

# Climatography of the United States

No. 20

1971-2000

Station: EL RITO, NM

COOP ID: 292820

Climate Division: NM 2

NWS Call Sign:

Elevation: 6,870 Feet Lat: 36° 20N

Lon: 106° 11W

## 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	42.8	16.7	29.8	65	1971	31	39.3	1986	-20+	1971	6	22.9	1988	1093	0	.0	.0	5.3	3.9	30.5	1.2
Feb	48.6	21.1	34.9	70	1965	28	41.3	1995	-9+	1963	12	30.6	1975	844	0	.0	.0	10.7	1.8	27.3	.4
Mar	55.8	26.0	40.9	80	1989	10	45.5	1972	-6	1965	4	36.0	1977	747	0	.0	.0	21.7	.2	26.1	@
Apr	63.9	31.9	47.9	82	1989	21	54.7	1989	5	1977	4	42.2	1973	513	0	.0	.0	27.3	@	15.4	.0
May	72.6	39.7	56.2	94	2000	29	62.7	1996	17+	1967	12	52.0	1995	288	14	.0	.2	30.8	.0	4.2	.0
Jun	82.6	47.2	64.9	100	1968	21	68.8	1971	26	1980	1	60.9	1995	75	73	.0	2.6	30.0	.0	.5	.0
Jul	86.1	53.4	69.8	99	1971	12	72.0	2000	33	1980	4	67.3	1975	3	151	.0	4.9	31.0	.0	.0	.0
Aug	83.7	52.6	68.2	98	2000	5	72.0	2000	38	1964	21	65.9	1976	15	113	.0	1.4	31.0	.0	.0	.0
Sep	78.1	46.2	62.2	94	2000	16	67.1	1990	25	1970	26	59.2+	1986	125	40	.0	.3	30.0	.0	.7	.0
Oct	67.3	36.1	51.7	88+	1996	8	55.4+	1992	1	1993	30	45.1	1984	415	2	.0	.0	29.4	@	7.9	.0
Nov	52.2	25.7	39.0	73+	1964	1	45.6	1999	-10	1976	28	32.9	2000	782	0	.0	.0	17.5	.8	24.5	.1
Dec	43.7	18.0	30.9	66	1995	1	39.5	1980	-10	1978	9	25.3	1992	1058	0	.0	.0	6.8	2.7	30.4	.6
Ann	64.8	34.6	49.7	100	Jun 1968	21	72.0+	Aug 2000	-20+	Jan 1971	6	22.9	Jan 1988	5958	393	.0	9.4	271.5	9.4	167.5	2.3

+ 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/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: 1903-2001

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

035-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: EL RITO, NM**

**COOP ID: 292820**

**Climate Division: NM 2**

**NWS Call Sign:**

**Elevation: 6,870 Feet Lat: 36°20N**

**Lon: 106°11W**

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	.75	.52	1.09	1974	1	2.12	1974	.01	1998	4.7	2.4	.2	@	.04	.08	.16	.26	.38	.52	.69	.91	1.21	1.74	2.27
Feb	.55	.43	1.06	1989	6	1.68	1982	.00	1999	4.6	1.9	.1	@	.02	.06	.14	.22	.31	.41	.52	.67	.88	1.22	1.56
Mar	.88	.85	.95	1978	3	2.24	1973	.03	1997	5.8	2.6	.3	.0	.12	.19	.31	.43	.56	.70	.87	1.07	1.35	1.79	2.23
Apr	.79	.53	1.10	1999	30	2.91	1999	.00	1996	4.7	2.3	.3	@	.01	.06	.15	.26	.39	.53	.72	.95	1.28	1.84	2.40
May	.95	.83	1.33	1952	17	2.31	1979	.00+	1998	5.6	2.9	.4	.1	.00	.10	.27	.42	.57	.74	.94	1.18	1.51	2.04	2.57
Jun	.90	.56	1.25	1991	14	2.74	1991	.03+	1980	5.8	2.8	.5	@	.04	.09	.19	.31	.45	.62	.82	1.08	1.44	2.07	2.70
Jul	1.68	1.59	1.58	1994	24	3.51	1996	.20	1987	10.2	4.6	.6	.2	.36	.51	.76	.98	1.20	1.44	1.71	2.04	2.46	3.15	3.79
Aug	2.23	2.13	2.55	1999	5	5.68	1999	.69	1978	11.8	6.1	1.1	.2	.94	1.14	1.42	1.66	1.88	2.10	2.34	2.61	2.96	3.49	3.97
Sep	1.30	1.27	1.56	1975	4	3.16	1971	.08	2000	7.6	4.2	.5	.1	.28	.40	.59	.76	.94	1.12	1.33	1.58	1.91	2.43	2.92
Oct	1.20	.77	1.31	1965	17	4.33	1972	.04	1992	5.8	3.1	.6	.1	.08	.15	.30	.47	.65	.87	1.13	1.46	1.92	2.70	3.48
Nov	.97	.74	1.21	1977	7	2.88	1978	.00+	1999	4.8	2.6	.6	.1	.00	.12	.31	.46	.62	.79	.99	1.22	1.53	2.04	2.53
Dec	.57	.47	.85	1951	30	1.70	1992	.01	1998	4.7	1.9	.1	.0	.02	.04	.09	.16	.25	.36	.49	.68	.94	1.40	1.87
Ann	12.77	12.33	2.55	Aug 1999	5	5.68	Aug 1999	.00+	Nov 1999	76.1	37.4	5.3	.8	9.01	9.73	10.66	11.37	12.00	12.61	13.24	13.93	14.77	16.00	17.06

+ 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: 1903-2001

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

Complete documentation available from:  
[www.ncdc.noaa.gov/oa/climate/normals/usnormals.html](http://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: EL RITO, NM**

**COOP ID: 292820**

**Climate Division: NM 2**

**NWS Call Sign:**

**Elevation: 6,870 Feet**

**Lat: 36° 20N**

**Lon: 106° 11W**

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	7.8	6.5	1	#	12.0	1997	12	18.1	1995	12	1997	12	8	1974	3.1	2.1	1.0	.5	.1	2.1	.5	.2	.0
Feb	6.2	3.0	#	0	16.0	1989	6	26.7	1982	21	1989	6	4	1989	2.3	1.6	.9	.4	@	1.0	.4	.2	.0
Mar	5.0	4.0	#	0	15.0	1994	27	22.0	1994	8	1973	23	1	1973	1.8	1.2	.5	.2	.1	.5	.1	.0	.0
Apr	1.9	.0	#	0	16.0	1977	3	17.0	1977	4	1995	10	#+	1999	.7	.5	.2	.1	@	.2	.1	.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	1.4	.0	#	0	12.0	1986	12	12.0	1986	12	1986	12	#+	1999	.3	.3	.2	.2	@	.2	.1	.1	@
Nov	4.5	2.0	#	0	15.0	1976	27	25.0	1975	15	1976	28	2	1976	1.3	1.0	.6	.4	@	1.0	.6	.4	.1
Dec	6.9	2.7	#	0	10.5	1983	28	29.6	1983	13	1997	8	4	1997	2.3	1.7	.9	.5	@	1.1	.5	.5	.0
Ann	33.7	18.2	N/A	N/A	16.0+	Feb 1989	6	29.6	Dec 1983	21	Feb 1989	6	8	Jan 1974	11.8	8.4	4.3	2.3	.2	6.1	2.3	1.4	.1

+ 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: EL RITO, NM**

**COOP ID: 292820**

**Climate Division: NM 2**

**NWS Call Sign:**

**Elevation: 6,870 Feet**

**Lat: 36° 20N**

**Lon: 106° 11W**

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	6/23	6/16	6/11	6/07	6/03	5/31	5/27	5/22	5/15
32	6/17	6/09	6/03	5/30	5/25	5/21	5/16	5/10	5/02
28	5/29	5/21	5/15	5/11	5/06	5/02	4/27	4/21	4/14
24	5/10	5/02	4/27	4/23	4/18	4/14	4/10	4/05	3/28
20	4/27	4/19	4/14	4/10	4/06	4/01	3/28	3/23	3/16
16	4/17	4/08	4/02	3/28	3/23	3/18	3/13	3/07	2/26
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	9/11	9/16	9/20	9/23	9/25	9/28	10/01	10/05	10/10
32	9/20	9/25	9/29	10/02	10/05	10/08	10/11	10/14	10/19
28	9/30	10/06	10/10	10/13	10/16	10/19	10/23	10/27	11/01
24	10/11	10/17	10/20	10/24	10/27	10/30	11/03	11/07	11/12
20	10/19	10/25	10/29	11/02	11/05	11/08	11/12	11/16	11/22
16	10/30	11/05	11/10	11/14	11/18	11/22	11/26	12/01	12/07
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	138	130	123	118	113	108	103	97	88
32	161	151	144	138	132	126	120	113	103
28	194	183	175	169	162	156	149	141	130
24	219	209	202	196	191	185	179	173	163
20	241	231	224	218	213	207	201	194	184
16	271	260	252	245	239	233	226	218	207

\* 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: EL RITO, NM**

**COOP ID: 292820**

**Climate Division: NM 2**

**NWS Call Sign:**

**Elevation: 6,870 Feet    Lat: 36° 20N    Lon: 106° 11W**

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	1093	844	747	513	288	75	3	15	125	415	782	1058	5958
60	938	704	592	368	167	24	0	1	48	270	632	903	4647
57	845	620	499	286	112	9	0	0	22	195	542	810	3940
55	783	564	438	235	81	5	0	0	12	151	483	748	3500
50	628	424	289	129	30	0	0	0	2	68	341	593	2504
32	163	52	7	0	0	0	0	0	0	0	30	123	375

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	93	132	283	477	748	988	1171	1121	905	610	238	88	6854
55	0	0	0	22	117	303	458	408	227	48	1	0	1584
57	0	0	0	13	85	247	396	346	178	30	0	0	1295
60	0	0	0	5	48	172	303	254	114	12	0	0	908
65	0	0	0	0	14	73	151	113	40	2	0	0	393
70	0	0	0	0	2	18	36	23	8	0	0	0	87

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	24	91	247	492	736	904	860	651	370	80	3	0	24	115	362	854	1590	2494	3354	4005	4375	4455	4458
45	0	1	29	130	339	586	749	705	502	231	24	0	0	1	30	160	499	1085	1834	2539	3041	3272	3296	3296
50	0	0	2	49	199	436	594	550	353	119	2	0	0	0	2	51	250	686	1280	1830	2183	2302	2304	2304
55	0	0	0	14	90	290	439	395	214	39	0	0	0	0	0	14	104	394	833	1228	1442	1481	1481	1481
60	0	0	0	0	24	156	284	240	94	8	0	0	0	0	0	0	24	180	464	704	798	806	806	806
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	7	41	100	203	341	489	585	549	419	266	78	12	7	48	148	351	692	1181	1766	2315	2734	3000	3078	3090

(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.

- 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](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)