29	1.74	2.30	3.09	4.45	5.80
Oct	.92	.54	2.00+	1998	27	4.76	1998	.00+	1999	3.3	2.0	.5	.2	.00	.00	.00	.10	.32	.56	.83	1.17	1.63	2.41	3.15
Nov	.37	.24	1.30	2000	4	1.34	2000	.00+	1999	2.2	1.2	.1	@	.00	.00	.00	.07	.16	.25	.35	.48	.65	.95	1.23
Dec	.50	.21	1.23	1991	21	3.77	1991	.00+	2000	2.3	1.5	.3	.1	.00	.00	.01	.07	.15	.26	.40	.58	.85	1.33	1.82
Ann	10.59	9.41	4.77	Jun 1978	29	8.15	Sep 1974	.00+	Dec 2000	37.5	23.9	6.4	1.9	5.49	6.36	7.54	8.48	9.35	10.21	11.11	12.15	13.43	15.36	17.07

+ Also occurred on an earlier date(s)

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

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

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1971-2000

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Station: CORNUDAS SERVICE STN, TX

COOP ID: 412012

Climate Division: TX 5

NWS Call Sign:

Elevation: 4,480 Feet

Lat: 31°47N

Lon: 105°28W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										Snow Fall >= Thresholds					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	.7	.0	#	0	5.1	1982	13	5.2	1982	3	1973	2	#+	1982	.4	.2	.1	@	.0	.1	@	.0	.0
Feb	.3	.0	#	0	5.0	1973	22	5.0	1973	2	1973	22	#+	1980	.1	.1	@	@	.0	.1	.0	.0	.0
Mar	.0	.0	0	0	.4	1999	18	.4	1999	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	.1	.0	#	0	2.0	1976	28	2.0	1976	#	1976	28	#	1976	@	@	.0	.0	.0	.0	.0	.0	.0
Nov	.5	.0	#	0	3.0	1976	13	8.0	1976	4	1976	13	#+	1980	.2	.2	.1	.0	.0	.2	@	.0	.0
Dec	.2	.0	#	0	5.0	1974	25	5.0	1974	5	1974	25	#+	1978	.1	@	@	@	.0	.1	@	@	.0
Ann	1.8	.0	N/A	N/A	5.1	Jan 1982	13	8.0	Nov 1976	5	Dec 1974	25	#+	Jan 1982	.8	.5	.2	@	.0	.5	@	@	.0

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

@ 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

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normal/usnormals.html

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No. 20
1971-2000**

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COOP ID: 412012

Climate Division: TX 5

NWS Call Sign:

Elevation: 4,480 Feet

Lat: 31° 47N

Lon: 105° 28W

Freeze Data									
Spring Freeze Dates (Month/Day)									
Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/16	5/11	5/06	5/03	4/29	4/26	4/22	4/18	4/12
32	5/04	4/28	4/24	4/20	4/17	4/14	4/10	4/06	4/01
28	4/22	4/17	4/13	4/10	4/07	4/04	4/01	3/28	3/23
24	4/10	4/04	3/30	3/26	3/22	3/18	3/14	3/10	3/03
20	4/03	3/24	3/17	3/10	3/05	2/27	2/20	2/13	2/03
16	3/16	3/04	2/24	2/16	2/09	2/02	1/26	1/16	1/02
Fall Freeze Dates (Month/Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/04	10/09	10/13	10/16	10/18	10/21	10/24	10/28	11/02
32	10/13	10/18	10/21	10/24	10/27	10/30	11/02	11/06	11/11
28	10/20	10/26	10/30	11/02	11/06	11/09	11/12	11/16	11/22
24	10/30	11/04	11/08	11/12	11/15	11/18	11/21	11/25	12/01
20	11/07	11/13	11/17	11/20	11/24	11/27	11/30	12/04	12/10
16	11/19	11/27	12/02	12/07	12/12	12/16	12/22	12/28	1/10
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	194	187	181	176	171	167	162	156	148
32	213	206	201	196	192	188	184	179	172
28	230	224	219	216	212	208	205	200	194
24	263	254	248	242	237	232	226	220	211
20	303	289	280	271	263	255	247	237	223
16	>365	335	322	312	304	296	288	279	266

* 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 documentation available from:

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COOP ID: 412012

Climate Division: TX 5 NWS Call Sign: Elevation: 4,480 Feet Lat: 31°47N Lon: 105°28W

Degree Days to Selected Base Temperatures (°F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	711	521	386	196	46	1	0	0	18	150	472	706	3207
60	556	381	243	103	13	0	0	0	3	60	330	551	2240
57	463	300	168	62	5	0	0	0	0	29	252	459	1738
55	401	247	126	41	2	0	0	0	0	17	205	398	1437
50	252	132	49	12	0	0	0	0	0	3	109	253	810
32	1	0	0	0	0	0	0	0	0	0	0	5	6

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	313	403	639	829	1133	1352	1452	1385	1172	902	519	321	10420
55	0	6	52	180	422	662	739	672	482	205	33	2	3455
57	0	3	32	141	362	602	677	610	422	156	20	0	3025
60	0	0	14	91	277	512	584	517	335	93	8	0	2431
65	0	0	2	35	156	363	429	362	200	29	1	0	1577
70	0	0	0	9	69	224	275	213	97	5	0	0	892

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	121	214	401	612	893	1125	1213	1140	943	666	297	128	121	335	736	1348	2241	3366	4579	5719	6662	7328	7625	7753
45	43	109	256	463	738	975	1058	985	793	512	175	45	43	152	408	871	1609	2584	3642	4627	5420	5932	6107	6152
50	8	41	131	318	583	825	903	830	643	363	78	5	8	49	180	498	1081	1906	2809	3639	4282	4645	4723	4728
55	0	5	52	187	429	675	748	675	494	223	16	0	0	5	57	244	673	1348	2096	2771	3265	3488	3504	3504
60	0	0	9	86	280	525	593	520	348	103	0	0	0	0	9	95	375	900	1493	2013	2361	2464	2464	2464
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	149	220	343	448	575	682	777	737	606	460	259	153	149	369	712	1160	1735	2417	3194	3931	4537	4997	5256	5409

(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

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

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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normal/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 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.

- | | |
|---|---|
| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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