

Climatography of the United States

No. 20

1971-2000

Station: JEFFERSON, TX

COOP ID: 414577

Climate Division: TX 4

NWS Call Sign:

Elevation: 199 Feet Lat: 32°46N Lon: 94°20W

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	54.7	31.4	43.1	80+	1997	5	48.9	1990	9+	1996	9	33.9	1979	680	0	.0	.0	20.5	1.3	17.7	.0
Feb	60.0	35.4	47.7	92	1986	21	55.1	1976	5+	1905	14	37.7	1978	486	2	.0	@	22.2	.8	11.4	.0
Mar	68.3	43.8	56.1	89+	1995	24	61.6	1974	15	1996	9	50.2	1996	289	10	.0	.0	29.4	@	4.5	.0
Apr	75.3	50.4	62.9	93+	1987	28	68.6	1981	28	1989	11	57.8	1997	113	49	.0	.2	29.9	.0	.8	.0
May	81.9	60.5	71.2	97	1998	31	75.6	1996	39+	1996	1	67.1	1976	20	212	.0	2.5	31.0	.0	.0	.0
Jun	88.4	67.9	78.2	101+	1998	21	83.2	1998	46	1984	1	74.6	1974	0	394	.2	14.4	30.0	.0	.0	.0
Jul	93.1	70.8	82.0	105+	1998	31	87.2	1998	55	1990	14	79.6	1976	0	526	1.9	24.3	31.0	.0	.0	.0
Aug	93.1	69.6	81.4	107	1998	3	84.6	1980	52+	1992	31	76.4	1992	0	506	2.4	24.6	31.0	.0	.0	.0
Sep	87.1	62.7	74.9	108	2000	1	79.5	1980	38+	1989	26	68.5	1974	8	305	.7	13.3	30.0	.0	.0	.0
Oct	77.6	50.0	63.8	95	1998	1	67.5	1973	25	1993	31	56.1	1976	104	67	.0	1.3	30.9	.0	.6	.0
Nov	65.7	41.2	53.5	87	1988	8	58.8	1973	16	1903	19	46.4	1976	355	9	.0	.0	27.7	@	6.8	.0
Dec	57.1	34.2	45.7	81	1995	4	55.3	1984	-5	1989	23	35.5	1983	602	1	.0	.0	23.8	.7	15.2	@
Ann	75.2	51.5	63.4	108	Sep 2000	1	87.2	Jul 1998	-5	Dec 1989	23	33.9	Jan 1979	2657	2081	5.2	80.6	337.4	2.8	57.0	@

+ 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: 1903-2001

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

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1971-2000**

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

Station: JEFFERSON, TX

COOP ID: 414577

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NWS Call Sign:

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Lon: 94°20W

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	4.13	3.95	4.12	1932	5	10.28	1990	.68	1971	8.8	6.7	2.6	1.2	1.19	1.58	2.17	2.69	3.19	3.71	4.28	4.96	5.84	7.22	8.50
Feb	3.96	3.84	4.00	1989	3	8.54	1997	.16	1999	7.4	5.8	2.4	1.1	.75	1.10	1.68	2.22	2.77	3.35	4.02	4.82	5.89	7.61	9.24
Mar	4.41	3.96	6.00	1989	29	10.67	1989	.71	1986	7.7	6.1	3.0	1.2	1.36	1.78	2.40	2.94	3.46	4.00	4.59	5.28	6.18	7.58	8.88
Apr	4.07	3.41	9.10	1921	26	12.25	1991	.69	1987	7.2	5.6	2.7	1.3	.88	1.25	1.85	2.39	2.93	3.51	4.16	4.94	5.97	7.61	9.16
May	4.60	4.17	4.22	1905	7	10.84	1994	.70	1998	7.6	5.8	2.9	1.4	1.04	1.47	2.14	2.75	3.36	4.00	4.72	5.58	6.72	8.52	10.22
Jun	4.84	4.76	6.60	1986	27	15.31	1986	.34	1978	7.2	5.8	2.8	1.4	.77	1.19	1.89	2.56	3.25	4.00	4.86	5.91	7.31	9.60	11.78
Jul	2.89	2.22	6.20	1994	12	10.14	1994	.00	1993	6.1	4.5	2.0	.7	.41	.79	1.28	1.68	2.09	2.51	2.99	3.56	4.30	5.48	6.59
Aug	2.93	3.03	4.20	1915	18	7.21	1974	.22	2000	6.9	4.4	2.0	.9	.42	.67	1.09	1.49	1.92	2.38	2.92	3.58	4.46	5.91	7.30
Sep	3.40	2.95	7.84	1950	17	10.02	1998	.29+	1989	5.9	4.3	2.3	1.1	.36	.61	1.08	1.55	2.06	2.63	3.31	4.14	5.29	7.18	9.03
Oct	4.64	4.46	8.55	1994	8	13.41	1994	.39	1977	6.4	5.1	2.6	1.4	.85	1.26	1.94	2.57	3.21	3.91	4.70	5.65	6.92	8.97	10.92
Nov	4.68	4.89	4.88	1937	10	10.96	2000	.83	1995	8.5	6.4	3.4	1.9	1.26	1.70	2.38	2.97	3.55	4.16	4.84	5.64	6.69	8.32	9.85
Dec	4.71	4.39	6.09	1904	26	13.99	1987	.84	1980	7.7	5.8	2.5	1.3	1.14	1.58	2.27	2.88	3.49	4.13	4.85	5.71	6.83	8.61	10.27
Ann	49.26	48.23	9.10	Apr 1921	26	15.31	Jun 1986	.00	Jul 1993	87.4	66.3	31.2	14.9	34.76	37.56	41.14	43.87	46.29	48.64	51.06	53.74	57.00	61.72	65.81

+ 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: 1903-2001

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

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NWS Call Sign:

Elevation: 199 Feet

Lat: 32°46N

Lon: 94°20W

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	.5	.0	#	0	4.5	1977	31	5.5	1978	5	1977	31	1	1988	.2	.2	.1	.0	.0	.5	.3	@	.0
Feb	.8	.0	#	0	4.0	1985	2	10.0	1985	2	1996	3	#	1996	.4	.3	.1	.0	.0	.1	.0	.0	.0
Mar	#	.0	0	0	#	1989	6	#	1989	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	#	1980	27	#	1980	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.0	.0	#	0	.6	1989	9	.6	1989	#	2000	14	#	2000	.2	.0	.0	.0	.0	.0	.0	.0	.0
Ann	1.3	.0	N/A	N/A	4.5	Jan 1977	31	10.0	Feb 1985	5	Jan 1977	31	1	Jan 1988	.8	.5	.2	.0	.0	.6	.3	@	.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

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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	4/17	4/13	4/10	4/08	4/05	4/03	4/01	3/29	3/24
32	4/12	4/06	4/01	3/29	3/25	3/22	3/18	3/14	3/08
28	3/24	3/18	3/13	3/09	3/05	3/01	2/25	2/21	2/14
24	3/10	3/01	2/22	2/17	2/12	2/07	2/01	1/26	1/17
20	2/25	2/17	2/11	2/05	1/31	1/25	1/18	1/05	0/00
16	2/20	2/10	2/02	1/27	1/19	1/11	12/26	0/00	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	10/07	10/12	10/16	10/19	10/22	10/26	10/29	11/02	11/07
32	10/21	10/26	10/30	11/03	11/06	11/10	11/13	11/17	11/23
28	10/29	11/06	11/13	11/18	11/23	11/28	12/03	12/09	12/17
24	11/13	11/21	11/27	12/02	12/07	12/11	12/16	12/22	12/30
20	11/24	12/03	12/09	12/14	12/20	12/26	1/03	1/16	0/00
16	12/09	12/19	12/26	1/02	1/10	1/19	0/00	0/00	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	218	212	207	203	199	195	191	187	180
32	253	243	237	231	225	220	214	208	198
28	294	283	275	268	262	255	249	241	230
24	328	318	310	303	297	291	284	276	266
20	>365	>365	>365	341	324	314	306	298	287
16	>365	>365	>365	>365	>365	343	330	319	306

* 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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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	680	486	289	113	20	0	0	0	8	104	355	602	2657
60	534	356	165	41	3	0	0	0	1	38	227	457	1822
57	447	283	109	17	1	0	0	0	0	17	165	374	1413
55	392	238	79	9	0	0	0	0	0	9	130	321	1178
50	269	147	28	1	0	0	0	0	0	1	63	210	719
32	27	6	0	0	0	0	0	0	0	0	0	14	47

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	370	446	744	926	1215	1384	1549	1529	1286	986	644	436	11515
55	23	34	110	244	502	694	836	816	596	282	84	31	4252
57	16	23	78	193	441	634	774	754	536	228	59	21	3757
60	9	12	41	126	351	544	681	661	447	156	31	12	3071
65	0	2	10	49	212	394	526	506	305	67	9	1	2081
70	0	0	0	12	104	247	371	352	181	20	0	0	1287

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	193	284	509	693	961	1145	1296	1275	1050	753	425	238	193	477	986	1679	2640	3785	5081	6356	7406	8159	8584	8822
45	107	185	364	544	806	995	1141	1120	900	599	294	137	107	292	656	1200	2006	3001	4142	5262	6162	6761	7055	7192
50	55	105	238	400	651	845	986	965	750	447	184	74	55	160	398	798	1449	2294	3280	4245	4995	5442	5626	5700
55	21	52	134	262	496	695	831	810	600	302	101	33	21	73	207	469	965	1660	2491	3301	3901	4203	4304	4337
60	6	17	63	149	344	545	676	655	452	182	48	12	6	23	86	235	579	1124	1800	2455	2907	3089	3137	3149
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	138	197	327	449	643	785	874	853	704	497	273	162	138	335	662	1111	1754	2539	3413	4266	4970	5467	5740	5902

(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.

- 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/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