U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: COLORADO CITY, TX **COOP ID: 411903**

Climate Division: TX 2 **NWS Call Sign:** **Elevation: 2,105 Feet** **Lat: 32˚23N** **Lon: 100˚54W**

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	57.0	27.0	42.0	91	1911	30	47.1	2000	-7	1947	4	34.4	1979	713	0	.0	.0	23.7	1.2	20.5	@
Feb	63.5	31.5	47.5	99	1904	25	54.5	1976	-1	1951	1	38.6	1978	491	0	.0	@	23.6	.9	16.4	@
Mar	70.9	39.0	55.0	98	1946	31	61.3	1974	8	1948	11	50.6	1996	316	6	.0	.8	29.9	.1	4.8	.0
Apr	79.9	47.9	63.9	101+	1972	12	69.4	1972	23+	1973	9	57.9	1997	116	84	.1	4.2	29.9	.0	.8	.0
May	87.0	58.7	72.9	110	2000	25	80.1	1996	27	1907	4	68.5	1976	20	263	1.7	11.2	31.0	.0	.0	.0
Jun	92.5	66.3	79.4	115	1907	30	85.1	1998	42	1919	3	75.8	1997	0	431	4.3	21.0	30.0	.0	.0	.0
Jul	95.9	69.5	82.7	112	1912	30	88.2	1998	51	1905	10	78.3	1976	0	549	6.6	27.2	31.0	.0	.0	.0
Aug	94.2	68.4	81.3	110	1959	30	85.5	2000	51	1915	30	75.2	1971	0	504	3.7	26.1	31.0	.0	.0	.0
Sep	87.6	61.3	74.5	107+	2000	5	80.0	1977	33	1908	28	66.8	1974	12	294	1.2	14.7	30.0	.0	@	.0
Oct	78.8	49.7	64.3	103	2000	2	68.6	1998	22	1993	31	56.9	1976	93	69	.2	3.4	30.7	.0	.4	.0
Nov	66.9	37.0	52.0	91+	1996	21	58.4	1973	3	1911	29	45.7	1976	399	8	.0	.1	27.7	.1	8.6	.0
Dec	58.7	28.4	43.6	88+	1954	4	48.7	1984	2	1953	24	33.7	1983	665	0	.0	.0	24.8	1.0	18.8	.1
Ann	77.7	48.7	63.3	115	Jun 1907	30	88.2	Jul 1998	-7	Jan 1947	4	33.7	Dec 1983	2825	2208	17.8	108.7	343.3	3.3	70.3	.1

\+ 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/normals/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1898-2001

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: COLORADO CITY, TX **COOP ID: 411903**

Climate Division: TX 2 **NWS Call Sign:** **Elevation: 2,105 Feet** **Lat: 32°23N** **Lon: 100°54W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	.44	.40	1.73	1939	8	1.75	1973	.00+	1997
Feb	.89	.64	2.70	1997	20	3.90	1997	.00+	1999
Mar	1.07	.86	4.60	2000	23	5.00	2000	.00	1971
Apr	1.33	1.12	8.65	1900	6	3.80	1997	.12	1998
May	2.49	2.36	4.45	1961	19	5.72	1995	.42	1984
Jun	2.84	2.41	4.05+	1926	18	6.85	1997	.42	1998
Jul	1.23	.85	6.14	1919	20	8.09	1975	.01	1995
Aug	2.29	1.91	3.71	1971	1	9.18	1971	.00	2000
Sep	3.09	3.44	6.88	1926	4	7.42	1974	.00	2000
Oct	2.22	1.51	2.54	1924	6	5.21	1983	.09	1992
Nov	.90	.62	2.41	1920	8	3.10	1996	.00	1999
Dec	.64	.55	2.35	1913	2	2.54	1991	.00+	1999
Ann	19.43	19.17	8.65	Apr 1900	6	9.18	Aug 1971	.00+	Sep 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	4.2	1.9	.4	@
Feb	4.4	2.4	.4	.1
Mar	4.3	2.1	.3	.1
Apr	4.9	3.0	.8	.3
May	7.4	4.8	1.8	.6
Jun	6.9	4.3	1.6	.7
Jul	5.2	2.8	.8	.3
Aug	4.5	3.0	1.0	.5
Sep	6.5	4.6	1.9	.8
Oct	5.8	3.8	1.5	.5
Nov	4.0	2.0	.6	.1
Dec	4.5	2.1	.5	.1
Ann	62.6	36.8	11.6	4.1

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
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.00	.00	.12	.20	.27	.35	.44	.55	.70	.94	1.17
Feb	.00	.08	.23	.37	.52	.68	.87	1.10	1.42	1.94	2.45
Mar	.05	.14	.29	.45	.62	.81	1.03	1.31	1.70	2.34	2.97
Apr	.21	.32	.51	.70	.89	1.10	1.34	1.63	2.02	2.66	3.27
May	.67	.91	1.26	1.58	1.89	2.21	2.57	3.00	3.55	4.42	5.24
Jun	.70	.96	1.38	1.74	2.11	2.49	2.92	3.43	4.10	5.15	6.14
Jul	.05	.11	.24	.40	.59	.82	1.10	1.47	2.00	2.91	3.83
Aug	.18	.43	.80	1.13	1.48	1.86	2.29	2.82	3.54	4.69	5.81
Sep	.29	.64	1.15	1.60	2.06	2.56	3.13	3.81	4.73	6.21	7.62
Oct	.26	.43	.74	1.05	1.38	1.75	2.18	2.71	3.43	4.62	5.78
Nov	.06	.15	.30	.43	.57	.72	.90	1.11	1.41	1.89	2.35
Dec	.00	.00	.11	.23	.35	.48	.63	.81	1.07	1.47	1.87
Ann	12.43	13.73	15.42	16.72	17.90	19.04	20.24	21.57	23.20	25.59	27.68

\+ 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: 1898-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: COLORADO CITY, TX **COOP ID: 411903**

Climate Division: TX 2 **NWS Call Sign:** **Elevation: 2,105 Feet** **Lat: 32°23N** **Lon: 100°54W**

Snow (inches)

Snow Totals

Means/Medians (1)

Extremes (2)

Mean Number of Days (1)

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	#	#	#	0	#	1994	31	#+	1994	#+	1997	7	#+	1997	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Feb	.0	.0	0	0	.2	1971	7	.2	1971	0	0	0	0	0	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Mar	#	.0	#	0	#	1972	30	#+	1972	#	1971	2	#	1971	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Apr	.0	.0	#	0	.0	0	0	.0	0	3	1996	6	#	1996	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
May	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	-9.9	-9.9	-9.9	-9.9	-9.9	.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	-9.9	-9.9	-9.9	-9.9	-9.9	.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	#	1972	29	#	1972	0	0	0	0	0	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Dec	#	.0	#	0	#	1995	31	#	1995	#	1995	31	#	1995	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0
Ann	#	#	N/A	N/A	.2	Feb 1971	7	.2	Feb 1971	3	Apr 1996	6	#+	Jan 1997	-9.9	-9.9	-9.9	-9.9	-9.9	.0	.0	.0	.0

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

(1) Derived from Snow Climatology and 1971-2000 daily data

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

(2) Derived from 1971-2000 daily data

-9/-9.9 represents missing values

Annual statistics for Mean/Median snow depths are not appropriate

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: COLORADO CITY, TX **COOP ID: 411903**

Climate Division: TX 2 **NWS Call Sign:** **Elevation: 2,105 Feet** **Lat: 32˚23N** **Lon: 100˚54W**

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	5/01	4/24	4/19	4/15	4/11	4/07	4/02	3/28	3/21
32	4/13	4/07	4/02	3/29	3/25	3/22	3/18	3/13	3/06
28	4/06	3/30	3/25	3/20	3/16	3/12	3/07	3/02	2/23
24	3/27	3/19	3/13	3/09	3/04	2/28	2/23	2/17	2/09
20	3/15	3/07	3/01	2/24	2/19	2/14	2/09	2/03	1/26
16	3/02	2/21	2/14	2/08	2/03	1/28	1/22	1/13	0/00

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	10/08	10/14	10/18	10/22	10/25	10/28	11/01	11/05	11/11
32	10/20	10/27	10/31	11/04	11/07	11/11	11/14	11/19	11/25
28	10/29	11/03	11/07	11/10	11/13	11/16	11/19	11/23	11/28
24	11/03	11/10	11/15	11/20	11/24	11/28	12/02	12/07	12/14
20	11/18	11/25	11/30	12/04	12/09	12/13	12/17	12/22	12/29
16	11/30	12/08	12/14	12/19	12/24	12/29	1/05	1/15	0/00

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	221	213	207	202	197	192	187	181	172
32	254	244	237	232	226	221	215	208	199
28	267	258	252	247	242	237	231	225	216
24	293	283	276	270	264	258	252	245	235
20	324	313	305	298	292	286	279	271	260
16	>365	>365	>365	336	324	314	305	296	283

***** 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:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: COLORADO CITY, TX **COOP ID: 411903**

Climate Division: TX 2 **NWS Call Sign:** **Elevation: 2,105 Feet** **Lat: 32˚23N** **Lon: 100˚54W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	713	491	316	116	20	0	0	0	12	93	399	665	2825
60	559	359	185	49	5	0	0	0	2	33	269	512	1973
57	471	284	123	25	1	0	0	0	0	14	203	422	1543
55	413	237	89	15	0	0	0	0	0	8	165	366	1293
50	278	142	31	3	0	0	0	0	0	1	89	234	778
32	19	4	0	0	0	0	0	0	0	0	1	10	34

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	328	437	712	957	1266	1421	1572	1527	1273	1000	600	368	11461
55	10	26	88	282	553	731	859	814	583	295	74	11	4326
57	5	17	60	232	492	671	797	752	523	239	52	5	3845
60	1	8	29	167	403	581	704	659	434	165	28	1	3180
65	0	0	6	84	263	431	549	504	294	69	8	0	2208
70	0	0	0	32	149	285	394	351	175	20	0	0	1406

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	201	261	535	744	977	1199	1166	1296	1044	799	414	209	201	462	997	1741	2718	3917	5083	6379	7423	8222	8636	8845
45	104	160	390	595	822	1049	1011	1141	894	645	286	111	104	264	654	1249	2071	3120	4131	5272	6166	6811	7097	7208
50	47	85	258	450	667	899	856	986	744	494	179	51	47	132	390	840	1507	2406	3262	4248	4992	5486	5665	5716
55	14	36	147	314	513	749	701	831	597	349	90	18	14	50	197	511	1024	1773	2474	3305	3902	4251	4341	4359
60	0	11	68	190	362	599	546	676	452	214	39	1	0	11	79	269	631	1230	1776	2452	2904	3118	3157	3158
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	176	223	360	487	629	791	722	859	687	523	288	177	176	399	759	1246	1875	2666	3388	4247	4934	5457	5745	5922

(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/normals/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.
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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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