

Climatography of the United States

No. 20

1971-2000

Station: BIG LAKE 2, TX

COOP ID: 410779

Climate Division: TX 6

NWS Call Sign:

Elevation: 2,690 Feet Lat: 31° 12N

Lon: 101° 29W

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	56.4	29.1	42.8	85+	1975	28	49.8	1999	2+	1979	3	34.0	1979	689	0	.0	.0	23.0	1.5	20.4	.0
Feb	61.8	33.5	47.7	88	1996	23	56.8	2000	8	1989	4	39.9	1978	488	1	.0	.0	24.2	.9	13.1	@
Mar	69.8	41.7	55.8	95	1967	29	63.0	2000	5	1980	2	47.1	1996	304	17	.0	.5	29.6	.2	5.2	.0
Apr	78.1	49.4	63.8	100+	1972	15	69.6	1972	24+	1997	12	58.1	1997	117	79	.1	3.8	29.8	.0	1.1	.0
May	85.7	58.7	72.2	108	2000	25	81.9	2000	34	1978	4	67.6	1976	30	254	1.2	11.4	31.0	.0	.0	.0
Jun	90.9	65.6	78.3	110	1998	28	84.7	1998	44	1964	1	72.7	1995	1	398	2.9	19.5	30.0	.0	.0	.0
Jul	93.4	68.0	80.7	109	1998	13	87.0	1998	52	1975	13	74.5	1976	0	487	4.8	25.2	31.0	.0	.0	.0
Aug	92.3	66.6	79.5	107	1970	10	84.3	1999	53+	1970	28	73.7	1971	1	449	2.5	24.7	31.0	.0	.0	.0
Sep	86.0	60.5	73.3	106+	2000	6	79.2	1977	32	1989	24	64.0	1974	23	271	.6	13.3	29.9	.0	@	.0
Oct	76.8	50.5	63.7	100+	1979	9	68.0	1998	24	1993	30	55.7	1976	111	69	.1	2.2	30.6	.0	.7	.0
Nov	65.6	39.2	52.4	90	1975	10	57.5+	1985	11+	1976	30	44.9	1976	386	8	.0	@	27.7	.2	7.7	.0
Dec	57.6	30.8	44.2	84	1981	22	49.4	1994	1+	1989	24	35.3	1983	645	0	.0	.0	24.5	.9	19.3	.0
Ann	76.2	49.5	62.9	110	Jun 1998	28	87.0	Jul 1998	1+	Dec 1989	24	34.0	Jan 1979	2795	2033	12.2	100.6	342.3	3.7	67.5	@

+ 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: 1963-2001

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

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: BIG LAKE 2, TX

COOP ID: 410779

Climate Division: TX 6

NWS Call Sign:

Elevation: 2,690 Feet Lat: 31°12N

Lon: 101°29W

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	.68	.54	1.80	1994	22	2.42	1994	.00+	1976	3.5	2.0	.3	.1	.00	.03	.11	.21	.32	.45	.62	.82	1.11	1.61	2.11
Feb	.92	.63	2.60	1997	20	4.01	1992	.01	1991	3.4	2.1	.6	.1	.02	.05	.13	.24	.38	.55	.77	1.07	1.51	2.28	3.07
Mar	.81	.52	2.50	1979	19	5.15	1979	.00+	1975	3.1	1.9	.5	.2	.00	.00	.07	.17	.30	.47	.68	.96	1.36	2.07	2.80
Apr	1.42	1.13	3.05	1997	25	4.24	1981	.00+	1998	3.8	2.3	1.0	.4	.00	.13	.37	.60	.83	1.09	1.40	1.77	2.27	3.12	3.94
May	2.39	2.14	1.87	1986	30	6.52	1987	.00	2000	6.1	4.3	1.8	.7	.24	.52	.92	1.26	1.62	2.00	2.43	2.95	3.65	4.77	5.84
Jun	1.99	1.63	3.00	1991	7	6.71	2000	.00	1990	4.3	3.0	1.2	.6	.12	.31	.62	.92	1.23	1.57	1.97	2.46	3.12	4.22	5.28
Jul	1.79	1.07	4.85	1990	31	9.18	1990	.00	2000	4.3	2.9	1.0	.5	.01	.06	.22	.43	.70	1.04	1.48	2.08	2.95	4.50	6.09
Aug	2.18	1.60	3.79	2001	17	8.68	1974	.00+	2000	5.1	3.6	1.5	.7	.00	.00	.36	.71	1.09	1.52	2.04	2.70	3.60	5.13	6.64
Sep	2.97	2.80	3.30+	1991	14	12.60	1974	.00+	2000	5.3	3.8	2.0	1.0	.00	.12	.50	.92	1.42	2.00	2.71	3.61	4.90	7.09	9.29
Oct	1.92	1.22	4.15	1966	4	7.86	1974	.00	1988	4.3	2.9	1.3	.6	.04	.16	.40	.67	.98	1.33	1.77	2.33	3.11	4.44	5.76
Nov	.88	.61	2.71	2001	15	2.84	1996	.00+	1999	3.1	1.7	.5	.1	.00	.00	.07	.20	.35	.54	.76	1.06	1.49	2.21	2.94
Dec	.84	.42	2.12	1980	8	3.97	1991	.00+	1996	3.5	2.0	.4	.1	.00	.00	.03	.15	.30	.49	.71	1.01	1.44	2.18	2.94
Ann	18.79	18.42	4.85	Jul 1990	31	12.60	Sep 1974	.00+	Sep 2000	49.8	32.5	12.1	5.1	9.54	11.10	13.23	14.92	16.48	18.04	19.69	21.56	23.89	27.40	30.53

+ 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: 1963-2001

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

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

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: BIG LAKE 2, TX

COOP ID: 410779

Climate Division: TX 6

NWS Call Sign:

Elevation: 2,690 Feet

Lat: 31° 12N

Lon: 101° 29W

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	1.2	.0	#	0	4.0	1982	14	6.0	1978	#	1997	8	#	1997	.5	.5	.2	.0	.0	.0	.0	.0	.0
Feb	.1	.0	0	0	2.0	1973	8	2.0+	1973	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
Mar	#	.0	0	0	#	1995	2	#+	1995	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	#	1980	29	#	1980	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.4	.0	0	0	5.0	2000	8	5.0	2000	0	0	0	0	0	.1	.1	.1	.1	.0	.0	.0	.0	.0
Dec	.2	.0	#	0	2.8	1998	12	2.8	1998	3+	1998	11	#+	1998	.1	.1	.0	.0	.0	.0	.0	.0	.0
Ann	1.9	.0	N/A	N/A	5.0	Nov 2000	8	6.0	Jan 1978	3+	Dec 1998	11	#+	Dec 1998	.8	.8	.3	.1	.0	.0	.0	.0	.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

**Climatography
of the United States
No. 20
1971-2000**

Station: BIG LAKE 2, TX

COOP ID: 410779

Climate Division: TX 6

NWS Call Sign:

Elevation: 2,690 Feet

Lat: 31° 12N

Lon: 101° 29W

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	4/24	4/19	4/15	4/12	4/09	4/06	4/03	3/31	3/26
32	4/15	4/10	4/06	4/03	4/01	3/29	3/26	3/22	3/17
28	4/07	4/01	3/27	3/23	3/19	3/16	3/12	3/07	3/01
24	3/28	3/18	3/11	3/05	2/28	2/23	2/17	2/10	2/01
20	3/13	3/01	2/21	2/13	2/07	1/31	1/23	1/14	12/31
16	3/08	2/24	2/14	2/06	1/30	1/22	1/13	12/31	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	10/01	10/09	10/15	10/20	10/25	10/30	11/04	11/10	11/19
32	10/17	10/23	10/28	11/01	11/05	11/09	11/13	11/18	11/24
28	10/28	11/04	11/09	11/13	11/17	11/20	11/24	11/29	12/06
24	10/30	11/09	11/17	11/23	11/29	12/05	12/11	12/18	12/28
20	11/18	11/27	12/03	12/09	12/14	12/20	12/26	1/02	1/17
16	11/27	12/09	12/18	12/26	1/03	1/11	1/21	2/04	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	226	217	210	204	198	193	187	180	171
32	242	234	228	223	218	213	208	202	194
28	268	259	252	247	242	236	231	224	215
24	311	296	286	278	270	263	255	246	234
20	>365	>365	332	318	307	297	288	277	263
16	>365	>365	>365	>365	342	324	310	297	279

* 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/normal/usnormals.html

**Climatography
of the United States
No. 20
1971-2000**

Station: BIG LAKE 2, TX

COOP ID: 410779

Climate Division: TX 6 NWS Call Sign: Elevation: 2,690 Feet Lat: 31°12N Lon: 101°29W

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	689	488	304	117	30	1	0	1	23	111	386	645	2795
60	538	358	185	50	9	0	0	0	6	43	256	491	1936
57	452	284	129	25	3	0	0	0	2	21	190	401	1507
55	395	239	98	15	1	0	0	0	0	11	152	344	1255
50	266	146	41	2	0	0	0	0	0	2	77	212	746
32	21	5	0	0	0	0	0	0	0	0	0	5	31

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	354	442	736	952	1247	1387	1510	1471	1238	981	612	384	11314
55	16	32	121	277	535	697	797	758	548	279	74	9	4143
57	10	21	90	227	475	637	735	696	489	227	52	4	3663
60	4	11	53	161	388	547	642	603	404	156	28	1	2998
65	0	1	17	79	254	398	487	449	271	69	8	0	2033
70	0	0	3	29	148	258	337	302	163	22	0	0	1262

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	184	288	521	734	1020	1163	1284	1246	1017	759	407	206	184	472	993	1727	2747	3910	5194	6440	7457	8216	8623	8829
45	96	177	375	585	865	1013	1129	1091	867	605	278	112	96	273	648	1233	2098	3111	4240	5331	6198	6803	7081	7193
50	40	93	244	440	710	863	974	936	719	453	169	46	40	133	377	817	1527	2390	3364	4300	5019	5472	5641	5687
55	7	40	135	305	555	713	819	781	572	311	86	11	7	47	182	487	1042	1755	2574	3355	3927	4238	4324	4335
60	0	8	62	187	405	563	664	626	422	182	32	0	0	8	70	257	662	1225	1889	2515	2937	3119	3151	3151
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	161	218	347	476	663	773	838	820	669	487	272	174	161	379	726	1202	1865	2638	3476	4296	4965	5452	5724	5898

(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.
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