

Climatology of the United States

No. 20

1971-2000

Station: LANGTRY, TX

COOP ID: 415048

Climate Division: TX 6

NWS Call Sign:

Elevation: 1,290 Feet Lat: 29°48N

Lon: 101°34W

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	61.8	32.9	47.4	93	2000	20	56.2	1998	13	1972	5	38.0	1979	551	4	.0	@	26.6	.2	14.5	.0
Feb	67.2	38.1	52.7	98	1986	19	60.9	2000	11	1985	2	44.2	1978	361	14	.0	.5	25.8	.2	6.9	.0
Mar	75.8	47.5	61.7	100+	1974	31	68.0	2000	21	1980	2	56.5	1981	156	51	.1	2.7	30.7	.0	1.6	.0
Apr	84.0	56.4	70.2	110	1996	26	76.1	1986	29	1973	9	63.9	1997	26	182	1.0	8.6	30.0	.0	.1	.0
May	90.6	65.9	78.3	110	1996	29	84.5	1998	42	1970	3	72.7	1976	4	416	3.5	19.2	31.0	.0	.0	.0
Jun	95.3	72.3	83.8	113	1980	29	89.6	1998	53+	1979	12	78.2	1979	0	564	6.7	25.6	30.0	.0	.0	.0
Jul	97.6	74.6	86.1	111+	1998	15	92.0	1998	57	1985	1	78.7	1976	0	653	11.8	28.9	31.0	.0	.0	.0
Aug	97.2	74.1	85.7	113	1969	18	89.2	1977	62	1992	27	77.7	1971	0	640	11.0	28.7	31.0	.0	.0	.0
Sep	91.8	67.9	79.9	112	2000	7	85.5	1977	40	1969	30	71.3	1974	2	447	3.3	22.0	30.0	.0	.0	.0
Oct	81.9	57.0	69.5	104	1979	4	72.7	1998	26	1993	31	60.5	1976	43	182	.2	5.9	30.9	.0	.2	.0
Nov	70.5	44.4	57.5	97	1988	8	63.9	1985	15	1976	29	49.6	1976	260	34	.0	.3	29.2	.0	3.1	.0
Dec	62.6	34.5	48.6	90	1977	5	54.4	1984	9	1989	23	42.3	1983	511	1	.0	@	27.9	.2	12.2	.0
Ann	81.4	55.5	68.5	113+	Jun 1980	29	92.0	Jul 1998	9	Dec 1989	23	38.0	Jan 1979	1914	3188	37.6	142.4	354.1	.6	38.6	.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

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

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: LANGTRY, TX

COOP ID: 415048

Climate Division: TX 6

NWS Call Sign:

Elevation: 1,290 Feet Lat: 29°48N

Lon: 101°34W

Precipitation (inches)

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	.49	.41	1.68	1947	17	1.51	1985	.00+	1999	3.8	1.2	.2	@	.00	.00	.06	.14	.22	.32	.44	.60	.81	1.19	1.56
Feb	.81	.44	1.95	1997	20	2.81	1992	.00+	1976	3.3	1.7	.5	.1	.00	.03	.12	.24	.37	.53	.72	.97	1.33	1.95	2.57
Mar	.66	.50	1.40	1994	16	2.12	1999	.00+	1996	2.6	1.2	.5	.2	.00	.00	.07	.15	.26	.40	.57	.79	1.10	1.65	2.21
Apr	1.02	.65	4.32	1981	18	8.66	1981	.00+	1998	3.1	1.7	.5	.2	.00	.01	.09	.21	.37	.57	.83	1.19	1.71	2.64	3.60
May	1.87	1.59	3.07	1931	28	7.18	1992	.29	1998	5.1	3.2	1.3	.7	.33	.50	.77	1.03	1.29	1.57	1.89	2.27	2.79	3.62	4.42
Jun	1.67	1.37	7.00	1936	29	5.66	2000	.00+	1996	4.3	3.0	1.5	.5	.00	.13	.40	.66	.94	1.25	1.62	2.07	2.69	3.73	4.75
Jul	1.38	.74	3.74	1950	12	5.74	1976	.00	1989	3.5	2.2	.9	.4	.00	.03	.14	.29	.50	.76	1.11	1.59	2.30	3.56	4.88
Aug	1.55	.76	6.04	1980	12	8.61	1971	.00+	1989	3.4	2.5	1.1	.5	.00	.03	.17	.36	.60	.91	1.30	1.82	2.58	3.92	5.29
Sep	2.35	1.94	4.19	1988	18	6.96	1991	.00	1999	4.8	3.2	1.6	.7	.03	.15	.43	.75	1.12	1.57	2.12	2.83	3.85	5.59	7.34
Oct	1.59	1.13	3.05	1981	13	6.02	1981	.00+	1999	4.9	2.8	1.1	.4	.00	.03	.18	.38	.63	.94	1.34	1.88	2.65	4.01	5.40
Nov	.74	.53	2.51	1978	5	3.48	1978	.00+	1999	3.6	1.9	.5	@	.00	.00	.05	.18	.32	.48	.68	.92	1.27	1.84	2.44
Dec	.54	.26	1.78	1984	31	2.31+	1986	.00+	1996	3.1	1.3	.2	.1	.00	.00	.04	.10	.17	.28	.42	.62	.91	1.44	1.99
Ann	14.67	14.77	7.00	Jun 1936	29	8.66	Apr 1981	.00+	Nov 1999	45.5	25.9	9.9	3.8	8.01	9.18	10.73	11.96	13.08	14.20	15.37	16.70	18.34	20.79	22.96

+ 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

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Station: LANGTRY, TX

COOP ID: 415048

Climate Division: TX 6

NWS Call Sign:

Elevation: 1,290 Feet

Lat: 29°48N

Lon: 101°34W

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	.3	.0	0	0	6.0	1985	13	6.0+	1985	0	0	0	0	0	.1	.1	.1	.1	.0	.0	.0	.0	.0
Feb	.3	.0	#	0	5.0	1973	9	5.0	1973	5	1973	9	#	1973	.1	.1	.1	.1	.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	#	1976	29	#	1976	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	.6	.0	N/A	N/A	6.0	Jan 1985	13	6.0+	Jan 1985	5	Feb 1973	9	#	Feb 1973	.2	.2	.2	.2	.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:

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Climate Division: TX 6

NWS Call Sign:

Elevation: 1,290 Feet

Lat: 29° 48N

Lon: 101° 34W

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	4/08	4/01	3/27	3/22	3/18	3/14	3/10	3/04	2/25
32	3/31	3/23	3/18	3/13	3/09	3/04	2/27	2/22	2/14
28	3/13	3/04	2/26	2/21	2/16	2/11	2/06	1/31	1/22
24	2/24	2/14	2/07	2/01	1/25	1/19	1/11	12/30	0/00
20	2/03	1/24	1/16	1/08	12/29	0/00	0/00	0/00	0/00
16	1/21	1/11	12/31	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	10/26	10/31	11/05	11/08	11/11	11/15	11/18	11/22	11/28
32	11/01	11/08	11/13	11/17	11/21	11/25	11/29	12/03	12/10
28	11/09	11/17	11/23	11/29	12/04	12/09	12/14	12/20	12/29
24	11/28	12/05	12/11	12/15	12/20	12/25	12/31	1/08	0/00
20	12/07	12/20	12/30	1/09	1/23	0/00	0/00	0/00	0/00
16	12/23	1/07	1/23	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	263	254	248	243	238	232	227	221	212
32	284	275	268	262	257	251	245	238	229
28	330	316	306	298	290	282	274	264	251
24	>365	>365	>365	343	330	321	312	302	290
20	>365	>365	>365	>365	>365	>365	>365	338	318
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:
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Climate Division: TX 6 NWS Call Sign: Elevation: 1,290 Feet Lat: 29°48N Lon: 101°34W

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	551	361	156	26	4	0	0	0	2	43	260	511	1914
60	408	245	75	5	0	0	0	0	0	12	158	366	1269
57	327	187	43	1	0	0	0	0	0	5	110	284	957
55	278	154	28	0	0	0	0	0	0	3	84	234	781
50	176	85	8	0	0	0	0	0	0	0	36	134	439
32	9	1	0	0	0	0	0	0	0	0	0	1	11

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	485	579	918	1147	1434	1554	1676	1663	1436	1162	764	514	13332
55	41	88	233	457	721	864	963	950	746	451	158	34	5706
57	28	65	186	397	659	804	901	888	686	392	124	22	5152
60	16	38	125	311	566	714	808	795	596	306	82	11	4368
65	4	14	51	182	416	564	653	640	447	182	34	1	3188
70	0	4	14	88	276	415	498	485	308	88	11	0	2187

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	287	408	708	926	1203	1323	1440	1419	1211	929	556	316	287	695	1403	2329	3532	4855	6295	7714	8925	9854	10410	10726
45	167	280	556	777	1048	1173	1285	1264	1061	776	410	188	167	447	1003	1780	2828	4001	5286	6550	7611	8387	8797	8985
50	76	169	410	627	893	1023	1130	1109	911	621	280	86	76	245	655	1282	2175	3198	4328	5437	6348	6969	7249	7335
55	24	85	270	480	738	873	975	954	761	468	166	32	24	109	379	859	1597	2470	3445	4399	5160	5628	5794	5826
60	1	33	151	337	583	723	820	799	612	324	84	4	1	34	185	522	1105	1828	2648	3447	4059	4383	4467	4471
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	221	278	460	600	799	879	947	934	802	614	359	229	221	499	959	1559	2358	3237	4184	5118	5920	6534	6893	7122

(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/normal/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
- 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">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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