

# Climatology of the United States

No. 20

1971-2000

Station: ABIQUIU DAM, NM

COOP ID: 290041

Climate Division: NM 2

NWS Call Sign:

Elevation: 6,380 Feet Lat: 36° 14N

Lon: 106° 26W

## 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	42.9	16.0	29.5	62	2000	19	37.3	1986	-25	1971	6	21.8	1977	1103	0	.0	.0	5.3	4.0	30.5	1.7
Feb	48.7	20.9	34.8	70+	1963	6	41.4	1995	-15+	1982	6	29.2	1985	846	0	.0	.0	11.5	1.7	27.0	.5
Mar	56.4	28.2	42.3	85	1989	12	49.2	1989	-8	1962	12	37.7	1977	704	0	.0	.0	22.3	.2	24.0	.0
Apr	63.9	34.3	49.1	86	1966	17	55.6	1989	11	1970	22	44.0+	1975	477	0	.0	.0	26.7	.0	11.7	.0
May	73.8	43.5	58.7	93+	1958	28	65.2	1996	19	1967	2	55.5	1975	216	19	.0	.1	30.7	.0	1.3	.0
Jun	84.9	52.5	68.7	100	1998	30	72.9	1990	30+	1969	16	64.1	1983	31	141	@	5.1	30.0	.0	@	.0
Jul	88.7	57.8	73.3	100+	1958	13	76.2	1980	37	1983	12	70.7	1992	0	255	@	9.7	31.0	.0	.0	.0
Aug	86.6	56.5	71.6	99+	1960	1	74.5	2000	39	1970	31	69.0	1993	3	206	.0	5.0	31.0	.0	.0	.0
Sep	79.9	49.1	64.5	95	1958	1	68.4	1998	20	1983	28	61.8	1996	72	56	.0	.8	29.9	.0	.3	.0
Oct	69.0	37.7	53.4	85+	1957	1	58.4	1979	14	1991	31	46.8	1984	366	4	.0	.0	29.3	.0	6.8	.0
Nov	54.6	26.5	40.6	77	1989	12	46.7	1999	-8	1976	29	34.3	2000	734	0	.0	.0	19.2	.6	24.4	.1
Dec	45.0	17.8	31.4	67	1988	5	37.8	1980	-18	1990	31	21.9	1976	1042	0	.0	.0	8.4	3.2	30.5	.8
Ann	66.2	36.7	51.5	100+	Jun 1998	30	76.2	Jul 1980	-25	Jan 1971	6	21.8	Jan 1977	5594	681	.0	20.7	275.3	9.7	156.5	3.1

+ 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: 1957-2001

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

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# 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: ABIQUIU DAM, NM**

**COOP ID: 290041**

**Climate Division: NM 2**

**NWS Call Sign:**

**Elevation: 6,380 Feet Lat: 36°14N**

**Lon: 106°26W**

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	.36	.24	.86	1965	8	1.02	1979	.03	1976	4.5	1.2	.1	.0	.03	.05	.10	.15	.20	.27	.34	.44	.57	.79	1.01
Feb	.24	.23	.49	1963	11	.61	1987	.00	1991	4.2	.8	.0	.0	.01	.03	.07	.11	.14	.19	.24	.30	.38	.52	.66
Mar	.58	.50	1.40	1973	24	2.42	1973	.01	1988	4.8	1.5	.2	.1	.02	.04	.09	.16	.25	.36	.50	.68	.94	1.40	1.88
Apr	.63	.43	1.50	1985	29	2.46	1985	.01	1989	4.6	1.9	.3	@	.02	.04	.11	.19	.28	.40	.55	.75	1.03	1.52	2.03
May	.98	1.02	1.29	1978	2	2.43	1992	.00	1996	6.7	2.8	.4	.1	.02	.08	.21	.34	.50	.68	.90	1.19	1.59	2.26	2.94
Jun	.75	.66	1.17	1999	22	2.23	1999	.00	1980	5.6	2.4	.1	.1	.04	.12	.23	.34	.46	.59	.74	.93	1.18	1.59	2.00
Jul	1.62	1.40	1.51	1982	29	3.11	1999	.19	1995	10.4	4.5	.8	.2	.34	.48	.72	.94	1.15	1.39	1.65	1.96	2.38	3.05	3.68
Aug	1.91	1.70	1.30	1984	6	5.07	1988	.57	2000	12.2	5.4	1.0	.1	.59	.77	1.04	1.27	1.50	1.73	1.99	2.29	2.68	3.29	3.85
Sep	1.20	1.06	1.29	1975	4	2.64	1971	.02	2000	7.3	3.2	.5	.1	.17	.27	.44	.61	.78	.97	1.19	1.46	1.83	2.42	3.00
Oct	.89	.68	1.05	1985	11	2.31	1998	.00	1995	6.2	3.0	.2	@	.10	.21	.36	.49	.62	.76	.91	1.10	1.35	1.74	2.12
Nov	.55	.46	1.08	1957	5	1.85	1991	.00+	1999	4.6	1.8	.1	.0	.00	.08	.19	.28	.37	.46	.57	.69	.86	1.14	1.40
Dec	.30	.21	.67	1991	12	1.19	1971	.00	1988	3.9	1.1	@	.0	.01	.02	.06	.10	.15	.20	.27	.36	.48	.69	.90
Ann	10.01	9.57	1.51	Jul 1982	29	5.07	Aug 1988	.00+	Nov 1999	75.0	29.6	3.7	.7	6.50	7.15	8.00	8.66	9.25	9.82	10.42	11.08	11.89	13.08	14.12

+ 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: 1957-2001

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

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

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Station: ABIQUIU DAM, NM

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Climate Division: NM 2

NWS Call Sign:

Elevation: 6,380 Feet

Lat: 36° 14N

Lon: 106° 26W

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	2.7	.5	1	0	6.0	1988	6	12.5	1988	13	1972	11	7	1974	1.5	.9	.3	.1	.0	2.0	.2	.0	.0
Feb	1.7	.0	#	0	5.1	1982	11	15.2	1982	5+	1982	11	1	1982	1.1	.6	.2	.1	.0	1.0	.3	.1	.0
Mar	1.1	.0	#	0	4.0	1974	10	4.4	1981	15	1991	1	1	1991	.7	.5	.1	.0	.0	.3	@	.0	.0
Apr	.9	.0	#	0	11.3	1977	3	11.3	1977	11	1977	3	#+	1999	.5	.1	.1	.1	.1	.1	.1	@	@
May	#	.0	#	0	#	1978	5	#	1978	#	1978	5	#	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	.0	#	0	2.5	1991	31	2.5	1991	2	1991	31	#	1991	.1	.1	.0	.0	.0	@	.0	.0	.0
Nov	.8	.0	#	0	6.2	2000	23	6.2	2000	7	1976	30	1	1976	.2	.2	.1	.1	.0	.1	@	.0	.0
Dec	3.1	1.1	#	0	6.0	1971	14	16.5	1971	8	1971	14	3	1971	1.5	1.0	.2	.1	.0	.8	.3	.0	.0
Ann	10.4	1.6	N/A	N/A	11.3	Apr 1977	3	16.5	Dec 1971	15	Mar 1991	1	7	Jan 1974	5.6	3.4	1.0	.5	.1	4.3	.9	.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

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**Elevation: 6,380 Feet**

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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	5/31	5/26	5/22	5/18	5/15	5/12	5/09	5/05	4/29
32	5/20	5/13	5/08	5/04	4/30	4/26	4/22	4/17	4/11
28	5/07	4/30	4/25	4/21	4/17	4/13	4/09	4/04	3/28
24	4/22	4/15	4/10	4/06	4/02	3/29	3/24	3/19	3/12
20	4/14	4/06	3/31	3/26	3/22	3/17	3/12	3/06	2/26
16	4/04	3/24	3/16	3/09	3/03	2/25	2/18	2/10	1/30
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	9/24	9/28	10/02	10/05	10/08	10/10	10/13	10/17	10/21
32	9/30	10/05	10/08	10/12	10/14	10/17	10/20	10/24	10/29
28	10/06	10/12	10/16	10/19	10/23	10/26	10/30	11/03	11/09
24	10/16	10/22	10/27	10/31	11/04	11/07	11/11	11/16	11/22
20	10/22	10/29	11/03	11/07	11/11	11/15	11/20	11/25	12/02
16	11/06	11/12	11/16	11/20	11/24	11/27	12/01	12/06	12/12
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	167	159	154	149	145	140	135	130	122
32	190	182	176	171	166	162	157	151	142
28	215	206	199	193	188	183	177	170	161
24	245	235	228	221	215	210	203	196	185
20	269	257	248	241	234	227	219	211	198
16	304	290	281	273	265	257	249	240	226

\* 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:

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**Degree Days to Selected Base Temperatures (°F)**

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	1103	846	704	477	216	31	0	3	72	366	734	1042	5594
60	948	706	549	334	108	6	0	0	19	230	584	887	4371
57	855	622	457	253	63	2	0	0	7	161	494	794	3708
55	793	566	397	205	41	0	0	0	3	123	436	732	3296
50	638	427	257	107	10	0	0	0	0	54	296	577	2366
32	174	57	9	0	0	0	0	0	0	0	18	128	386

**Cooling Degree Days (1)**

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	94	135	328	513	826	1100	1278	1226	974	661	274	109	7518
55	0	0	4	27	154	410	565	513	287	70	2	0	2032
57	0	0	1	16	114	352	503	451	230	47	1	0	1715
60	0	0	0	6	66	266	410	358	153	22	0	0	1281
65	0	0	0	0	19	141	255	206	56	4	0	0	681
70	0	0	0	0	3	54	111	79	10	0	0	0	257

**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	2	25	113	278	563	840	1006	950	709	389	91	3	2	27	140	418	981	1821	2827	3777	4486	4875	4966	4969
45	0	1	41	160	410	690	851	795	560	249	28	0	0	1	42	202	612	1302	2153	2948	3508	3757	3785	3785
50	0	0	12	73	264	541	696	640	412	132	2	0	0	0	12	85	349	890	1586	2226	2638	2770	2772	2772
55	0	0	0	17	142	391	541	485	265	48	0	0	0	0	0	17	159	550	1091	1576	1841	1889	1889	1889
60	0	0	0	0	52	250	386	330	138	8	0	0	0	0	0	0	52	302	688	1018	1156	1164	1164	1164
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	7	38	109	208	359	543	659	618	447	272	90	17	7	45	154	362	721	1264	1923	2541	2988	3260	3350	3367

(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> |
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## 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)