

Climatography of the United States

No. 20

1971-2000

Station: SIERRA CITY, CA

COOP ID: 048207

Climate Division: CA 2

NWS Call Sign:

Elevation: 4,240 Feet Lat: 39° 34N

Lon: 120° 37W

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	48.0	29.1	38.6	70+	1975	17	43.6	1986	3	1950	15	32.8	1973	820	0	.0	.0	13.7	.9	23.5	.0
Feb	50.4	29.8	40.1	78	1991	26	47.7	1991	5	1949	12	35.5+	1999	697	0	.0	.0	14.0	.8	20.0	.0
Mar	53.7	31.8	42.8	84	1966	31	49.2	1986	9	1966	3	35.5	1991	689	0	.0	.0	19.2	.2	18.8	.0
Apr	60.4	35.1	47.8	86+	1985	14	56.4	1987	15	1999	9	39.7	1975	523	5	.0	.0	24.4	.1	11.6	.0
May	68.8	40.7	54.8	94	1984	29	62.7	1992	24+	1974	18	44.5	1998	341	22	.0	.2	28.8	.0	3.2	.0
Jun	77.7	47.4	62.6	101	1961	16	67.7+	1987	28	1952	12	57.7	1971	133	60	.0	2.5	29.8	.0	.3	.0
Jul	85.2	52.7	69.0	103+	1960	19	74.3	1988	32	1983	8	63.4	1983	30	153	.3	8.2	31.0	.0	@	.0
Aug	85.3	51.9	68.6	104	1981	9	73.1	1988	33	1951	29	63.2	1976	32	144	.2	9.0	31.0	.0	.0	.0
Sep	79.5	47.9	63.7	102	1988	4	69.3	1975	31+	1971	30	57.5	1986	119	78	.1	3.2	29.7	.0	.1	.0
Oct	69.2	41.1	55.2	92+	1987	6	64.6	1988	21+	1971	31	48.7	1984	335	29	.0	.2	28.7	.0	3.0	.0
Nov	54.1	32.8	43.5	85	1966	2	53.2	1976	12	1975	29	35.3	1994	648	1	.0	.0	19.3	.1	15.4	.0
Dec	48.0	29.4	38.7	76	1958	3	45.9	1989	1	1990	21	30.2	1971	816	0	.0	.0	14.1	1.2	22.3	.0
Ann	65.0	39.1	52.1	104	Aug 1981	9	74.3	Jul 1988	1	Dec 1990	21	30.2	Dec 1971	5183	492	.6	23.3	283.7	3.3	118.2	.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: 1948-2000

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

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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: SIERRA CITY, CA

COOP ID: 048207

Climate Division: CA 2

NWS Call Sign:

Elevation: 4,240 Feet Lat: 39°34N

Lon: 120°37W

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	11.49	10.36	8.02	1997	1	31.91	1995	.37	1984	11.4	9.7	6.4	4.5	1.08	1.90	3.45	5.05	6.79	8.75	11.08	14.00	18.01	24.68	31.22
Feb	12.00	9.29	8.00	1986	17	39.52	1986	.00	1995	11.4	9.9	6.4	3.9	.67	1.80	3.64	5.41	7.28	9.36	11.79	14.79	18.87	25.60	32.14
Mar	10.11	8.41	6.70	1986	8	28.16	1995	1.17	1994	12.6	10.7	5.7	3.1	1.38	2.20	3.65	5.05	6.53	8.15	10.04	12.35	15.48	20.59	25.53
Apr	4.41	3.73	6.02	1982	11	12.62	1982	.44	1977	8.6	6.6	2.9	1.4	.71	1.09	1.73	2.34	2.97	3.65	4.43	5.39	6.66	8.74	10.72
May	3.18	2.47	3.29	1990	31	9.84	1996	.15	1992	7.3	5.5	2.1	.9	.27	.48	.90	1.34	1.83	2.38	3.04	3.87	5.02	6.94	8.82
Jun	1.00	.77	1.97	1971	26	3.14	1995	.00+	1994	3.7	2.3	.5	.2	.00	.04	.16	.30	.47	.66	.90	1.21	1.65	2.41	3.17
Jul	.39	.13	3.15	1974	8	5.46	1974	.00+	1994	1.3	.7	.2	.1	.00	.00	.00	.01	.05	.13	.24	.41	.67	1.14	1.65
Aug	.55	.24	2.85	1965	14	4.12	1976	.00+	1998	1.9	1.1	.4	.1	.00	.00	.00	.03	.12	.23	.40	.62	.95	1.55	2.16
Sep	1.65	1.22	2.63	1986	27	8.73	1986	.00+	1997	3.5	2.6	1.2	.7	.00	.00	.04	.23	.50	.85	1.31	1.92	2.82	4.40	6.04
Oct	3.99	2.55	4.08	1991	26	12.38	1989	.00	1978	5.6	4.3	2.3	1.3	.04	.20	.61	1.12	1.75	2.52	3.48	4.75	6.57	9.75	12.98
Nov	8.54	5.64	7.00	1988	23	28.72	1973	.71	1992	9.7	8.1	5.2	3.0	.60	1.13	2.22	3.39	4.70	6.22	8.04	10.36	13.59	19.03	24.41
Dec	8.98	8.23	8.93	1964	22	29.26	1996	.00	1989	9.3	8.5	5.0	3.3	.30	.99	2.25	3.54	4.97	6.61	8.55	11.00	14.39	20.07	25.67
Ann	66.29	60.17	8.93	Dec 1964	22	39.52	Feb 1986	.00+	Aug 1998	86.3	70.0	38.3	22.5	34.94	40.33	47.60	53.37	58.66	63.92	69.48	75.77	83.60	95.32	105.75

+ 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: 1948-2000

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

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Station: SIERRA CITY, CA

COOP ID: 048207

Climate Division: CA 2

NWS Call Sign:

Elevation: 4,240 Feet

Lat: 39°34N

Lon: 120°37W

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	12.8	10.1	6	2	36.0	1982	1	36.0+	1982	60	1971	14	38	1971	4.1	3.4	2.1	1.7	.3	7.4	5.6	4.5	2.1
Feb	22.1	9.6	4	1	18.5	1975	1	76.5	1990	47	1975	4	23	1975	4.3	3.7	2.2	1.3	.7	7.4	5.7	4.5	3.4
Mar	20.9	15.5	2	1	20.0	1985	6	82.8	1985	53	1982	31	9	1985	4.4	4.2	2.3	1.6	.8	5.3	4.2	3.2	1.7
Apr	6.4	1.0	1	#	18.0	1975	4	32.0	1975	24	1982	10	5	1982	1.6	1.4	.8	.3	.1	1.5	.9	.5	.3
May	.7	.0	#	0	5.0	1977	5	5.0	1977	5	1977	5	#+	1991	.3	.2	.1	@	.0	.2	@	@	.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	#	1987	18	#	1987	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	#	1986	27	#+	1986	#	1971	26	#	1971	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	1.2	.0	#	0	8.5	1984	16	8.5	1984	5+	1989	25	#+	1989	.4	.3	.2	.1	.0	.2	.1	.1	.0
Nov	7.7	5.8	#	#	24.0	1982	30	45.5	1985	24	1985	11	6	1985	2.1	1.9	.9	.5	.2	2.5	1.7	1.0	.2
Dec	14.9	6.5	2	#	24.0	1971	25	59.0	1988	46	1971	25	20	1971	3.2	2.7	1.3	.9	.5	3.7	1.8	1.1	.4
Ann	86.7	48.5	N/A	N/A	36.0	Jan 1982	1	82.8	Mar 1985	60	Jan 1971	14	38	Jan 1971	20.4	17.8	9.9	6.4	2.6	28.2	20.0	14.9	8.1

+ 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:

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Climate Division: CA 2

NWS Call Sign:

Elevation: 4,240 Feet

Lat: 39° 34N

Lon: 120° 37W

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	6/29	6/22	6/17	6/12	6/08	6/04	5/30	5/25	5/17
32	6/13	6/05	5/30	5/24	5/20	5/15	5/10	5/04	4/25
28	5/21	5/10	5/02	4/25	4/18	4/12	4/05	3/28	3/17
24	4/26	4/14	4/06	3/30	3/23	3/16	3/09	2/28	2/16
20	4/10	3/23	3/10	2/27	2/17	2/06	1/25	1/10	12/12
16	3/13	2/22	2/07	1/25	1/10	12/22	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	9/11	9/20	9/26	10/01	10/07	10/12	10/17	10/23	11/01
32	10/04	10/11	10/16	10/21	10/25	10/29	11/03	11/08	11/15
28	10/17	10/24	10/30	11/04	11/08	11/13	11/17	11/23	12/01
24	10/31	11/11	11/19	11/26	12/02	12/08	12/15	12/23	1/03
20	11/12	11/24	12/03	12/11	12/19	12/27	1/05	1/18	0/00
16	11/28	12/14	12/26	1/07	1/20	2/08	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	147	137	131	125	120	115	109	102	93
32	193	181	172	164	158	151	143	134	122
28	245	231	220	211	203	195	186	175	161
24	302	285	273	263	254	244	234	222	205
20	>365	>365	334	313	299	287	275	262	244
16	>365	>365	>365	>365	>365	>365	353	321	291

* 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:
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NWS Call Sign:

Elevation: 4,240 Feet Lat: 39°34N Lon: 120°37W

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	820	697	689	523	341	133	30	32	119	335	648	816	5183
60	665	557	535	385	223	60	6	6	52	221	503	661	3874
57	572	473	445	308	166	32	1	1	27	165	421	569	3180
55	510	418	388	261	133	20	0	0	17	133	368	510	2758
50	362	288	253	164	67	5	0	0	4	69	248	367	1827
32	25	18	12	8	0	0	0	0	0	1	20	41	125

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	228	245	346	480	704	917	1146	1135	950	718	363	248	7480
55	0	1	9	43	124	246	433	422	277	137	20	4	1716
57	0	0	4	30	95	198	372	361	227	107	14	1	1409
60	0	0	1	17	58	136	285	274	161	70	6	0	1008
65	0	0	0	5	22	60	153	144	78	29	1	0	492
70	0	0	0	0	7	17	64	58	26	10	0	0	182

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	61	84	133	251	467	679	897	895	712	475	161	69	61	145	278	529	996	1675	2572	3467	4179	4654	4815	4884
45	17	34	56	145	326	529	742	740	564	333	77	18	17	51	107	252	578	1107	1849	2589	3153	3486	3563	3581
50	0	2	13	68	203	385	587	585	417	207	29	0	0	2	15	83	286	671	1258	1843	2260	2467	2496	2496
55	0	0	0	25	104	251	433	432	276	110	6	0	0	0	0	25	129	380	813	1245	1521	1631	1637	1637
60	0	0	0	1	41	137	283	281	156	44	0	0	0	0	0	1	42	179	462	743	899	943	943	943
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	49	66	102	180	308	432	573	569	451	308	106	50	49	115	217	397	705	1137	1710	2279	2730	3038	3144	3194

(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 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