

# Climatology of the United States

## No. 20

### 1971-2000

**Station: SAN JOSE, CA**

**COOP ID: 047821**

**Climate Division: CA 4**

**NWS Call Sign:**

**Elevation: 67 Feet**

**Lat: 37° 22N**

**Lon: 121° 54W**

### 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	59.3	41.7	50.5	79	1962	8	55.1	1986	24	1949	11	46.2	1985	450	0	.0	.0	30.1	.0	2.2	.0
Feb	63.4	44.6	54.0	81	1986	26	57.5	1991	26	1989	7	50.3	1989	308	0	.0	.0	27.8	.0	.4	.0
Mar	67.0	46.4	56.7	84+	1988	26	60.2	1993	30	1966	3	52.2	1985	267	9	.0	.0	31.0	.0	@	.0
Apr	72.1	48.3	60.2	95+	1996	30	64.7	1989	35+	1967	20	54.4	1975	170	25	.0	.5	30.0	.0	.0	.0
May	76.7	51.8	64.3	101+	2001	31	69.7	1997	37	1952	4	59.3	1977	95	72	.1	1.7	31.0	.0	.0	.0
Jun	81.8	55.4	68.6	109	2000	14	73.4	1981	42	1966	2	65.0	1982	24	131	.7	4.2	30.0	.0	.0	.0
Jul	84.3	57.5	70.9	108	1972	14	74.2	1984	47+	1955	6	68.3	1987	4	188	.5	4.7	31.0	.0	.0	.0
Aug	84.0	57.7	70.9	105	1993	1	74.4	1998	47	1973	22	68.6	1973	2	183	.2	4.3	31.0	.0	.0	.0
Sep	82.2	56.7	69.5	104	1971	14	73.0	1984	42+	1950	30	66.1	1986	13	146	.2	4.2	30.0	.0	.0	.0
Oct	75.9	52.3	64.1	101	1987	5	67.7	1992	36+	1971	30	59.9	1971	82	54	@	1.0	31.0	.0	.0	.0
Nov	65.3	45.6	55.5	85+	1967	2	59.9	1995	21	1976	16	50.2	1994	289	3	.0	.0	30.0	.0	.2	.0
Dec	58.9	41.0	50.0	79	1958	12	54.7	1983	19+	1990	23	44.4	1990	467	0	.0	.0	29.5	.0	3.0	.0
Ann	72.6	49.9	61.3	109	Jun 2000	14	74.4	Aug 1998	19+	Dec 1990	23	44.4	Dec 1990	2171	811	1.7	20.6	362.4	.0	5.8	.0

+ 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: 1948-2001

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

# Climatography of the United States

## No. 20 1971-2000

Station: SAN JOSE, CA

COOP ID: 047821

Climate Division: CA 4

NWS Call Sign:

Elevation: 67 Feet

Lat: 37°22N

Lon: 121°54W

### 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	3.03	2.46	3.60	1968	30	8.66	1995	.17	1984	10.2	6.6	1.9	.7	.26	.46	.87	1.29	1.75	2.27	2.90	3.69	4.78	6.60	8.39
Feb	2.84	2.16	2.23	1998	3	10.23	1998	.14	1997	9.7	6.1	2.1	.4	.23	.42	.79	1.19	1.62	2.12	2.71	3.46	4.49	6.22	7.93
Mar	2.69	2.52	1.91	1995	9	6.85	1995	.06	1988	10.3	6.6	1.7	.3	.22	.40	.76	1.13	1.54	2.01	2.57	3.27	4.24	5.87	7.47
Apr	1.02	.70	1.46	1983	28	3.90	1983	.03	1977	5.4	2.8	.5	@	.06	.12	.25	.39	.54	.73	.95	1.23	1.63	2.30	2.98
May	.44	.14	1.62	1990	27	2.38	1990	.00+	1992	3.0	1.2	.1	.1	.00	.00	.00	.00	.05	.14	.26	.46	.75	1.31	1.90
Jun	.10	.01	.79	1995	16	.84	1995	.00+	1998	.9	.3	@	.0	.00	.00	.00	.00	.00	.00	.03	.08	.16	.31	.47
Jul	.06	.00	.75	1980	2	.75	1980	.00+	2000	.3	.2	@	.0	.00	.00	.00	.00	.00	.00	.00	.00	.06	.20	.34
Aug	.07	.00	1.92	1968	21	.71	1976	.00+	1999	.5	.2	.1	.0	.00	.00	.00	.00	.00	.00	.00	.00	.01	.15	.39
Sep	.23	.04	2.00	1959	18	1.04	1982	.00+	1997	1.5	.7	.1	.0	.00	.00	.00	.00	.02	.06	.12	.22	.38	.69	1.01
Oct	.87	.74	3.22	1962	13	2.22	1973	.00+	1995	3.6	2.0	.5	.1	.00	.00	.18	.33	.48	.64	.84	1.09	1.41	1.97	2.50
Nov	1.73	1.36	2.42	1970	29	5.48	1972	.05+	1995	7.4	4.0	1.1	.2	.06	.14	.32	.54	.80	1.13	1.53	2.06	2.81	4.12	5.45
Dec	2.00	1.92	1.90	1955	22	4.71	1995	.04	1989	8.9	4.7	1.4	.1	.24	.39	.68	.95	1.25	1.58	1.97	2.45	3.09	4.16	5.20
Ann	15.08	13.57	3.60	Jan 1968	30	10.23	Feb 1998	.00+	Jul 2000	61.7	35.4	9.5	1.9	6.93	8.25	10.08	11.56	12.94	14.32	15.80	17.49	19.61	22.82	25.72

+ 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](http://www.ncdc.noaa.gov/oa/climate/normals/usnormals.html)

# Climatography of the United States

## No. 20 1971-2000

Station: SAN JOSE, CA

COOP ID: 047821

Climate Division: CA 4

NWS Call Sign:

Elevation: 67 Feet

Lat: 37° 22N

Lon: 121° 54W

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	#	.0	0	0	#	1972	26	#	1972	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.0	.0	0	0	.5	1976	5	.5	1976	0	0	0	0	0	@	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Apr	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	#	.0	0	0	#	1988	30	#+	1988	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	#	.0	N/A	N/A	.5	Feb 1976	5	.5	Feb 1976	0	0	0	0	0	@	.0	.0	.0	.0	.0	.0	.0	.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

Complete documentation available from:

[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

# Climatography of the United States No. 20 1971-2000

Station: SAN JOSE, CA

COOP ID: 047821

Climate Division: CA 4

NWS Call Sign:

Elevation: 67 Feet

Lat: 37° 22N

Lon: 121° 54W

<b>Freeze Data</b>									
<b>Spring Freeze Dates (Month/Day)</b>									
<b>Temp (F)</b>	<b>Probability of later date in spring (thru Jul 31) than indicated(*)</b>								
	<b>.10</b>	<b>.20</b>	<b>.30</b>	<b>.40</b>	<b>.50</b>	<b>.60</b>	<b>.70</b>	<b>.80</b>	<b>.90</b>
<b>36</b>	3/17	3/06	2/26	2/19	2/13	2/07	1/31	1/23	1/12
<b>32</b>	2/10	2/01	1/24	1/18	1/11	1/04	12/27	12/11	0/00
<b>28</b>	1/16	12/30	12/07	0/00	0/00	0/00	0/00	0/00	0/00
<b>24</b>	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
<b>20</b>	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
<b>16</b>	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
<b>Fall Freeze Dates (Month/Day)</b>									
<b>Temp (F)</b>	<b>Probability of earlier date in fall (beginning Aug 1) than indicated(*)</b>								
	<b>.10</b>	<b>.20</b>	<b>.30</b>	<b>.40</b>	<b>.50</b>	<b>.60</b>	<b>.70</b>	<b>.80</b>	<b>.90</b>
<b>36</b>	10/31	11/10	11/17	11/23	11/29	12/04	12/10	12/17	12/27
<b>32</b>	11/24	12/05	12/12	12/19	12/26	1/02	1/11	1/28	0/00
<b>28</b>	12/14	12/30	1/20	0/00	0/00	0/00	0/00	0/00	0/00
<b>24</b>	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
<b>20</b>	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
<b>16</b>	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
<b>Freeze Free Period</b>									
<b>Temp (F)</b>	<b>Probability of longer than indicated freeze free period (Days)</b>								
	<b>.10</b>	<b>.20</b>	<b>.30</b>	<b>.40</b>	<b>.50</b>	<b>.60</b>	<b>.70</b>	<b>.80</b>	<b>.90</b>
<b>36</b>	335	317	305	295	286	278	268	258	243
<b>32</b>	>365	>365	>365	>365	358	340	328	316	301
<b>28</b>	>365	>365	>365	>365	>365	>365	>365	>365	>365
<b>24</b>	>365	>365	>365	>365	>365	>365	>365	>365	>365
<b>20</b>	>365	>365	>365	>365	>365	>365	>365	>365	>365
<b>16</b>	>365	>365	>365	>365	>365	>365	>365	>365	>365

\* 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

# Climatology of the United States

## No. 20 1971-2000

Station: SAN JOSE, CA

COOP ID: 047821

Climate Division: CA 4

NWS Call Sign:

Elevation: 67 Feet

Lat: 37° 22N

Lon: 121° 54W

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

Base	Heating Degree Days (1)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Below													
65	450	308	267	170	95	24	4	2	13	82	289	467	2171
60	299	177	143	78	31	3	0	0	1	21	159	319	1231
57	213	112	89	40	13	0	0	0	0	6	98	235	806
55	162	78	60	23	6	0	0	0	0	2	67	185	583
50	69	20	15	4	0	0	0	0	0	0	19	90	217
32	0	0	0	0	0	0	0	0	0	0	0	0	0

### Cooling Degree Days (1)

Base	Cooling Degree Days (1)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Above													
32	573	617	765	845	1000	1098	1207	1204	1123	995	703	556	10686
55	22	50	112	178	293	408	494	491	433	284	80	28	2873
57	11	28	79	135	237	348	432	429	373	226	51	16	2365
60	4	10	40	83	162	261	339	336	284	148	22	7	1696
65	0	0	9	25	72	131	188	183	146	54	3	0	811
70	0	0	0	5	19	45	68	60	50	10	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	321	403	506	592	735	841	940	942	869	735	457	305	321	724	1230	1822	2557	3398	4338	5280	6149	6884	7341	7646
45	176	260	351	442	580	691	785	787	719	580	307	162	176	436	787	1229	1809	2500	3285	4072	4791	5371	5678	5840
50	66	129	201	293	425	541	630	632	569	425	170	61	66	195	396	689	1114	1655	2285	2917	3486	3911	4081	4142
55	14	43	84	153	271	391	475	477	419	270	64	11	14	57	141	294	565	956	1431	1908	2327	2597	2661	2672
60	0	3	19	55	135	242	320	322	270	134	11	0	0	3	22	77	212	454	774	1096	1366	1500	1511	1511
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	145	198	263	335	433	524	612	613	554	440	236	143	145	343	606	941	1374	1898	2510	3123	3677	4117	4353	4496

(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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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 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/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)