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: 044523

Lon: 118°26W

Station: KERN RIVER PH 3, 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 59.3 31.5 45.4 80 1976 16 52.3 1986 11 1950 5 41.3 1982 607 0 .0 .0 27.4 .0 15.4 Jan 62.5 34.3 48.4 86 1986 26 54.6 1995 14 1989 6 43.4 1989 465 0 .0 .0 26.3 .1 10.4 0. Feb Mar 65.6 37.4 51.5 90 1966 31 57.9 1972 21 1950 12 45.4 1991 422 4 .0 .0 30.2 .0 5.6 0. 97 2 1975 277 Apr 71.9 41.7 56.8 1981 30 64.3 1987 26 1997 49.0 31 .0 1.1 29.8 .0 1.3 0. May 80.2 48.8 64.5 102 +1984 29 69.9 1992 30 1975 5 56.7 1998 120 105 .1 6.0 31.0 .0 @ .0 73.0 30 39 89.8 56.2 109 +1972 78.3 1981 1971 1 66.3 1998 19 259 3.6 17.7 30.0 .0 .0 .0 Jun Jul 96.8 62.0 79.4 112 1998 19 85.2 42+ 1975 74.5 1983 11.7 28.9 31.0 0. 1996 0 446 .0 .0 96.3 61.3 78.8 109 1990 5 83.6 1996 44 1948 26 74.2 1976 0 429 10.5 27.2 31.0 .0 .0 .0 Aug 2 Sep 89.8 55.6 72.7 108 1950 77.4 1991 36+ 1950 30 66.3 1986 16 247 2.8 19.1 30.0 .0 .0 .0 79.7 58.0 1984 Oct 45.9 62.8 102 1980 1 67.9 1991 23 1971 30 140 71 .1 5.2 31.0 .0 .4 .0 35.1 50.9 89+ 1989 10 56.4 1976 19 1948 29 45.7 1994 425 .0 29.5 .0 .0 Nov 66.6 1 .0 7.6 Dec 60.0 30.5 45.3 84+ 1980 16 50.9 1980 10 1990 22 39.5 1971 612 0 .0 .0 28.1 .0 16.3 0. Jul Jul Dec Dec 76.5 45.0 60.8 112 1998 19 85.2 1996 10 1990 22 39.5 1971 3103 1593 28.8 105.2 355.3 57.0 .0 .1 Ann

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

Issue Date: February 2004 103-A

(1) From the 1971-2000 Monthly Normals

Elevation: 2,703 Feet Lat: 35°47N

- (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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										Pı	recipit	tation	(incl	nes)												
	Me	ans/	P	recip	itatio	on Total	s			M	lean N of D	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												
		ans(1)				Extremes	8			D	aily Pre	cipitatio	n	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	2.88	2.34	3.28	1963	31	8.84	1995	.00+	1984	7.1	5.0	2.3	.9	.00	.21	.67	1.11	1.59	2.14	2.78	3.56	4.66	6.48	8.27		
Feb	2.74	1.84	2.93	1978	9	10.55	1998	.07	1997	6.9	5.0	2.4	.6	.18	.34	.68	1.06	1.48	1.97	2.56	3.32	4.38	6.17	7.95		
Mar	2.35	2.22	2.29	1978	4	8.81	1991	.00+	1997	7.5	5.0	1.3	.5	.00	.20	.60	.97	1.36	1.80	2.30	2.92	3.78	5.19	6.57		
Apr	.61	.56	1.90	1986	6	1.99	1988	.00+	1993	3.9	1.9	.3	.1	.00	.00	.04	.15	.27	.41	.57	.77	1.05	1.51	1.98		
May	.31	.21	1.02	2000	16	1.35	1998	.00+	1997	2.6	1.0	.2	@	.00	.00	.00	.08	.15	.22	.30	.39	.52	.74	.95		
Jun	.13	.00	1.01	1977	8	1.18	1977	.00+	2000	.9	.4	.1	@	.00	.00	.00	.00	.00	.00	.00	.03	.15	.43	.75		
Jul	.13	.01	.90	1984	30	2.31	1984	.00+	2000	1.0	.4	@	.0	.00	.00	.00	.00	.00	.00	.02	.07	.17	.38	.65		
Aug	.19	.03	1.26	1961	22	1.42	1983	.00+	1997	1.1	.6	.1	.0	.00	.00	.00	.00	.00	.02	.07	.17	.32	.61	.91		
Sep	.40	.06	1.86	1976	29	3.72	1976	.00+	2000	1.9	1.0	.3	@	.00	.00	.00	.00	.01	.07	.18	.36	.66	1.25	1.89		
Oct	.49	.23	.89	1974	28	2.82	1996	.00+	1999	2.5	1.2	.2	.0	.00	.00	.01	.06	.14	.24	.37	.56	.83	1.32	1.82		
Nov	1.26	.95	3.37	1950	19	4.94	1982	.00+	1995	3.8	2.6	.9	.1	.00	.00	.14	.31	.53	.78	1.10	1.52	2.11	3.14	4.18		
Dec	1.75	1.34	2.26	1996	11	6.79	1977	.00+	1999	5.3	3.4	1.1	.5	.00	.09	.34	.60	.89	1.23	1.63	2.14	2.86	4.07	5.27		
Ann	13.24	12.88	3.37	Nov 1950	19	10.55	Feb 1998	.00+	Sep 2000	44.5	27.5	9.2	2.7	5.82	7.00	8.65	10.00	11.26	12.52	13.88	15.44	17.41	20.40	23.10		

⁺ 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: 2,703 Feet Lat: 35°47N Lon: 118°26W

										Snov	w (inc	hes)														
						Sn	ow To	tals							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	.3	.0	#	0	6.0	1997	14	6.0	1997	6	1997	14	#	1997	.1	.1	.1	.1	.0	@	@	@	.0			
Feb	.0	.0	0	0	.5	1971	28	.5	1971	0	0	0	0	0	.1	.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	#	1986	23	#	1986	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0			
Ann	.3	.0	N/A	N/A	6.0	Jan 1997	14	6.0	Jan 1997	6	Jan 1997	14	#	Jan 1997	.2	.1	.1	.1	.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: KERN RIVER PH 3, CA

Climate Division: CA 5 NWS Call Sign:

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Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 5/12 5/05 4/30 4/25 4/21 4/17 4/13 4/08 4/01 32 4/07 3/29 4/21 4/13 4/02 3/24 3/19 3/13 3/05 28 4/04 3/23 3/14 3/07 2/28 2/21 2/14 2/05 1/24 2/24 1/23 12/12 24 2/13 2/05 1/29 1/16 1/09 12/30 20 2/09 1/25 1/12 12/30 12/07 0/00 0/00 0/00 0/00 16 1/01 0/00 0/00 0/00 0/00 0/00 0/00 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 36 10/19 10/23 10/26 10/29 10/31 11/03 11/05 11/09 11/13 32 10/28 11/02 11/05 11/08 11/11 11/14 11/17 11/21 11/25 28 11/05 11/11 11/15 11/18 11/21 11/24 11/28 12/01 12/07 24 11/19 11/29 12/06 12/12 12/19 12/25 1/01 1/09 1/26 20 12/10 12/27 1/10 1/27 0/00 0/00 0/00 0/00 0/00 1/05 0/00 0/00 0/00 0/00 16 0/00 0/00 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 .90 218 209 203 197 192 187 182 36 176 167 32 256 246 239 233 227 221 215 208 198 28 305 291 282 273 265 258 249 239 226 24 >365 >365 365 342 329 318 308 297 282 20 >365 >365 >365 >365 >365 >365 >365 >365 340

>365

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

>365

Complete documentation available from:

>365

Elevation: 2,703 Feet

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^{*} 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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				Deg	ree Days to	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	607	465	422	277	120	19	0	0	16	140	425	612	3103
60	452	327	281	173	55	4	0	0	3	64	284	457	2100
57	360	249	207	124	30	1	0	0	1	35	209	370	1586
55	302	199	164	95	20	0	0	0	0	22	164	313	1279
50	168	100	81	41	5	0	0	0	0	5	78	185	663
32	0	0	0	0	0	0	0	0	0	0	0	3	3

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	416	459	605	744	1008	1230	1469	1452	1221	954	566	414	10538
55	6	14	56	149	315	540	756	739	531	263	40	11	3420
57	1	8	37	118	263	481	694	677	472	214	25	6	2996
60	0	2	18	77	195	394	601	584	384	150	10	0	2415
65	0	0	4	31	105	259	446	429	247	71	1	0	1593
70	0	0	0	11	44	148	296	277	135	25	0	0	936

Growing Degree Units (2) Base Growing Degree Units (Monthly) Growing Degree Units (Accumulated Monthly)																									
Base					Growin	g Degree	Units (M	(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	225	288	402	553	814	1044	1269	1251	1037	762	386	228	225	513	915	1468	2282	3326	4595	5846	6883	7645	8031	8259	
45	108	164	258	406	659	894	1114	1096	887	607	244	111	108	272	530	936	1595	2489	3603	4699	5586	6193	6437	6548	
50	40	77	136	272	505	744	959	941	737	454	131	40	40	117	253	525	1030	1774	2733	3674	4411	4865	4996	5036	
55	5	28	57	155	357	594	804	786	587	306	55	3	5	33	90	245	602	1196	2000	2786	3373	3679	3734	3737	
60	0	2	16	73	221	445	649	631	437	183	15	0	0	2	18	91	312	757	1406	2037	2474	2657	2672	2672	
Base		Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)			
50/86	167	201	263	357	515	654	787	772	648	488	269	175	167	368	631	988	1503	2157	2944	3716	4364	4852	5121	5296	

(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/normals/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.

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