

Climatology of the United States

No. 20

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

Station: FLOYDADA, TX

1971-2000

COOP ID: 413214

Climate Division: TX 1

NWS Call Sign:

Elevation: 3,219 Feet Lat: 33° 58N

Lon: 101° 20W

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	50.1	23.2	36.7	81+	1974	18	42.5	1998	-9	1963	13	27.6	1979	879	0	.0	.0	17.7	4.1	27.6	.2
Feb	55.5	27.2	41.4	88+	1962	12	49.1	1999	-6	1960	25	28.5	1978	662	0	.0	.0	19.4	2.7	20.8	.1
Mar	64.0	33.9	49.0	94	1989	13	54.8	1972	3	1980	2	44.4	1996	498	0	.0	.2	27.1	.5	13.0	.0
Apr	72.9	43.1	58.0	99	1959	25	63.2	1972	18	1945	4	51.7	1997	231	22	.0	1.0	28.9	@	2.9	.0
May	81.1	53.2	67.2	109	2000	24	73.8	1996	29	1970	2	62.5	1976	67	134	.7	6.3	30.8	.0	@	.0
Jun	88.8	62.5	75.7	111	1994	28	81.7	1990	42	1946	2	71.7	1982	5	325	2.3	14.6	30.0	.0	.0	.0
Jul	92.3	66.3	79.3	107	1983	4	84.3	1998	46	1947	23	75.1	1976	0	443	3.1	21.8	31.0	.0	.0	.0
Aug	90.2	64.6	77.4	109	1944	3	82.3	1999	48	1961	23	72.7	1971	1	385	1.3	19.2	31.0	.0	.0	.0
Sep	83.0	57.4	70.2	103+	2000	6	76.3	1998	34+	1983	22	63.3	1974	30	186	.4	8.6	29.8	.0	.0	.0
Oct	73.6	46.0	59.8	100	2000	4	63.1	1973	16	1993	31	51.5	1976	189	27	@	1.1	30.2	@	1.8	.0
Nov	60.3	33.8	47.1	89	1941	17	55.0	1999	2+	1991	4	40.6	1976	541	2	.0	.0	23.9	.7	13.1	.0
Dec	51.5	25.5	38.5	85	1939	10	43.5	1994	-3+	1989	23	27.3	1983	822	0	.0	.0	18.6	2.7	25.5	.4
Ann	71.9	44.7	58.4	111	Jun 1994	28	84.3	Jul 1998	-9	Jan 1963	13	27.3	Dec 1983	3925	1524	7.8	72.8	318.4	10.7	104.7	.7

+ 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: 1911-2001

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

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COOP ID: 413214

Climate Division: TX 1

NWS Call Sign:

Elevation: 3,219 Feet Lat: 33°58N

Lon: 101°20W

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	.45	.30	1.50	1999	30	2.08	1983	.00+	1998	3.0	1.3	.3	@	.00	.00	.04	.10	.18	.27	.39	.54	.76	1.15	1.54
Feb	.72	.58	1.50	1998	16	2.56	1990	.00+	1999	3.4	2.1	.4	.1	.00	.05	.17	.28	.40	.53	.69	.89	1.16	1.61	2.05
Mar	.98	.60	2.30	2001	8	4.40	1973	.00	1991	3.7	2.2	.5	.3	.02	.07	.19	.33	.49	.67	.89	1.18	1.59	2.29	2.98
Apr	1.58	1.32	2.75	1942	9	5.88	1997	.00+	1989	4.3	3.1	1.1	.3	.00	.06	.27	.49	.76	1.06	1.44	1.92	2.60	3.77	4.93
May	3.01	2.79	3.71	1951	16	7.45	1982	.00	1998	6.8	5.1	2.2	.8	.40	.79	1.30	1.72	2.15	2.60	3.10	3.70	4.49	5.75	6.94
Jun	3.74	3.57	5.06	1957	1	8.14	1986	.35	1998	6.9	5.3	2.6	1.2	.77	1.11	1.66	2.16	2.67	3.21	3.82	4.55	5.52	7.06	8.53
Jul	2.00	2.02	2.72	1981	29	4.35	1988	.00	1983	5.3	3.7	1.4	.5	.23	.48	.81	1.10	1.39	1.70	2.05	2.46	3.02	3.90	4.74
Aug	2.50	2.24	3.88	1981	12	6.33	1981	.07	2000	6.4	4.2	1.6	.6	.20	.37	.69	1.04	1.42	1.86	2.38	3.05	3.96	5.49	7.01
Sep	2.88	2.25	6.51	1942	19	7.73	1971	.00	2000	6.0	4.4	1.8	.9	.06	.23	.59	.99	1.45	1.99	2.65	3.49	4.67	6.69	8.70
Oct	1.62	1.10	4.37	1983	20	7.61	1983	.00+	1992	4.7	3.0	1.0	.3	.00	.05	.23	.46	.72	1.04	1.43	1.94	2.68	3.94	5.21
Nov	.84	.66	4.35	1946	3	2.03	1986	.00+	1999	3.7	2.1	.5	.1	.00	.02	.10	.21	.35	.51	.72	1.00	1.40	2.10	2.81
Dec	.63	.34	1.60	1997	23	2.78	1991	.00+	2000	3.3	1.7	.4	.1	.00	.00	.03	.13	.25	.39	.56	.78	1.08	1.60	2.14
Ann	20.95	20.74	6.51	Sep 1942	19	8.14	Jun 1986	.00+	Dec 2000	57.5	38.2	13.8	5.2	12.75	14.24	16.20	17.73	19.11	20.46	21.87	23.45	25.40	28.27	30.79

+ 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: 1911-2001

(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: FLOYDADA, TX

COOP ID: 413214

Climate Division: TX 1

NWS Call Sign:

Elevation: 3,219 Feet

Lat: 33°58N

Lon: 101°20W

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	2.9	1.5	#	#	12.0	1983	1	24.0	1983	12	1983	22	4	1983	1.1	.8	.2	.2	@	1.7	.5	.4	.1
Feb	2.0	.0	#	0	10.0	1978	17	11.0	1979	10	1978	18	2	1986	.9	.7	.2	.1	.1	1.1	.4	.2	.1
Mar	.3	.0	#	0	2.0	1994	1	2.0	1994	2	1994	1	#+	1996	.3	.1	.0	.0	.0	.1	.0	.0	.0
Apr	.2	.0	#	0	3.0	1983	8	4.0	1983	2+	1983	8	#+	1983	.1	.1	@	.0	.0	.1	.0	.0	.0
May	.0	.0	#	0	.0	0	0	.0	0	#	1996	26	#	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	#	1996	14	#	1996	.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	.2	.0	#	0	5.0	1976	29	5.0	1976	5	1976	29	#+	1999	.1	@	@	@	.0	.1	@	@	.0
Nov	1.1	.0	#	0	10.0	1980	17	21.0	1980	10	1980	17	2	1980	.4	.3	.2	.1	@	.4	.3	.2	@
Dec	1.2	.0	#	0	5.0	1979	14	7.0	1979	5	1979	14	#+	1999	.8	.5	.1	@	.0	.6	.2	@	.0
Ann	7.9	1.5	N/A	N/A	12.0	Jan 1983	1	24.0	Jan 1983	12	Jan 1983	22	4	Jan 1983	3.7	2.5	.7	.4	.1	4.1	1.4	.8	.2

+ 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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COOP ID: 413214

Climate Division: TX 1

NWS Call Sign:

Elevation: 3,219 Feet

Lat: 33° 58N

Lon: 101° 20W

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	5/04	4/29	4/26	4/23	4/20	4/17	4/14	4/11	4/06
32	4/20	4/16	4/13	4/10	4/08	4/05	4/03	3/30	3/26
28	4/11	4/07	4/03	4/01	3/29	3/26	3/23	3/20	3/15
24	4/04	3/29	3/24	3/19	3/15	3/11	3/07	3/02	2/23
20	3/29	3/21	3/14	3/09	3/04	2/27	2/22	2/16	2/07
16	3/18	3/08	3/01	2/23	2/18	2/12	2/06	1/30	1/20
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	10/07	10/12	10/15	10/18	10/22	10/25	10/29	11/04
32	10/13	10/19	10/23	10/27	10/30	11/03	11/06	11/11	11/17
28	10/27	11/01	11/04	11/07	11/10	11/13	11/16	11/19	11/24
24	11/05	11/10	11/13	11/16	11/18	11/21	11/24	11/27	12/01
20	11/10	11/17	11/21	11/25	11/29	12/02	12/06	12/11	12/17
16	11/11	11/21	11/29	12/05	12/11	12/17	12/24	12/31	1/11
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	204	196	190	185	181	176	171	165	157
32	226	219	214	209	205	201	196	191	184
28	244	238	233	229	225	222	218	213	207
24	269	262	256	251	247	243	238	233	225
20	303	291	283	276	269	262	255	247	235
16	341	324	312	303	295	287	278	267	253

* 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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COOP ID: 413214

Climate Division: TX 1 NWS Call Sign: Elevation: 3,219 Feet Lat: 33° 58N Lon: 101° 20W

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	879	662	498	231	67	5	0	1	30	189	541	822	3925
60	724	525	348	126	22	0	0	0	7	90	400	667	2909
57	631	447	264	78	9	0	0	0	2	52	321	575	2379
55	571	395	213	53	5	0	0	0	0	34	273	514	2058
50	426	275	111	16	0	0	0	0	0	9	170	369	1376
32	66	30	1	0	0	0	0	0	0	0	8	36	141

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	210	292	527	781	1090	1310	1466	1407	1147	861	459	237	9787
55	2	12	25	144	381	620	753	694	457	183	33	2	3306
57	1	8	14	109	324	560	691	632	398	138	22	1	2898
60	0	3	5	67	244	470	598	539	313	83	11	0	2333
65	0	0	0	22	134	325	443	385	186	27	2	0	1524
70	0	0	0	5	58	194	290	239	92	5	0	0	883

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	86	161	320	551	847	1074	1223	1164	915	626	269	109	86	247	567	1118	1965	3039	4262	5426	6341	6967	7236	7345
45	32	88	202	405	692	924	1068	1009	765	473	163	45	32	120	322	727	1419	2343	3411	4420	5185	5658	5821	5866
50	4	38	109	277	538	774	913	854	616	334	85	12	4	42	151	428	966	1740	2653	3507	4123	4457	4542	4554
55	0	9	51	165	387	624	758	699	472	204	33	0	0	9	60	225	612	1236	1994	2693	3165	3369	3402	3402
60	0	1	15	81	250	477	603	544	332	105	5	0	0	1	16	97	347	824	1427	1971	2303	2408	2413	2413
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	98	150	248	363	533	703	807	772	591	397	196	106	98	248	496	859	1392	2095	2902	3674	4265	4662	4858	4964

(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

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.

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