

Climatography of the United States

No. 20

1971-2000

Station: OCATE 2 NW, NM

COOP ID: 296275

Climate Division: NM 2

NWS Call Sign:

Elevation: 7,655 Feet Lat: 36° 12N

Lon: 105° 04W

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	45.1	14.3	29.7	70+	1990	10	35.1	1986	-29+	1971	6	23.4	1979	1096	0	.0	.0	11.0	3.4	29.9	3.4
Feb	48.3	17.6	33.0	71	1986	25	39.1	1976	-21	1982	6	28.6	1983	897	0	.0	.0	14.1	2.3	26.4	2.2
Mar	53.5	21.4	37.5	75	1966	31	44.7	1974	-13	1988	18	31.7	1987	854	0	.0	.0	20.9	.5	28.0	.7
Apr	60.8	27.0	43.9	82	1981	30	47.8	1992	-4	1973	5	36.3	1983	632	0	.0	.0	25.9	.3	22.0	.2
May	69.2	35.9	52.6	89	2000	29	59.3	1996	9	1984	8	48.7	1983	387	2	.0	.0	30.2	.0	9.4	.0
Jun	78.3	43.3	60.8	97	1998	29	64.8	1994	24	1981	16	56.5	1983	145	18	.0	1.3	30.0	.0	.8	.0
Jul	80.7	48.2	64.5	97	1971	13	68.2	1980	31	1982	6	62.0	1991	52	36	.0	1.1	31.0	.0	@	.0
Aug	78.2	47.4	62.8	92	1980	1	65.7	1995	33	1968	24	60.0	1990	92	22	.0	.2	31.0	.0	.0	.0
Sep	73.0	40.9	57.0	90+	1995	3	60.4	1998	14	1970	26	54.1	1987	244	3	.0	.1	29.9	.0	3.1	.0
Oct	64.1	30.0	47.1	83+	1972	2	49.8	1977	-8	1993	30	41.6	1984	557	0	.0	.0	28.7	.2	19.4	@
Nov	52.5	20.6	36.6	77	1980	10	42.4	1973	-31	1976	27	29.6	1972	853	0	.0	.0	18.9	1.0	27.0	1.1
Dec	45.9	14.4	30.2	74	1970	8	36.4	1980	-26	1982	29	21.6	1983	1080	0	.0	.0	12.2	3.1	29.9	3.0
Ann	62.5	30.1	46.3	97+	Jun 1998	29	68.2	Jul 1980	-31	Nov 1976	27	21.6	Dec 1983	6889	81	.0	2.7	283.8	10.8	195.9	10.6

+ 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

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1960-2001

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

067-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: OCATE 2 NW, NM

COOP ID: 296275

Climate Division: NM 2

NWS Call Sign:

Elevation: 7,655 Feet Lat: 36°12N

Lon: 105°04W

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	.38	.33	.95	2001	27	1.12	1979	.00+	1998	2.2	1.5	@	.0	.00	.00	.11	.18	.24	.31	.39	.49	.61	.81	1.01
Feb	.34	.17	.63	1989	5	1.54	1987	.00+	2000	1.9	1.3	.1	.0	.00	.00	.00	.04	.11	.19	.29	.41	.59	.89	1.19
Mar	.74	.59	1.06	1998	15	2.02	1998	.00+	1997	3.7	2.5	.3	.1	.00	.09	.23	.35	.47	.60	.75	.93	1.17	1.56	1.93
Apr	1.14	.70	2.40	1999	30	4.54	1999	.00+	1996	3.9	2.9	.5	.2	.00	.06	.21	.38	.57	.79	1.06	1.39	1.87	2.67	3.47
May	2.08	1.87	1.60	1995	29	6.15	1994	.00	1998	6.8	5.1	1.4	.2	.17	.40	.74	1.05	1.36	1.70	2.10	2.57	3.21	4.25	5.25
Jun	2.28	1.81	2.72	1965	16	8.09	1988	.00	1998	7.0	5.3	1.2	.5	.11	.32	.66	1.00	1.36	1.76	2.22	2.81	3.60	4.91	6.19
Jul	3.60	3.30	2.67	1971	19	8.45	1971	.50	1980	10.6	7.9	2.4	.7	1.07	1.41	1.93	2.37	2.80	3.25	3.74	4.32	5.07	6.25	7.34
Aug	3.83	3.44	3.04	1967	9	8.49	1981	.54	1973	11.8	9.2	2.6	.6	1.08	1.45	2.00	2.48	2.94	3.43	3.97	4.60	5.43	6.72	7.93
Sep	2.03	1.90	3.35	1996	6	4.53	1990	.40	2000	6.1	4.4	1.5	.3	.49	.68	.97	1.24	1.50	1.78	2.09	2.46	2.95	3.72	4.44
Oct	1.13	.64	1.94	1960	17	4.55	1998	.00+	1995	3.7	2.6	.7	.2	.00	.00	.13	.29	.48	.71	.99	1.36	1.88	2.79	3.70
Nov	.65	.41	1.38	1978	3	3.59	1978	.00+	1999	2.4	1.7	.3	.1	.00	.00	.10	.22	.34	.47	.63	.82	1.09	1.52	1.96
Dec	.47	.41	3.03	1972	6	1.56	1987	.00+	1998	2.4	1.8	.2	@	.00	.00	.04	.13	.22	.33	.44	.59	.80	1.13	1.47
Ann	18.67	19.74	3.35	Sep 1996	6	8.49	Aug 1981	.00+	Feb 2000	62.5	46.2	11.2	2.9	12.42	13.60	15.12	16.29	17.34	18.36	19.42	20.59	22.03	24.12	25.95

+ 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: 1960-2001

(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: OCATE 2 NW, NM

COOP ID: 296275

Climate Division: NM 2

NWS Call Sign:

Elevation: 7,655 Feet

Lat: 36°12N

Lon: 105°04W

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	6.8	5.5	1	#	12.0	1990	18	20.0	1990	20	1990	19	4	1975	1.8	1.8	.9	.2	@	1.3	.6	.1	.0
Feb	4.6	2.0	#	#	15.5	1997	24	20.0	1987	13	1990	21	6	1987	1.8	1.7	.8	.4	.1	.4	.4	.3	.1
Mar	7.4	6.0	#	#	10.0	1981	11	26.0	1985	10	2000	22	1+	2000	2.5	2.5	1.0	.4	.1	1.2	.6	.4	.1
Apr	4.6	3.0	#	0	10.0	1973	2	22.8	1995	10	1998	16	1	1998	1.5	1.4	.7	.2	.1	.4	.3	.1	.0
May	.8	.0	#	0	7.0	1978	2	16.0	1978	4	1999	1	#	1999	.3	.3	.2	.1	.0	@	@	.0	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	#+	1999	14	#+	1999	.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	#	1987	29	#	1987	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.1	.0	#	0	2.0	1971	17	2.0	1971	2	1971	17	#+	1997	@	@	.0	.0	.0	@	.0	.0	.0
Oct	3.1	1.0	#	0	15.0	1996	27	29.0	1996	15	1996	27	1	1996	.8	.8	.4	.2	.1	.2	.1	.1	.1
Nov	4.1	2.0	#	#	7.0	1986	2	14.0	1986	7	1997	14	1	1972	1.3	1.3	.5	.2	.0	.5	.2	.2	.0
Dec	5.9	4.5	#	#	8.0	1989	1	16.0	1983	8+	2000	26	5	1978	2.0	2.0	1.1	.4	.0	.6	.3	.2	.0
Ann	37.4	24.0	N/A	N/A	15.5	Feb 1997	24	29.0	Oct 1996	20	Jan 1990	19	6	Feb 1987	12.0	11.8	5.6	2.1	.4	4.6	2.5	1.4	.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:

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Elevation: 7,655 Feet

Lat: 36° 12N

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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	7/05	6/29	6/24	6/20	6/17	6/13	6/09	6/05	5/30
32	6/19	6/13	6/08	6/04	6/01	5/28	5/24	5/20	5/14
28	6/04	5/29	5/25	5/22	5/18	5/15	5/11	5/07	5/01
24	5/24	5/18	5/13	5/09	5/05	5/01	4/27	4/23	4/16
20	5/15	5/08	5/04	4/29	4/25	4/21	4/17	4/12	4/06
16	5/06	4/29	4/24	4/20	4/16	4/12	4/08	4/03	3/27
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	8/28	9/02	9/06	9/09	9/12	9/15	9/18	9/21	9/26
32	9/13	9/16	9/18	9/20	9/22	9/24	9/26	9/29	10/02
28	9/20	9/23	9/25	9/27	9/29	10/01	10/03	10/05	10/08
24	9/26	9/30	10/03	10/05	10/07	10/10	10/12	10/15	10/19
20	10/03	10/08	10/12	10/15	10/18	10/21	10/24	10/28	11/02
16	10/11	10/16	10/21	10/24	10/27	10/31	11/03	11/07	11/13
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	109	101	96	91	86	82	77	71	63
32	132	125	121	116	113	109	105	100	93
28	153	146	141	137	133	129	125	120	113
24	177	169	164	159	155	150	145	140	132
20	198	190	184	179	175	170	165	159	151
16	220	211	205	199	194	188	183	176	167

* 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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NWS Call Sign:

Elevation: 7,655 Feet Lat: 36°12N Lon: 105°04W

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	1096	897	854	632	387	145	52	92	244	557	853	1080	6889
60	941	757	699	483	246	55	4	19	117	402	703	925	5351
57	848	673	606	397	173	24	0	4	61	311	613	832	4542
55	786	617	544	341	132	13	0	1	36	253	553	770	4046
50	631	477	395	215	57	2	0	0	5	130	409	615	2936
32	125	70	38	8	0	0	0	0	0	1	54	133	429

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	53	98	207	365	638	864	1007	954	748	467	190	76	5667
55	0	0	0	9	57	186	294	242	94	6	0	0	888
57	0	0	0	5	36	138	232	183	60	2	0	0	656
60	0	0	0	1	15	78	143	105	25	0	0	0	367
65	0	0	0	0	2	18	36	22	3	0	0	0	81
70	0	0	0	0	0	1	2	1	0	0	0	0	4

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	10	24	65	172	398	634	769	723	528	256	61	15	10	34	99	271	669	1303	2072	2795	3323	3579	3640	3655
45	1	3	17	80	251	484	614	568	379	130	17	0	1	4	21	101	352	836	1450	2018	2397	2527	2544	2544
50	0	0	1	21	125	335	459	413	235	47	0	0	0	0	1	22	147	482	941	1354	1589	1636	1636	1636
55	0	0	0	1	46	192	304	259	110	9	0	0	0	0	0	1	47	239	543	802	912	921	921	921
60	0	0	0	0	9	72	152	115	28	0	0	0	0	0	0	0	9	81	233	348	376	376	376	376
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	34	50	96	181	310	430	495	461	366	241	96	44	34	84	180	361	671	1101	1596	2057	2423	2664	2760	2804

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
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">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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