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: 047077

Lon: 119°01W

Station: PORTERVILLE, CA

Climate Division: CA 5 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 57.9 39.4 48.7 79 1986 29 54.5 1986 19 1950 5 41.9 1972 507 0 .0 .0 26.0 .0 7.0 0. Jan 64.9 43.3 54.1 85 1989 23 58.3 1991 23 1989 7 50.1 1971 304 0 .0 .0 27.5 .0 2.0 0. Feb Mar 69.8 46.9 58.4 91 1969 30 63.3 1972 28 +1971 2 53.5 1977 225 19 .0 @ 30.9 .0 .3 .0 99 58.2 1975 Apr 76.9 50.3 63.6 1981 30 69.7 1987 29 1953 9 118 76 .0 2.5 30.0 .0 .0 May 85.3 56.4 70.9 109 1984 30 76.6 1992 37+ 1975 5 63.2 1977 40 220 1.4 10.4 31.0 .0 .0 .0 93.2 82.4 30 73.5 .0 Jun 62.4 77.8 112 +1976 29 1981 1971 1998 2 386 6.5 20.9 30.0 .0 @ Jul 98.1 67.4 82.8 113 1972 16 86.0 48 1955 6 78.1 1987 0 551 13.4 28.9 31.0 0. .0 1996 .0 96.8 66.1 81.5 112 1996 13 84.7 1971 46 1968 25 75.8 1976 0 510 10.9 27.4 31.0 .0 .0 .0 Aug 3 37 2 Sep 91.8 61.2 76.5 109 +1955 80.8 1991 1968 21 71.4 1986 346 4.3 19.6 30.0 .0 .0 .0 82.5 72.2 33+ 30 63.5 1984 50 .5 Oct 52.9 67.7 103 1996 10 1991 1961 132 6.4 31.0 .0 .1 .0 67.9 43.5 55.7 89 2 61.1 1995 27 +1993 25 51.3 1994 285 .0 .0 29.6 .0 1.8 .0 Nov 1966 6 Dec 58.3 38.2 48.3 80 1981 20 53.7 1977 16+ 1990 24 43.8 1972 520 0 .0 .0 26.3 .0 8.7 .0 Jul Jul Dec Jan 52.3 65.5 113 1972 16 86.0 1996 16+ 1990 24 41.9 1972 2053 2246 37.0 116.1 354.3 0. 19.9 .0 78.6 Ann

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

Issue Date: February 2004 174-A

(1) From the 1971-2000 Monthly Normals

Elevation: 393 Feet Lat: 36°04N

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

⁺ Also occurred on an earlier date(s)

[@] Denotes mean number of days greater than 0 but less than .05

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Climate Division: CA 5 NWS Call Sign: Elevation: 393 Feet Lat: 36°04N Lon: 119°01W

										Pı	recipi	tation	(incl	nes)											
	Precipitation Totals Means/ Extremes									M	ean N	Numb Oays (3		Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount Monthly/Annual Precipitation vs Probability Levels											
	Medi					Extremes	5			Daily Precipitation				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	2.17	1.97	1.82	1969	20	5.53	1997	.03	1976	9.0	5.2	1.6	.1	.16	.29	.57	.87	1.20	1.59	2.05	2.64	3.46	4.83	6.20	
Feb	1.99	1.74	2.72	1969	25	5.93	1998	.10	1977	7.5	5.0	1.3	.2	.17	.31	.57	.85	1.15	1.50	1.91	2.42	3.13	4.32	5.49	
Mar	2.33	1.86	1.49+	1991	19	8.30	1991	.00+	1997	8.3	5.4	1.5	.3	.00	.37	.83	1.20	1.57	1.96	2.40	2.91	3.61	4.73	5.80	
Apr	.87	.82	1.23	1951	29	2.44	1982	.00+	1997	4.4	2.5	.4	@	.00	.00	.17	.31	.46	.63	.83	1.08	1.42	1.99	2.55	
May	.42	.12	1.83	1971	27	2.93	1971	.00+	1997	2.1	1.1	.2	.1	.00	.00	.00	.00	.03	.11	.24	.43	.72	1.26	1.83	
Jun	.11	.00	.80	1993	5	1.05	1993	.00+	1997	.6	.3	.1	.0	.00	.00	.00	.00	.00	.00	.00	.03	.13	.36	.62	
Jul	.01	.00	.22	2001	6	.17	1982	.00+	2000	.2	.1	.0	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.08	
Aug	.02	.00	.25	1977	18	.26	1977	.00+	1999	.4	@	.0	.0	**	**	**	**	**	**	**	**	**	**	**	
Sep	.35	.04	1.55	1976	30	3.24	1976	.00+	1996	1.2	.6	.3	.1	.00	.00	.00	.00	.00	.01	.08	.25	.55	1.15	1.82	
Oct	.65	.46	2.13	1972	19	2.55	1972	.00+	1999	2.7	1.5	.4	.1	.00	.00	.00	.13	.27	.42	.60	.82	1.13	1.66	2.17	
Nov	1.14	.82	1.61	1970	26	3.26	1972	.01	1992	5.6	2.9	.7	.1	.04	.09	.21	.36	.54	.75	1.01	1.36	1.86	2.72	3.59	
Dec	1.43	1.36	2.34	1966	6	4.18	1996	.00	1989	7.2	3.9	.8	.1	.06	.17	.38	.58	.81	1.07	1.37	1.75	2.27	3.15	4.01	
Ann	11.49	10.44	2.72	Feb 1969	25	8.30	Mar 1991	.00+	Jul 2000	49.2	28.5	7.3	1.1	5.90	6.85	8.14	9.17	10.11	11.05	12.05	13.18	14.59	16.70	18.59	

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

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

[#] 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

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

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Climate Division: CA 5 NWS Call Sign: Elevation: 393 Feet Lat: 36°04N Lon: 119°01W

										Snov	w (incl	hes)													
						Sno	ow To	tals							Mean Number of Days (1)										
	Mean	s/Medi	ians (1)	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	3	1999	25	#	1999	.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	#	1972	8	#	1972	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
Ann	#	.0	N/A	N/A	#	Dec 1972	8	#	Dec 1972	3	Jan 1999	25	#	Jan 1999	.0	.0	.0	.0	.0	.0	.0	.0	.0		

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

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

[@] 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

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Station: PORTERVILLE, CA

Climate Division: CA 5 NWS Call Sign:

/S Call Sign: Elevation: 393 Feet

				Freez	e Data											
			Spri	ng Freeze Da	ates (Month/	Day)										
Temp (F)		P	robability of	later date in	n spring (thr	u Jul 31) tha	n indicated(*)								
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	4/22	4/08	3/30	3/21	3/14	3/06	2/26	2/16	2/03							
32	3/20	3/06	2/24	2/16	2/08	1/31	1/23	1/13	12/30							
28	2/08	1/27	1/18	1/10	1/02	12/25	12/13	0/00	0/00							
24	1/09	12/27	12/10	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							
•			Fal	l Freeze Dat	es (Month/D	ay)		•	•							
Town (F)		Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
Temp (F) - 36 32 28	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	11/03	11/07	11/11	11/14	11/17	11/19	11/22	11/26	11/30							
32	11/11	11/17	11/21	11/25	11/28	12/02	12/05	12/09	12/15							
28	11/23	12/02	12/08	12/14	12/20	12/27	1/06	0/00	0/00							
24	12/21	1/06	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 F	ree Period			•	•							
Tomp (F)			Probability	of longer tha	n indicated	freeze free p	eriod (Days)									
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	291	276	265	256	247	238	229	218	203							
32	343	324	311	301	291	282	272	261	245							
28	>365	>365	>365	>365	360	340	326	312	295							
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.

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	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	507	304	225	118	40	2	0	0	2	50	285	520	2053		
60	359	173	116	49	12	0	0	0	0	13	159	367	1248		
57	275	107	68	24	5	0	0	0	0	4	99	282	864		
55	224	73	43	14	2	0	0	0	0	2	69	227	654		
50	123	18	10	2	0	0	0	0	0	0	20	118	291		
32	0	0	0	0	0	0	0	0	0	0	0	0	0		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	516	620	816	948	1204	1375	1574	1533	1335	1106	711	503	12241
55	27	49	146	272	493	685	861	820	645	394	89	17	4498
57	16	27	110	221	434	625	799	758	585	335	60	10	3980
60	7	9	64	157	348	535	706	665	495	250	30	2	3268
65	0	0	19	76	220	386	551	510	346	132	6	0	2246
70	0	0	4	26	123	245	396	355	208	54	0	0	1411

										Gro	wing l	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (M	Ionthly)					Growing Degree Units (Accumulated Monthly)											
	JanFebMarAprMayJunJulAugSepOctNovDec											Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	250	393	541	682	933	1114	1312	1269	1080	841	449	245	250	643	1184	1866	2799	3913	5225	6494	7574	8415	8864	9109
45	126	251	386	532	778	964	1157	1114	930	686	302	120	126	377	763	1295	2073	3037	4194	5308	6238	6924	7226	7346
50	49	126	242	383	623	814	1002	959	780	532	170	39	49	175	417	800	1423	2237	3239	4198	4978	5510	5680	5719
55	11	50	118	243	468	665	847	804	630	379	75	3	11	61	179	422	890	1555	2402	3206	3836	4215	4290	4293
60	0	7	38	128	321	515	692	649	480	239	22	0	0	7	45	173	494	1009	1701	2350	2830	3069	3091	3091
Base				Gro	wing Deg	gree Unit	s for Co	rn (Mont	hly)						Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	140	230	324	423	582	697	812	797	683	527	282	145	140	370	694	1117	1699	2396	3208	4005	4688	5215	5497	5642

(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