## 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: ESTANCIA 7 NE, NM 1971-2000 COOP ID: 293060

Climate Division: NM 6 NWS Call Sign: Elevation: 6,120 Feet Lat: 34°51N Lon: 105°58W

	Temperature (°F)																						
	Mea	<b>n</b> (1)						Extr	emes					Degree Base To	Days (1) emp 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	46.3	13.2	29.8	71	1971	31	35.7	1986	-37	1971	7	24.3	1979	1092	0	.0	.0	13.0	2.4	29.7	1.5		
Feb	52.3	16.9	34.6	77	1986	25	40.4	1995	-29	1951	1	30.4	1974	852	0	.0	.0	19.1	.9	26.4	.5		
Mar	59.5	21.7	40.6	84	1989	10	44.8	1989	-9	1948	11	35.8	1977	756	0	.0	.0	27.7	.1	24.9	@		
Apr	66.8	27.5	47.2	88+	1981	30	52.7	1989	7	1983	5	40.3	1973	536	0	.0	.0	28.5	@	17.7	.0		
May	76.2	37.3	56.8	96	2000	31	62.5	1996	12	1967	2	53.0	1975	265	10	.0	.9	31.0	.0	4.8	.0		
Jun	86.5	45.4	66.0	104+	1989	19	71.2	1990	27	1963	9	62.5	1973	61	89	.7	11.0	30.0	.0	.2	.0		
Jul	88.6	51.8	70.2	103	1957	3	73.3	1993	37	1965	5	68.2	1975	2	164	.4	16.0	31.0	.0	.0	.0		
Aug	85.7	51.1	68.4	98+	1966	1	72.0	1994	33	1968	24	65.4	1971	17	123	.0	8.6	31.0	.0	.0	.0		
Sep	79.5	42.9	61.2	96	1983	3	65.7	1983	22	1970	27	58.4	1975	138	25	.0	1.7	29.9	.0	1.4	.0		
Oct	69.6	30.8	50.2	89+	1954	3	53.5	1992	4	1991	31	45.6	1976	458	0	.0	.0	30.0	.0	13.9	.0		
Nov	56.2	20.2	38.2	79	1968	1	41.8	1998	-22	1976	28	33.1	1976	804	0	.0	.0	22.4	.2	25.5	.2		
Dec	47.0	12.4	29.7	70+	1950	11	36.4	1977	-23	1997	26	22.7	1997	1094	0	.0	.0	14.1	2.2	29.7	2.0		
Ann	67.9	30.9	49.4	104+	Jun 1989	19	73.3	Jul 1993	-37	Jan 1971	7	22.7	Dec 1997	6075	411	1.1	38.2	307.7	5.8	174.2	4.2		

<sup>+</sup> Also occurred on an earlier date(s)

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

Issue Date: February 2004 040-A

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

### 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

**COOP ID: 293060** 

**Station: ESTANCIA 7 NE, NM** 

Climate Division: NM 6 NWS Call Sign: Elevation: 6,120 Feet Lat: 34°51N Lon: 105°58W

										Pı	recipi	tation	(incl	nes)													
		Precipitation Totals  Means/ Medians(1)  Extremes										Number (3)	5)	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 seman distribution.													
	Medi	ans(1)				23101 03110	,			_	uny 110	c-pruus		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	.70	.58	1.38	1987	16	2.63	1987	.00	1976	4.4	2.3	.3	.1	.05	.12	.23	.34	.44	.56	.70	.86	1.09	1.45	1.81			
Feb	.51	.40	.97	1957	18	1.63	1986	.00+	2000	3.7	1.6	.1	.0	.00	.00	.11	.20	.28	.38	.50	.64	.83	1.14	1.45			
Mar	.71	.62	1.27	1998	15	2.90	1998	.00+	1972	4.8	2.1	.3	.1	.00	.06	.19	.30	.42	.55	.70	.89	1.14	1.56	1.97			
Apr	.57	.43	1.13	1988	16	1.76	1988	.00+	1996	3.3	1.7	.2	@	.00	.00	.00	.19	.31	.44	.58	.74	.97	1.33	1.67			
May	1.22	.96	2.30	1991	21	4.55	1992	.00+	2000	4.5	2.8	.8	.2	.00	.00	.19	.38	.59	.84	1.13	1.51	2.03	2.91	3.78			
Jun	1.18	.51	3.15	1996	27	6.95	1996	.00+	1982	4.4	2.5	.6	.2	.00	.00	.09	.23	.42	.66	.97	1.38	1.98	3.04	4.14			
Jul	2.30	2.38	1.69	1995	18	4.89	1998	.64	1980	9.6	5.7	1.2	.3	.83	1.05	1.36	1.62	1.87	2.13	2.41	2.73	3.15	3.79	4.38			
Aug	2.43	2.39	2.64	1950	2	6.07	1993	.79	1984	9.8	6.2	1.5	.2	.81	1.04	1.37	1.66	1.94	2.22	2.53	2.89	3.36	4.08	4.75			
Sep	1.88	1.61	1.76	1981	16	4.54	1997	.34	1989	6.8	4.4	1.1	.4	.41	.59	.86	1.11	1.36	1.63	1.93	2.28	2.76	3.51	4.22			
Oct	1.54	.72	2.30	1960	16	5.68	1985	.00	1975	5.5	3.3	.9	.3	.02	.09	.27	.47	.72	1.01	1.37	1.84	2.51	3.67	4.83			
Nov	.87	.75	1.48	1986	2	3.76	1986	.00+	1999	4.3	2.4	.4	.1	.00	.00	.24	.40	.55	.71	.89	1.11	1.40	1.87	2.32			
Dec	.95	.62	1.34	1987	13	3.05	1991	.00+	1996	4.0	2.5	.6	@	.00	.00	.13	.27	.44	.63	.86	1.16	1.57	2.29	3.00			
Ann	14.86	14.72	3.15	Jun 1996	27	6.95	Jun 1996	.00+	May 2000	65.1	37.5	8.0	1.9	9.39	10.40	11.72	12.74	13.66	14.55	15.49	16.53	17.81	19.69	21.33			

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

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

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

# 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

**COOP ID: 293060** 

**Station: ESTANCIA 7 NE, NM** 

Climate Division: NM 6 NWS Call Sign: Elevation: 6,120 Feet Lat: 34°51N Lon: 105°58W

										Snov	w (incl	hes)													
						Sno	ow To	tals							Mean Number of Days (1)										
	Mean	s/Medi	ans (1)	1					Extre	mes (2)							ow Fa			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	3.9	3.4	2	#	22.0	1987	16	22.0	1987	39	1987	18	14	1987	1.9	1.6	.9	.4	.1	3.3	2.5	.5	.0		
Feb	3.4	1.6	1	#	10.0	1983	4	10.4	1983	18	1986	9	5	1987	1.6	1.0	.8	.3	.1	.9	.4	.2	.0		
Mar	2.4	.0	#	0	7.5	1989	20	8.5	2000	12+	1989	21	8	1978	1.2	1.0	.3	.1	.0	.7	.3	.2	@		
Apr	1.1	.0	#	0	8.0	1986	19	8.0	1986	4	1997	13	#+	1997	.3	.2	.1	.1	.0	.1	@	.0	.0		
May	#	.0	#	0	#	1987	5	#	1987	3	1978	2	#	1978	.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	8.0	1986	12	8.0+	1991	8	1991	31	#+	1997	.3	.2	.2	.1	.0	.1	.1	.1	.0		
Nov	2.6	.0	#	0	8.0	1976	27	12.0	1991	10	1986	23	3	1980	.7	.7	.4	.3	.0	.5	.3	.2	.0		
Dec	7.3	5.0	1	1	17.0	1987	13	30.8	1997	17	1987	13	5	1992	1.9	1.6	1.2	.6	.1	4.4	2.8	1.7	.4		
Ann	22.1	10.0	N/A	N/A	22.0	Jan 1987	16	30.8	Dec 1997	39	Jan 1987	18	14	Jan 1987	7.9	6.3	3.9	1.9	.3	10.0	6.4	2.9	.4		

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

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

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

## 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

**COOP ID: 293060** 

Lon: 105°58W

Lat: 34°51N

Elevation: 6.120 Feet

**Station: ESTANCIA 7 NE, NM** 

Climate Division: NM 6 NWS Call Sign:

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(\*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 6/16 6/11 6/07 6/04 6/01 5/29 5/25 5/22 5/16 32 6/03 5/29 5/25 5/22 5/19 5/16 5/12 5/09 5/03 28 5/24 5/19 5/14 5/11 5/07 5/04 4/30 4/26 4/20 4/25 4/03 24 5/09 5/03 4/29 4/21 4/17 4/13 4/09 20 5/01 4/24 4/18 4/13 4/09 4/04 3/31 3/25 3/17 3/22 16 4/14 4/08 4/03 3/30 3/26 3/18 3/13 3/07 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(\*) Temp (F) .20 .30 .40 .50 .60 .70 .10 .80 .90 36 9/14 9/17 9/20 9/22 9/24 9/26 9/28 10/01 10/04 32 9/20 9/23 9/26 9/29 10/01 10/03 10/05 10/08 10/12 28 9/27 10/01 10/04 10/07 10/09 10/12 10/15 10/18 10/22 24 10/04 10/10 10/13 10/17 10/20 10/22 10/26 10/29 11/04 20 10/14 10/20 10/24 10/28 10/31 11/03 11/06 11/11 11/16 10/24 11/07 11/10 16 10/30 11/03 11/13 11/16 11/20 11/26 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 132 126 122 118 114 111 107 103 97 36 32 156 148 143 139 134 130 126 120 113 28 176 163 159 154 150 145 140 132 169 24 206 197 191 186 181 176 170 164 156

210

234

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

216

239

Derived from 1971-2000 serially complete daily data

223

246

234

255

20

16

Complete documentation available from:

192

217

185

210

175

201

204

228

199

223

<sup>\*</sup> Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

## 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: ESTANCIA 7 NE, NM COOP ID: 293060

Climate Division: NM 6 NWS Call Sign: Elevation: 6,120 Feet Lat: 34°51N Lon: 105°58W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1092	852	756	536	265	61	2	17	138	458	804	1094	6075		
60	937	712	601	389	144	16	0	1	51	306	654	939	4750		
57	844	628	508	306	89	6	0	0	22	223	564	846	4036		
55	782	572	447	253	61	2	0	0	11	173	504	784	3589		
50	627	432	296	143	18	0	0	0	1	76	359	629	2581		
32	138	45	6	1	0	0	0	0	0	0	31	147	368		

Base	Cooling Degree Days (1)														
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
32	69	117	273	455	768	1018	1184	1129	876	565	216	76	6746		
55	0	0	0	18	116	331	471	416	197	25	0	0	1574		
57	0	0	0	10	82	274	409	354	148	13	0	0	1290		
60	0	0	0	4	44	194	316	262	87	4	0	0	911		
65	0	0	0	0	10	89	164	123	25	0	0	0	411		
70	0	0	0	0	1	26	45	32	3	0	0	0	107		

	Growing Degree U																												
Base		Growing Degree Units (Monthly)														Growing Degree Units (Accumulated Monthly)													
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec .													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
40	12	49	148	317	583	833	984	922	687	376	98	17	12	61	209	526	1109	1942	2926	3848	4535	4911	5009	5026					
45	1	10	59	187	428	683	829	767	537	239	34	0	1	11	70	257	685	1368	2197	2964	3501	3740	3774	3774					
50	0	0	17	85	278	533	674	612	388	120	8	0	0	0	17	102	380	913	1587	2199	2587	2707	2715	2715					
55	0	0	1	29	146	383	519	457	245	36	0	0	0	0	1	30	176	559	1078	1535	1780	1816	1816	1816					
60	0	0	0	2	55	241	364	302	119	6	0	0	0	0	0	2	57	298	662	964	1083	1089	1089	1089					
Base		Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)															
50/86	<b>86</b> 46 94 186 291 431 542 615 587 464 322 138 48											48	46	140	326	617	1048	1590	2205	2792	3256	3578	3716	3764					

(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

### 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

- c. Snow Tables
  - 1. Snow Climatology
  - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

### 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