

Climatology of the United States

No. 20 1971-2000

Station: MOUNTAIN PASS, CA

COOP ID: 045890

Climate Division: CA 7

NWS Call Sign:

Elevation: 4,730 Feet

Lat: 35° 28N

Lon: 115° 33W

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	50.3	28.5	39.4	71	1971	17	45.9	1986	3	1974	3	30.6	1973	795	0	.0	.0	19.8	.6	19.5	.0
Feb	53.9	31.3	42.6	79	1986	27	48.2	1995	4	1989	7	35.9	1973	628	0	.0	.0	20.3	.4	13.9	.0
Mar	59.7	34.7	47.2	88+	1998	23	55.3	1972	12	1974	4	35.8	1973	563	11	.0	.0	26.4	@	10.3	.0
Apr	67.0	40.9	54.0	90	1989	7	64.9	1989	19	1986	3	40.4	1975	365	33	.0	.1	28.7	.0	4.4	.0
May	75.7	49.3	62.5	104	1967	26	70.7	1984	20	1975	5	54.1	1977	174	96	.1	3.8	30.9	.0	.7	.0
Jun	86.6	60.8	73.7	109	1968	25	79.0	1994	32	1999	7	68.7	1998	13	275	.6	12.1	30.0	.0	@	.0
Jul	92.5	66.5	79.5	110+	1967	30	83.3	1996	46	1974	11	75.7	1987	0	449	2.5	22.5	31.0	.0	.0	.0
Aug	90.7	64.5	77.6	109	1967	5	81.4	1995	44	1976	16	70.8	1976	0	391	1.4	19.0	31.0	.0	.0	.0
Sep	84.4	56.5	70.5	102+	1996	2	75.0	1979	33	1961	20	64.3	1985	26	190	1.1	11.5	30.0	.0	.0	.0
Oct	72.4	45.7	59.1	96	1980	2	65.8	1988	20+	1975	25	50.4	1971	231	47	.0	2.0	30.7	.0	1.4	.0
Nov	58.1	36.6	47.4	89	1967	1	53.8	1995	8	1983	26	37.8	1972	532	2	.0	.0	25.8	.1	9.3	.0
Dec	50.7	29.1	39.9	70+	1989	6	47.0	1980	-2	1972	10	31.6	1972	778	0	.0	.0	20.5	.8	19.5	.1
Ann	70.2	45.4	57.8	110+	Jul 1967	30	83.3	Jul 1996	-2	Dec 1972	10	30.6	Jan 1973	4105	1494	5.7	71.0	325.1	1.9	79.0	.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: 1955-2001

(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

Station: MOUNTAIN PASS, CA

COOP ID: 045890

Climate Division: CA 7

NWS Call Sign:

Elevation: 4,730 Feet Lat: 35°28N

Lon: 115°33W

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	1.04	.77	1.50	1982	21	3.55	1993	.00+	1984	3.9	2.4	.5	.1	.00	.00	.21	.40	.60	.81	1.04	1.33	1.72	2.33	2.94
Feb	1.17	.75	1.76	1963	10	5.10	1998	.00+	1984	3.6	2.4	.7	.2	.00	.00	.14	.30	.50	.74	1.03	1.42	1.95	2.89	3.83
Mar	1.12	.79	1.58	1998	25	4.94	1992	.00+	1997	4.5	2.7	.4	.1	.00	.00	.08	.24	.43	.67	.96	1.35	1.90	2.84	3.80
Apr	.41	.20	.90	1958	3	2.70	1975	.00+	1997	1.9	1.2	.2	.0	.00	.00	.00	.02	.09	.19	.32	.48	.73	1.16	1.59
May	.33	.20	.77	1977	9	1.36	1987	.00+	2000	1.7	.9	.2	.0	.00	.00	.00	.01	.05	.13	.23	.37	.57	.95	1.34
Jun	.25	.00	.75	1972	7	2.98	1990	.00+	2000	.6	.4	@	.0	.00	.00	.00	.00	.00	.00	.00	.06	.30	.85	1.47
Jul	.97	.32	2.95	1980	31	5.90	1984	.00+	2000	3.0	1.5	.6	.2	.00	.00	.00	.07	.20	.40	.67	1.06	1.65	2.73	3.85
Aug	1.19	.71	3.53	1992	5	3.97	1992	.00+	1985	2.8	1.9	.6	.2	.00	.00	.17	.36	.56	.80	1.09	1.47	1.98	2.86	3.73
Sep	.69	.42	1.93	1958	8	3.78	1997	.00+	2000	1.6	1.2	.4	.1	.00	.00	.00	.00	.12	.28	.50	.79	1.22	1.96	2.71
Oct	.45	.30	2.07	1974	26	3.48	1974	.00+	1999	2.0	1.1	.1	@	.00	.00	.00	.07	.17	.28	.41	.57	.79	1.16	1.52
Nov	.65	.52	1.50	1982	30	2.18	1978	.00+	2000	1.9	1.3	.4	.1	.00	.00	.00	.15	.31	.47	.64	.85	1.13	1.60	2.04
Dec	.71	.45	.98	1984	27	2.25	1978	.00+	1999	2.6	1.6	.4	.0	.00	.00	.05	.14	.25	.40	.58	.84	1.20	1.85	2.51
Ann	8.98	8.77	3.53	Aug 1992	5	5.90	Jul 1984	.00+	Nov 2000	30.1	18.6	4.5	1.0	4.77	5.49	6.47	7.25	7.96	8.66	9.41	10.25	11.30	12.87	14.26

+ 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: 1955-2001

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

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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	1.0	.0	#	0	13.0	1982	21	13.0+	1982	14	1990	18	6	1990	.9	.6	.3	.1	@	1.2	.6	.3	.1
Feb	2.0	.0	#	0	12.0	1987	26	15.0	1987	7	1985	3	1	1979	.5	.4	.2	@	@	.7	.4	.1	.0
Mar	2.2	.0	#	0	10.0	1982	18	14.0	1982	10	1982	18	1	1982	.8	.8	.3	.1	@	.7	.2	.1	.1
Apr	.5	.0	#	0	4.0	1982	1	7.0	1975	4	1982	1	#+	1983	.2	.2	@	.0	.0	.2	@	.0	.0
May	.0	.0	0	0	.5	1977	9	.5	1977	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	.1	.0	#	0	3.0	1974	29	3.0	1974	#	1996	27	#	1996	@	@	@	.0	.0	.0	.0	.0	.0
Nov	.4	.0	#	0	4.0	1978	25	4.0	1982	4+	1985	12	#+	1988	.3	.3	.1	.0	.0	.3	.1	.0	.0
Dec	1.3	.0	#	0	5.5	1974	29	10.2	1972	10	1985	11	1	1985	.3	.3	.2	.1	.0	.5	.2	.1	.0
Ann	7.5	.0	N/A	N/A	13.0	Jan 1982	21	15.0	Feb 1987	14	Jan 1990	18	6	Jan 1990	3.0	2.6	1.1	.3	@	3.6	1.5	.6	.2

+ 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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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	5/29	5/21	5/16	5/11	5/07	5/03	4/28	4/23	4/15
32	5/19	5/09	5/01	4/25	4/19	4/13	4/06	3/29	3/19
28	5/06	4/24	4/15	4/07	3/31	3/24	3/16	3/07	2/23
24	4/13	3/28	3/16	3/06	2/25	2/16	2/06	1/25	1/09
20	3/20	3/04	2/21	2/10	1/31	1/20	1/06	12/11	0/00
16	2/19	2/05	1/24	1/13	12/31	12/09	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	10/07	10/13	10/17	10/21	10/24	10/28	10/31	11/05	11/10
32	10/14	10/20	10/25	10/29	11/01	11/05	11/09	11/14	11/20
28	11/01	11/06	11/10	11/14	11/17	11/20	11/24	11/28	12/03
24	11/06	11/13	11/18	11/22	11/26	11/30	12/05	12/10	12/17
20	11/15	11/27	12/05	12/13	12/21	12/29	1/10	0/00	0/00
16	11/30	12/12	12/21	12/29	1/10	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	197	187	181	175	170	164	158	152	142
32	233	220	211	203	196	189	181	172	159
28	274	259	248	239	230	222	212	202	187
24	324	304	292	281	272	263	253	241	225
20	>365	>365	>365	362	328	308	291	274	252
16	>365	>365	>365	>365	>365	>365	340	320	300

* 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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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	795	628	563	365	174	13	0	0	26	231	532	778	4105
60	640	488	423	254	98	3	0	0	6	135	390	623	3060
57	547	406	347	199	64	1	0	0	2	91	311	532	2500
55	490	352	300	167	47	0	0	0	1	68	262	475	2162
50	346	228	201	97	19	0	0	0	0	27	158	334	1410
32	34	9	17	3	0	0	0	0	0	0	4	33	100

Base	Cooling Degree Days (1)												
	Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
32	262	305	488	661	945	1251	1472	1414	1154	839	464	278	9533
55	5	5	58	135	279	561	759	701	465	194	31	7	3200
57	0	2	43	107	234	502	697	639	406	155	21	2	2808
60	0	0	27	72	175	414	604	546	320	106	10	0	2274
65	0	0	11	33	96	275	449	391	190	47	2	0	1494
70	0	0	3	14	42	155	294	243	89	16	0	0	856

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	112	159	271	435	766	1030	1221	1176	982	640	297	116	112	271	542	977	1743	2773	3994	5170	6152	6792	7089	7205
45	41	78	154	301	615	880	1066	1021	832	488	184	42	41	119	273	574	1189	2069	3135	4156	4988	5476	5660	5702
50	6	23	72	187	465	730	911	866	683	343	95	9	6	29	101	288	753	1483	2394	3260	3943	4286	4381	4390
55	0	2	25	93	325	581	756	711	533	215	34	0	0	2	27	120	445	1026	1782	2493	3026	3241	3275	3275
60	0	0	1	37	202	436	601	556	391	113	7	0	0	0	1	38	240	676	1277	1833	2224	2337	2344	2344
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	81	105	175	278	488	683	810	785	639	409	187	80	81	186	361	639	1127	1810	2620	3405	4044	4453	4640	4720

(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/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