# 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

COOP ID: 047150

Lon: 120°42W

**Station: PRIEST VALLEY, CA** 

Climate Division: CA 4 NWS Call Sign:

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 56.7 29.8 43.3 79 1976 17 49.1 1986 5 1960 38.7 1972 674 0 .0 .0 26.4 .0 21.2 0. Jan 59.0 32.2 45.6 81 1986 28 50.6 1995 11 1950 2 41.7 +1990 543 0 .0 .0 25.9 .2 16.0 0. Feb Mar 62.1 33.9 48.0 86 1966 31 52.2 1972 13 1977 14 42.5 1977 527 0 .0 .0 29.8 .0 14.1 0. 34.9 8 45.8 1975 Apr 69.1 52.0 98 1989 56.1 1992 17 1976 391 .0 .2 29.6 .0 11.0 0. May 77.5 39.8 58.7 105 2001 31 65.9 1997 22 +1964 4 52.9 1998 226 30 .1 3.7 31.0 .0 4.1 .0 44.9 1972 30 70.9 7 Jun 87.0 66.0 110 1981 29+1999 61.8 1998 61 90 2.0 12.6 30.0 .0 .4 .0 Jul 93.4 49.6 71.5 113 1972 14 75.9 33 1975 30 66.6 1987 10 212 6.0 23.0 31.0 1996 .0 .0 .0 92.9 49.2 71.1 111 1998 4 74.8 1996 33 +1968 26 66.4 1976 9 197 5.6 22.2 31.0 .0 .0 .0 Aug 59 .2 Sep 87.7 45.5 66.6 108 +1988 4 71.0 1984 26 +1948 27 60.0 1986 107 1.7 13.9 30.0 .0 .0 77.5 62.7 30 54.3 233 Oct 38.6 58.1 103 +1980 3 1991 17 1971 1981 16 .2 3.7 31.0 .0 5.4 .0 63.7 31.7 47.7 90 1997 3 53.9 1995 12 1961 18 42.3 1994 519 0 .0 @ 29.3 18.0 .0 Nov .0 Dec 57.1 28.1 42.6 83+ 1958 4 47.9 1977 2 1990 22 36.6 1990 694 0 .0 .0 26.7 @ 23.3 .0 Jul Jul Dec Dec 38.2 55.9 113 1972 14 75.9 1996 2 1990 22 1990 3946 653 15.6 79.3 351.7 113.7 .0 73.6 36.6 .2 Ann

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Issue Date: February 2004 177-A

(1) From the 1971-2000 Monthly Normals

Elevation: 2,300 Feet Lat: 36°11N

- (2) Derived from station's available digital record: 1948-2001
- (3) Derived from 1971-2000 serially complete daily data

<sup>+</sup> Also occurred on an earlier date(s)

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

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Station: PRIEST VALLEY, CA COOP ID: 047150

Climate Division: CA 4 NWS Call Sign: Elevation: 2,300 Feet Lat: 36°11N Lon: 120°42W

										Pı	recipi	tation	(incl	nes)													
			P	recip	itatio	n Total	s			M	ean N	lumbo ays (3	_	Precipitation Probabilities (1)  Probability that the monthly/annual precipitation will be equal to or less than the indicated amount													
	Medi					Extremes	3			D	aily Pre	cipitatio	n	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	4.37	3.35	5.05	1995	24	14.70	1995	.03	1976	8.6	6.8	3.2	1.2	.22	.46	.97	1.55	2.23	3.03	4.00	5.26	7.04	10.08	13.13			
Feb	4.07	2.94	3.25	1969	24	12.02	1998	.07	1997	8.2	6.5	3.1	1.3	.19	.40	.86	1.40	2.03	2.78	3.70	4.89	6.57	9.47	12.37			
Mar	4.00	3.24	5.05	1995	10	13.29	1991	.00	1972	8.7	6.5	2.9	1.1	.08	.32	.83	1.39	2.03	2.78	3.69	4.86	6.50	9.29	12.07			
Apr	1.32	.87	2.83	1958	3	4.47+	1983	.00+	1997	4.6	3.0	.8	.2	.00	.06	.24	.43	.65	.91	1.22	1.61	2.17	3.11	4.05			
May	.49	.09	1.70	1998	5	4.37	1998	.00+	1997	2.1	1.4	.2	@	.00	.00	.00	.00	.02	.10	.24	.46	.82	1.49	2.20			
Jun	.10	.00	.42	1995	15	.53	1995	.00+	1999	.7	.4	.0	.0	.00	.00	.00	.00	.00	.00	.05	.12	.20	.33	.45			
Jul	.06	.00	1.00	1966	30	.88	1992	.00+	2000	.3	.2	@	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.39			
Aug	.09	.00	1.35	1976	19	1.60	1976	.00+	2000	.5	.2	@	@	.00	.00	.00	.00	.00	.00	.00	.00	.06	.27	.54			
Sep	.46	.11	2.10	1976	29	4.88	1976	.00+	2000	1.4	1.0	.3	.1	.00	.00	.00	.00	.00	.07	.22	.44	.79	1.44	2.14			
Oct	1.08	.91	2.15	1996	29	2.99	1996	.00+	1999	2.8	2.0	1.0	.2	.00	.00	.00	.17	.38	.63	.93	1.32	1.87	2.82	3.77			
Nov	2.00	1.46	2.22	1978	21	6.17	1972	.00+	2000	5.2	3.8	1.7	.3	.00	.06	.29	.56	.89	1.28	1.77	2.40	3.31	4.88	6.46			
Dec	2.96	2.63	5.10	1966	6	9.01	1996	.00	1989	6.7	4.5	1.9	.8	.10	.32	.73	1.16	1.63	2.17	2.81	3.62	4.75	6.63	8.49			
Ann	21.00	20.55	5.10	Dec 1966	6	14.70	Jan 1995	.00+	Nov 2000	49.8	36.3	15.1	5.2	9.48	11.34	13.92	16.01	17.96	19.92	22.02	24.42	27.44	32.03	36.16			

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

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

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

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**COOP ID: 047150** 

**Station: PRIEST VALLEY, CA** 

Climate Division: CA 4 NWS Call Sign: Elevation: 2,300 Feet Lat: 36°11N Lon: 120°42W

										Snov	w (inc	hes)															
	Snow Totals  Means/Medians (1)  Extremes (2)															Mean Number of Days (1)											
	Mean	s/Medi	ians (1)	)					Extre	mes (2)				ow Fa		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	.9	.0	0	0	10.0	1974	4	15.0	1974	0	0	0	0	0	.3	.2	.1	.1	@	.0	.0	.0	.0				
Feb	.3	.0	#	0	3.5	1976	5	3.5	1976	#+	1996	26	#+	1996	.1	.1	@	.0	.0	.0	.0	.0	.0				
Mar	.3	.0	#	0	4.0	1976	2	4.0	1976	1	1975	13	#+	1976	.2	.1	@	.0	.0	.0	.0	.0	.0				
Apr	.0	.0	0	0	.8	1982	1	.8	1982	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	.1	.0	0	0	2.5	1978	11	2.5	1978	0	0	0	0	0	@	@	.0	.0	.0	.0	.0	.0	.0				
Dec	.2	.0	#	0	2.0	1984	18	2.0+	1987	4+	1988	15	#+	1988	.1	.1	.0	.0	.0	.0	.0	.0	.0				
Ann	1.8	.0	N/A	N/A	10.0	Jan 1974	4	15.0	Jan 1974	4+	Dec 1988	15	#+	Feb 1996	.7	.5	.1	.1	@	.0	.0	.0	.0				

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

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**COOP ID: 047150** 

Lon: 120°42W

Lat: 36°11N

Elevation: 2,300 Feet

**Station: PRIEST VALLEY, CA** 

Climate Division: CA 4 NWS Call Sign:

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(\*) Temp (F) .10 .20 .30 .40 .70 .80 .90 36 7/06 6/28 6/22 6/17 6/12 6/07 6/02 5/27 5/19 32 5/22 6/11 6/04 5/30 5/26 5/18 5/13 5/08 5/01 28 5/26 5/16 5/09 5/03 4/28 4/22 4/16 4/09 3/30 4/23 24 4/07 3/26 3/17 3/08 2/26 2/17 2/05 1/20 20 3/15 2/28 2/17 2/08 1/30 1/21 1/11 12/30 12/12 2/03 16 2/19 1/22 1/11 12/30 12/16 11/21 0/00 0/00 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(\*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 9/21 36 9/09 9/16 9/25 9/29 10/03 10/07 10/12 10/19 32 9/26 10/02 10/06 10/10 10/13 10/17 10/20 10/25 10/31 28 10/09 10/16 10/21 10/25 10/29 11/01 11/05 11/10 11/17 24 10/27 11/03 11/08 11/12 11/16 11/20 11/24 11/29 12/06 20 11/05 11/16 11/23 11/30 12/06 12/12 12/19 12/27 1/08 11/24 12/04 12/20 12/28 16 12/13 1/07 1/24 0/00 0/00 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 135 126 119 114 108 103 98 91 82 36 32 172 162 155 149 144 138 132 125 116 28 220 208 198 190 183 158 146 176 168 24 299 283 272 262 253 243 234 222 206 354 329 272 20 >365 315 304 294 283 256

>365

**0/00** Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

>365

Derived from 1971-2000 serially complete daily data

>365

>365

16

Complete documentation available from:

324

308

290

>365

344

<sup>\*</sup> Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

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**Station: PRIEST VALLEY, CA** 

Climate Division: CA 4 NWS Call Sign: Elevation: 2,300 Feet Lat: 36°11N Lon: 120°42W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	674	543	527	391	226	61	10	9	59	233	519	694	3946		
60	519	403	376	252	125	17	0	0	16	120	370	539	2737		
57	426	319	290	178	79	6	0	0	6	70	283	446	2103		
55	364	265	236	136	55	3	0	0	3	46	230	384	1722		
50	223	142	127	58	17	0	0	0	0	11	116	242	936		
32	3	0	0	0	0	0	0	0	0	0	0	5	8		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	351	381	496	601	826	1019	1226	1211	1038	807	471	334	8761
55	0	2	19	47	168	331	513	498	350	139	11	0	2078
57	0	0	11	28	130	274	451	436	294	102	5	0	1731
60	0	0	4	12	83	195	358	344	214	58	1	0	1269
65	0	0	0	1	30	90	212	197	107	16	0	0	653
70	0	0	0	0	8	27	98	84	38	3	0	0	258

										Gro	wing l	Degre	e Uni	ts (2)												
Base					Growin	g Degree	Units (N	Ionthly)					Growing Degree Units (Accumulated Monthly)													
	Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   Nov   Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
40	147	194	266	369	589	787	991	972	806	567	253	137	147	341	607	976	1565	2352	3343	4315	5121	5688	5941	6078		
45	56	84	133	227	435	637	836	817	656	413	130	44	56	140	273	500	935	1572	2408	3225	3881	4294	4424	4468		
50	5	22	46	110	287	488	681	662	506	264	50	2	5	27	73	183	470	958	1639	2301	2807	3071	3121	3123		
55	0	0	2	32	160	341	526	507	356	141	10	0	0	0	2	34	194	535	1061	1568	1924	2065	2075	2075		
60	0	0	0	4	70	205	372	352	217	55	0	0	0	0	0	4	74	279	651	1003	1220	1275	1275	1275		
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)				
50/86	138 156 203 296 424 510 587 583 514 423 223 145													294	497	793	1217	1727	2314	2897	3411	3834	4057	4202		

(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

### 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

- c. Snow Tables
  - 1. Snow Climatology
  - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

### 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