

# Climatography of the United States

No. 20

1971-2000

Station: SEYMOUR, TX

COOP ID: 418221

Climate Division: TX 2

NWS Call Sign:

Elevation: 1,287 Feet Lat: 33° 36N

Lon: 99° 16W

## 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	52.7	27.7	40.2	88	1969	9	47.0	1990	-14	1947	4	31.0	1979	769	0	.0	.0	18.9	3.0	23.0	.0
Feb	58.1	32.2	45.2	93+	1996	23	53.6	1976	-9+	1985	3	33.7	1978	560	3	.0	.1	20.3	2.0	14.8	.1
Mar	67.1	40.2	53.7	100	1940	31	59.9	1974	5	1948	11	49.3	1996	355	3	.0	.7	27.9	.2	6.9	.0
Apr	75.8	48.6	62.2	103+	1939	26	67.9	1972	22	1938	8	56.3	1997	144	60	@	2.3	29.6	.0	1.1	.0
May	83.6	58.6	71.1	107+	1989	25	78.1	1996	30	1909	1	66.0	1976	30	218	.6	7.0	31.0	.0	.0	.0
Jun	91.1	67.4	79.3	115	1994	28	85.4	1998	47	1983	7	74.1	1983	2	428	2.9	19.0	30.0	.0	.0	.0
Jul	96.5	71.8	84.2	114	1939	8	89.8	1980	54+	1915	5	79.7	1975	0	593	8.9	27.5	31.0	.0	.0	.0
Aug	95.6	70.7	83.2	120	1936	12	89.4	2000	50	1915	31	77.6	1971	0	563	9.2	26.0	31.0	.0	.0	.0
Sep	87.4	62.9	75.2	112	1939	1	81.5	2000	34	1942	27	67.5	1974	13	317	2.4	14.5	30.0	.0	.0	.0
Oct	77.4	51.4	64.4	106	1937	5	68.6	1998	20	1993	31	56.3	1976	98	79	.2	3.0	30.7	.0	.7	.0
Nov	64.0	38.8	51.4	92	1934	7	58.2	1999	7	1911	29	44.9	1976	413	5	.0	.0	25.7	.2	8.7	.0
Dec	55.0	29.9	42.5	90	1954	5	46.6	1977	-8+	1989	24	30.1	1983	699	0	.0	.0	21.1	1.7	20.8	.1
Ann	75.4	50.0	62.7	120	Aug 1936	12	89.8	Jul 1980	-14	Jan 1947	4	30.1	Dec 1983	3083	2269	24.2	100.1	327.2	7.1	76.0	.2

+ 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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## No. 20 1971-2000

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

**Station: SEYMOUR, TX**

**COOP ID: 418221**

**Climate Division: TX 2**

**NWS Call Sign:**

**Elevation: 1,287 Feet Lat: 33°36N**

**Lon: 99°16W**

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	1.05	.93	2.00	1949	20	3.13	1999	.00+	1986	4.1	2.7	.7	.2	.00	.05	.19	.35	.52	.72	.97	1.28	1.72	2.45	3.19
Feb	1.56	1.08	3.30	1981	28	4.35	1997	.00+	1991	4.7	3.1	.8	.4	.00	.07	.27	.49	.75	1.05	1.43	1.90	2.56	3.70	4.84
Mar	1.88	1.50	3.90	2000	23	5.72	1999	.43	1971	5.1	3.3	1.5	.4	.33	.50	.77	1.03	1.29	1.58	1.90	2.29	2.82	3.66	4.47
Apr	1.84	1.67	4.48	1967	12	5.87	1990	.20	1989	5.2	3.8	1.4	.4	.24	.39	.65	.90	1.17	1.47	1.82	2.24	2.82	3.76	4.67
May	4.13	3.89	6.20	1989	16	14.88	1982	.30	1984	7.2	5.3	2.6	1.5	.70	1.06	1.66	2.22	2.81	3.44	4.16	5.04	6.21	8.10	9.91
Jun	3.63	3.06	3.80	1986	5	9.00	1992	.45	1994	6.8	5.0	2.3	1.1	.85	1.19	1.72	2.19	2.67	3.17	3.73	4.39	5.27	6.66	7.97
Jul	1.86	1.68	3.82	1988	11	5.25	1988	.10	1981	4.6	3.3	1.0	.5	.25	.40	.67	.93	1.20	1.50	1.85	2.28	2.85	3.80	4.71
Aug	2.58	2.25	4.20	1978	5	9.49	1996	.00	2000	5.5	4.0	1.6	.7	.08	.26	.61	.98	1.39	1.86	2.43	3.15	4.15	5.83	7.49
Sep	3.51	3.31	5.10	1986	1	8.53	1988	.05	1999	5.8	4.2	2.3	1.1	.16	.34	.74	1.21	1.75	2.39	3.18	4.21	5.67	8.16	10.67
Oct	2.86	2.66	4.00	1953	4	8.14	1972	.07	1987	5.9	4.5	1.9	.8	.18	.35	.70	1.09	1.53	2.04	2.66	3.46	4.56	6.44	8.31
Nov	1.48	1.24	3.81	2001	15	5.17	2000	.00	1989	4.7	2.8	1.1	.4	.10	.24	.48	.69	.92	1.18	1.47	1.83	2.32	3.11	3.89
Dec	1.41	1.16	4.00	1911	8	4.69	1991	.00	1996	4.5	3.2	.8	.3	.05	.15	.35	.55	.77	1.03	1.34	1.72	2.26	3.16	4.04
Ann	27.79	27.42	6.20	May 1989	16	14.88	May 1982	.00+	Aug 2000	64.1	45.2	18.0	7.8	21.38	22.66	24.27	25.48	26.54	27.56	28.61	29.76	31.15	33.14	34.84

+ 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

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

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**Climate Division: TX 2**

**NWS Call Sign:**

**Elevation: 1,287 Feet**

**Lat: 33°36N**

**Lon: 99°16W**

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	.8	.0	#	0	6.0	1992	18	6.0	1992	6	1992	18	#+	1992	.2	.2	.1	.1	.0	.1	.1	.1	.0
Feb	.1	.0	#	0	2.0	1972	12	2.0	1972	2	1972	12	#+	1996	.1	.1	.0	.0	.0	.1	.0	.0	.0
Mar	.1	.0	#	0	2.5	1971	3	2.5	1971	3	1971	3	#	1971	@	@	.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	.4	.0	#	0	6.0	1980	17	6.0	1980	6	1980	17	#+	1980	.2	.2	.1	@	.0	.1	.1	.1	.0
Dec	.4	.0	#	0	4.5	1971	3	4.5	1971	#	1990	31	#	1990	.2	.1	.1	.0	.0	.0	.0	.0	.0
Ann	1.8	.0	N/A	N/A	6.0+	Jan 1992	18	6.0+	Jan 1992	6+	Jan 1992	18	#+	Feb 1996	.7	.6	.3	.1	.0	.3	.2	.2	.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	4/26	4/21	4/17	4/14	4/11	4/09	4/06	4/02	3/28
32	4/14	4/09	4/05	4/02	3/30	3/27	3/24	3/21	3/15
28	4/06	3/31	3/26	3/22	3/18	3/14	3/10	3/05	2/26
24	3/23	3/15	3/09	3/04	2/28	2/23	2/18	2/12	2/04
20	3/13	3/03	2/24	2/18	2/12	2/06	1/30	1/22	1/10
16	2/27	2/17	2/09	2/02	1/26	1/19	1/11	12/29	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	10/07	10/13	10/18	10/22	10/26	10/30	11/03	11/08	11/15
32	10/21	10/26	10/31	11/03	11/06	11/09	11/13	11/17	11/22
28	11/02	11/07	11/11	11/14	11/17	11/20	11/23	11/27	12/02
24	11/07	11/14	11/19	11/23	11/27	12/01	12/05	12/10	12/17
20	11/12	11/22	11/29	12/06	12/11	12/17	12/23	12/31	1/12
16	11/28	12/06	12/13	12/19	12/24	12/31	1/07	1/22	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	221	213	207	202	197	192	187	181	173
32	242	234	229	224	220	216	211	206	199
28	266	258	253	248	243	239	234	228	220
24	302	292	284	278	272	266	259	252	241
20	>365	330	317	308	300	292	284	274	262
16	>365	>365	>365	350	335	324	315	304	291

\* 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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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	769	560	355	144	30	2	0	0	13	98	413	699	3083
60	615	429	218	66	7	0	0	0	2	37	280	546	2200
57	525	354	151	35	2	0	0	0	0	17	211	458	1753
55	468	307	114	21	1	0	0	0	0	9	171	401	1492
50	328	207	48	5	0	0	0	0	0	1	92	268	949
32	32	18	0	0	0	0	0	0	0	0	1	19	70

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	286	386	672	905	1211	1417	1616	1586	1294	1005	583	342	11303
55	9	31	72	237	499	727	903	873	604	301	63	12	4331
57	4	21	48	191	438	667	841	811	544	246	43	7	3861
60	1	12	22	132	350	577	748	718	457	173	22	2	3214
65	0	3	3	60	218	428	593	563	317	79	5	0	2269
70	0	0	0	20	115	288	438	411	197	27	0	0	1496

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	134	231	443	672	967	1184	1375	1341	1059	760	364	165	134	365	808	1480	2447	3631	5006	6347	7406	8166	8530	8695
45	67	144	307	522	812	1034	1220	1186	909	608	247	88	67	211	518	1040	1852	2886	4106	5292	6201	6809	7056	7144
50	25	74	196	380	657	884	1065	1031	760	459	149	38	25	99	295	675	1332	2216	3281	4312	5072	5531	5680	5718
55	4	32	107	255	505	734	910	876	610	321	74	11	4	36	143	398	903	1637	2547	3423	4033	4354	4428	4439
60	0	9	47	147	355	584	755	721	468	195	30	0	0	9	56	203	558	1142	1897	2618	3086	3281	3311	3311
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	120	175	289	428	629	794	899	879	691	491	242	138	120	295	584	1012	1641	2435	3334	4213	4904	5395	5637	5775

(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)