

# Climatography of the United States No. 20

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

Station: MOUNT PLEASANT, TX

1971-2000

COOP ID: 416108

Climate Division: TX 4

NWS Call Sign:

Elevation: 425 Feet Lat: 33°10N Lon: 95°00W

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	54.2	29.3	41.8	86	1943	24	49.7	1999	-5	1962	12	31.3	1978	721	0	.0	.0	19.7	1.6	20.1	.0
Feb	59.6	32.7	46.2	91	1996	22	54.6	2000	-12	1951	2	34.8	1978	531	3	.0	@	21.6	1.0	14.2	.0
Mar	67.6	40.7	54.2	92	1929	24	60.0	1974	11+	1996	9	48.8	1996	343	8	.0	@	29.2	.1	6.7	.0
Apr	75.3	48.3	61.8	97	1936	13	67.6	1981	23	1936	3	57.3	1983	139	43	.0	.5	29.9	.0	1.1	.0
May	82.4	58.3	70.4	100+	1921	24	75.5	1996	34	1954	4	65.6	1976	25	191	.0	4.1	31.0	.0	.0	.0
Jun	89.9	66.6	78.3	107	1936	21	82.6	1998	48+	1983	1	75.3	1976	0	398	.4	18.2	30.0	.0	.0	.0
Jul	94.2	70.1	82.2	112	1934	27	89.0	1998	50	1924	5	79.3	1976	0	531	4.4	26.7	31.0	.0	.0	.0
Aug	94.6	68.5	81.6	118	1936	10	85.5	1998	48	1967	13	75.6	1992	0	513	5.3	26.0	31.0	.0	.0	.0
Sep	88.0	61.6	74.8	109+	2000	4	80.4	1998	36+	1983	23	68.3	1974	9	304	.9	15.4	30.0	.0	.0	.0
Oct	78.4	49.0	63.7	104	1938	1	67.2	1973	23+	1989	20	56.5	1976	108	67	.0	2.4	30.9	.0	1.1	.0
Nov	65.6	39.7	52.7	91	1951	13	58.7	1973	9+	1976	30	44.6	1976	383	13	.0	.0	27.4	@	8.2	.0
Dec	57.0	32.0	44.5	85+	1955	26	53.7	1984	-2+	1989	24	33.0	1983	637	1	.0	.0	22.9	.9	16.4	.1
Ann	75.6	49.7	62.7	118	Aug 1936	10	89.0	Jul 1998	-12	Feb 1951	2	31.3	Jan 1978	2896	2072	11.0	93.3	334.6	3.6	67.8	.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](http://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: 1905-2001

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

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**Station: MOUNT PLEASANT, TX**

**COOP ID: 416108**

**Climate Division: TX 4**

**NWS Call Sign:**

**Elevation: 425 Feet Lat: 33°10N**

**Lon: 95°00W**

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	3.27	2.92	6.40	1923	21	7.42	1999	.23	1983	7.4	5.3	2.4	.9	.57	.85	1.33	1.78	2.24	2.73	3.30	3.99	4.91	6.39	7.80
Feb	3.54	3.12	5.10	1986	4	9.49	1997	.34	1999	6.8	5.2	2.3	1.2	.79	1.12	1.64	2.11	2.58	3.07	3.63	4.30	5.17	6.57	7.88
Mar	4.42	4.37	7.25	1987	17	10.40	1990	1.03	1986	7.7	5.7	3.4	1.3	1.29	1.71	2.34	2.89	3.42	3.98	4.59	5.31	6.24	7.71	9.07
Apr	3.77	3.55	5.25	1958	27	9.26	1995	.16	1987	7.5	5.5	2.4	1.1	.57	.88	1.43	1.95	2.49	3.08	3.77	4.60	5.73	7.55	9.31
May	5.02	4.38	4.32	1930	18	13.93	1989	.18	1988	9.0	6.6	3.2	1.7	.73	1.15	1.88	2.57	3.30	4.09	5.01	6.14	7.65	10.11	12.48
Jun	4.89	4.09	7.14	1945	12	12.23	1992	.72	1971	7.2	5.4	2.9	1.6	1.08	1.53	2.25	2.90	3.55	4.23	5.01	5.94	7.16	9.11	10.95
Jul	3.75	3.42	4.50	1926	13	12.61	1992	.10	1993	5.6	4.2	2.2	1.2	.29	.54	1.03	1.55	2.12	2.78	3.57	4.56	5.94	8.25	10.53
Aug	2.05	1.46	3.66	1961	17	8.56	1996	.05	2000	5.2	3.7	1.4	.6	.16	.29	.56	.84	1.15	1.51	1.94	2.49	3.24	4.51	5.77
Sep	3.56	2.87	5.40	1957	22	14.41	1974	.46	1983	5.9	4.2	2.4	1.3	.41	.68	1.18	1.68	2.21	2.80	3.49	4.35	5.52	7.45	9.33
Oct	4.74	3.77	5.46	1985	19	14.16	1984	.28	1977	6.6	5.1	2.9	1.8	.56	.93	1.60	2.26	2.96	3.74	4.66	5.79	7.33	9.86	12.31
Nov	5.07	5.08	8.06	1994	5	11.27	2000	.63	1989	7.0	5.1	2.9	1.7	1.05	1.52	2.26	2.94	3.62	4.35	5.17	6.16	7.47	9.55	11.53
Dec	4.49	4.06	5.35	1982	3	10.98	1982	.53	1981	7.4	5.5	3.0	1.9	1.02	1.44	2.10	2.69	3.28	3.90	4.61	5.45	6.55	8.30	9.95
Ann	48.57	47.34	8.06	Nov 1994	5	14.41	Sep 1974	.05	Aug 2000	83.3	61.5	31.4	16.3	34.14	36.93	40.50	43.21	45.62	47.96	50.38	53.05	56.30	61.01	65.09

+ 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: 1905-2001

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

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Station: MOUNT PLEASANT, TX

COOP ID: 416108

Climate Division: TX 4

NWS Call Sign:

Elevation: 425 Feet

Lat: 33°10N

Lon: 95°00W

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	.9	.0	#	0	4.7	1977	31	5.7	1978	5	1977	31	1	1978	.6	.3	.1	.0	.0	.8	.1	@	.0
Feb	.8	.0	#	0	4.0	1985	2	5.0	1978	5	1985	2	1	1985	.6	.4	.1	.0	.0	.5	.2	@	.0
Mar	.1	.0	#	0	1.3	1971	3	1.3	1971	1	1971	3	#	1971	.1	.1	.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	.1	.0	#	0	.7	1976	13	.7	1976	1	1976	13	#+	1993	.1	.0	.0	.0	.0	@	.0	.0	.0
Dec	.4	.0	0	0	5.0	1983	16	7.0	1983	5	1983	16	1	1983	.3	.1	@	@	.0	.1	.1	@	.0
Ann	2.3	.0	N/A	N/A	5.0	Dec 1983	16	7.0	Dec 1983	5+	Feb 1985	2	1+	Feb 1985	1.7	.9	.2	@	.0	1.4	.4	@	.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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**Elevation: 425 Feet**

**Lat: 33° 10N**

**Lon: 95° 00W**

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	4/22	4/18	4/14	4/12	4/09	4/06	4/03	3/31	3/26
32	4/14	4/08	4/04	4/01	3/29	3/26	3/22	3/18	3/13
28	4/01	3/26	3/22	3/18	3/15	3/11	3/08	3/03	2/26
24	3/20	3/12	3/05	2/28	2/23	2/18	2/13	2/07	1/29
20	3/08	2/26	2/18	2/11	2/05	1/30	1/23	1/15	1/05
16	2/19	2/09	2/02	1/27	1/21	1/13	1/02	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	10/02	10/08	10/12	10/15	10/19	10/22	10/26	10/30	11/05
32	10/17	10/23	10/28	11/01	11/05	11/08	11/12	11/17	11/24
28	10/28	11/04	11/10	11/14	11/19	11/23	11/28	12/03	12/11
24	11/05	11/14	11/20	11/26	12/01	12/06	12/11	12/18	12/27
20	11/18	11/27	12/04	12/09	12/14	12/19	12/25	12/31	1/09
16	12/06	12/16	12/24	12/31	1/08	1/17	2/03	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	215	207	201	197	192	188	183	177	169
32	246	237	231	225	220	215	210	203	194
28	275	266	259	253	248	243	237	231	221
24	313	301	293	286	280	274	267	258	247
20	348	333	324	316	309	302	295	286	274
16	>365	>365	>365	>365	>365	340	326	316	304

\* 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: 425 Feet    Lat: 33°10N    Lon: 95°00W**

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	721	531	343	139	25	0	0	0	9	108	383	637	2896
60	576	401	210	58	5	0	0	0	1	42	258	492	2043
57	490	327	147	28	1	0	0	0	0	20	195	407	1615
55	435	282	112	16	0	0	0	0	0	12	159	354	1370
50	309	185	48	2	0	0	0	0	0	2	87	237	870
32	42	14	0	0	0	0	0	0	0	0	2	20	78

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	344	410	687	894	1189	1388	1554	1536	1285	983	621	407	11298
55	24	34	87	220	476	698	841	823	595	281	89	28	4196
57	17	23	60	173	415	638	779	761	535	228	65	19	3713
60	10	13	30	113	326	548	686	668	446	157	37	11	3045
65	0	3	8	43	191	398	531	513	304	67	13	1	2072
70	0	0	0	10	89	250	376	360	181	20	2	0	1288

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	170	259	474	674	957	1161	1319	1299	1054	748	408	218	170	429	903	1577	2534	3695	5014	6313	7367	8115	8523	8741
45	93	161	336	525	802	1011	1164	1144	904	594	283	124	93	254	590	1115	1917	2928	4092	5236	6140	6734	7017	7141
50	43	86	214	381	647	861	1009	989	754	443	174	67	43	129	343	724	1371	2232	3241	4230	4984	5427	5601	5668
55	19	38	119	247	493	711	854	834	604	305	97	30	19	57	176	423	916	1627	2481	3315	3919	4224	4321	4351
60	4	12	54	138	344	561	699	679	458	181	46	11	4	16	70	208	552	1113	1812	2491	2949	3130	3176	3187
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	137	193	316	443	641	786	875	855	700	502	270	158	137	330	646	1089	1730	2516	3391	4246	4946	5448	5718	5876

(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](http://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](http://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"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)