## 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: 295937** 

Lon: 103°56W

Station: MOSQUERO 1 NE, NM

**Climate Division: NM 3** 

**NWS Call Sign:** 

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 48.1 19.1 33.6 80 1935 2 40.7 1986 -24 1963 12 23.3 1979 973 0 .0 .0 14.0 3.7 29.9 1.1 Jan 53.4 22.7 38.1 78 1996 21 44.4 2000 -19 1933 8 32.0 1989 756 0 .0 .0 18.0 2.3 25.2 .6 Feb Mar 61.1 28.1 44.6 86 1989 11 50.1 1972 -13+1948 4 41.3 1996 633 0 .0 .0 25.6 .4 21.9 0. 45.3 1973 5 Apr 69.4 34.8 52.1 94 1989 21 57.6 1981 5 1945 3 392 .0 .1 28.3 .0 11.1 0. May 77.9 44.4 61.2 100 2000 30 67.9 1974 20 1927 9 57.4 1983 164 45 (a) 1.4 30.8 .0 1.5 .0 54.0 27 35 66.9+ .5 9.0 Jun 86.8 70.4 103 +1998 76.3 1990 1955 10 1983 26 187 30.0 .0 .0 .0 Jul 88.9 58.9 73.9 104 1934 12 79.3 1980 40 1943 5 71.1 1991 276 .2 12.4 31.0 0. .0 .0 71.6 7 85.6 57.5 101 1944 4 75.8 2000 40 1932 31 68.9 1990 210 .1 6.3 31.0 .0 .0 .0 Aug 77 Sep 79.7 50.5 65.1 98+ 1945 4 70.3 1998 18 1936 27 60.7 1974 78 .0 1.7 29.8 .0 .4 .0 54.5 57.7 30 49.3 Oct 70.1 38.8 93 2000 1 1992 0 1993 1976 330 2 .0 .1 29.9 .1 6.1 .0 27.2 41.9 82 1994 47.6 1981 -16 1976 28 33.9 1972 693 0 .0 .0 21.4 21.9 Nov 56.6 1 .9 .1 Dec 48.1 20.0 34.1 78 1980 17 43.6 1980 -15 1978 9 25.2 1983 959 0 .0 .0 14.0 3.4 28.9 1.1 Jul Jul Jan Jan 38.0 53.4 104 1934 12 79.3 1980 -24 1963 12 23.3 1979 5011 803 .8 31.0 303.8 10.8 146.9 2.9 68.8 Ann

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

Issue Date: February 2004 065-A

(1) From the 1971-2000 Monthly Normals

Elevation: 5,465 Feet Lat: 35°48N

- (2) Derived from station's available digital record: 1926-2001
- (3) Derived from 1971-2000 serially complete daily data

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

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

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**COOP ID: 295937** 

**Station: MOSQUERO 1 NE, NM** 

Climate Division: NM 3 NWS Call Sign: Elevation: 5,465 Feet Lat: 35°48N Lon: 103°56W

										Pı	recipi	tation	(incl	nes)												
			P	recip	itatio	on Total	s			M	lean N of D	Numbo Pays (3		Precipitation Probabilities (1)  Probability that the monthly/annual precipitation will be equal to or less than the indicated amount												
	Mea Medi					Extremes	i			D	aily Pre	cipitatio	n	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	.37	.31	1.01	1990	18	1.34	1990	.00	1998	3.2	1.3	.1	@	.01	.03	.08	.13	.19	.26	.34	.45	.60	.86	1.12		
Feb	.35	.24	.85+	1934	8	1.83	1987	.00+	2000	3.0	1.0	.1	.0	.00	.00	.05	.10	.16	.23	.32	.42	.58	.83	1.09		
Mar	.77	.52	1.20	1941	21	2.39	1981	.00	1972	4.0	2.0	.5	.1	.02	.06	.16	.27	.39	.54	.71	.94	1.25	1.79	2.33		
Apr	1.03	.62	2.75	1999	30	4.29	1999	.00+	1996	4.5	2.3	.5	.2	.00	.03	.15	.29	.46	.66	.91	1.24	1.70	2.50	3.30		
May	1.95	1.99	2.85	1941	1	4.10	1986	.03	1974	6.6	4.0	1.3	.4	.20	.35	.61	.88	1.18	1.51	1.89	2.37	3.03	4.12	5.19		
Jun	2.24	2.09	4.06	1986	9	6.95	1986	.16	1998	7.5	4.8	1.4	.4	.36	.55	.88	1.19	1.51	1.85	2.25	2.73	3.38	4.43	5.43		
Jul	2.63	2.38	2.56	1982	8	6.68	1982	.52	1978	9.2	5.3	1.7	.5	.82	1.07	1.44	1.76	2.07	2.39	2.74	3.15	3.67	4.50	5.26		
Aug	2.94	2.52	2.99	1981	11	7.08	1981	.50	1978	9.9	5.7	1.8	.7	.77	1.05	1.47	1.85	2.21	2.60	3.03	3.54	4.21	5.26	6.24		
Sep	1.77	1.44	3.30	1961	18	4.37	1981	.05	2000	6.2	3.1	1.1	.3	.12	.23	.46	.70	.97	1.29	1.67	2.15	2.82	3.95	5.07		
Oct	1.17	.59	3.96	1928	13	4.64	2000	.00+	1995	4.5	2.6	.6	.2	.00	.00	.15	.32	.52	.76	1.05	1.43	1.95	2.86	3.77		
Nov	.80	.53	3.01	1978	3	4.93	1978	.00+	1989	3.7	1.8	.4	.2	.00	.04	.15	.26	.40	.55	.74	.98	1.31	1.88	2.45		
Dec	.49	.37	1.04	1987	13	1.67	1997	.00	1976	3.0	1.4	.2	@	.01	.05	.11	.18	.26	.35	.46	.60	.79	1.11	1.43		
Ann	16.51	16.04	4.06	Jun 1986	9	7.08	Aug 1981	.00+	Feb 2000	65.3	35.3	9.7	3.0	10.84	11.90	13.28	14.34	15.29	16.21	17.17	18.24	19.54	21.45	23.12		

<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: 1926-2001

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

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**COOP ID: 295937** 

Station: MOSQUERO 1 NE, NM

Climate Division: NM 3 NWS Call Sign: Elevation: 5,465 Feet Lat: 35°48N Lon: 103°56W

										Snov	w (incl	hes)											
						Sn	ow To	tals									Mea	n Nui	mber	of Day	<b>ys</b> (1)		
	Mean	s/Medi	ans (1)	)	Extremes (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	3.5	1	#	10.0	1990	18	15.0	1987	13	1990	19	4	1990	2.3	1.7	.4	.1	@	5.5	2.2	.9	.3
Feb	3.3	2.3	#	#	9.0	1990	20	14.0	1987	9	1990	20	3	1990	1.9	1.3	.4	.1	.0	3.2	1.3	.7	.0
Mar	3.7	2.0	#	#	12.0	1994	8	19.5	1994	12	1994	8	1	1994	1.9	1.6	.5	.1	@	1.3	.3	.2	@
Apr	2.1	.0	#	#	8.0	1979	3	8.0+	1997	8	1997	25	1	1997	.7	.7	.3	.1	.0	.5	.2	.1	.0
May	.8	.0	#	0	6.0	1978	2	11.0	1978	6	1978	3	#+	1990	.2	.2	.2	.1	.0	.2	.1	.1	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	1	1975	9	#	1975	.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	1	1979	27	#	1979	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.0	.0	0	0	.1	1996	27	.1	1996	0	0	0	0	0	@	.0	.0	.0	.0	.0	.0	.0	.0
Oct	1.2	.0	#	0	5.0	1991	31	11.0	1984	5	1991	31	#+	1999	.4	.4	.2	@	.0	.3	.1	@	.0
Nov	3.3	2.4	#	#	9.0	1991	16	13.1	1972	7	1996	30	1	1992	1.5	1.2	.5	.1	.0	2.1	.6	.1	.0
Dec	5.0	3.8	1	#	12.0	1987	13	17.5	1987	12	1987	13	3	1992	2.0	1.8	.7	.2	@	6.4	2.8	1.3	.1
Ann	23.3	14.0	N/A	N/A	12.0+	Mar 1994	8	19.5	Mar 1994	13	Jan 1990	19	4	Jan 1990	10.9	8.9	3.2	.8	@	19.5	7.6	3.4	.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

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Lat: 35°48N

Lon: 103°56W

**Station: MOSQUERO 1 NE, NM** 

Climate Division: NM 3 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 5/29 5/24 5/21 5/18 5/15 5/13 5/10 5/07 5/02 32 5/09 5/16 5/12 5/07 5/05 5/02 4/30 4/27 4/23 28 5/05 5/01 4/28 4/25 4/23 4/20 4/18 4/15 4/11 4/25 4/12 24 4/20 4/17 4/14 4/09 4/06 4/03 3/29 20 4/17 4/12 4/08 4/05 4/02 3/29 3/26 3/22 3/17 4/03 3/24 16 4/10 3/28 3/19 3/15 3/11 3/05 2/26 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(\*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 9/28 36 9/21 9/25 9/30 10/02 10/05 10/07 10/10 10/14 32 9/25 9/29 10/03 10/05 10/08 10/11 10/13 10/17 10/21 28 10/05 10/10 10/14 10/17 10/19 10/22 10/25 10/29 11/03 24 10/15 10/20 10/23 10/26 10/29 11/01 11/04 11/07 11/12 20 10/23 10/28 11/01 11/04 11/07 11/09 11/13 11/16 11/21 11/01 11/14 11/17 11/23 11/27 16 11/06 11/10 11/20 12/03 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 159 152 147 143 139 135 131 119 36 126 32 176 169 164 160 156 152 147 142 135 28 190 186 182 179 175 172 162 196 168 24 221 214 209 204 200 196 191 186 178

223

247

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

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Derived from 1971-2000 serially complete daily data

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Complete documentation available from:

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Elevation: 5,465 Feet

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

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Station: MOSQUERO 1 NE, NM

O 1 NE, NM COOP ID: 295937

Climate Division: NM 3 NWS Call Sign: Elevation: 5,465 Feet Lat: 35°48N Lon: 103°56W

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	973	756	633	392	164	26	1	7	77	330	693	959	5011	
60	818	616	478	258	78	6	0	0	23	191	543	804	3815	
57	725	532	386	188	43	2	0	0	8	123	457	711	3175	
55	663	476	327	149	27	0	0	0	3	87	401	649	2782	
50	512	341	190	71	6	0	0	0	0	31	271	497	1919	
32	101	28	1	0	0	0	0	0	0	0	22	87	239	

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	151	196	391	603	904	1152	1298	1226	992	695	319	151	8078
55	0	0	4	62	219	462	585	513	305	69	8	0	2227
57	0	0	2	42	173	403	523	451	250	44	4	0	1892
60	0	0	0	21	114	317	430	358	174	19	0	0	1433
65	0	0	0	5	45	187	276	210	78	2	0	0	803
70	0	0	0	0	12	90	134	89	24	0	0	0	349

										Gro	wing l	Degre	e Uni	ts (2)											
Base					Growin	g Degree	Units (M	Ionthly)					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	37	79	186	361	636	898	1040	977	752	454	144	45	37	116	302	663	1299	2197	3237	4214	4966	5420	5564	5609	
45	8	29	93	233	482	748	885	822	604	311	66	12	8	37	130	363	845	1593	2478	3300	3904	4215	4281	4293	
50	0	3	31	128	333	598	730	667	458	181	23	0	0	3	34	162	495	1093	1823	2490	2948	3129	3152	3152	
55	0	0	6	52	198	448	575	512	316	85	3	0	0	0	6	58	256	704	1279	1791	2107	2192	2195	2195	
60	0 0 0 14 91 300 420 357 183 25 0 0											0	0	0	14	105	405	825	1182	1365	1390	1390	1390		
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	60 97 184 280 417 565 679 640 478 316 131 62													157	341	621	1038	1603	2282	2922	3400	3716	3847	3909	

(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