U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RUSK, TX **COOP ID: 417841**

Climate Division: TX 6 **NWS Call Sign:** **Elevation: 720 Feet** **Lat: 31˚49N** **Lon: 95˚09W**

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	55.5	36.8	46.2	85	1943	23	52.2	1975	0	1982	11	36.1	1978	589	4	.0	.0	20.9	1.3	12.1	@
Feb	60.8	40.4	50.6	93	1986	21	60.2	1976	1	1951	1	39.5	1978	414	11	.0	@	22.3	.8	7.0	.0
Mar	68.5	47.4	58.0	94	1946	30	63.8	1974	13	1943	3	50.2	1988	250	26	.0	.0	29.4	@	1.9	.0
Apr	75.2	54.2	64.7	96	1948	12	71.4	1981	23	1987	3	60.0	1997	85	75	.0	.2	29.9	.0	.1	.0
May	81.9	62.6	72.3	98+	1998	31	77.0	1996	40+	1978	5	68.8	1993	10	234	.0	2.6	31.0	.0	.0	.0
Jun	88.4	69.3	78.9	103	1980	28	83.8	1998	46	1955	10	74.8	1989	0	415	.2	12.8	30.0	.0	.0	.0
Jul	92.8	72.4	82.6	107	1954	26	87.0	1998	57	1967	16	78.6	1989	0	545	2.6	24.2	31.0	.0	.0	.0
Aug	93.1	71.8	82.5	107+	1962	13	87.5	1999	53	1967	12	77.6	1992	0	541	3.3	24.4	31.0	.0	.0	.0
Sep	87.5	66.6	77.1	110	2000	5	81.5	1986	40	1942	27	70.3	1974	2	363	.6	13.0	30.0	.0	.0	.0
Oct	77.9	57.0	67.5	97	1956	2	71.1	1971	26	1993	31	60.5	1976	50	126	.0	1.2	30.9	.0	.1	.0
Nov	66.5	47.4	57.0	89+	1955	15	63.1	1973	15	1976	29	50.4	1976	274	32	.0	.0	27.7	.1	2.3	.0
Dec	58.1	39.5	48.8	83	1956	8	59.2	1984	1	1989	23	39.5	1989	507	5	.0	.0	23.7	.6	8.8	.0
Ann	75.5	55.5	65.5	110	Sep 2000	5	87.5	Aug 1999	0	Jan 1982	11	36.1	Jan 1978	2181	2377	6.7	78.4	337.8	2.8	32.3	@

+ 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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1942-2001

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RUSK, TX **COOP ID: 417841**

Climate Division: TX 6 **NWS Call Sign:** **Elevation: 720 Feet** **Lat: 31˚49N** **Lon: 95˚09W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	4.41	4.10	4.40	1999	29	11.82	1999	.08	1971
Feb	3.64	3.01	3.30	1997	21	10.01	1992	.10	1996
Mar	4.12	4.01	8.73	1989	30	11.82	1989	.41	1971
Apr	3.86	3.29	4.24	1944	29	10.37	1982	.82	1987
May	4.69	4.76	4.05	1955	20	10.20	1991	.05	1998
Jun	4.34	4.29	10.00	2001	7	11.21	1993	.30	1985
Jul	2.95	2.76	4.70	1959	26	6.63	1973	.42	1977
Aug	2.38	2.01	4.08	1994	8	8.87	1996	.00	1999
Sep	4.01	3.34	4.75	1979	20	11.61	1973	.74	1981
Oct	4.94	3.32	8.00	1957	15	11.95	1985	.72	1977
Nov	4.63	4.80	3.40	1988	26	11.98	2000	.28	1999
Dec	4.53	4.45	3.50	1968	3	9.95	1991	.65	1981
Ann	48.50	48.23	10.00	Jun 2001	7	11.98	Nov 2000	.00	Aug 1999

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	7.7	6.5	2.8	1.2
Feb	6.2	5.2	2.5	1.5
Mar	7.3	6.1	2.8	1.1
Apr	6.1	5.4	2.5	1.3
May	7.2	6.4	3.4	1.6
Jun	6.4	5.7	2.9	1.4
Jul	5.2	4.4	1.9	1.2
Aug	5.0	4.2	1.6	.8
Sep	5.9	5.0	2.6	1.4
Oct	5.9	5.4	3.2	1.7
Nov	7.0	6.2	3.1	1.7
Dec	7.2	6.3	3.0	1.7
Ann	77.1	66.8	32.3	16.6

Precipitation Probabilities (1)

Probability that the monthly/annual precipitation will be equal to or less than the indicated amount

Monthly/Annual Precipitation vs Probability Levels
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.61	.98	1.61	2.22	2.86	3.57	4.38	5.38	6.73	8.94	11.07
Feb	.57	.89	1.41	1.91	2.43	3.00	3.65	4.44	5.50	7.22	8.87
Mar	.93	1.31	1.91	2.45	3.00	3.57	4.22	5.00	6.02	7.64	9.16
Apr	.89	1.25	1.81	2.32	2.83	3.36	3.97	4.68	5.63	7.13	8.54
May	.51	.87	1.52	2.17	2.87	3.66	4.58	5.73	7.29	9.87	12.39
Jun	.74	1.12	1.75	2.34	2.95	3.62	4.38	5.30	6.52	8.51	10.41
Jul	.69	.97	1.40	1.79	2.17	2.58	3.03	3.57	4.29	5.42	6.48
Aug	.07	.25	.57	.92	1.29	1.73	2.25	2.91	3.82	5.35	6.86
Sep	.72	1.08	1.66	2.21	2.77	3.37	4.05	4.89	5.99	7.77	9.48
Oct	.90	1.34	2.06	2.74	3.42	4.16	5.01	6.02	7.38	9.56	11.64
Nov	1.11	1.54	2.22	2.82	3.42	4.05	4.76	5.60	6.71	8.46	10.11
Dec	1.18	1.60	2.26	2.84	3.41	4.01	4.68	5.47	6.51	8.14	9.66
Ann	32.33	35.38	39.33	42.36	45.07	47.70	50.43	53.47	57.18	62.59	67.31

\+ 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: 1942-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: RUSK, TX **COOP ID: 417841**

Climate Division: TX 6 **NWS Call Sign:** **Elevation: 720 Feet** **Lat: 31°49N** **Lon: 95°09W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	.5	.0	#	0
Feb	.1	.0	#	0
Mar	.0	.0	#	0
Apr	.0	.0	0	0
May	.0	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.0	.0	0	0
Nov	#	.0	0	0
Dec	#	.0	#	0
Ann	.6	.0	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	3.5	1977	31	4.1	1977	4	1977	31	#+	2000
Feb	.6	1989	6	1.0	1989	2	1985	1	#	1985
Mar	.5	1989	5	.5	1989	1	1989	5	#	1989
Apr	.0	0	0	.0	0	0	0	0	0	0
May	.0	0	0	.0	0	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	.0	0	0	.0	0	0	0	0	0	0
Nov	#	1980	27	#	1980	0	0	0	0	0
Dec	#	1996	17	#+	1996	#	1990	30	#	1990
Ann	3.5	Jan 1977	31	4.1	Jan 1977	4	Jan 1977	31	#+	Jan 2000

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.5	.2	.1	.0	.0
Feb	.1	.0	.0	.0	.0
Mar	.1	.0	.0	.0	.0
Apr	.0	.0	.0	.0	.0
May	.0	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.0	.0	.0	.0	.0
Nov	.0	.0	.0	.0	.0
Dec	.0	.0	.0	.0	.0
Ann	.7	.2	.1	.0	.0

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.2	@	.0	.0
Feb	.0	.0	.0	.0
Mar	@	.0	.0	.0
Apr	.0	.0	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	.0	.0	.0	.0
Dec	.0	.0	.0	.0
Ann	.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:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RUSK, TX **COOP ID: 417841**

Climate Division: TX 6 **NWS Call Sign:** **Elevation: 720 Feet** **Lat: 31˚49N** **Lon: 95˚09W**

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	4/15	4/08	4/04	3/31	3/27	3/24	3/20	3/15	3/09
32	4/01	3/24	3/19	3/14	3/10	3/06	3/01	2/24	2/16
28	3/20	3/11	3/04	2/26	2/20	2/14	2/08	2/01	1/23
24	3/10	2/27	2/20	2/13	2/07	1/31	1/24	1/15	12/29
20	2/24	2/14	2/06	1/31	1/24	1/17	1/09	12/24	0/00
16	2/12	2/03	1/26	1/20	1/13	1/04	12/20	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	10/25	10/31	11/04	11/08	11/11	11/14	11/18	11/22	11/28
32	11/05	11/10	11/14	11/18	11/21	11/24	11/28	12/02	12/07
28	11/13	11/21	11/26	12/01	12/05	12/09	12/14	12/20	12/27
24	11/23	12/01	12/07	12/13	12/18	12/23	12/29	1/05	1/19
20	12/08	12/16	12/23	12/28	1/03	1/10	1/18	0/00	0/00
16	12/17	12/28	1/06	1/14	1/23	2/03	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	247	241	236	232	228	224	220	216	209
32	282	273	266	261	255	250	245	238	229
28	323	311	302	294	287	280	273	264	251
24	>365	353	332	321	312	304	296	286	273
20	>365	>365	>365	>365	352	336	324	311	295
16	>365	>365	>365	>365	>365	>365	350	338	325

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RUSK, TX **COOP ID: 417841**

Climate Division: TX 6 **NWS Call Sign:** **Elevation: 720 Feet** **Lat: 31˚49N** **Lon: 95˚09W**

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	589	414	250	85	10	0	0	0	2	50	274	507	2181
60	446	292	145	28	1	0	0	0	0	14	171	366	1463
57	365	229	97	11	0	0	0	0	0	6	122	289	1119
55	314	192	70	6	0	0	0	0	0	3	95	242	922
50	208	116	27	0	0	0	0	0	0	0	44	147	542
32	15	4	0	0	0	0	0	0	0	0	0	4	23

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	453	524	799	980	1247	1405	1568	1564	1352	1100	748	525	12265
55	39	68	157	295	534	715	855	851	662	390	153	50	4769
57	28	49	121	241	472	655	793	789	602	330	120	34	4234
60	16	29	76	168	380	565	700	696	512	246	79	19	3486
65	4	11	26	75	234	415	545	541	363	126	32	5	2377
70	0	1	8	21	115	267	390	387	227	46	11	0	1473

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	248	342	554	742	997	1158	1313	1308	1102	833	500	298	248	590	1144	1886	2883	4041	5354	6662	7764	8597	9097	9395
45	153	234	413	592	842	1008	1158	1153	952	679	364	189	153	387	800	1392	2234	3242	4400	5553	6505	7184	7548	7737
50	82	139	284	442	687	858	1003	998	802	525	246	103	82	221	505	947	1634	2492	3495	4493	5295	5820	6066	6169
55	38	74	169	306	532	708	848	843	652	385	143	51	38	112	281	587	1119	1827	2675	3518	4170	4555	4698	4749
60	10	33	86	180	377	558	693	688	502	243	71	20	10	43	129	309	686	1244	1937	2625	3127	3370	3441	3461
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	147	205	335	467	679	811	897	880	750	543	296	178	147	352	687	1154	1833	2644	3541	4421	5171	5714	6010	6188

(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.
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

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/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