

Climatology of the United States

No. 20

1971-2000

Station: LOS LUNAS 3 SSW, NM

COOP ID: 295150

Climate Division: NM 5

NWS Call Sign:

Elevation: 4,840 Feet Lat: 34°46N

Lon: 106°45W

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	50.6	17.5	34.1	75	2000	18	39.9	1993	-25	1971	7	29.0	1977	960	0	.0	.0	19.2	.9	29.5	.5
Feb	57.6	22.0	39.8	79+	1986	25	46.9	1995	-10+	1964	7	34.4	1974	706	0	.0	.0	24.3	.4	24.7	.0
Mar	64.7	28.4	46.6	86	1989	11	49.9	1999	6+	1962	15	41.3	1977	573	0	.0	.0	30.1	.0	20.3	.0
Apr	71.8	34.5	53.2	93	1989	21	58.4	1989	16	1980	1	47.1	1973	360	4	.0	.1	29.8	.0	10.3	.0
May	80.3	44.3	62.3	102	2000	31	68.3	1996	20	1967	2	58.4	1975	138	54	.1	3.2	31.0	.0	1.1	.0
Jun	90.0	53.0	71.5	107	1994	27	75.9	1994	35	1961	4	67.7	1975	13	207	1.6	17.8	30.0	.0	.0	.0
Jul	91.9	59.9	75.9	104	1999	2	79.2	1996	45	1995	5	73.3	1976	0	338	1.7	23.6	31.0	.0	.0	.0
Aug	89.7	58.9	74.3	101+	1994	8	77.6	1995	41	1968	24	71.2	1976	1	291	.3	18.5	31.0	.0	.0	.0
Sep	83.6	50.0	66.8	98+	1980	3	72.2	1998	32+	1973	28	63.7	1975	51	106	.0	6.4	30.0	.0	.1	.0
Oct	73.7	37.3	55.5	93+	1996	9	58.7	1992	15	1989	31	51.6	1976	298	3	.0	.1	30.7	.0	7.1	.0
Nov	60.0	25.0	42.5	83+	2001	1	47.7	1995	-15	1976	29	37.6	1976	676	0	.0	.0	26.5	.1	24.2	.1
Dec	50.7	17.9	34.3	74	1995	14	39.2	1995	-5+	1990	24	29.6	1974	952	0	.0	.0	18.5	.7	28.9	.1
Ann	72.1	37.4	54.7	107	Jun 1994	27	79.2	Jul 1996	-25	Jan 1971	7	29.0	Jan 1977	4728	1003	3.7	69.7	332.1	2.1	146.2	.7

+ 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: 1957-2001

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

059-A

Climatology 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: LOS LUNAS 3 SSW, NM

COOP ID: 295150

Climate Division: NM 5

NWS Call Sign:

Elevation: 4,840 Feet Lat: 34°46N

Lon: 106°45W

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	.43	.36	.67	1978	31	1.46	1983	.00+	2000	3.8	1.6	.1	.0	.00	.03	.09	.16	.23	.31	.41	.53	.71	.99	1.28
Feb	.42	.42	1.40	1964	7	1.38	1978	.00+	1999	3.7	1.4	.1	.0	.00	.00	.06	.15	.23	.32	.42	.54	.70	.96	1.22
Mar	.57	.39	1.64	1998	16	2.97	1998	.00+	1996	3.8	1.5	.2	.1	.00	.03	.11	.19	.28	.39	.53	.70	.93	1.34	1.74
Apr	.50	.32	1.36	1990	25	3.06	1990	.00+	1996	3.1	1.5	.3	@	.00	.00	.00	.02	.10	.22	.37	.58	.88	1.41	1.96
May	.60	.50	.95	1978	2	2.17	1992	.00+	2000	4.1	1.9	.1	.0	.00	.00	.10	.20	.30	.42	.57	.75	.99	1.41	1.82
Jun	.52	.28	1.60	1961	15	2.72	1996	.00+	1977	3.6	1.4	.3	@	.00	.00	.03	.09	.17	.28	.42	.61	.88	1.36	1.85
Jul	1.39	1.31	1.79	1991	22	3.91	1974	.00	1982	7.4	3.8	.6	.1	.08	.21	.43	.63	.85	1.09	1.37	1.71	2.18	2.95	3.70
Aug	1.89	1.71	2.41	1980	27	4.51	1993	.38	1983	8.8	4.2	1.2	.3	.57	.75	1.02	1.25	1.48	1.71	1.97	2.27	2.66	3.26	3.82
Sep	1.39	1.29	2.20	1988	13	4.47	1988	.10	2000	6.3	3.1	1.0	.1	.23	.35	.55	.75	.94	1.16	1.40	1.70	2.10	2.75	3.37
Oct	1.09	.70	1.65	1972	13	4.57	1972	.00+	1982	4.4	2.7	.6	.2	.00	.00	.09	.23	.40	.62	.91	1.29	1.83	2.80	3.79
Nov	.59	.44	1.27	1991	16	1.93	1986	.00+	1999	3.9	1.5	.2	.1	.00	.00	.16	.28	.39	.50	.61	.76	.95	1.23	1.52
Dec	.54	.31	.89	1991	12	2.09	1991	.00+	1996	3.4	1.6	.3	.0	.00	.00	.04	.14	.25	.36	.50	.67	.91	1.30	1.71
Ann	9.93	10.48	2.41	Aug 1980	27	4.57	Oct 1972	.00+	May 2000	56.3	26.2	5.0	.9	5.85	6.59	7.56	8.31	9.00	9.67	10.38	11.18	12.16	13.61	14.89

+ 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: LOS LUNAS 3 SSW, NM

COOP ID: 295150

Climate Division: NM 5

NWS Call Sign:

Elevation: 4,840 Feet

Lat: 34° 46N

Lon: 106° 45W

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	1.8	.8	#	0	5.0	1992	13	8.5	1987	4+	1997	15	1	1972	1.1	.6	.3	@	.0	.1	.1	.0	.0
Feb	.9	.0	#	0	4.5	1986	7	8.5	1986	5	1986	10	1	1986	.4	.3	.2	.0	.0	.3	.3	.2	.0
Mar	.2	.0	#	0	3.6	1999	13	3.6	1999	2	2000	22	#	2000	.1	.1	@	.0	.0	.1	.0	.0	.0
Apr	.3	.0	#	0	4.3	1988	1	4.3	1988	3	1984	26	#	1984	.1	.1	.1	.0	.0	@	@	.0	.0
May	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.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	.4	.0	0	0	5.0	1991	31	5.0	1991	0	0	0	0	0	.1	.1	.1	@	.0	.0	.0	.0	.0
Nov	.6	.0	#	0	5.0	1976	27	5.0	1976	3	1990	8	#+	1997	.3	.2	.1	@	.0	.2	@	.0	.0
Dec	2.3	.0	#	0	10.0	1992	5	11.0+	1997	5+	1997	11	1	1984	.8	.7	.3	.2	@	.7	.4	.2	.0
Ann	6.5	.8	N/A	N/A	10.0	Dec 1992	5	11.0+	Dec 1997	5+	Dec 1997	11	1+	Feb 1986	2.9	2.1	1.1	.2	@	1.4	.8	.4	.0

+ 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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Climate Division: NM 5

NWS Call Sign:

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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	5/29	5/24	5/20	5/16	5/13	5/10	5/07	5/03	4/27
32	5/18	5/13	5/09	5/05	5/02	4/29	4/25	4/21	4/16
28	5/02	4/27	4/23	4/19	4/16	4/12	4/09	4/05	3/30
24	4/16	4/12	4/08	4/06	4/03	4/01	3/29	3/26	3/22
20	4/09	4/02	3/28	3/24	3/20	3/16	3/12	3/07	2/28
16	3/27	3/19	3/13	3/08	3/03	2/27	2/22	2/16	2/08
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	9/26	9/30	10/02	10/04	10/06	10/09	10/11	10/13	10/17
32	10/05	10/09	10/12	10/14	10/17	10/19	10/21	10/24	10/28
28	10/11	10/15	10/18	10/21	10/24	10/26	10/29	11/01	11/06
24	10/22	10/26	10/29	10/31	11/03	11/05	11/08	11/11	11/15
20	10/29	11/02	11/06	11/09	11/11	11/14	11/17	11/20	11/25
16	11/11	11/15	11/18	11/21	11/23	11/26	11/29	12/02	12/06
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	160	154	150	146	141	137	131	124
32	184	178	174	170	167	163	160	155	149
28	212	205	199	195	190	186	181	176	168
24	231	224	220	216	213	209	205	201	195
20	261	252	246	240	235	230	225	219	210
16	292	283	276	270	264	259	253	246	236

* 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)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	960	706	573	360	138	13	0	1	51	298	676	952	4728
60	805	566	418	225	60	2	0	0	12	163	526	797	3574
57	712	482	328	158	31	0	0	0	4	99	436	704	2954
55	650	426	271	119	18	0	0	0	1	66	377	642	2570
50	495	291	146	49	4	0	0	0	0	18	240	487	1730
32	66	12	0	0	0	0	0	0	0	0	7	60	145

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	130	230	450	634	940	1185	1361	1312	1045	729	321	130	8467
55	0	0	8	64	245	495	648	599	356	82	2	0	2499
57	0	0	4	42	196	435	586	537	299	52	0	0	2151
60	0	0	1	20	131	346	493	444	217	23	0	0	1675
65	0	0	0	4	54	207	338	291	106	3	0	0	1003
70	0	0	0	0	15	97	187	148	38	0	0	0	485

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	27	100	259	448	722	970	1134	1078	832	505	153	27	27	127	386	834	1556	2526	3660	4738	5570	6075	6228	6255
45	4	33	136	303	567	820	979	923	682	357	66	2	4	37	173	476	1043	1863	2842	3765	4447	4804	4870	4872
50	0	7	56	178	412	670	824	768	532	215	15	0	0	7	63	241	653	1323	2147	2915	3447	3662	3677	3677
55	0	1	8	78	264	520	669	613	383	101	1	0	0	1	9	87	351	871	1540	2153	2536	2637	2638	2638
60	0	0	0	20	130	370	514	458	238	27	0	0	0	0	0	20	150	520	1034	1492	1730	1757	1757	1757
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	69	149	262	358	490	604	720	696	544	381	179	72	69	218	480	838	1328	1932	2652	3348	3892	4273	4452	4524

(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