

# Climatography of the United States

No. 20

1971-2000

Station: PORT ISABEL, TX

COOP ID: 417179

Climate Division: TX10

NWS Call Sign:

Elevation: 17 Feet

Lat: 26°04N

Lon: 97°13W

## 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	67.4	52.0	59.7	89	1936	12	67.6	1998	22+	1963	13	53.8	1973	225	60	.0	.0	28.8	@	1.0	.0
Feb	70.0	54.8	62.4	90+	1954	27	70.0	1999	23	1951	1	53.7	1978	147	74	.0	.1	27.2	@	.5	.0
Mar	75.0	61.6	68.3	100	1984	28	73.7	2000	32	1948	11	62.7	1996	41	144	.1	.4	31.0	.0	.0	.0
Apr	79.0	67.2	73.1	94+	1964	26	78.2	1999	37	1938	8	67.8	1987	8	251	.0	.8	30.0	.0	.0	.0
May	83.7	73.2	78.5	97	1954	2	82.0	2000	52	1996	1	75.9	1997	0	417	@	1.9	31.0	.0	.0	.0
Jun	87.7	76.7	82.2	99	1936	11	85.3	1998	62+	1957	6	79.3	1983	0	517	@	13.6	30.0	.0	.0	.0
Jul	89.2	77.5	83.4	99+	1961	11	86.4	1998	66	1942	28	79.9	1976	0	569	.0	19.7	31.0	.0	.0	.0
Aug	89.3	77.4	83.4	99+	1961	6	86.1	1998	62	1967	13	80.6	1971	0	570	.2	24.5	31.0	.0	.0	.0
Sep	87.3	75.1	81.2	100+	2000	4	84.0	1972	55	1995	23	76.5	1974	0	487	.1	13.5	30.0	.0	.0	.0
Oct	83.1	69.7	76.4	96	1941	21	78.7	1971	37	1993	31	69.4	1976	1	354	.0	2.9	31.0	.0	.0	.0
Nov	76.4	62.5	69.5	95	1988	5	75.6	1994	34	1976	29	61.2	1976	54	188	.0	.1	29.7	.0	.0	.0
Dec	69.0	54.0	61.5	90	1977	6	69.1	1984	17+	1989	24	50.0	1989	191	83	.0	.1	29.8	.1	.7	.0
Ann	79.8	66.8	73.3	100+	Sep 2000	4	86.4	Jul 1998	17+	Dec 1989	24	50.0	Dec 1989	667	3714	.4	77.6	360.5	.1	2.2	.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](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: 1897-2001

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

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

**Station: PORT ISABEL, TX**

**COOP ID: 417179**

**Climate Division: TX10**

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**Elevation: 17 Feet**

**Lat: 26°04N**

**Lon: 97°13W**

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	1.93	1.50	3.70	1988	16	5.68	1988	.09	1971	8.2	3.7	.9	.5	.23	.38	.65	.92	1.21	1.53	1.90	2.36	2.99	4.02	5.03
Feb	1.73	1.71	2.83	1958	22	4.52	1983	.01	1976	6.2	3.3	1.0	.5	.17	.29	.52	.76	1.03	1.32	1.67	2.10	2.70	3.69	4.67
Mar	1.22	.38	5.00	1997	12	10.16	1997	.00+	1986	4.2	1.6	.5	.3	.00	.01	.07	.18	.35	.58	.90	1.35	2.04	3.29	4.62
Apr	1.79	.90	7.45	1956	23	6.79	1991	.00+	2000	3.8	2.2	1.0	.5	.00	.00	.05	.23	.49	.85	1.33	2.01	3.03	4.86	6.78
May	2.41	2.12	5.04	1929	29	6.75	1992	.00+	1998	5.2	3.2	1.6	.8	.00	.12	.46	.81	1.22	1.68	2.24	2.95	3.95	5.63	7.30
Jun	1.95	1.15	6.60	1941	22	9.75	1993	.00+	1998	4.8	3.1	1.1	.5	.00	.00	.22	.50	.83	1.22	1.71	2.36	3.26	4.84	6.42
Jul	1.74	.91	5.15	1978	31	8.41	1976	.00+	2000	3.8	2.6	.9	.6	.00	.00	.14	.35	.63	.98	1.44	2.05	2.93	4.49	6.09
Aug	2.13	1.32	5.05	1945	26	5.70	1995	.00+	1997	5.7	3.5	1.2	.4	.00	.06	.30	.59	.94	1.36	1.88	2.56	3.53	5.21	6.90
Sep	6.12	3.99	12.00	1984	19	26.22	1984	.95	2000	9.5	6.9	2.6	1.5	.69	1.16	2.01	2.87	3.78	4.80	5.99	7.47	9.49	12.82	16.06
Oct	3.75	2.87	5.97	1932	14	11.92	1995	.47	1975	7.4	4.7	2.1	1.0	.58	.90	1.45	1.96	2.50	3.08	3.76	4.57	5.67	7.46	9.17
Nov	2.16	1.54	3.20	1986	13	6.87	1986	.07	1984	6.2	3.4	1.3	.5	.23	.40	.70	1.00	1.32	1.68	2.11	2.64	3.36	4.56	5.72
Dec	1.63	1.37	6.00	1940	21	5.44	1986	.05+	1990	7.1	2.9	.7	.3	.10	.20	.40	.62	.87	1.16	1.52	1.97	2.61	3.68	4.75
Ann	28.56	27.58	12.00	Sep 1984	19	26.22	Sep 1984	.00+	Jul 2000	72.1	41.1	14.9	7.4	17.13	19.20	21.93	24.05	25.97	27.86	29.83	32.05	34.77	38.80	42.34

+ 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:  
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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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.0	.0	0	0	.0	0	0	.0	0	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
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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.0	.0	N/A	N/A	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.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

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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	3/03	2/17	2/07	1/29	1/19	1/09	12/23	0/00	0/00
32	2/05	1/25	1/15	1/06	12/23	0/00	0/00	0/00	0/00
28	1/22	1/06	0/00	0/00	0/00	0/00	0/00	0/00	0/00
24	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	0/00	0/00	0/00	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	12/03	12/12	12/18	12/24	12/30	1/07	1/17	0/00	0/00
32	12/23	12/31	1/07	1/14	1/26	0/00	0/00	0/00	0/00
28	1/02	1/15	0/00	0/00	0/00	0/00	0/00	0/00	0/00
24	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	0/00	0/00	0/00	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	>365	>365	>365	>365	342	328	317	305	291
32	>365	>365	>365	>365	>365	>365	>365	358	330
28	>365	>365	>365	>365	>365	>365	>365	>365	>365
24	>365	>365	>365	>365	>365	>365	>365	>365	>365
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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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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	225	147	41	8	0	0	0	0	0	1	54	191	667
60	136	77	10	0	0	0	0	0	0	0	20	109	352
57	92	46	4	0	0	0	0	0	0	0	10	71	223
55	67	31	2	0	0	0	0	0	0	0	6	50	156
50	27	11	0	0	0	0	0	0	0	0	1	20	59
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	859	852	1126	1234	1440	1507	1592	1593	1477	1376	1123	915	15094
55	213	239	415	544	727	817	879	880	787	663	439	252	6855
57	176	197	355	484	665	757	817	818	727	601	383	211	6191
60	127	145	268	394	572	667	724	725	637	508	303	157	5227
65	60	74	144	251	417	517	569	570	487	354	188	83	3714
70	24	29	59	131	264	367	414	415	337	207	100	35	2382

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	619	651	892	1007	1217	1293	1357	1376	1253	1128	883	682	619	1270	2162	3169	4386	5679	7036	8412	9665	10793	11676	12358
45	472	510	737	857	1062	1143	1202	1221	1103	973	734	530	472	982	1719	2576	3638	4781	5983	7204	8307	9280	10014	10544
50	334	371	584	707	907	993	1047	1066	953	818	587	386	334	705	1289	1996	2903	3896	4943	6009	6962	7780	8367	8753
55	215	246	434	557	752	843	892	911	803	664	444	259	215	461	895	1452	2204	3047	3939	4850	5653	6317	6761	7020
60	117	137	289	409	597	693	737	756	653	512	308	153	117	254	543	952	1549	2242	2979	3735	4388	4900	5208	5361
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	362	390	584	705	892	938	984	987	906	806	592	409	362	752	1336	2041	2933	3871	4855	5842	6748	7554	8146	8555

(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)