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: SANTA BARBARA, CA **COOP ID: 047902**

Climate Division: CA 6 **NWS Call Sign:** **Elevation: 5 Feet** **Lat: 34˚25N** **Lon: 119˚41W**

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	64.5	44.7	54.6	89	1962	7	58.1	1986	20+	1949	10	49.7	1972	324	0	.0	.0	31.0	.0	.3	.0
Feb	65.4	46.7	56.1	89+	1995	20	60.6	1995	27+	1949	12	51.7	1990	253	2	.0	.0	28.0	.0	.1	.0
Mar	66.1	48.3	57.2	96	1988	26	61.1	1988	30	1953	3	52.9	1991	248	6	.0	.1	31.0	.0	@	.0
Apr	69.2	50.1	59.7	101	1989	6	63.5	1996	30	1970	28	55.0	1975	172	13	@	.3	30.0	.0	.0	.0
May	69.6	53.0	61.3	101	1968	26	66.8	1997	36	1991	20	58.1	1971	142	28	.0	.2	31.0	.0	.0	.0
Jun	72.1	55.8	64.0	103+	1990	27	69.0	1981	42+	1943	13	60.2	1991	80	48	.1	.5	30.0	.0	.0	.0
Jul	75.1	58.6	66.9	108	1937	1	70.2	1984	44	1948	6	64.2	1991	26	82	.1	.1	31.0	.0	.0	.0
Aug	76.7	59.5	68.1	99	1978	10	72.2	1984	46	1993	13	65.6+	1999	24	120	.0	.4	31.0	.0	.0	.0
Sep	75.2	58.5	66.9	105+	1978	25	74.1	1984	38	1948	26	63.1	1993	55	111	.1	.7	30.0	.0	.0	.0
Oct	73.3	54.9	64.1	103	1950	13	67.7	1997	34	1935	31	60.3	1971	73	46	@	.8	31.0	.0	.0	.0
Nov	68.9	49.0	59.0	97+	1956	10	63.2	1976	28	1931	24	54.9	1994	193	11	.0	.2	30.0	.0	.0	.0
Dec	65.3	44.7	55.0	92	1958	3	59.2	1977	25	1948	25	49.3	1971	312	3	.0	.0	30.9	.0	.5	.0
Ann	70.1	52.0	61.1	108	Jul 1937	1	74.1	Sep 1984	20+	Jan 1949	10	49.3	Dec 1971	1902	470	.3	3.3	364.9	.0	.9	.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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1927-2001

(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: SANTA BARBARA, CA **COOP ID: 047902**

Climate Division: CA 6 **NWS Call Sign:** **Elevation: 5 Feet** **Lat: 34˚25N** **Lon: 119˚41W**

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	Median	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	4.14	2.41	8.00	1995	4	24.20	1995	.00+	1984	7.1	5.1	2.7	1.3	.00	.00	.71	1.38	2.10	2.92	3.90	5.14	6.83	9.69	12.52
Feb	4.68	2.86	3.65	1945	2	21.76	1998	.00+	1982	6.3	4.9	3.1	1.7	.00	.18	.76	1.43	2.20	3.12	4.24	5.68	7.72	11.20	14.70
Mar	3.59	3.05	3.80	1952	15	11.73	1978	.00+	1997	6.5	4.7	2.3	1.1	.00	.00	.70	1.29	1.92	2.62	3.46	4.50	5.89	8.26	10.57
Apr	.77	.32	3.30	2000	17	3.97	1988	.00+	1997	2.9	1.7	.5	.2	.00	.00	.02	.10	.21	.37	.57	.86	1.30	2.08	2.89
May	.35	.02	1.66	1949	18	2.96	1977	.00+	2000	1.4	.6	.3	.1	.00	.00	.00	.00	.00	.01	.08	.22	.50	.99	1.64
Jun	.09	.01	1.13	1963	11	.71	1993	.00+	1997	.9	.2	@	.0	.00	.00	.00	.00	.00	.00	.02	.07	.14	.28	.43
Jul	.01	.00	.63	1950	9	.13	1987	.00+	2000	.4	@	.0	.0	.00	.00	.00	.00	.00	.00	.00	.00	.01	.04	.07
Aug	.03	.00	.70	1936	9	.50	1977	.00+	2000	.5	.2	.1	.0	.00	.00	.00	.00	.00	.00	.00	.00	.01	.11	.23
Sep	.29	.02	1.90	1976	11	4.01	1976	.00+	1996	1.2	.3	.2	.1	.00	.00	.00	.00	.00	.01	.05	.17	.41	.84	1.43
Oct	.52	.13	2.74	1996	29	3.80	2000	.00+	1999	1.7	.9	.3	.2	.00	.00	.00	.00	.00	.10	.28	.53	.92	1.60	2.32
Nov	1.48	1.07	3.49	1965	16	5.47	1972	.00+	2000	3.8	2.6	1.1	.5	.00	.00	.17	.38	.62	.93	1.30	1.79	2.48	3.68	4.89
Dec	2.63	1.71	5.32	1977	28	7.33	1971	.00	1989	4.9	3.0	1.7	.8	.02	.10	.34	.66	1.06	1.57	2.22	3.09	4.35	6.58	8.86
Ann	18.58	16.74	8.00	Jan 1995	4	24.20	Jan 1995	.00+	Nov 2000	37.6	24.2	12.3	6.0	6.60	8.35	10.88	13.02	15.05	17.14	19.41	22.06	25.44	30.67	35.47

+ 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: 1927-2001
(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: SANTA BARBARA, CA **COOP ID: 047902**

Climate Division: CA 6 **NWS Call Sign:** **Elevation: 5 Feet** **Lat: 34˚25N** **Lon: 119˚41W**

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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.0	.0	0	0	.0	0	0	.0	0	0	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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.0	.0	N/A	N/A	.0	0	0	.0	0	0	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/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: SANTA BARBARA, CA **COOP ID: 047902**

Climate Division: CA 6 **NWS Call Sign:** **Elevation: 5 Feet** **Lat: 34˚25N** **Lon: 119˚41W**

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	3/19	2/26	2/11	1/27	1/12	12/22	0/00	0/00	0/00
32	1/28	1/04	0/00	0/00	0/00	0/00	0/00	0/00	0/00
28	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
24	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00

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	11/25	12/07	12/15	12/24	1/01	1/13	0/00	0/00	0/00
32	12/19	1/10	0/00	0/00	0/00	0/00	0/00	0/00	0/00
28	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
24	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00
16	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	>365	>365	>365	>365	>365	>365	329	304	276
32	>365	>365	>365	>365	>365	>365	>365	>365	334
28	>365	>365	>365	>365	>365	>365	>365	>365	>365
24	>365	>365	>365	>365	>365	>365	>365	>365	>365
20	>365	>365	>365	>365	>365	>365	>365	>365	>365
16	>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/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: SANTA BARBARA, CA **COOP ID: 047902**

Climate Division: CA 6 **NWS Call Sign:** **Elevation: 5 Feet** **Lat: 34˚25N** **Lon: 119˚41W**

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	324	253	248	172	142	80	26	24	55	73	193	312	1902
60	182	129	121	72	55	19	1	3	13	14	87	175	871
57	113	75	69	32	23	6	0	0	5	3	45	111	482
55	78	47	41	16	11	2	0	0	0	0	25	78	298
50	19	8	7	1	0	0	0	0	0	0	4	20	59
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	700	673	781	831	909	958	1079	1118	1046	996	808	714	10613
55	65	76	108	157	207	270	366	405	356	284	144	79	2517
57	38	48	74	112	156	214	304	343	301	224	103	50	1967
60	14	18	33	62	96	137	212	253	219	142	55	21	1262
65	0	2	6	13	28	48	82	120	111	46	11	3	470
70	0	0	0	0	5	8	13	36	40	7	0	0	109

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	457	470	543	599	670	729	840	880	821	761	577	470	457	927	1470	2069	2739	3468	4308	5188	6009	6770	7347	7817
45	303	325	388	449	515	579	685	725	671	606	427	318	303	628	1016	1465	1980	2559	3244	3969	4640	5246	5673	5991
50	156	185	233	299	360	429	530	570	521	451	277	170	156	341	574	873	1233	1662	2192	2762	3283	3734	4011	4181
55	53	65	96	158	206	279	375	415	371	297	136	59	53	118	214	372	578	857	1232	1647	2018	2315	2451	2510
60	6	15	24	47	74	132	220	260	221	146	43	7	6	21	45	92	166	298	518	778	999	1145	1188	1195
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	243	240	277	321	372	429	529	571	518	449	320	251	243	483	760	1081	1453	1882	2411	2982	3500	3949	4269	4520

(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