

Climatography of the United States

No. 20

1971-2000

Station: ALICE, TX

COOP ID: 410144

Climate Division: TX 9

NWS Call Sign:

Elevation: 201 Feet Lat: 27°44N Lon: 98°04W

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	67.5	44.1	55.8	93+	1972	24	63.4	2000	12	1962	12	48.2	1977	325	33	.0	.2	27.9	.1	3.1	.0
Feb	71.7	47.5	59.6	100	1986	19	68.6	2000	19	1917	2	50.1	1978	197	46	@	.9	26.6	@	1.9	.0
Mar	79.0	54.6	66.8	102	1989	30	72.1	2000	21	1917	5	61.0	1996	63	118	.1	2.6	30.8	.0	.3	.0
Apr	84.3	60.6	72.5	107+	1984	27	77.4	1972	31	1920	5	68.3	1997	9	232	.5	6.7	30.0	.0	.0	.0
May	88.5	67.9	78.2	108+	1999	5	82.7	1989	43+	1954	4	72.7	1976	1	410	.7	14.0	31.0	.0	.0	.0
Jun	93.4	72.2	82.8	111+	1998	16	88.3	1998	52	1919	3	80.6	1973	0	533	2.3	24.9	30.0	.0	.0	.0
Jul	96.1	73.1	84.6	111	1939	9	88.6	1998	61+	1967	17	80.8	1976	0	607	6.6	29.2	31.0	.0	.0	.0
Aug	96.2	73.0	84.6	110	1956	8	87.8	1997	61	1967	15	81.6	1973	0	609	7.0	29.0	31.0	.0	.0	.0
Sep	92.1	69.7	80.9	110	2000	6	84.6	1977	45+	1942	29	76.2	1974	0	476	1.8	22.3	30.0	.0	.0	.0
Oct	85.2	61.7	73.5	102	1938	2	77.0	1984	28	1993	31	65.2	1976	7	269	@	9.6	31.0	.0	@	.0
Nov	76.5	53.5	65.0	97	1988	4	72.2	1973	22	1911	30	55.7	1976	123	123	.0	1.4	29.5	.0	.5	.0
Dec	69.2	46.2	57.7	94	1977	5	66.2	1984	12	1989	23	47.9	1989	264	37	.0	.3	28.9	@	2.2	.0
Ann	83.3	60.3	71.8	111+	Jun 1998	16	88.6	Jul 1998	12+	Dec 1989	23	47.9	Dec 1989	989	3493	19.0	141.1	357.7	.1	8.0	.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

003-A

(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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No. 20
1971-2000**

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

Station: ALICE, TX

COOP ID: 410144

Climate Division: TX 9

NWS Call Sign:

Elevation: 201 Feet Lat: 27°44N

Lon: 98°04W

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	1.21	1.26	4.65	1958	5	4.00	1992	.00+	1999	6.2	2.9	.7	.2	.00	.08	.27	.45	.65	.88	1.16	1.49	1.96	2.75	3.52
Feb	1.51	1.26	3.40	1958	22	4.54	1992	.00+	1999	5.3	2.9	.8	.4	.00	.00	.32	.57	.83	1.13	1.47	1.90	2.46	3.42	4.35
Mar	1.34	1.01	3.30	1931	16	4.75	1993	.00	1971	4.8	2.4	.8	.3	.01	.05	.18	.35	.55	.81	1.14	1.58	2.21	3.33	4.46
Apr	1.65	1.13	3.85	1966	25	7.16	1976	.00	1998	4.3	2.6	1.0	.5	.01	.07	.23	.44	.70	1.01	1.42	1.95	2.73	4.09	5.47
May	3.16	3.26	4.10	1936	9	8.04	1972	.00+	1998	5.9	4.3	2.2	1.0	.00	.47	1.08	1.59	2.09	2.63	3.24	3.95	4.92	6.49	7.98
Jun	3.41	3.02	6.35	1931	28	12.60	1981	.00+	1982	5.8	4.6	2.4	1.1	.00	.31	.89	1.43	1.99	2.62	3.35	4.24	5.46	7.49	9.46
Jul	1.76	1.10	10.00	1942	6	5.46	1976	.00+	1996	4.5	3.1	1.5	.6	.00	.09	.34	.61	.90	1.24	1.65	2.16	2.89	4.10	5.31
Aug	2.70	2.15	7.30	2001	31	13.89	1980	.00	1997	5.4	3.8	1.4	.7	.07	.26	.62	1.01	1.44	1.93	2.53	3.29	4.34	6.12	7.89
Sep	4.52	3.50	12.14	1971	12	18.59	1971	.29	2000	6.8	5.1	2.4	1.3	.43	.75	1.36	1.99	2.68	3.45	4.37	5.51	7.09	9.71	12.28
Oct	3.55	2.76	7.05	1914	24	10.91	1994	.00+	1992	4.8	3.4	1.9	1.0	.00	.19	.70	1.23	1.82	2.51	3.33	4.35	5.80	8.23	10.64
Nov	1.50	1.43	5.50	2001	15	4.29	1976	.00+	1999	3.9	2.3	1.0	.5	.00	.00	.21	.48	.75	1.06	1.43	1.88	2.52	3.54	4.56
Dec	1.21	.74	4.50	1991	22	6.45	1991	.00+	1999	5.2	2.4	.6	.2	.00	.07	.25	.44	.64	.87	1.14	1.49	1.96	2.77	3.56
Ann	27.52	27.53	12.14	Sep 1971	12	18.59	Sep 1971	.00+	Dec 1999	62.9	39.8	16.7	7.8	16.04	18.09	20.82	22.94	24.88	26.78	28.77	31.02	33.79	37.88	41.50

+ 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

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Station: ALICE, TX

COOP ID: 410144

Climate Division: TX 9

NWS Call Sign:

Elevation: 201 Feet

Lat: 27°44N

Lon: 98°04W

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	#	1973	11	#	1973	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	#	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	#	.0	N/A	N/A	#+	Nov 1976	29	#+	Nov 1976	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

Complete documentation available from:

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Lat: 27° 44N

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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	3/20	3/10	3/03	2/25	2/19	2/13	2/07	1/31	1/21
32	3/13	2/26	2/16	2/07	1/29	1/21	1/11	12/29	12/06
28	2/19	2/08	1/30	1/23	1/15	1/06	12/23	0/00	0/00
24	1/27	1/14	1/02	12/15	0/00	0/00	0/00	0/00	0/00
20	12/29	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	11/15	11/21	11/26	11/30	12/04	12/08	12/12	12/17	12/23
32	11/19	11/28	12/04	12/10	12/15	12/21	12/27	1/04	1/19
28	11/28	12/11	12/20	12/29	1/07	1/18	2/06	0/00	0/00
24	12/22	1/04	1/17	2/05	0/00	0/00	0/00	0/00	0/00
20	1/10	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	322	310	302	294	287	281	273	264	252
32	>365	>365	343	329	320	311	302	292	278
28	>365	>365	>365	>365	350	338	330	322	312
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

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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	325	197	63	9	1	0	0	0	0	7	123	264	989
60	218	116	19	0	0	0	0	0	0	1	61	161	576
57	167	77	8	0	0	0	0	0	0	0	36	113	401
55	135	56	4	0	0	0	0	0	0	0	24	85	304
50	69	22	0	0	0	0	0	0	0	0	8	34	133
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	737	773	1078	1212	1432	1523	1630	1632	1466	1285	990	796	14554
55	159	185	369	522	719	833	917	919	776	572	325	168	6464
57	129	150	311	462	657	773	855	857	716	510	276	134	5830
60	87	105	230	372	564	683	762	764	626	418	211	89	4911
65	33	46	118	232	410	533	607	609	476	269	123	37	3493
70	16	16	44	116	263	383	452	454	327	139	58	13	2281

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	505	583	837	981	1196	1299	1401	1410	1251	1054	765	562	505	1088	1925	2906	4102	5401	6802	8212	9463	10517	11282	11844
45	366	448	683	831	1041	1149	1246	1255	1101	899	617	420	366	814	1497	2328	3369	4518	5764	7019	8120	9019	9636	10056
50	243	316	532	681	886	999	1091	1100	951	744	471	289	243	559	1091	1772	2658	3657	4748	5848	6799	7543	8014	8303
55	147	206	389	531	731	849	936	945	801	591	337	179	147	353	742	1273	2004	2853	3789	4734	5535	6126	6463	6642
60	74	115	250	384	576	699	781	790	651	441	220	97	74	189	439	823	1399	2098	2879	3669	4320	4761	4981	5078
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	313	367	546	658	828	886	930	930	846	714	493	350	313	680	1226	1884	2712	3598	4528	5458	6304	7018	7511	7861

(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.

- | | |
|---|---|
| <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