

Climatography of the United States

No. 20

1971-2000

Station: SAN JON, NM

COOP ID: 297867

Climate Division: NM 3

NWS Call Sign:

Elevation: 4,230 Feet Lat: 35°07N

Lon: 103°20W

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	51.5	23.6	37.6	81	1950	21	43.7	2000	-33	1963	13	28.3	1979	851	0	.0	.0	20.0	2.2	25.7	.5
Feb	56.9	27.7	42.3	85	1962	12	50.7	2000	-15	1951	1	35.2	1978	636	0	.0	.0	21.6	1.2	20.0	.3
Mar	64.6	34.3	49.5	91	1989	11	55.6	1974	-9	1948	5	45.8	1987	481	0	.0	@	28.6	.2	13.0	.0
Apr	72.5	42.0	57.3	98	1965	22	63.0	1981	11	1973	8	49.8	1973	259	27	.0	.7	29.2	.0	5.1	.0
May	81.2	51.6	66.4	104	1974	28	74.3	1996	25	1954	3	61.8	1983	81	123	.3	5.8	30.9	.0	.2	.0
Jun	90.3	61.1	75.7	110	1990	24	83.3	1990	36	1967	1	71.8	1983	6	327	4.4	18.7	30.0	.0	.0	.0
Jul	92.6	65.6	79.1	108	1958	13	85.2	1980	50+	1959	1	74.9	1975	0	436	4.6	24.2	31.0	.0	.0	.0
Aug	90.2	64.1	77.2	108	1964	6	82.2	2000	47	1960	11	72.6	1971	1	377	1.7	20.2	31.0	.0	.0	.0
Sep	83.8	56.5	70.2	105	1948	5	75.4	1983	32+	1970	26	65.4	1974	27	181	.3	9.3	29.9	.0	@	.0
Oct	73.9	45.0	59.5	97	1979	8	62.1	1979	11	1993	30	53.9	1976	188	16	.0	.9	30.2	@	2.3	.0
Nov	60.8	32.8	46.8	87	1980	8	53.5	1999	-5	1957	23	38.6	1972	546	0	.0	.0	25.5	.3	15.2	@
Dec	52.1	24.9	38.5	79	1980	17	45.5	1980	-15	1961	12	30.9	1983	822	0	.0	.0	20.5	1.9	25.0	.5
Ann	72.5	44.1	58.3	110	Jun 1990	24	85.2	Jul 1980	-33	Jan 1963	13	28.3	Jan 1979	3898	1487	11.3	79.8	328.4	5.8	106.5	1.3

+ 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

Issue Date: February 2004

(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

080-A

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No. 20 1971-2000

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: SAN JON, NM

COOP ID: 297867

Climate Division: NM 3

NWS Call Sign:

Elevation: 4,230 Feet Lat: 35°07N

Lon: 103°20W

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	.57	.44	1.60	1999	30	2.39	1999	.00+	2000	3.6	1.8	.2	.1	.00	.03	.10	.19	.28	.39	.53	.69	.93	1.34	1.75
Feb	.55	.21	1.62	1956	4	1.98	1990	.00+	2000	3.3	1.4	.2	.1	.00	.00	.04	.10	.19	.30	.44	.64	.92	1.42	1.94
Mar	.94	.74	1.90	1985	20	2.63	1985	.00	1997	4.1	2.1	.5	.1	.03	.09	.22	.35	.50	.67	.88	1.14	1.51	2.13	2.75
Apr	1.15	.95	2.51	1999	14	5.77	1997	.00+	1996	4.0	2.4	.8	.2	.00	.07	.25	.43	.62	.84	1.10	1.42	1.87	2.63	3.37
May	1.98	1.75	2.32	1969	6	5.61	1994	.00	1998	5.6	3.7	1.6	.4	.12	.32	.63	.92	1.23	1.56	1.96	2.44	3.10	4.18	5.23
Jun	2.33	2.44	2.30	1962	26	5.73	1988	.13	1998	6.2	4.3	1.6	.5	.30	.49	.82	1.14	1.48	1.86	2.30	2.85	3.58	4.78	5.95
Jul	2.81	2.19	3.50	1996	10	9.06	1972	.02	1987	7.2	4.8	1.6	.6	.36	.59	.99	1.38	1.79	2.25	2.78	3.43	4.32	5.77	7.17
Aug	3.38	3.01	2.96	1986	31	10.61	1981	.22	1973	7.6	5.2	2.4	1.1	.62	.92	1.42	1.88	2.35	2.85	3.43	4.12	5.05	6.54	7.96
Sep	1.81	1.24	3.68	1986	2	5.06	1988	.00	2000	5.3	3.6	1.0	.3	.15	.34	.64	.90	1.18	1.47	1.81	2.23	2.79	3.70	4.57
Oct	1.52	1.47	2.70	2000	23	4.89	1998	.00	1975	4.0	2.7	.9	.4	.02	.08	.24	.44	.67	.96	1.33	1.81	2.49	3.68	4.89
Nov	.87	.75	1.78	1986	4	3.79	1986	.00	1989	3.7	2.1	.3	.2	.02	.08	.20	.32	.46	.62	.81	1.06	1.40	1.98	2.55
Dec	.58	.51	1.93	1959	16	2.63	1997	.00	1976	3.4	1.7	.3	@	.01	.03	.09	.17	.26	.37	.51	.69	.95	1.41	1.87
Ann	18.49	18.16	3.68	Sep 1986	2	10.61	Aug 1981	.00+	Sep 2000	58.0	35.8	11.4	4.0	11.58	12.85	14.52	15.80	16.96	18.09	19.28	20.60	22.22	24.60	26.69

+ 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:
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Station: SAN JON, NM

COOP ID: 297867

Climate Division: NM 3

NWS Call Sign:

Elevation: 4,230 Feet

Lat: 35°07N

Lon: 103°20W

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	5.2	2.6	1	#	13.0	1999	30	19.0+	1999	13	1999	30	10	1983	2.1	1.4	.6	.3	@	2.1	.6	.1	.1
Feb	4.1	1.3	#	#	11.0	1983	1	22.3	1986	22	1986	10	3	1986	1.8	1.2	.5	.2	.1	1.7	.9	.6	.2
Mar	1.8	.3	#	0	6.0	1989	21	10.6	1988	7	1999	19	1	1999	1.0	.6	.3	.1	.0	.4	.2	.1	.0
Apr	1.3	.0	#	0	8.5	1988	1	13.0	1988	9	1988	1	#+	1999	.4	.4	.2	@	.0	.4	.2	@	.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	10.5	1979	31	11.5	1979	5	1991	31	#+	1997	.1	.1	@	@	@	@	.0	.0	.0
Nov	1.9	.0	#	0	4.6	2000	7	10.0	1980	5	2000	7	1	1972	.9	.7	.3	.0	.0	.6	.2	.1	.0
Dec	4.2	3.5	#	0	12.0	1997	23	22.5	1997	17	1997	25	4	1997	2.0	1.2	.4	.2	@	1.9	1.3	.9	.3
Ann	18.9	7.7	N/A	N/A	13.0	Jan 1999	30	22.5	Dec 1997	22	Feb 1986	10	10	Jan 1983	8.3	5.6	2.3	.8	.1	7.1	3.4	1.8	.6

+ 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/normal/usnormals.html

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Elevation: 4,230 Feet

Lat: 35° 07N

Lon: 103° 20W

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	5/14	5/10	5/07	5/04	5/01	4/29	4/26	4/23	4/19
32	5/06	5/01	4/27	4/24	4/21	4/18	4/15	4/11	4/06
28	4/17	4/13	4/10	4/07	4/04	4/02	3/30	3/27	3/23
24	4/11	4/06	4/01	3/29	3/25	3/22	3/18	3/14	3/08
20	4/02	3/25	3/19	3/14	3/10	3/06	3/01	2/23	2/15
16	3/25	3/15	3/08	3/02	2/24	2/18	2/12	2/05	1/26
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	9/28	10/02	10/05	10/07	10/10	10/12	10/15	10/18	10/22
32	10/07	10/12	10/15	10/18	10/21	10/23	10/26	10/30	11/04
28	10/21	10/25	10/28	10/30	11/02	11/04	11/06	11/09	11/13
24	10/28	11/02	11/06	11/10	11/13	11/16	11/20	11/24	11/29
20	11/05	11/10	11/14	11/17	11/21	11/24	11/27	12/01	12/07
16	11/14	11/19	11/24	11/27	11/30	12/04	12/07	12/11	12/17
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	178	172	168	164	161	157	153	149	143
32	198	193	189	185	182	179	175	171	166
28	228	222	218	214	211	207	203	199	193
24	256	248	242	237	232	227	222	216	208
20	282	273	266	260	255	250	244	237	228
16	311	300	292	285	279	272	265	257	246

* 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

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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	851	636	481	259	81	6	0	1	27	188	546	822	3898
60	696	496	331	153	31	0	0	0	5	82	404	667	2865
57	603	416	248	104	14	0	0	0	1	44	323	574	2327
55	542	363	197	77	8	0	0	0	0	27	273	513	2000
50	397	241	96	28	1	0	0	0	0	6	168	368	1305
32	48	15	0	0	0	0	0	0	0	0	7	33	103

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	220	304	542	758	1065	1311	1459	1399	1144	851	451	235	9739
55	1	8	26	144	360	621	746	686	454	165	27	1	3239
57	0	4	15	112	305	561	684	624	395	120	17	0	2837
60	0	0	5	71	228	472	591	531	309	65	8	0	2280
65	0	0	0	27	123	327	436	377	181	16	0	0	1487
70	0	0	0	8	52	197	282	231	88	2	0	0	860

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	99	174	337	544	845	1094	1235	1172	924	628	264	108	99	273	610	1154	1999	3093	4328	5500	6424	7052	7316	7424
45	43	92	213	402	690	944	1080	1017	774	476	156	47	43	135	348	750	1440	2384	3464	4481	5255	5731	5887	5934
50	13	38	115	271	535	794	925	862	624	333	81	16	13	51	166	437	972	1766	2691	3553	4177	4510	4591	4607
55	0	11	52	161	384	645	770	707	477	202	31	0	0	11	63	224	608	1253	2023	2730	3207	3409	3440	3440
60	0	0	17	81	244	495	615	552	338	104	10	0	0	0	17	98	342	837	1452	2004	2342	2446	2456	2456
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	105	160	261	377	541	698	802	770	601	406	202	109	105	265	526	903	1444	2142	2944	3714	4315	4721	4923	5032

(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