

# Climatology of the United States

No. 20

1971-2000

Station: DULCE, NM

COOP ID: 292608

Climate Division: NM 1

NWS Call Sign:

Elevation: 6,793 Feet Lat: 36° 56N

Lon: 107° 00W

## 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	41.5	7.0	24.3	65	1953	7	31.5	1986	-41	1930	22	16.5	1984	1265	0	.0	.0	4.5	3.8	30.9	9.1
Feb	46.2	12.9	29.6	68	1954	6	36.8	1995	-41	1951	1	21.1	1979	992	0	.0	.0	9.3	1.4	27.9	3.8
Mar	53.7	20.4	37.1	82	1910	24	41.2	1999	-20	1966	5	32.3	1979	867	0	.0	.0	20.7	.1	29.4	.4
Apr	62.1	25.1	43.6	83+	1953	28	48.0	1987	-2	1933	14	37.8	1973	641	0	.0	.0	26.6	.0	25.9	.0
May	70.9	31.7	51.3	93	1953	27	56.3	2000	10+	1929	2	47.0	1971	426	1	.0	.1	30.6	.0	18.0	.0
Jun	81.2	37.8	59.5	103	1954	25	63.8	1996	20+	1919	1	55.0	1983	186	20	.0	1.9	30.0	.0	6.4	.0
Jul	85.1	46.3	65.7	102	1954	28	69.3	1998	25	1956	1	61.7	1982	59	80	.0	5.4	31.0	.0	.6	.0
Aug	82.8	46.9	64.9	99	1954	21	69.3	1995	27	1962	31	60.6	1975	76	71	.0	2.0	31.0	.0	.3	.0
Sep	76.5	38.3	57.4	97	1948	7	61.3	1998	11	1912	23	53.1	1975	240	11	.0	.3	29.9	.0	6.7	.0
Oct	66.2	27.5	46.9	89	1955	3	50.5	1972	0	1906	24	42.5	1984	563	0	.0	.0	29.2	.0	24.1	.0
Nov	51.4	17.9	34.7	74+	1999	12	38.8	1999	-37	1931	25	28.7	1979	910	0	.0	.0	17.1	1.0	28.3	1.1
Dec	42.8	9.2	26.0	66	1932	1	34.4	1980	-47	1961	12	17.8	1978	1208	0	.0	.0	6.3	3.3	30.8	6.3
Ann	63.4	26.8	45.1	103	Jun 1954	25	69.3+	Jul 1998	-47	Dec 1961	12	16.5	Jan 1984	7433	183	.0	9.7	266.2	9.6	229.3	20.7

+ 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](http://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: 1906-2001

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

032-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: DULCE, NM

COOP ID: 292608

Climate Division: NM 1

NWS Call Sign:

Elevation: 6,793 Feet Lat: 36°56N

Lon: 107°00W

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	1.39	1.33	1.22	1974	1	3.12	1974	.07	1986	6.6	3.9	.7	.1	.18	.29	.49	.68	.88	1.11	1.38	1.70	2.14	2.86	3.56
Feb	1.22	1.10	1.26	1988	3	3.03	1993	.03	1977	6.3	3.8	.6	@	.13	.22	.39	.56	.74	.95	1.19	1.49	1.90	2.59	3.25
Mar	1.63	1.51	1.48	1982	15	3.83	1985	.00	1997	7.7	4.6	.9	.1	.16	.35	.62	.85	1.10	1.36	1.65	2.01	2.49	3.26	4.00
Apr	1.09	.96	1.48	1935	18	2.78+	1999	.00	1989	6.1	3.3	.6	@	.13	.26	.44	.60	.76	.93	1.12	1.35	1.65	2.14	2.60
May	1.42	1.38	1.65	1981	17	4.38	1981	.00	1986	7.3	3.9	.7	.1	.03	.12	.31	.51	.74	1.00	1.32	1.73	2.29	3.26	4.22
Jun	.75	.60	1.15	1914	1	2.54	1986	.00+	1998	5.4	2.2	.4	@	.00	.00	.15	.27	.40	.55	.72	.94	1.23	1.72	2.21
Jul	1.76	1.73	2.33	1915	26	4.05	1990	.08	1994	10.2	5.0	1.0	.1	.21	.35	.60	.84	1.10	1.39	1.73	2.14	2.71	3.64	4.54
Aug	2.51	2.29	1.91	1968	5	5.85	1993	.15	1978	12.0	6.2	1.5	.4	.57	.81	1.17	1.50	1.84	2.19	2.58	3.05	3.67	4.65	5.58
Sep	1.68	1.58	2.39	1923	18	4.49	1985	.17	1974	7.5	4.3	1.1	.1	.30	.45	.69	.92	1.16	1.41	1.70	2.05	2.52	3.27	3.99
Oct	1.72	1.21	1.90	1906	21	6.44	1972	.00	1995	6.8	4.6	1.1	.1	.04	.15	.37	.62	.89	1.21	1.60	2.10	2.79	3.97	5.14
Nov	1.45	1.32	4.00	1931	22	2.86+	1991	.04	1989	5.8	4.0	.7	.2	.18	.29	.50	.70	.91	1.15	1.43	1.77	2.23	3.00	3.74
Dec	1.16	.90	2.50	1931	10	3.11	1990	.00	1999	6.5	3.7	.5	@	.07	.18	.36	.53	.71	.91	1.14	1.43	1.81	2.45	3.06
Ann	17.78	17.13	4.00	Nov 1931	22	6.44	Oct 1972	.00+	Dec 1999	88.2	49.5	9.8	1.2	12.39	13.42	14.76	15.77	16.67	17.55	18.45	19.45	20.67	22.44	23.98

+ 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: 1906-2001

(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](http://www.ncdc.noaa.gov)

Station: DULCE, NM

COOP ID: 292608

Climate Division: NM 1

NWS Call Sign:

Elevation: 6,793 Feet

Lat: 36°56N

Lon: 107°00W

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	15.2	13.0	8	8	17.0	1978	15	48.0	1974	40	1974	10	23	1974	5.8	4.2	1.8	.8	.1	20.0	16.8	13.8	9.9
Feb	11.8	9.5	9	7	14.0	1975	15	43.5	1975	32	1979	3	28	1978	5.0	3.5	1.3	.7	.1	17.0	15.1	11.3	6.8
Mar	7.8	5.9	3	#	8.0	1973	9	32.5	1973	33	1978	1	33	1978	3.8	2.7	.9	.4	.0	4.7	3.3	2.3	.4
Apr	2.4	.1	#	0	6.5	1971	19	12.5	1971	5	1971	19	2	1980	1.5	.8	.2	.1	.0	.4	.2	@	.0
May	.1	.0	#	0	1.0	1999	1	1.5	1999	1	1999	1	#	1999	.1	@	.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	.9	.0	#	0	7.1	1991	30	10.9	1991	9	1991	31	1	1991	.8	.5	.1	@	.0	.3	.1	.1	.0
Nov	5.8	5.0	1	#	17.0	1993	14	20.7	1993	15	1993	14	3	1993	2.2	1.8	.8	.3	@	4.7	2.7	1.3	.4
Dec	10.6	8.9	3	1	12.0	1971	13	38.1	1990	21	1990	30	12	1983	5.3	3.5	1.6	.6	.1	10.9	6.8	4.6	1.9
Ann	54.6	42.4	N/A	N/A	17.0+	Nov 1993	14	48.0	Jan 1974	40	Jan 1974	10	33	Mar 1978	24.5	17.0	6.7	2.9	.3	58.0	45.0	33.4	19.4

+ 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](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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

**Station: DULCE, NM**

**COOP ID: 292608**

**Climate Division: NM 1**

**NWS Call Sign:**

**Elevation: 6,793 Feet**

**Lat: 36° 56N**

**Lon: 107° 00W**

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	7/21	7/15	7/11	7/08	7/05	7/01	6/28	6/24	6/18
32	7/12	7/06	7/02	6/28	6/25	6/22	6/18	6/14	6/08
28	6/22	6/15	6/11	6/06	6/03	5/30	5/26	5/21	5/14
24	6/06	5/30	5/26	5/22	5/18	5/14	5/10	5/05	4/29
20	5/23	5/15	5/10	5/05	5/01	4/26	4/21	4/16	4/08
16	5/03	4/27	4/22	4/18	4/14	4/10	4/06	4/02	3/26
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	8/12	8/19	8/24	8/29	9/02	9/06	9/10	9/15	9/22
32	8/29	9/04	9/08	9/11	9/14	9/18	9/21	9/25	10/01
28	9/11	9/15	9/18	9/20	9/23	9/25	9/28	10/01	10/05
24	9/19	9/24	9/28	10/01	10/04	10/07	10/10	10/13	10/18
20	10/01	10/06	10/09	10/12	10/15	10/17	10/20	10/24	10/29
16	10/16	10/21	10/24	10/27	10/30	11/02	11/05	11/08	11/13
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	85	76	69	64	58	53	47	41	32
32	108	98	92	86	81	75	70	63	54
28	134	126	121	116	112	107	102	97	89
24	163	154	148	143	138	133	128	122	113
20	192	183	177	171	166	161	156	150	141
16	224	215	209	203	198	193	188	181	172

\* 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](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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

**Station: DULCE, NM**

**COOP ID: 292608**

**Climate Division: NM 1**

**NWS Call Sign:**

**Elevation: 6,793 Feet    Lat: 36°56N    Lon: 107°00W**

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	1265	992	867	641	426	186	59	76	240	563	910	1208	7433
60	1110	852	712	491	279	87	12	20	124	408	760	1053	5908
57	1017	768	619	402	199	47	3	7	73	318	670	960	5083
55	955	712	557	345	153	29	1	3	47	259	610	898	4569
50	800	572	403	212	66	5	0	0	10	134	460	743	3405
32	285	142	25	3	0	0	0	0	0	0	58	225	738

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	43	73	181	353	597	824	1044	1018	761	460	138	40	5532
55	0	0	0	4	38	163	332	307	117	6	0	0	967
57	0	0	0	2	22	122	272	249	83	3	0	0	753
60	0	0	0	0	8	72	188	170	45	1	0	0	484
65	0	0	0	0	1	20	80	71	11	0	0	0	183
70	0	0	0	0	0	3	19	17	1	0	0	0	40

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	0	2	37	152	359	589	803	777	526	232	23	0	0	2	39	191	550	1139	1942	2719	3245	3477	3500	3500
45	0	0	3	56	216	439	648	622	377	108	3	0	0	0	3	59	275	714	1362	1984	2361	2469	2472	2472
50	0	0	0	12	92	290	493	467	233	31	0	0	0	0	0	12	104	394	887	1354	1587	1618	1618	1618
55	0	0	0	0	25	158	338	312	108	5	0	0	0	0	0	0	25	183	521	833	941	946	946	946
60	0	0	0	0	1	60	186	162	28	0	0	0	0	0	0	0	1	61	247	409	437	437	437	437
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	6	29	89	195	330	463	540	519	402	261	79	11	6	35	124	319	649	1112	1652	2171	2573	2834	2913	2924

(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](http://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](http://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"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)