U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: TAOS, NM **COOP ID: 298668**

Climate Division: NM 2 **NWS Call Sign: E23** **Elevation: 6,965 Feet** **Lat: 36˚23N** **Lon: 105˚35W**

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	39.6	10.7	25.2	63+	1971	31	34.1	1986	-27	1971	6	18.1	1992	1235	0	.0	.0	4.4	5.0	30.9	6.8
Feb	44.2	17.9	31.1	68	1986	26	38.6	1995	-25	1951	2	24.0	1979	951	0	.0	.0	8.9	2.2	27.8	1.7
Mar	52.1	24.9	38.5	76+	1989	11	43.0	1972	-6	1948	5	33.6	1977	821	0	.0	.0	20.2	.2	28.5	.1
Apr	60.5	30.1	45.3	82	1965	22	50.6	2000	4	1970	2	40.0	1973	590	0	.0	.0	26.4	.1	20.5	.0
May	69.9	38.2	54.1	93	2000	29	60.9	2000	18	1975	7	50.1	1978	345	5	.0	.2	30.6	.0	6.5	.0
Jun	80.7	46.4	63.6	97	1996	20	68.1	1990	28	1954	7	60.0	1983	93	49	.0	2.5	30.0	.0	.2	.0
Jul	84.5	52.0	68.3	98+	1958	10	71.6	1980	37	1995	5	65.8	1992	8	108	.0	5.2	31.0	.0	.0	.0
Aug	81.9	51.4	66.7	96+	1958	3	69.8	1994	36+	1964	21	62.7	1974	29	80	.0	1.7	31.0	.0	.0	.0
Sep	75.7	44.3	60.0	94	1960	4	63.8	1990	23	1970	26	57.6	1988	163	12	.0	.4	29.9	.0	1.3	.0
Oct	65.0	33.3	49.2	86	1963	1	52.5	1979	0	1996	22	43.9	1984	491	0	.0	.0	29.1	.1	17.1	@
Nov	50.7	21.7	36.2	72+	1999	7	40.4+	1981	-21	1976	29	30.5	1972	864	0	.0	.0	16.9	1.0	28.3	.5
Dec	41.6	12.8	27.2	65	1980	28	36.3	1980	-27	1990	24	20.7	1992	1172	0	.0	.0	6.4	3.9	30.9	4.0
Ann	62.2	32.0	47.1	98+	Jul 1958	10	71.6	Jul 1980	-27+	Dec 1990	24	18.1	Jan 1992	6762	254	.0	10.0	264.8	12.5	192.0	13.1

\+ 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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

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

Issue Date: February 2004

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: TAOS, NM

COOP ID: 298668

Climate Division: NM 2 **NWS Call Sign: E23** **Elevation: 6,965 Feet** **Lat: 36˚23N** **Lon: 105˚35W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	.58	.52	.93	1957	8	1.75	1979	.00	1998
Feb	.55	.51	1.10	1955	18	1.52	1982	.00	1991
Mar	.82	.86	.99	1985	12	2.73	1985	.02	1971
Apr	.82	.61	1.35	1980	25	2.18	1999	.00	1991
May	1.19	.96	2.90	1955	18	3.78	1995	.00	1996
Jun	.97	.77	2.20	2000	27	2.82	2000	.01	1971
Jul	1.43	1.24	1.50	1982	31	3.15	1982	.31	1994
Aug	1.90	1.62	1.81	1993	14	6.12	1993	.26	1978
Sep	1.33	1.28	1.30	1971	17	2.78	1975	.21	1979
Oct	1.19	.98	1.18	1998	31	3.10	1998	.00	1995
Nov	.89	.80	1.40	1953	6	2.57	1994	.00+	1999
Dec	.63	.57	.79	1955	2	2.70	1990	.00	2000
Ann	12.30	11.93	2.90	May 1955	18	6.12	Aug 1993	.00+	Dec 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	4.9	2.0	.1	.0
Feb	4.8	2.1	.1	.0
Mar	5.6	2.8	.3	.0
Apr	5.1	2.6	.3	@
May	6.6	3.6	.6	.1
Jun	5.4	2.4	.5	.1
Jul	8.5	3.8	.5	@
Aug	10.4	4.9	.8	.1
Sep	6.7	3.3	.8	.1
Oct	6.1	3.5	.6	.1
Nov	5.5	2.6	.4	.0
Dec	5.0	2.2	.1	.0
Ann	74.6	35.8	5.1	.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 gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.04	.11	.20	.29	.37	.47	.58	.72	.90	1.20	1.48
Feb	.04	.10	.19	.27	.35	.44	.55	.68	.85	1.14	1.41
Mar	.08	.14	.26	.37	.49	.63	.80	1.00	1.28	1.74	2.19
Apr	.02	.07	.17	.29	.42	.57	.75	.99	1.32	1.89	2.45
May	.02	.09	.23	.39	.58	.80	1.08	1.43	1.93	2.79	3.64
Jun	.06	.12	.25	.38	.53	.70	.91	1.17	1.54	2.16	2.78
Jul	.41	.54	.75	.93	1.10	1.28	1.48	1.72	2.03	2.51	2.96
Aug	.57	.75	1.02	1.25	1.48	1.71	1.97	2.28	2.67	3.29	3.87
Sep	.28	.40	.60	.77	.95	1.14	1.36	1.61	1.95	2.50	3.01
Oct	.08	.21	.40	.57	.75	.95	1.18	1.46	1.84	2.46	3.06
Nov	.00	.14	.32	.46	.60	.75	.92	1.12	1.39	1.82	2.23
Dec	.02	.07	.16	.25	.35	.46	.60	.77	1.01	1.41	1.80
Ann	8.28	9.04	10.02	10.77	11.44	12.09	12.77	13.52	14.44	15.77	16.93

+ 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: 1948-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: TAOS, NM **COOP ID: 298668**

Climate Division: NM 2 **NWS Call Sign: E23** **Elevation: 6,965 Feet** **Lat: 36˚23N** **Lon: 105˚35W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	8.5	6.2	2	2
Feb	5.6	4.4	1	#
Mar	5.6	4.0	#	#
Apr	2.4	1.9	#	#
May	.5	.0	#	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	#	.0	0	0
Oct	.8	.0	#	0
Nov	3.8	1.1	1	#
Dec	5.5	4.4	1	#
Ann	32.7	22.0	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	8.0	1974	1	27.0	1979	15	1974	5	8	1979
Feb	10.0	1989	6	18.8	1982	14+	1989	9	9	1979
Mar	9.5	1985	30	21.3	1985	8	1985	30	2	1979
Apr	8.0	1980	25	13.8	1984	4+	1988	2	#+	1994
May	4.0	1978	5	10.0	1978	4	1978	5	#+	1995
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	#	1986	25	#	1986	0	0	0	0	0
Oct	3.2	1996	25	9.2	1996	6	1996	22	1	1996
Nov	7.0	1975	29	17.6	1972	13	1976	27	3	1972
Dec	15.0	1990	22	15.0	1990	25	1990	22	6	1990
Ann	15.0	Dec 1990	22	27.0	Jan 1979	25	Dec 1990	22	9	Feb 1979

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	4.1	2.7	1.1	.4	.0
Feb	3.6	2.6	.7	.2	@
Mar	2.9	2.0	.6	.2	.0
Apr	1.5	1.2	.2	@	.0
May	.2	.2	.1	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.5	.3	.1	.0	.0
Nov	2.0	1.3	.5	.3	.0
Dec	3.6	2.3	.8	.4	.1
Ann	18.4	12.6	4.1	1.5	.1

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	13.2	7.9	4.5	1.0
Feb	7.3	3.0	.9	.1
Mar	2.5	.6	.2	.0
Apr	1.2	.1	.0	.0
May	.1	.1	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.4	.1	.1	.0
Nov	2.9	1.8	1.1	@
Dec	7.7	4.2	2.0	.2
Ann	35.3	17.8	8.8	1.3

+ 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/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: TAOS, NM **COOP ID: 298668**

Climate Division: NM 2 **NWS Call Sign: E23** **Elevation: 6,965 Feet** **Lat: 36˚23N** **Lon: 105˚35W**

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	6/19	6/14	6/10	6/07	6/04	6/01	5/29	5/25	5/20
32	6/06	5/31	5/28	5/24	5/21	5/18	5/15	5/11	5/06
28	5/21	5/17	5/14	5/11	5/09	5/06	5/04	5/01	4/26
24	5/12	5/05	4/30	4/26	4/22	4/18	4/14	4/10	4/03
20	5/03	4/26	4/21	4/17	4/13	4/09	4/05	3/31	3/24
16	4/19	4/12	4/07	4/02	3/29	3/25	3/20	3/15	3/08

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	9/10	9/13	9/16	9/18	9/20	9/22	9/24	9/27	9/30
32	9/17	9/21	9/24	9/27	9/29	10/01	10/04	10/07	10/11
28	9/24	9/29	10/02	10/05	10/07	10/10	10/13	10/16	10/20
24	10/06	10/10	10/13	10/16	10/19	10/21	10/24	10/27	11/01
20	10/18	10/22	10/25	10/28	10/30	11/02	11/05	11/08	11/12
16	10/24	10/29	11/01	11/04	11/07	11/10	11/13	11/16	11/21

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	128	121	116	111	107	103	99	94	87
32	151	144	139	134	130	126	121	116	109
28	171	164	159	155	151	147	143	138	131
24	198	191	186	182	179	175	171	166	159
20	226	217	210	205	200	195	189	182	174
16	247	238	232	227	222	217	212	206	197

***** 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/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: TAOS, NM **COOP ID: 298668**

Climate Division: NM 2 **NWS Call Sign: E23** **Elevation: 6,965 Feet** **Lat: 36˚23N** **Lon: 105˚35W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1235	951	821	590	345	93	8	29	163	491	864	1172	6762
60	1080	811	666	442	210	30	0	3	62	339	714	1017	5374
57	987	727	573	356	144	12	0	0	28	254	624	924	4629
55	925	671	511	300	107	6	0	0	14	203	564	862	4163
50	770	531	358	178	43	1	0	0	1	99	417	707	3105
32	273	120	18	2	0	0	0	0	0	0	48	204	665

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	61	93	220	402	683	946	1124	1074	839	533	173	54	6202
55	0	0	0	10	77	262	411	361	163	22	0	0	1306
57	0	0	0	5	52	208	349	299	117	11	0	0	1041
60	0	0	0	1	25	136	256	209	61	3	0	0	691
65	0	0	0	0	5	49	108	80	12	0	0	0	254
70	0	0	0	0	0	9	17	13	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	9	65	204	449	712	877	823	596	290	47	0	0	9	74	278	727	1439	2316	3139	3735	4025	4072	4072
45	0	0	16	102	304	562	722	668	446	161	11	0	0	0	16	118	422	984	1706	2374	2820	2981	2992	2992
50	0	0	0	34	166	412	567	513	297	63	0	0	0	0	0	34	200	612	1179	1692	1989	2052	2052	2052
55	0	0	0	4	69	269	412	358	163	15	0	0	0	0	0	4	73	342	754	1112	1275	1290	1290	1290
60	0	0	0	0	17	139	257	204	57	0	0	0	0	0	0	0	17	156	413	617	674	674	674	674
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	5	27	92	193	335	476	559	526	409	252	75	10	5	32	124	317	652	1128	1687	2213	2622	2874	2949	2959

(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

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

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/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