

Climatology of the United States

No. 20

1971-2000

Station: EMORY, TX

COOP ID: 412902

Climate Division: TX 4

NWS Call Sign:

Elevation: 435 Feet Lat: 32° 52N Lon: 95° 46W

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	53.1	31.6	42.4	81+	1975	28	50.0	1990	3+	1982	12	32.3	1978	702	0	.0	.0	19.9	1.6	17.2	.0
Feb	58.5	35.7	47.1	91	1996	22	54.7	1976	4+	1985	3	35.3	1978	508	7	.0	@	21.6	1.1	11.3	.0
Mar	66.8	43.8	55.3	88+	1991	6	60.3	1974	16	1996	9	50.3	1996	309	8	.0	.0	29.1	.1	3.9	.0
Apr	74.0	51.3	62.7	93	1987	18	68.7	1981	28+	1989	12	58.0	1983	123	53	.0	.3	30.0	.0	.5	.0
May	80.4	60.1	70.3	96	1966	17	75.7	1996	39	1997	13	65.7	1976	26	188	.0	1.7	31.0	.0	.0	.0
Jun	87.3	67.9	77.6	101+	1980	29	82.7	1998	50+	1992	3	73.8	1983	0	379	.2	13.3	30.0	.0	.0	.0
Jul	92.4	71.1	81.8	108	1963	22	87.5	1998	54	1967	15	78.3	1976	0	519	4.0	25.3	31.0	.0	.0	.0
Aug	93.0	69.8	81.4	110	1964	6	85.0	1980	53+	1992	28	74.2	1992	0	508	4.0	25.8	31.0	.0	.0	.0
Sep	86.5	63.4	75.0	108+	2000	5	80.5	1998	38	1967	29	67.0	1974	9	307	.8	14.1	30.0	.0	.0	.0
Oct	76.7	52.2	64.5	101	1898	4	68.4	1979	23	1993	31	57.3	1976	89	72	.0	2.3	30.9	.0	.2	.0
Nov	64.5	41.8	53.2	88	1978	1	58.7	1999	12	1976	29	46.0	1972	368	12	.0	.0	27.3	@	5.7	.0
Dec	55.5	33.9	44.7	83	1966	7	52.6	1984	-5	1989	24	33.5	1983	631	0	.0	.0	22.7	1.2	14.5	.1
Ann	74.1	51.9	63.0	110	Aug 1964	6	87.5	Jul 1998	-5	Dec 1989	24	32.3	Jan 1978	2765	2053	9.0	82.8	334.5	4.0	53.3	.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/normal/usnormals.html

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1897-2001

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

098-A

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: EMORY, TX

COOP ID: 412902

Climate Division: TX 4

NWS Call Sign:

Elevation: 435 Feet Lat: 32°52N

Lon: 95°46W

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	3.04	2.81	4.55	1990	19	7.10	1980	.00	1986	7.2	4.8	2.1	.8	.38	.77	1.28	1.71	2.15	2.61	3.13	3.75	4.57	5.87	7.11
Feb	3.34	3.42	4.25	1986	3	7.51	1997	.51	1981	6.5	4.6	2.2	1.0	.63	.92	1.41	1.87	2.33	2.82	3.39	4.07	4.97	6.42	7.81
Mar	3.88	3.77	4.85	1990	9	11.36	1990	.60	1986	7.6	5.6	2.6	1.0	1.09	1.46	2.02	2.50	2.98	3.47	4.02	4.67	5.50	6.82	8.05
Apr	3.72	3.34	5.48	1958	27	9.51	1976	.40	1987	6.7	5.0	2.5	1.1	.70	1.04	1.58	2.08	2.60	3.15	3.77	4.53	5.53	7.14	8.67
May	5.31	5.14	5.55	1970	31	12.07	1990	.36	1988	7.5	5.8	3.4	1.8	1.28	1.78	2.55	3.24	3.93	4.66	5.47	6.44	7.70	9.71	11.60
Jun	4.19	3.57	5.65	1992	29	12.59	2000	.10	1990	6.6	5.4	2.9	1.6	.50	.82	1.41	2.00	2.62	3.31	4.12	5.12	6.48	8.71	10.88
Jul	2.33	2.12	4.12	1971	27	7.24	1971	.00	1993	3.9	3.0	1.3	.5	.13	.36	.72	1.06	1.42	1.82	2.29	2.87	3.65	4.94	6.20
Aug	2.23	1.53	3.92	1979	3	7.70	1979	.00+	2000	4.7	3.2	1.5	.7	.00	.00	.31	.65	1.04	1.49	2.04	2.74	3.71	5.38	7.05
Sep	2.98	2.61	5.58	1957	22	8.56	1973	.60	1997	5.1	4.2	2.0	.8	.49	.74	1.18	1.59	2.01	2.47	3.00	3.64	4.50	5.89	7.22
Oct	4.66	4.15	5.60	1993	20	10.40	1984	.40	1975	6.8	5.0	2.7	1.6	.66	1.04	1.71	2.36	3.04	3.78	4.64	5.70	7.12	9.45	11.69
Nov	3.89	3.36	4.30	1974	24	9.99	2000	.00	1995	6.2	4.5	2.7	1.4	.35	.79	1.42	1.99	2.58	3.21	3.93	4.81	5.98	7.88	9.69
Dec	3.93	3.45	4.55	1982	3	11.56	1971	.21	1981	6.7	5.0	2.8	1.3	.78	1.14	1.72	2.24	2.78	3.35	4.00	4.79	5.82	7.48	9.06
Ann	43.50	43.17	5.65	Jun 1992	29	12.59	Jun 2000	.00+	Aug 2000	75.5	56.1	28.7	13.6	31.54	33.88	36.86	39.11	41.11	43.04	45.03	47.22	49.88	53.72	57.04

+ 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: 1897-2001

(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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No. 20

1971-2000

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151 Patton Avenue
Asheville, North Carolina 28801
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Station: EMORY, TX

COOP ID: 412902

Climate Division: TX 4

NWS Call Sign:

Elevation: 435 Feet

Lat: 32°52N

Lon: 95°46W

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	.0	.0	#	0	.5	1982	31	.5+	1982	2	1997	7	#+	1997	.1	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.3	.0	#	0	2.2	1996	2	2.2	1996	3	1985	2	#+	1998	.1	.1	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	#	0	.2	1982	6	.2	1982	#	1996	26	#	1996	.1	.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	#	1978	31	#	1978	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.3	.0	N/A	N/A	2.2	Feb 1996	2	2.2	Feb 1996	3	Feb 1985	2	#+	Feb 1998	.3	.1	.0	.0	.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:

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Station: EMORY, TX

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Climate Division: TX 4

NWS Call Sign:

Elevation: 435 Feet

Lat: 32° 52N

Lon: 95° 46W

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	4/19	4/13	4/10	4/07	4/04	4/01	3/29	3/25	3/20
32	4/09	4/03	3/29	3/26	3/22	3/19	3/15	3/10	3/04
28	3/25	3/18	3/13	3/08	3/04	2/28	2/24	2/18	2/11
24	3/12	3/03	2/25	2/20	2/15	2/09	2/04	1/29	1/20
20	2/28	2/18	2/11	2/05	1/30	1/23	1/16	1/06	0/00
16	2/18	2/07	1/30	1/23	1/16	1/08	12/29	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	10/17	10/22	10/25	10/28	10/31	11/03	11/06	11/09	11/14
32	10/27	11/02	11/06	11/09	11/12	11/16	11/19	11/23	11/29
28	11/01	11/08	11/14	11/18	11/22	11/27	12/01	12/07	12/14
24	11/13	11/21	11/27	12/02	12/06	12/11	12/16	12/21	12/29
20	11/28	12/06	12/11	12/16	12/21	12/26	1/01	1/09	0/00
16	12/09	12/18	12/24	12/30	1/04	1/11	1/21	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	232	224	219	214	209	205	200	195	187
32	258	250	244	239	234	230	225	219	210
28	294	283	275	269	263	257	250	242	232
24	325	315	307	300	294	288	281	274	263
20	>365	>365	352	333	323	314	306	297	285
16	>365	>365	>365	>365	>365	352	336	322	305

* 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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Climate Division: TX 4 NWS Call Sign: Elevation: 435 Feet Lat: 32°52N Lon: 95°46W

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	702	508	309	123	26	0	0	0	9	89	368	631	2765
60	556	379	181	49	5	0	0	0	0	31	243	484	1928
57	470	307	122	23	1	0	0	0	0	13	181	399	1516
55	415	264	90	13	0	0	0	0	0	7	145	345	1279
50	291	173	35	1	0	0	0	0	0	1	76	226	803
32	35	13	0	0	0	0	0	0	0	0	1	16	65

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	357	436	722	920	1186	1369	1542	1531	1287	1006	635	409	11400
55	24	43	99	242	473	679	829	818	597	300	90	24	4218
57	17	30	69	193	412	619	767	756	537	244	65	16	3725
60	10	18	35	129	323	529	674	663	448	169	37	9	3044
65	0	7	8	53	188	379	519	508	307	72	12	0	2053
70	0	0	0	14	88	236	364	356	184	21	2	0	1265

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	190	284	495	693	957	1153	1325	1309	1074	784	434	233	190	474	969	1662	2619	3772	5097	6406	7480	8264	8698	8931
45	106	182	352	543	802	1003	1170	1154	924	629	305	131	106	288	640	1183	1985	2988	4158	5312	6236	6865	7170	7301
50	50	101	231	399	647	853	1015	999	774	478	197	66	50	151	382	781	1428	2281	3296	4295	5069	5547	5744	5810
55	19	52	131	261	492	703	860	844	624	333	111	29	19	71	202	463	955	1658	2518	3362	3986	4319	4430	4459
60	3	19	57	147	338	553	705	689	476	205	51	8	3	22	79	226	564	1117	1822	2511	2987	3192	3243	3251
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	131	187	307	438	645	802	896	865	720	505	270	154	131	318	625	1063	1708	2510	3406	4271	4991	5496	5766	5920

(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