

Climatology of the United States

No. 20

1971-2000

Station: SOUTH ENTR YOSEMITE NP, CA

COOP ID: 048380

Climate Division: CA 5

NWS Call Sign:

Elevation: 5,120 Feet Lat: 37° 30N

Lon: 119° 39W

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	44.8	25.4	35.1	72	1962	7	42.0	1986	-3	1949	10	30.0	1979	927	0	.0	.0	10.3	1.8	27.1	.0
Feb	46.4	25.9	36.2	73	1954	8	42.8	1991	1	1949	12	31.4	1990	808	0	.0	.0	12.5	1.5	24.8	.0
Mar	48.3	27.3	37.8	78	1966	31	43.4	1997	3	1951	3	30.9	1991	828	0	.0	.0	15.9	.8	25.3	.0
Apr	54.3	30.3	42.3	82	1981	30	48.7	1989	12+	1975	7	32.7	1975	681	0	.0	.0	21.5	.1	18.0	.0
May	62.4	36.6	49.5	89	1950	30	56.3	1992	18	1950	4	41.0	1977	486	5	.0	.0	27.3	.0	7.6	.0
Jun	71.0	43.3	57.2	98+	1972	30	62.6	1981	25	1952	10	51.9	1998	248	13	.0	.4	29.5	.0	1.2	.0
Jul	77.6	48.7	63.2	101	1976	14	67.2	1976	31	1951	5	57.6	1983	112	58	.1	2.1	31.0	.0	.0	.0
Aug	77.1	48.5	62.8	99	1978	5	65.8	1981	32	1960	25	59.4	1979	98	31	.0	1.2	31.0	.0	.0	.0
Sep	71.4	44.2	57.8	98	1950	2	62.4	1974	23	1948	26	49.7	1986	235	19	.0	.2	29.8	.0	.6	.0
Oct	62.5	36.6	49.6	90+	1980	3	56.9	1988	14	1949	19	44.4	1982	484	5	.0	.1	28.3	.0	7.7	.0
Nov	51.0	29.0	40.0	80	1949	4	47.8	1995	7	1985	12	31.9	1994	750	0	.0	.0	18.4	.6	20.4	.0
Dec	46.1	25.3	35.7	78	1958	3	41.6	1980	-5	1967	20	28.7	1971	909	0	.0	.0	12.5	2.0	26.7	.1
Ann	59.4	35.1	47.3	101	Jul 1976	14	67.2	Jul 1976	-5	Dec 1967	20	28.7	Dec 1971	6566	131	.1	4.0	268.0	6.8	159.4	.1

+ 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: 1948-2001

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

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

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COOP ID: 048380

Climate Division: CA 5

NWS Call Sign:

Elevation: 5,120 Feet Lat: 37°30N

Lon: 119°39W

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	8.34	7.39	10.80	1963	31	21.60	1993	.10	1984	8.8	7.7	5.0	3.0	.39	.82	1.78	2.88	4.17	5.70	7.58	10.01	13.46	19.37	25.30
Feb	8.02	6.41	5.71	1969	24	29.50	1986	.32	1997	8.5	7.2	4.6	2.7	.65	1.19	2.24	3.35	4.58	5.98	7.65	9.75	12.66	17.54	22.35
Mar	7.26	6.00	5.67	1995	11	24.03	1995	.25	1997	10.0	8.0	4.2	2.2	.69	1.21	2.20	3.21	4.30	5.55	7.01	8.85	11.37	15.57	19.68
Apr	3.09	1.88	7.35	1982	11	13.59	1982	.19	1977	7.1	5.1	2.0	.9	.19	.38	.76	1.18	1.66	2.21	2.88	3.74	4.94	6.96	8.98
May	1.64	1.08	3.70	1996	16	6.10	1998	.00+	1997	5.1	3.6	1.1	.4	.00	.05	.24	.46	.73	1.05	1.46	1.98	2.72	4.01	5.31
Jun	.70	.29	1.88	1964	9	3.09	1993	.00+	1994	2.1	1.3	.6	.1	.00	.00	.04	.13	.25	.40	.58	.83	1.19	1.82	2.46
Jul	.17	.00	1.20	1992	12	1.89	1992	.00+	2000	.9	.5	.1	@	.00	.00	.00	.00	.00	.00	.00	.07	.23	.57	.95
Aug	.09	.00	.45	1964	31	.52	1972	.00+	2000	1.0	.2	.0	.0	.00	.00	.00	.00	.00	.00	.00	.04	.12	.30	.49
Sep	.86	.30	2.92	1959	19	3.95	1989	.00+	1996	2.8	1.8	.5	.2	.00	.00	.00	.00	.12	.31	.58	.95	1.50	2.48	3.49
Oct	2.20	1.83	4.40	1994	5	6.65	1982	.00+	1995	4.6	3.3	1.3	.8	.00	.00	.31	.65	1.03	1.47	2.01	2.70	3.66	5.30	6.94
Nov	4.39	3.77	6.63	1950	18	12.17	1983	.00+	1995	7.2	5.5	2.6	1.3	.00	.45	1.22	1.92	2.64	3.44	4.36	5.46	6.99	9.49	11.91
Dec	5.27	3.87	9.72	1955	23	18.19	1996	.00+	1999	7.4	6.2	3.0	1.8	.00	.48	1.37	2.21	3.08	4.05	5.18	6.55	8.44	11.57	14.62
Ann	42.03	40.95	10.80	Jan 1963	31	29.50	Feb 1986	.00+	Aug 2000	65.5	50.4	25.0	13.4	17.79	21.60	26.94	31.32	35.43	39.58	44.05	49.19	55.69	65.58	74.56

+ 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

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Station: SOUTH ENTR YOSEMITE NP, CA

COOP ID: 048380

Climate Division: CA 5

NWS Call Sign:

Elevation: 5,120 Feet

Lat: 37°30N

Lon: 119°39W

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	14.2	5.0	7	6	14.0	1974	6	41.3	1990	47	1974	7	34	1971	4.0	3.1	1.7	1.0	.4	10.7	9.2	7.6	3.7
Feb	18.1	16.0	8	3	19.0	1989	3	48.0	2000	43	1975	8	33	1982	3.7	3.2	2.0	1.3	.6	-9.9	-9.9	-9.9	-9.9
Mar	15.2	16.9	6	4	29.0	1991	17	32.5	1975	63	1991	26	23	1991	4.0	3.4	2.2	1.5	.5	-9.9	-9.9	-9.9	-9.9
Apr	6.4	.2	1	#	15.0	1975	6	35.5	1975	28	1991	1	8	1991	2.0	1.4	.6	.4	.1	2.1	1.9	1.6	1.1
May	.6	.0	#	0	5.0	1998	12	6.0	1998	5	1998	12	#+	1998	.4	.2	@	@	.0	.2	@	@	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	2	1999	2	#	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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	#	.0	0	0	#	1982	30	#	1982	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.7	.0	#	0	6.5	1996	30	7.8	1996	4	1996	30	#+	1996	.3	.2	.1	@	.0	.2	.1	.0	.0
Nov	4.8	1.5	1	#	10.0	1982	10	31.7	1994	20	1994	27	9	1994	1.6	1.2	.5	.4	.1	1.8	1.0	.7	.2
Dec	12.4	12.0	3	1	25.0	1996	21	32.1	1987	36	1996	22	10	1994	3.2	2.6	1.8	1.1	.3	5.4	4.4	3.1	1.4
Ann	72.4	51.6	N/A	N/A	29.0	Mar 1991	17	48.0	Feb 2000	63	Mar 1991	26	34	Jan 1971	19.2	15.3	8.9	5.7	2.0	-9.9	-9.9	-9.9	-9.9

+ Also occurred on an earlier date(s) #Denotes trace amounts

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-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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NWS Call Sign:

Elevation: 5,120 Feet

Lat: 37° 30N

Lon: 119° 39W

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	6/28	6/23	6/19	6/15	6/11	6/07	6/02	5/26
32	6/14	6/09	6/05	6/02	5/30	5/27	5/24	5/20	5/15
28	5/27	5/20	5/14	5/09	5/05	5/01	4/26	4/20	4/13
24	5/04	4/24	4/17	4/11	4/06	3/31	3/25	3/19	3/09
20	4/17	4/06	3/28	3/21	3/15	3/08	3/01	2/21	2/09
16	3/29	3/13	3/01	2/18	2/08	1/28	1/16	12/30	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	9/02	9/09	9/13	9/17	9/21	9/25	9/29	10/04	10/11
32	9/18	9/26	10/01	10/06	10/10	10/14	10/19	10/24	11/01
28	10/03	10/10	10/16	10/21	10/25	10/30	11/03	11/09	11/16
24	10/29	11/05	11/10	11/15	11/19	11/23	11/27	12/02	12/10
20	11/08	11/17	11/23	11/28	12/03	12/09	12/14	12/20	12/29
16	11/19	11/30	12/08	12/15	12/21	12/28	1/05	1/16	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	121	113	107	102	97	93	88	82	74
32	156	148	142	137	133	128	123	117	109
28	206	195	186	179	172	166	158	150	138
24	263	250	241	233	226	219	211	202	190
20	309	293	282	272	263	254	244	233	217
16	>365	>365	>365	341	320	305	290	274	254

* 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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Climate Division: CA 5

NWS Call Sign:

Elevation: 5,120 Feet Lat: 37° 30N Lon: 119° 39W

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	927	808	828	681	486	248	112	98	235	484	750	909	6566
60	772	668	688	534	344	135	40	25	129	344	601	754	5034
57	679	584	595	449	267	84	17	8	83	268	513	661	4208
55	617	528	534	394	222	58	10	2	58	223	456	599	3701
50	462	388	387	267	130	17	1	0	19	130	321	450	2572
32	50	34	38	21	3	0	0	0	0	3	31	66	246

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	147	151	218	331	545	755	969	956	774	547	270	180	5843
55	0	0	1	13	50	122	266	245	143	54	5	0	899
57	0	0	0	8	34	89	212	188	107	37	3	0	678
60	0	0	0	3	18	49	142	112	64	20	0	0	408
65	0	0	0	0	5	13	58	31	19	5	0	0	131
70	0	0	0	0	0	1	14	4	4	0	0	0	23

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	36	47	63	156	344	555	765	761	589	345	111	43	36	83	146	302	646	1201	1966	2727	3316	3661	3772	3815
45	2	8	13	71	215	411	610	606	440	215	47	5	2	10	23	94	309	720	1330	1936	2376	2591	2638	2643
50	0	0	0	21	115	273	456	451	299	114	7	0	0	0	0	21	136	409	865	1316	1615	1729	1736	1736
55	0	0	0	0	46	151	303	299	174	46	0	0	0	0	0	0	46	197	500	799	973	1019	1019	1019
60	0	0	0	0	11	66	166	160	77	13	0	0	0	0	0	0	11	77	243	403	480	493	493	493
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	33	47	56	121	227	348	485	484	363	231	85	42	33	80	136	257	484	832	1317	1801	2164	2395	2480	2522

(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