

Climatology of the United States

No. 20

1971-2000

Station: CACHUMA LAKE, CA

COOP ID: 041253

Climate Division: CA 6

NWS Call Sign:

Elevation: 781 Feet

Lat: 34° 34N

Lon: 119° 59W

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	66.0	39.6	52.8	88	1976	17	57.3	1986	20	1954	6	48.8	1973	379	0	.0	.0	30.7	.0	4.2	.0
Feb	67.5	41.2	54.4	92	1995	3	59.8	1995	22	1990	15	50.8	1979	299	1	.0	@	27.8	.0	1.9	.0
Mar	69.0	42.7	55.9	95	1988	27	61.0	1972	25	1953	3	50.8	1991	295	10	.0	.3	30.9	.0	.8	.0
Apr	74.1	44.0	59.1	105	1989	7	64.7	1989	27	1955	19	53.0	1975	202	24	.2	1.6	30.0	.0	.1	.0
May	78.7	47.7	63.2	104	1984	30	69.5	1997	31	1953	25	58.5	1998	116	61	.3	3.6	31.0	.0	.0	.0
Jun	85.6	50.3	68.0	109+	1961	15	73.9	1981	32	1955	2	64.2	1991	33	121	1.7	8.3	30.0	.0	.0	.0
Jul	91.2	52.7	72.0	112	1960	21	75.5	1984	36	1955	31	68.1	1987	4	220	2.6	15.8	31.0	.0	.0	.0
Aug	92.5	53.3	72.9	112	1997	6	75.7	1971	34+	1953	30	69.9	1989	1	246	4.1	17.5	31.0	.0	.0	.0
Sep	89.2	52.2	70.7	115	1971	14	77.2	1984	34+	1954	23	65.1	1986	18	183	2.5	12.3	30.0	.0	.0	.0
Oct	83.2	48.3	65.8	110	1980	2	68.9	1987	28	1971	30	62.8	1998	58	81	.9	7.2	31.0	.0	.1	.0
Nov	74.0	42.8	58.4	100	1997	3	63.9	1976	25	1958	17	53.0	1994	218	20	@	1.1	29.9	.0	1.2	.0
Dec	67.5	38.8	53.2	94	1958	4	57.9	1977	16	1990	22	48.4	1971	371	3	.0	@	30.7	.0	4.5	.0
Ann	78.2	46.1	62.2	115	Sep 1971	14	77.2	Sep 1984	16	Dec 1990	22	48.4	Dec 1971	1994	970	12.3	67.7	364.0	.0	12.8	.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

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1952-2001

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

Climatography of the United States

No. 20 1971-2000

Station: CACHUMA LAKE, CA

COOP ID: 041253

Climate Division: CA 6

NWS Call Sign:

Elevation: 781 Feet Lat: 34°34N

Lon: 119°59W

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	4.34	3.13	6.25	1995	10	25.13	1995	.00	1976	8.1	5.5	2.4	1.5	.05	.23	.69	1.26	1.94	2.77	3.81	5.18	7.13	10.53	13.97	
Feb	5.47	3.63	6.63	1998	3	23.30	1998	.06	1974	7.7	5.4	3.2	1.8	.11	.28	.76	1.40	2.21	3.24	4.57	6.36	8.97	13.61	18.38	
Mar	4.76	3.45	6.10	1991	19	18.60	1991	.00	1972	8.1	5.7	2.6	1.5	.06	.27	.79	1.42	2.18	3.09	4.22	5.70	7.82	11.48	15.17	
Apr	1.26	.66	2.47+	2000	17	5.75	1983	.00+	1997	4.1	2.2	.8	.4	.00	.01	.06	.18	.35	.58	.91	1.38	2.10	3.41	4.81	
May	.39	.00	1.69	1977	9	3.36	1998	.00+	1997	1.6	.9	.3	.1	.00	.00	.00	.00	.00	.00	.01	.12	.44	1.07	1.97	
Jun	.04	.00	.41	1993	5	.48	1995	.00+	1997	.5	.1	.0	.0	.00	.00	.00	.00	.00	.00	.00	.01	.05	.14	.25	
Jul	.01	.00	.08	1972	30	.08	1972	.00+	2000	.3	.0	.0	.0	.00	.00	.00	.00	.00	.00	.00	.00	.02	.04	.06	
Aug	.03	.00	.59	1983	19	.72	1983	.00+	2000	.5	@	@	.0	.00	.00	.00	.00	.00	.00	.00	.00	.01	.08	.17	
Sep	.30	.03	1.55	1978	5	2.98	1976	.00+	2000	1.3	.6	.1	.1	.00	.00	.00	.00	.00	.01	.09	.23	.48	.96	1.48	
Oct	.76	.48	4.09	1996	30	4.15	1996	.00+	1999	2.1	1.2	.3	.1	.00	.00	.00	.07	.24	.44	.67	.95	1.35	2.02	2.67	
Nov	1.58	.98	3.14	1965	17	5.36	1982	.00+	2000	4.3	2.7	1.1	.5	.00	.00	.22	.45	.72	1.04	1.43	1.94	2.63	3.83	5.03	
Dec	2.92	1.78	7.08	1997	6	10.11	1997	.00	1999	5.5	3.6	1.8	.7	.03	.15	.46	.83	1.29	1.85	2.55	3.47	4.79	7.09	9.42	
Ann	21.86	18.63	7.08	Dec 1997	6	25.13	Jan 1995	.00+	Nov 2000	44.1	27.9	12.6	6.7	7.12	9.20	12.25	14.85	17.36	19.94	22.78	26.09	30.36	36.99	43.11	

+ 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: 1952-2001

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

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Climatology of the United States

No. 20 1971-2000

Station: CACHUMA LAKE, CA

COOP ID: 041253

Climate Division: CA 6

NWS Call Sign:

Elevation: 781 Feet

Lat: 34° 34N

Lon: 119° 59W

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/normal/usnormals.html

Climatography of the United States

No. 20 1971-2000

Station: CACHUMA LAKE, CA

COOP ID: 041253

Climate Division: CA 6

NWS Call Sign:

Elevation: 781 Feet

Lat: 34° 34N

Lon: 119° 59W

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	4/30	4/20	4/12	4/06	3/31	3/25	3/19	3/12	3/02
32	4/01	3/17	3/07	2/25	2/17	2/08	1/30	1/19	1/04
28	2/10	1/29	1/20	1/12	1/04	12/25	12/11	0/00	0/00
24	1/18	1/01	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	10/25	10/30	11/03	11/07	11/10	11/14	11/17	11/21	11/27
32	11/11	11/18	11/23	11/28	12/02	12/06	12/10	12/16	12/23
28	11/27	12/08	12/17	12/25	1/02	1/11	1/25	0/00	0/00
24	12/24	1/11	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	260	247	238	231	223	216	208	199	187
32	336	319	307	297	287	278	268	256	239
28	>365	>365	>365	>365	>365	>365	344	323	301
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/normal/usnormals.html

Climatology of the United States

No. 20 1971-2000

Station: CACHUMA LAKE, CA

COOP ID: 041253

Climate Division: CA 6

NWS Call Sign:

Elevation: 781 Feet

Lat: 34° 34N

Lon: 119° 59W

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
65	379	299	295	202	116	33	4	1	18	58	218	371	1994
60	231	171	168	104	44	6	0	0	3	13	115	230	1085
57	151	108	111	61	20	1	0	0	0	3	70	159	684
55	108	76	80	39	11	0	0	0	0	1	47	121	483
50	33	20	24	10	1	0	0	0	0	0	13	47	148
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Cooling Degree Days (1)

Base	Cooling Degree Days (1)												
	Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
32	644	627	738	812	968	1078	1240	1268	1155	1045	792	656	11023
55	39	59	105	161	266	388	527	555	465	334	149	63	3111
57	20	35	74	123	212	330	465	493	405	274	112	40	2583
60	7	13	38	76	144	244	372	400	317	190	66	18	1885
65	0	1	10	24	61	121	220	246	183	81	20	3	970
70	0	0	0	6	16	42	93	108	85	21	3	0	374

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	398	421	489	569	711	828	974	1006	905	789	543	407	398	819	1308	1877	2588	3416	4390	5396	6301	7090	7633	8040
45	250	278	335	419	556	678	819	851	755	634	394	260	250	528	863	1282	1838	2516	3335	4186	4941	5575	5969	6229
50	123	149	194	272	401	528	664	696	605	479	252	134	123	272	466	738	1139	1667	2331	3027	3632	4111	4363	4497
55	45	59	85	148	250	379	509	541	455	326	129	46	45	104	189	337	587	966	1475	2016	2471	2797	2926	2972
60	7	19	28	63	121	230	354	386	306	190	57	5	7	26	54	117	238	468	822	1208	1514	1704	1761	1766
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	255	260	299	358	434	505	590	604	552	492	355	273	255	515	814	1172	1606	2111	2701	3305	3857	4349	4704	4977

(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

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 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.

- | | |
|---|---|
| <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