## 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

COOP ID: 419588

Station: WESLACO 2 E, TX

**Climate Division: TX10** 

**NWS Call Sign:** 

Elevation: 75 Feet Lat: 26°09N Lon: 97°58W

									r	Temp	eratui	re (°F)									
	Mea	<b>n</b> (1)						Extr	emes						Days (1) emp 65		Mean	Numb	er of I	Days (3)	1
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	69.4	47.7	58.6	93	1971	31	66.5	1998	16	1962	12	51.2	1977	263	55	.0	.2	28.8	.0	.9	.0
Feb	73.3	50.9	62.1	98	1996	21	70.5	1999	21	1951	1	53.2	1978	154	73	.0	.7	27.3	.0	.5	.0
Mar	80.1	57.5	68.8	104+	1984	28	74.0	2000	18	1958	13	64.1	1996	33	151	.3	3.6	30.9	.0	.1	.0
Apr	84.8	63.6	74.2	105	1955	23	78.5	1999	41	1980	14	69.1	1997	3	278	.2	8.0	30.0	.0	.0	.0
May	89.3	69.6	79.5	105+	1999	6	83.3	2000	47	1952	12	75.6	1992	0	448	.4	17.2	31.0	.0	.0	.0
Jun	93.1	73.1	83.1	105	1998	16	87.6	1998	59+	1970	3	80.4	1972	0	543	.7	26.1	30.0	.0	.0	.0
Jul	95.4	73.6	84.5	103+	2000	31	87.7	1998	66	1994	29	80.4	1976	0	605	3.0	29.0	31.0	.0	.0	.0
Aug	95.8	73.5	84.7	105	1953	11	87.7	1998	62+	1967	14	81.6	1973	0	610	4.0	29.3	31.0	.0	.0	.0
Sep	91.9	70.8	81.4	107	2000	6	84.6	1998	54	1948	28	77.0	1979	0	491	.9	22.4	30.0	.0	.0	.0
Oct	86.1	63.7	74.9	100	1990	5	78.2	1998	33	1993	31	67.4	1976	4	311	@	11.6	31.0	.0	.0	.0
Nov	78.3	56.4	67.4	99	1988	5	74.8	1994	31	1970	16	56.6	1976	99	169	.0	1.7	29.7	.0	.0	.0
Dec	71.3	49.6	60.5	94	1977	5	67.0	1984	16	1989	23	50.3	1989	199	57	.0	.1	29.8	.1	1.0	.0
Ann	84.1	62.5	73.3	107	Sep 2000	6	87.7+	Aug 1998	16+	Dec 1989	23	50.3	Dec 1989	755	3791	9.5	149.9	360.5	.1	2.5	.0

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Issue Date: February 2004 303-A

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1947-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

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**COOP ID: 419588** 

**Station: WESLACO 2 E, TX** 

Climate Division: TX10 NWS Call Sign: Elevation: 75 Feet Lat: 26°09N Lon: 97°58W

										Pı	recipit	tation	(incl	hes)										
		ans/	P	recipi	itatio	on Total					ean N of D	ays (3	)	Proba		M	nonthly/ onthly/Ar	annual j indic	precipita ated am	babilit ation will nount vs Probal	ll be equ	els		ın the
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	1.35	.76	2.61	1958	5	4.80	1973	.00	1996	7.2	2.9	.7	.3	.02	.09	.24	.42	.64	.90	1.21	1.63	2.21	3.23	4.24
Feb	1.44	.97	2.65	1983	25	5.99	1973	.00+	1999	5.1	2.9	.8	.4	.00	.00	.28	.52	.77	1.05	1.38	1.80	2.36	3.30	4.22
Mar	1.01	.48	2.93	1997	11	8.31	1997	.01	1971	3.9	1.7	.5	.2	.01	.02	.08	.18	.31	.50	.75	1.11	1.67	2.68	3.76
Apr	1.42	1.42 1.05 4.85 1954 9 4.97 1997 .00+							1999	4.3	2.3	.9	.4	.00	.00	.09	.33	.60	.91	1.28	1.76	2.43	3.53	4.68
May	2.67	1.91	4.88	1950	28	8.51	1982	.00+	1998	4.8	3.3	1.4	.9	.00	.25	.71	1.13	1.57	2.06	2.63	3.31	4.26	5.82	7.34
Jun	2.94	2.43	4.35	1993	21	10.75	1972	.00+	1998	5.9	4.3	1.7	.9	.00	.00	.80	1.32	1.82	2.36	2.98	3.74	4.71	6.33	7.88
Jul	2.21	1.02	4.77	1983	15	9.74	1975	.00+	2000	5.1	3.1	1.2	.6	.00	.00	.15	.41	.76	1.20	1.78	2.57	3.72	5.77	7.88
Aug	2.62	1.89	5.35	1960	12	10.20	1995	.00+	1997	6.0	3.8	1.5	.7	.00	.12	.47	.85	1.28	1.79	2.41	3.20	4.31	6.19	8.07
Sep	4.71	4.17	8.50	1985	30	13.86	1998	.92	1989	9.3	6.4	2.7	1.4	.92	1.35	2.04	2.67	3.32	4.01	4.79	5.73	6.98	8.98	10.88
Oct	2.46	1.83	4.55	1974	25	7.15	1974	.40	1979	5.6	3.8	1.5	.7	.40	.61	.97	1.31	1.66	2.04	2.47	3.01	3.72	4.88	5.99
Nov	1.30	.93	3.80	1986	11	5.84	1986	.00+	1999	5.2	2.6	.7	.2	.00	.07	.26	.46	.67	.92	1.22	1.59	2.12	3.00	3.87
Dec	xc 1.24 1.00 1.84 1990 31 4.01 1986 .00 1							1988	7.2	3.1	.6	.2	.05	.14	.32	.50	.70	.92	1.19	1.52	1.98	2.75	3.50	
Ann	<b>III</b>   25.37   25.36   8.50   1   30   13.86   1   00+							Jul 2000	69.6	40.2	14.2	6.9	15.88	17.63	19.91	21.68	23.27	24.83	26.46	28.28	30.51	33.79	36.66	

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1947-2001

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Station: WESLACO 2 E, TX

**COOP ID: 419588 Climate Division: TX10 Elevation:** 75 Feet **NWS Call Sign:** Lat: 26°09N Lon: 97°58W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nui	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1)	1					Extre	mes (2)							ow Fa					Depth esholo	
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	#	1973	9	#	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
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	N/A	N/A	#	Feb 1973	9	#	Feb 1973	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

### Climatography of the United States No. 20 1971-2000

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**COOP ID: 419588** 

**Station: WESLACO 2 E, TX** 

**Climate Division: TX10** 

**NWS Call Sign:** 

**Elevation:** 

75 Feet

Lat: 26°09N Lon: 97°58W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	/Day)			
Temp (F)		P	robability of	later date i	n spring (thr	ru Jul 31) tha	n indicated(	*)	
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	3/09	2/25	2/16	2/09	2/01	1/24	1/15	1/01	0/00
32	2/17	2/03	1/22	1/12	12/30	12/07	0/00	0/00	0/00
28	1/21	1/07	12/23	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
			Fal	l Freeze Dat	tes (Month/D	Day)			
Tomp (F)		Pro	bability of ea	arlier date ii	n fall (beginn	ning Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	11/22	12/02	12/09	12/15	12/21	12/28	1/05	1/16	0/00
32	12/13	12/24	1/02	1/11	1/22	0/00	0/00	0/00	0/00
28	12/23	1/04	1/18	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
<u> </u>			l	Freeze F	ree Period	1		l .	1
T (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	>365	>365	354	333	321	311	302	292	279
32	>365	>365	>365	>365	>365	>365	360	329	306
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

<sup>\*</sup> 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.

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**COOP ID: 419588** 

Station: WESLACO 2 E, TX

Climate Division: TX10 NWS Call Sign: Elevation: 75 Feet Lat: 26°09N Lon: 97°58W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	263	154	33	3	0	0	0	0	0	4	99	199	755
60	172	83	7	0	0	0	0	0	0	1	47	112	422
57	125	52	3	0	0	0	0	0	0	0	28	70	278
55	97	36	1	0	0	0	0	0	0	0	19	48	201
50	45	13	0	0	0	0	0	0	0	0	7	17	82
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	824	843	1141	1265	1471	1533	1628	1633	1481	1330	1060	881	15090
55	208	235	429	575	758	843	915	920	791	617	389	216	6896
57	174	194	368	515	696	783	853	858	731	555	338	176	6241
60	127	142	280	425	603	693	760	765	641	462	267	125	5290
65	55	73	151	278	448	543	605	610	491	311	169	57	3791
70	28	28	60	147	296	393	450	455	341	171	94	21	2484

										Gro	wing l	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (M	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         Nov         D           10         637         703         948         1062         1258         1322         1408         1419         1268         1127         868         6													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	637 703 948 1062 1258 1322 1408 1419 1268 1127 868												637	1340	2288	3350	4608	5930	7338	8757	10025	11152	12020	12704
45	5         487         561         793         912         1103         1172         1253         1264         1118         972         719											535	487	1048	1841	2753	3856	5028	6281	7545	8663	9635	10354	10889
50	349	422	641	762	948	1022	1098	1109	968	818	572	393	349	771	1412	2174	3122	4144	5242	6351	7319	8137	8709	9102
55	231	291	493	613	793	872	943	954	818	663	430	265	231	522	1015	1628	2421	3293	4236	5190	6008	6671	7101	7366
60	128	181	346	464	638	722	788	799	668	508	300	161	128	309	655	1119	1757	2479	3267	4066	4734	5242	5542	5703
Base	Base Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		,
50/86													388	833	1471	2204	3083	3992	4944	5897	6770	7542	8117	8545

(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

#### 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

- c. Snow Tables
  - 1. Snow Climatology
  - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

### 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