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: EAGLE PASS, TX **COOP ID: 412679**

Climate Division: TX 9 **NWS Call Sign: EGP** **Elevation: 808 Feet** **Lat: 28˚43N** **Lon: 100˚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	64.2	40.1	52.2	96	1943	22	58.3	1989	10	1962	12	44.1	1979	411	13	.0	.0	26.8	.2	5.6	.0
Feb	69.4	44.5	57.0	101	1917	25	64.7	1999	10+	1951	3	49.0	1978	251	26	@	.6	26.1	.1	2.6	.0
Mar	77.9	52.1	65.0	106	1928	28	69.1	1972	20	1922	3	59.0	1987	81	80	.1	3.2	30.8	.0	.5	.0
Apr	85.0	59.0	72.0	108	1984	21	78.0	1986	32	1920	5	66.2	1987	17	226	.8	9.7	30.0	.0	.0	.0
May	90.5	67.2	78.9	114	1927	28	84.3	1998	42	1908	1	72.8	1976	2	432	2.8	18.2	31.0	.0	.0	.0
Jun	95.2	72.5	83.9	115+	1916	6	89.2	1998	47	1919	3	79.7	1981	0	566	6.8	26.0	30.0	.0	.0	.0
Jul	98.1	74.7	86.4	115	1944	25	91.3	1998	62+	1927	25	79.9	1976	0	662	13.7	29.3	31.0	.0	.0	.0
Aug	97.9	74.1	86.0	112+	1962	11	88.7	1997	60	1926	26	79.2	1971	0	651	14.3	29.2	31.0	.0	.0	.0
Sep	92.6	69.8	81.2	111	2000	6	85.5	1977	42	1942	29	75.2	1974	0	485	3.4	22.8	30.0	.0	.0	.0
Oct	83.7	60.4	72.1	106	1926	12	75.2	1979	27	1917	30	63.3	1976	14	233	.2	7.9	30.9	.0	@	.0
Nov	73.2	49.7	61.5	100	1921	14	66.5	1988	19	1911	29	52.8	1976	163	56	.0	.6	29.4	.0	1.2	.0
Dec	65.1	41.7	53.4	94	1977	5	59.4	1984	12	1989	23	45.5	1983	369	9	.0	.1	28.3	.1	4.0	.0
Ann	82.7	58.8	70.8	115+	Jul 1944	25	91.3	Jul 1998	10+	Jan 1962	12	44.1	Jan 1979	1308	3439	42.1	147.6	355.3	.4	13.9	.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/normals/usnormals.html

(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

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: EAGLE PASS, TX **COOP ID: 412679**

Climate Division: TX 9 **NWS Call Sign: EGP** **Elevation: 808 Feet** **Lat: 28°43N** **Lon: 100°29W**

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	.80	.56	4.10	1941	28	3.39	1992	.00+	1996
Feb	.94	.59	2.83	1921	28	4.50	1992	.00+	1999
Mar	.72	.42	2.40	1967	24	3.14	1974	.00	1971
Apr	1.75	.79	4.46	1957	19	7.02	1992	.00	1984
May	2.95	2.38	8.66	1925	28	7.10	1982	.00	1998
Jun	3.49	2.56	15.60	1936	29	14.71	1971	.00+	1990
Jul	2.03	1.14	8.58	1992	22	13.23	1976	.00+	1998
Aug	2.01	.91	6.40	1969	27	7.16	1971	.00	1985
Sep	2.57	2.26	7.40	1928	22	7.79	1991	.08	1979
Oct	2.33	1.73	6.75	1911	13	9.53	1973	.00	1979
Nov	1.08	.93	3.06	1913	23	4.00	1980	.01+	1975
Dec	.81	.39	2.60	1902	1	3.95	1991	.00+	1985
Ann	21.48	19.82	15.60	Jun 1936	29	14.71	Jun 1971	.00+	Feb 1999

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	5.8	1.8	.5	.1
Feb	5.0	1.7	.5	.2
Mar	4.4	1.7	.3	.2
Apr	4.9	2.7	1.0	.6
May	7.0	4.1	1.8	.8
Jun	5.7	4.1	2.2	1.1
Jul	3.8	2.6	1.0	.6
Aug	4.7	3.0	1.2	.6
Sep	5.8	3.9	1.6	.9
Oct	5.5	3.5	1.5	.7
Nov	5.2	1.9	.6	.2
Dec	5.9	1.9	.4	.1
Ann	63.7	32.9	12.6	6.1

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	.02	.11	.22	.35	.50	.70	.96	1.33	1.97	2.61
Feb	.00	.02	.12	.25	.40	.58	.82	1.12	1.55	2.31	3.08
Mar	.01	.05	.13	.23	.34	.48	.65	.87	1.18	1.72	2.26
Apr	.00	.04	.16	.34	.59	.92	1.37	1.98	2.90	4.56	6.29
May	.28	.62	1.11	1.54	1.97	2.45	2.99	3.64	4.51	5.92	7.27
Jun	.00	.40	1.03	1.59	2.16	2.78	3.50	4.35	5.52	7.44	9.29
Jul	.00	.00	.13	.41	.75	1.18	1.71	2.42	3.45	5.22	7.02
Aug	.02	.09	.29	.54	.86	1.24	1.73	2.38	3.31	4.95	6.61
Sep	.25	.43	.78	1.14	1.53	1.97	2.48	3.13	4.03	5.51	6.96
Oct	.01	.09	.31	.59	.95	1.40	1.97	2.73	3.84	5.80	7.79
Nov	.02	.06	.16	.28	.44	.65	.91	1.26	1.78	2.69	3.62
Dec	.00	.02	.11	.21	.34	.50	.70	.96	1.34	1.99	2.65
Ann	11.42	13.15	15.49	17.34	19.03	20.72	22.50	24.51	27.01	30.75	34.08

\+ 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

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: EAGLE PASS, TX **COOP ID: 412679**

Climate Division: TX 9 **NWS Call Sign: EGP** **Elevation: 808 Feet** **Lat: 28°43N** **Lon: 100°29W**

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	.8	.0	0	0	9.5	1985	13	14.5	1985	0	0	0	0	0	.2	.2	.1	.1	.0	.0	.0	.0	.0
Feb	.0	.0	0	0	.5	1973	9	.5	1973	0	0	0	0	0	@	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	0	0	.0	0	0	.0	0	0	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	.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	.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	.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	.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	.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	.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	.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	.0
Dec	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.8	.0	N/A	N/A	9.5	Jan 1985	13	14.5	Jan 1985	0	0	0	0	0	.2	.2	.1	.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/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: EAGLE PASS, TX **COOP ID: 412679**

Climate Division: TX 9 **NWS Call Sign: EGP** **Elevation: 808 Feet** **Lat: 28˚43N** **Lon: 100˚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	3/26	3/18	3/11	3/06	3/01	2/25	2/19	2/13	2/05
32	3/10	3/01	2/22	2/17	2/12	2/06	1/31	1/24	1/13
28	2/19	2/08	2/01	1/25	1/19	1/12	1/05	12/26	0/00
24	2/04	1/25	1/17	1/10	1/02	12/24	12/07	0/00	0/00
20	1/11	12/31	12/17	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	0/00	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	10/31	11/08	11/13	11/17	11/21	11/25	11/30	12/05	12/12
32	11/14	11/21	11/26	12/01	12/05	12/10	12/14	12/20	12/29
28	12/02	12/10	12/17	12/22	12/28	1/02	1/09	1/20	0/00
24	12/12	12/22	12/30	1/07	1/15	1/25	0/00	0/00	0/00
20	12/26	1/06	1/21	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	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	293	283	276	270	264	258	252	245	236
32	334	317	308	301	295	289	282	275	265
28	>365	>365	>365	352	341	333	326	318	308
24	>365	>365	>365	>365	>365	>365	353	340	328
20	>365	>365	>365	>365	>365	>365	>365	>365	>365
16	>365	>365	>365	>365	>365	>365	>365	>365	>365

***** 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: EAGLE PASS, TX **COOP ID: 412679**

Climate Division: TX 9 **NWS Call Sign: EGP** **Elevation: 808 Feet** **Lat: 28˚43N** **Lon: 100˚29W**

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	411	251	81	17	2	0	0	0	0	14	163	369	1308
60	278	155	26	3	0	0	0	0	0	2	83	236	783
57	211	109	11	0	0	0	0	0	0	1	49	170	551
55	173	83	6	0	0	0	0	0	0	0	33	134	429
50	95	36	1	0	0	0	0	0	0	0	10	61	203
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	624	699	1023	1200	1453	1556	1685	1674	1475	1242	883	663	14177
55	85	139	315	510	740	866	972	961	785	529	226	84	6212
57	60	109	258	450	678	806	910	899	725	467	183	59	5604
60	34	70	181	362	585	716	817	806	635	376	126	31	4739
65	13	26	80	226	432	566	662	651	485	233	56	9	3439
70	2	9	23	120	289	416	507	496	337	116	18	1	2334

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	398	508	783	965	1213	1327	1444	1437	1243	1002	655	434	398	906	1689	2654	3867	5194	6638	8075	9318	10320	10975	11409
45	271	376	630	815	1058	1177	1289	1282	1093	847	507	295	271	647	1277	2092	3150	4327	5616	6898	7991	8838	9345	9640
50	157	253	480	665	903	1027	1134	1127	943	693	366	173	157	410	890	1555	2458	3485	4619	5746	6689	7382	7748	7921
55	76	151	335	519	748	877	979	972	793	540	241	83	76	227	562	1081	1829	2706	3685	4657	5450	5990	6231	6314
60	29	78	211	369	593	727	824	817	643	395	140	34	29	107	318	687	1280	2007	2831	3648	4291	4686	4826	4860
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	248	317	498	635	817	883	950	935	831	667	411	260	248	565	1063	1698	2515	3398	4348	5283	6114	6781	7192	7452

(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