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: PARADISE, CA 1971-2000 COOP ID: 046685

Climate Division: CA 2 NWS Call Sign: Elevation: 1,750 Feet Lat: 39°45N Lon: 121°37W

									7	Гетре	eratur	re (°F)									
	Mea	n (1)						Extr	emes					Degree Base To	-		Mean	Numb	er of I	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	53.7	37.7	45.7	79	1962	9	50.5	1986	18	1962	22	41.8	1973	598	0	.0	.0	21.8	.0	5.6	.0
Feb	56.4	40.1	48.3	81	1977	15	55.0	1991	17+	1962	27	43.5	1990	470	0	.0	.0	22.2	.1	2.6	.0
Mar	60.0	42.0	51.0	83	1972	16	56.8	1997	25+	1966	3	44.4	1991	441	6	.0	.0	27.5	.0	1.5	.0
Apr	66.7	45.7	56.2	90	1996	30	63.1	1987	23	1967	30	48.7	1975	289	25	.0	@	28.8	.0	.4	.0
May	75.5	51.4	63.5	101	1984	29	71.5	1992	32+	1964	4	55.0	1977	149	102	@	2.4	30.8	.0	.0	.0
Jun	84.9	58.4	71.7	106+	2000	15	76.8	1985	40	1967	2	65.7	1980	23	223	.9	9.0	30.0	.0	.0	.0
Jul	91.7	63.9	77.8	108+	1972	16	83.3	1996	42	1964	4	72.3	1987	1	398	3.4	19.5	31.0	.0	.0	.0
Aug	90.8	63.0	76.9	113	1998	5	81.8	1996	41	1977	26	69.9	1976	2	370	3.3	17.6	31.0	.0	.0	.0
Sep	85.2	59.4	72.3	108+	1998	3	77.5	1991	38	1971	30	65.0	1986	24	243	.7	9.7	30.0	.0	.0	.0
Oct	74.3	52.3	63.3	100	2001	2	69.4	1991	29	1971	29	56.8	1984	144	91	.0	1.8	30.9	.0	@	.0
Nov	59.9	42.9	51.4	90	1966	1	58.7	1995	26	1977	19	45.3	1994	413	6	.0	.0	26.8	.0	1.1	.0
Dec	53.9	37.9	45.9	79	1967	26	50.4	1976	14+	1972	9	39.1	1972	591	0	.0	.0	22.2	.1	5.8	.0
Ann	71.1	49.6	60.3	113	Aug 1998	5	83.3	Jul 1996	14+	Dec 1972	9	39.1	Dec 1972	3145	1464	8.3	60.0	333.0	.2	17.0	.0

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 164-A

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

⁽¹⁾ From the 1971-2000 Monthly Normals

⁽²⁾ Derived from station's available digital record: 1957-2001

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

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Climate Division: CA 2 NWS Call Sign: Elevation: 1,750 Feet Lat: 39°45N Lon: 121°37W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	on Total						ays (3	5)	Proba	bility th		nonthly/	annual j indic	precipita ated an	nount	ies (1)		less tha	in the
	Medi	ans(1)				Extremes	\$			P	aily Pre	приано	n		Th	ese value	s were det	ermined	from the	incomplet	e gamma	distribut	ion	
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	10.64	10.45	6.49	1966	5	32.29	1995	.50	1984	11.8	9.6	6.1	4.1	1.18	1.98	3.46	4.95	6.54	8.32	10.40	13.00	16.53	22.37	28.06
Feb	9.60	7.64	5.25	1975	13	25.30	1998	.39	1997	11.3	9.2	5.6	3.4	.94	1.64	2.95	4.28	5.73	7.37	9.30	11.71	15.02	20.51	25.88
Mar	9.33	7.18	9.13	1974	30	27.14	1995	.98	1994	12.3	9.5	5.6	3.4	1.25	2.01	3.34	4.64	6.00	7.51	9.25	11.40	14.30	19.05	23.63
Apr	3.85	3.46	3.60	1982	11	11.36	1978	.25	1973	7.8	5.8	2.7	1.0	.55	.87	1.42	1.96	2.52	3.13	3.84	4.70	5.87	7.77	9.61
May	1.94	1.06	2.82	1998	29	8.78	1998	.00+	1982	5.0	3.3	1.2	.6	.00	.01	.13	.32	.60	.97	1.48	2.18	3.24	5.16	7.17
Jun	.71	.39	1.93	1995	16	4.32	1995	.00+	1987	2.5	1.5	.4	.1	.00	.00	.03	.14	.27	.42	.61	.86	1.21	1.80	2.41
Jul	.12	.00	1.50	1974	9	2.50	1974	.00+	2000	.4	.2	.1	.1	.00	.00	.00	.00	.00	.00	.00	.00	.09	.38	.73
Aug	.26	.00	1.40	1965	12	1.55	1976	.00+	2000	1.0	.5	.2	.1	.00	.00	.00	.00	.00	.00	.01	.12	.36	.88	1.46
Sep	1.12	.56	2.28	1989	17	5.47	1986	.00+	1995	2.6	1.7	.8	.3	.00	.00	.00	.04	.19	.42	.74	1.21	1.92	3.22	4.59
Oct	2.91	2.43	7.90	1962	12	7.79	1982	.00+	1995	4.7	3.5	1.8	1.0	.00	.12	.50	.92	1.40	1.97	2.66	3.55	4.80	6.93	9.06
Nov	7.43	5.82	5.00	1981	16	25.21	1973	.04	1995	9.4	7.6	4.7	2.8	.39	.80	1.67	2.67	3.81	5.17	6.82	8.95	11.94	17.06	22.18
Dec	8.29	7.43	7.86	1995	12	23.15	1996	.00	1989	10.2	8.2	4.6	2.8	.72	1.64	3.00	4.21	5.46	6.82	8.36	10.25	12.76	16.85	20.76
Ann	56.20	54.91	9.13	Mar 1974	30	32.29	Jan 1995	.00+	Aug 2000	79.0	60.6	33.8	19.7	26.47	31.36	38.08	43.50	48.52	53.57	58.95	65.09	72.80	84.44	94.91

⁺ 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: 1957-2001

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COOP ID: 046685

Station: PARADISE, CA

Climate Division: CA 2 NWS Call Sign: Elevation: 1,750 Feet Lat: 39°45N Lon: 121°37W

			Snow Depth Median Snow Fall Highest Snow Bepth Median Fall Highest Fall Highest Snow Fall Highest Snow Bepth Highest Snow Depth																				
		Extremes (2) Sansy Sansy															Mea	n Nu	mber	of Day	VS (1)		
	Mean	s/Medi	ans (1)	1					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	1.9	.0	#	0	17.5	1975	29	17.5	1975	18	1975	29	1+	1975	.3	.2	.1	.1	.1	.2	.1	.1	.1
Feb	.8	.0	#	0	6.0	1990	17	14.5	1990	1	1971	28	#	1971	.2	.2	.2	.1	.0	@	.0	.0	.0
Mar	.8	.0	0	0	5.0	1976	3	9.0	1976	0	0	0	0	0	.3	.2	.2	.1	.0	.0	.0	.0	.0
Apr	.1	.0	0	0	1.0	1975	5	1.0	1975	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
May	#	.0	0	0	#	1974	18	#+	1974	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	#	1971	30	#	1971	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	1.2	.0	#	0	8.0	1972	6	18.8	1972	3	1971	12	#	1971	.3	.3	.1	.1	.0	.0	.0	.0	.0
Ann	4.8	.0	N/A	N/A	17.5	Jan 1975	29	18.8	Dec 1972	18	Jan 1975	29	1+	Jan 1975	1.2	1.0	.6	.4	.1	.2	.1	.1	.1

⁺ 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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COOP ID: 046685

Lon: 121°37W

Lat: 39°45N

1-2000

Elevation: 1,750 Feet

Station: PARADISE, CA

Climate Division: CA 2 NWS Call Sign:

				Freez	ze Data									
			Spri	ng Freeze D	ates (Month/	(Day)								
Probability of later date in spring (thru Jul 31) than indicated(*) 10 20 30 40 50 60 70 80 90 36 5/06 4/26 4/19 4/13 4/07 4/02 3/27 3/20 3/10 32 4/14 3/31 3/22 3/14 3/06 2/27 2/19 2/09 1/27 28 2/19 2/06 1/28 1/20 1/12 1/03 12/23 12/02 0/00 24 1/23 1/08 12/19 0/00 0/00 0/00 0/00 0/00 0/00 20 12/28 0/00 0/00 0/00 0/00 0/00 0/00 0/00 0/00 4 1/28 0/00 0/00 0/00 0/00 0/00 0/00 0/00 0/00 5 1/28 1/29 1/28 1/29 1/28 1/29 1/28 Fall Freeze Dates (Month/Day) Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(*) 36 10/29 11/04 11/08 11/12 11/16 11/19 11/23 11/27 12/03 32 11/09 11/18 11/24 11/30 12/05 12/10 12/15 12/21 12/30 28 12/02 12/14 12/23 12/31 1/07 1/16 1/28 0/00 0/00 20 12/25 1/11 2/03 0/00 0/00 0/00 0/00 0/00 0/00 0/00 4 12/25 1/11 2/03 0/00 0/00 0/00 0/00 0/00 0/00 0/00 5 12/10 12/15 12/21 12/30 6 12/25 1/11 2/03 0/00 0/00 0/00 0/00 0/00 0/00 0/00 6 12/25 1/11 2/03 0/00 0/00 0/00 0/00 0/00 0/00 7 12/15 12/21 12/30 7 12/15 12/21														
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	5/06	4/26	4/19	4/13	4/07	4/02	3/27	3/20	3/10					
32	4/14	3/31	3/22	3/14	3/06	2/27	2/19	2/09	1/27					
28	2/19	2/06	1/28	1/20	1/12	1/03	12/23	12/02	0/00					
24	1/23	1/08	12/19	0/00	0/00	0/00	0/00	0/00	0/00					
20	12/28	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					
-			Fa	ll Freeze Da	tes (Month/D	ay)	1	1	•					
To (E)		Pro	bability of e	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	ed(*)						
remb (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	10/29	11/04	11/08	11/12	11/16	11/19	11/23	11/27	12/03					
32	11/09	11/18	11/24	11/30	12/05	12/10	12/15	12/21	12/30					
28	12/02	12/14	12/23	12/31	1/07	1/16	1/28	0/00	0/00					
24	12/25	1/11	2/03	0/00	0/00	0/00	0/00	0/00	0/00					
20	1/01	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 th	an indicated	freeze free p	eriod (Days))						
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	258	246	237	229	222	214	206	197	185					
32	317	302	291	282	273	264	254	243	228					
28	>365	>365	>365	>365	>365	353	335	322	306					
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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				Deg	ree Days t	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	598	470	441	289	149	23	1	2	24	144	413	591	3145
60	443	334	301	180	77	6	0	0	6	71	280	440	2138
57	350	256	226	128	46	2	0	0	2	42	210	353	1615
55	290	208	184	98	31	1	0	0	1	28	169	297	1307
50	154	111	99	41	11	0	0	0	0	8	89	176	689
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	425	454	588	726	976	1189	1420	1392	1210	970	582	435	10367
55	3	18	59	134	294	500	707	679	520	285	62	16	3277
57	0	11	39	104	247	441	645	617	462	237	42	9	2854
60	0	4	21	65	184	355	552	524	376	173	22	3	2279
65	0	0	6	25	102	223	398	370	243	91	6	0	1464
70	0	0	0	8	44	118	253	228	138	38	1	0	828

										Gro	wing]	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (M	(Ionthly)					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	201	262	359	503	742	961	1181	1151	976	726	352	209	201	463	822	1325	2067	3028	4209	5360	6336	7062	7414	7623
45												96	88	227	442	802	1389	2200	3226	4222	5048	5619	5834	5930
50	27 58 113 227 441 661 871 841 676 423 109											32	27	85	198	425	866	1527	2398	3239	3915	4338	4447	4479
55	3	18	45	125	300	515	716	686	528	283	44	2	3	21	66	191	491	1006	1722	2408	2936	3219	3263	3265
60	0	1	8	54	179	371	561	532	381	168	13	0	0	1	9	63	242	613	1174	1706	2087	2255	2268	2268
Base	e Growing Degree Units for Corn (Monthly)													•	Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	60/86 85 113 171 281 455 622 776 749 634 437 167 9											91	85	198	369	650	1105	1727	2503	3252	3886	4323	4490	4581

(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