

Climatology of the United States

No. 20

1971-2000

Station: DEL RIO INTL AP, TX

COOP ID: 412360

Climate Division: TX 6

NWS Call Sign: DRT

Elevation: 999 Feet

Lat: 29° 23N

Lon: 100° 56W

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	62.8	39.7	51.3	90	2000	19	56.6	1998	15	1982	11	42.9	1979	423	2	.0	@	26.9	.1	5.9	.0
Feb	68.0	44.1	56.1	99	1996	21	63.5	2000	14	1985	2	48.3	1978	262	18	.0	.4	26.6	.1	2.7	.0
Mar	76.0	51.6	63.8	101+	1971	28	69.3	2000	21	1980	2	57.5	1987	111	86	@	2.3	30.8	.0	.7	.0
Apr	82.7	58.5	70.6	106	1984	20	75.6	1986	33+	1987	3	65.3	1997	27	207	.3	6.6	30.0	.0	.0	.0
May	88.7	66.7	77.7	109	2000	24	84.2	1998	45	1970	3	71.7	1976	1	401	1.5	15.2	31.0	.0	.0	.0
Jun	93.7	72.1	82.9	112	1988	9	89.1	1998	55+	1970	3	78.7	1979	0	545	4.0	24.7	30.0	.0	.0	.0
Jul	96.2	74.3	85.3	110	1954	27	91.7	1998	64	1976	17	77.4	1976	0	630	9.1	27.8	31.0	.0	.0	.0
Aug	96.0	74.1	85.1	109	1969	17	88.5	2000	64	1966	25	78.1	1971	0	622	7.7	28.3	31.0	.0	.0	.0
Sep	90.6	69.4	80.0	110	2000	6	85.3	1977	48+	1995	22	73.4	1974	2	453	1.6	20.2	30.0	.0	.0	.0
Oct	81.7	60.5	71.1	106	1979	3	74.9	1979	28	1993	31	62.5	1976	24	217	.1	5.1	30.9	.0	.1	.0
Nov	70.9	49.2	60.1	96	1988	4	64.9	1985	22	1976	29	52.6	1976	183	41	.0	.2	29.3	.0	1.1	.0
Dec	63.5	41.2	52.4	90	1977	4	58.3	1984	10	1989	23	44.3	1989	384	4	.0	@	28.3	.1	4.6	.0
Ann	80.9	58.5	69.7	112	Jun 1988	9	91.7	Jul 1998	10	Dec 1989	23	42.9	Jan 1979	1417	3226	24.3	130.8	355.8	.3	15.1	.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: 1951-2001

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

088-A

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: DEL RIO INTL AP, TX

COOP ID: 412360

Climate Division: TX 6

NWS Call Sign: DRT

Elevation: 999 Feet Lat: 29°23N

Lon: 100°56W

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	.57	.40	1.81	1994	21	2.36	1994	.00+	1996	4.8	1.5	.2	@	.00	.01	.05	.11	.20	.31	.45	.65	.95	1.48	2.03
Feb	.96	.63	2.57	1987	5	3.80	1992	.00	1974	4.9	1.9	.5	.2	.01	.04	.14	.26	.41	.59	.83	1.13	1.58	2.35	3.14
Mar	.96	.79	1.73	1979	20	3.20	1990	.00	1971	4.9	1.9	.6	.2	.00	.03	.11	.22	.37	.55	.79	1.11	1.58	2.42	3.28
Apr	1.71	1.46	2.94	1969	11	7.51	1981	.01	1998	5.2	2.8	1.2	.5	.09	.18	.38	.61	.88	1.19	1.57	2.06	2.75	3.94	5.12
May	2.31	2.11	3.76	1995	23	7.33	1995	.08	1998	7.3	4.1	1.7	.5	.27	.45	.78	1.10	1.44	1.82	2.27	2.82	3.57	4.81	6.01
Jun	2.34	1.82	2.90	1981	15	5.74	1987	.00+	1990	6.1	3.4	1.6	.8	.00	.06	.32	.63	1.01	1.47	2.05	2.80	3.88	5.75	7.64
Jul	2.02	.94	4.84	1975	17	13.18	1976	.00	1998	4.3	2.6	1.3	.7	.01	.05	.20	.43	.72	1.11	1.62	2.32	3.35	5.21	7.13
Aug	2.16	.95	17.03	1998	23	20.93	1998	.00	1985	3.9	2.4	1.1	.5	.01	.06	.22	.47	.79	1.20	1.74	2.49	3.59	5.55	7.59
Sep	2.06	1.38	5.21	1970	26	7.07	1991	.00	1999	5.7	3.2	1.3	.7	.15	.37	.70	1.00	1.32	1.66	2.06	2.54	3.19	4.26	5.28
Oct	2.00	1.41	7.60	1969	4	6.64	1981	.00	1979	5.7	3.1	1.4	.5	.03	.12	.35	.62	.93	1.31	1.78	2.40	3.27	4.78	6.30
Nov	.96	.80	2.07	1978	5	3.35	1978	.00+	1999	5.0	1.9	.7	.1	.00	.00	.25	.41	.58	.76	.96	1.22	1.54	2.09	2.61
Dec	.75	.46	1.70	1994	27	3.14	1994	.00	1973	5.5	1.8	.3	.2	.00	.02	.07	.15	.26	.40	.59	.86	1.24	1.95	2.67
Ann	18.80	17.86	17.03	Aug 1998	23	20.93	Aug 1998	.00+	Nov 1999	63.3	30.6	11.9	4.9	10.82	12.16	13.92	15.29	16.54	17.76	19.04	20.48	22.25	24.87	27.17

+ 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: 1951-2001

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

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

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: DEL RIO INTL AP, TX

COOP ID: 412360

Climate Division: TX 6

NWS Call Sign: DRT

Elevation: 999 Feet

Lat: 29°23N

Lon: 100°56W

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	8.4	1985	12	9.8	1985	9	1985	13	1	1985	.4	.2	.1	.1	.0	.2	.2	.1	.0
Feb	.1	.0	#	0	2.7	1973	8	2.7	1973	1	1973	9	#	1973	.1	.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	#	1989	.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	.1	.0	0	0	1.2	1993	30	1.2	1993	#	1993	30	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	#	.0	0	0	#	1976	28	#	1976	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	#	.0	0	0	#	1989	22	#	1989	#	1972	11	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	1.0	.0	N/A	N/A	8.4	Jan 1985	12	9.8	Jan 1985	9	Jan 1985	13	1	Jan 1985	.5	.2	.1	.1	.0	.2	.2	.1	.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/normal/usnormals.html

Climatography of the United States

No. 20 1971-2000

Station: DEL RIO INTL AP, TX

COOP ID: 412360

Climate Division: TX 6

NWS Call Sign: DRT

Elevation: 999 Feet

Lat: 29° 23N

Lon: 100° 56W

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	3/28	3/20	3/15	3/10	3/05	3/01	2/24	2/19	2/11
32	3/15	3/07	3/01	2/24	2/19	2/14	2/09	2/04	1/26
28	2/27	2/16	2/08	2/01	1/25	1/18	1/10	12/31	12/12
24	2/10	1/31	1/24	1/17	1/10	1/01	12/20	0/00	0/00
20	1/15	1/07	12/30	12/21	0/00	0/00	0/00	0/00	0/00
16	12/28	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	10/31	11/06	11/10	11/14	11/17	11/20	11/24	11/28	12/04
32	11/04	11/14	11/20	11/26	12/01	12/06	12/12	12/19	12/28
28	11/22	12/02	12/09	12/16	12/22	12/28	1/03	1/12	1/28
24	12/12	12/23	12/31	1/07	1/14	1/24	2/09	0/00	0/00
20	12/24	1/01	1/08	1/17	0/00	0/00	0/00	0/00	0/00
16	1/20	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	282	273	267	261	256	251	245	239	230
32	322	309	300	292	284	277	269	260	247
28	>365	>365	353	339	330	322	314	305	294
24	>365	>365	>365	>365	>365	>365	345	332	318
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

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normal/usnormals.html

**Climatography
of the United States
No. 20
1971-2000**

Station: DEL RIO INTL AP, TX

COOP ID: 412360

Climate Division: TX 6 NWS Call Sign: DRT Elevation: 999 Feet Lat: 29° 23N Lon: 100° 56W

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	423	262	111	27	1	0	0	0	2	24	183	384	1417
60	296	169	38	4	0	0	0	0	0	3	95	262	867
57	224	121	18	0	0	0	0	0	0	1	58	192	614
55	183	94	10	0	0	0	0	0	0	0	39	153	479
50	101	41	2	0	0	0	0	0	0	0	11	76	231
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	609	689	1002	1174	1429	1536	1657	1649	1444	1215	844	640	13888
55	60	125	310	486	716	846	944	936	754	504	200	65	5946
57	39	95	257	428	654	786	882	874	694	444	159	44	5356
60	18	58	185	343	561	696	789	781	604	356	104	22	4517
65	2	18	86	207	401	545	630	622	453	217	41	4	3226
70	0	4	30	102	257	396	479	471	312	107	8	0	2166

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	379	501	764	942	1186	1304	1418	1410	1214	976	614	412	379	880	1644	2586	3772	5076	6494	7904	9118	10094	10708	11120
45	252	364	610	792	1031	1154	1263	1255	1064	821	469	271	252	616	1226	2018	3049	4203	5466	6721	7785	8606	9075	9346
50	142	241	458	642	876	1004	1108	1100	914	667	326	151	142	383	841	1483	2359	3363	4471	5571	6485	7152	7478	7629
55	65	135	319	495	721	854	953	945	764	512	207	71	65	200	519	1014	1735	2589	3542	4487	5251	5763	5970	6041
60	19	70	194	351	566	704	798	790	614	364	112	24	19	89	283	634	1200	1904	2702	3492	4106	4470	4582	4606
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	237	310	488	623	811	883	944	935	825	656	380	248	237	547	1035	1658	2469	3352	4296	5231	6056	6712	7092	7340

(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