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: 029645

Lon: 114°08W

Station: YUCCA 1 NNE, AZ

Climate Division: AZ 1 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 61.5 38.2 49.9 82+ 1971 18 55.1 1986 4 1971 43.4 1979 470 0 .0 .0 28.0 .0 6.9 Jan 2 66.3 41.2 53.8 87+ 1986 26 59.1 1991 18 +1989 6 49.9 1975 317 .0 .0 27.3 @ 3.1 0. Feb Mar 71.3 44.4 57.9 93 1997 21 66.2 1972 21 1966 3 50.9 1973 259 37 .0 .2 30.6 .0 1.4 0. 72.8 31 2 1975 .2 Apr 79.9 49.9 64.9 102 1996 26 1989 1975 56.9 117 114 3.8 29.9 .0 .1 .0 May 89.4 59.1 74.3 109 +2001 23 80.9 1984 35 1975 67.7 1977 20 307 1.9 14.1 31.0 .0 .0 .0 1994 80.5 Jun 100.5 68.7 84.6 117 29 89.2 1981 46 1973 20 1998 0 588 13.4 26.5 30.0 .0 .0 .0 Jul 105.0 76.7 90.9 120 28 94.7 48 1974 12 87.0 1987 801 22.4 30.4 31.0 0. .0 1995 1996 0 .0 103.2 75.2 89.2 119 1993 1 92.9 1996 48 1974 21 85.8 1976 0 751 18.6 30.0 31.0 .0 .0 .0 Aug 2 0 Sep 97.1 67.0 82.1 111+1995 85.9 1979 40 1978 18 75.2 1985 512 8.1 23.4 30.0 .0 .0 .0 84.9 77.2 65.1 1984 Oct 55.0 70.0 105 1980 1 1988 28 1971 30 46 200 .8 8.4 31.0 .0 @ .0 70.7 43.8 57.3 89+ 2001 4 63.9 1995 23+ 1979 20 51.0 1994 252 20 .0 .0 29.6 .0 1.8 .0 Nov Dec 61.8 37.9 49.9 81 1958 3 56.5 1980 15 1968 21 44.4 1978 469 0 .0 .0 28.4 @ 7.1 .0 Jul Jul Jan Jan 82.6 54.8 68.7 120 1995 28 94.7 1996 4 1971 43.4 1979 1950 3332 65.4 136.8 357.8 0. 20.4 .0 Ann

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

Issue Date: February 2004 111-A

Elevation: 1,950 Feet Lat: 34°53N

- (2) Derived from station's available digital record: 1950-2001
- (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

⁽¹⁾ From the 1971-2000 Monthly Normals

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: 029645

Station: YUCCA 1 NNE, AZ

Climate Division: AZ 1 NWS Call Sign: Elevation: 1,950 Feet Lat: 34°53N Lon: 114°08W

										Pı	recipi	tation	(incl	nes)										
	Me	Precipitation Totals Means/ Extremes										ays (3	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	ans(1)				Extreme	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	1.12	.75	1.54	1993	8	5.27	1993	.00+	2000	4.0	2.6	.7	.2	.00	.00	.08	.29	.50	.75	1.04	1.40	1.90	2.73	3.58
Feb	1.08	.68	1.55	1993	9	4.57	1998	.00+	1984	3.7	2.4	.7	.2	.00	.00	.18	.35	.54	.75	1.01	1.33	1.78	2.54	3.28
Mar	1.26	.82	1.77	1973	12	5.03	1992	.00+	1997	4.5	3.1	.7	.2	.00	.00	.06	.25	.48	.75	1.09	1.53	2.15	3.21	4.30
Apr	.35	.13	.78	1988	16	1.84	1988	.00+	2000	2.2	1.0	.1	.0	.00	.00	.00	.00	.04	.12	.22	.37	.60	1.01	1.43
May	.20	.11	.83	1981	29	1.02	1990	.00+	2000	1.6	.7	.1	.0	.00	.00	.00	.02	.06	.10	.16	.23	.34	.54	.75
Jun	.08	.00	.66	1954	26	.92	1972	.00+	1999	.6	.2	.0	.0	.00	.00	.00	.00	.00	.00	.00	.02	.10	.26	.46
Jul	.73	.33	2.00	1974	20	4.31	1984	.00+	2000	2.2	1.4	.4	.2	.00	.00	.00	.08	.21	.37	.57	.85	1.26	1.98	2.71
Aug	.94	.59	2.81	1959	18	3.44	1971	.00+	1985	3.3	2.1	.7	.1	.00	.00	.11	.25	.41	.60	.83	1.14	1.56	2.30	3.04
Sep	.73	.31	3.61	1981	6	4.45	1976	.00+	2000	2.4	1.3	.5	.2	.00	.00	.01	.08	.18	.33	.54	.82	1.25	2.02	2.83
Oct	.49	.32	1.95	1978	21	2.57	1978	.00+	1999	2.3	1.2	.3	.1	.00	.00	.02	.08	.17	.27	.41	.59	.84	1.29	1.75
Nov	.51	.46	1.95	1965	23	1.78	1985	.00+	1999	2.0	1.2	.3	@	.00	.00	.00	.14	.25	.37	.50	.66	.88	1.25	1.60
Dec	.64	.33	1.59	1959	25	3.08	1984	.00+	2000	2.7	1.6	.4	@	.00	.00	.02	.08	.18	.31	.48	.72	1.08	1.73	2.41
Ann	8.13	7.78	3.61	Sep 1981	6	5.27	Jan 1993	.00+	Dec 2000	31.5	18.8	4.9	1.2	3.36	4.10	5.15	6.00	6.81	7.62	8.50	9.52	10.80	12.75	14.53

⁺ 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: 1950-2001

⁽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

COOP ID: 029645

Station: YUCCA 1 NNE, AZ

Climate Division: AZ 1 NWS Call Sign: Elevation: 1,950 Feet Lat: 34°53N Lon: 114°08W

										Snov	w (inc	hes)											
						Sn	ow To	tals									Mea	ın Nu	mber	of Da	ys (1)		
	Means/Medians (1)					Extremes (2)												Snow Fall >= Thresholds					n ds
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	2.2	1979	28	2.9	1979	2	1979	28	#	1979	.1	@	.0	.0	.0	@	.0	.0	.0
Feb	.1	.0	0	0	4.0	1985	4	4.0	1985	0	0	0	0	0	@	@	@	.0	.0	.0	.0	.0	.0
Mar	#	.0	0	0	#	1971	1	#	1971	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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.2	.0	N/A	N/A	4.0	Feb 1985	4	4.0	Feb 1985	2	Jan 1979	28	#	Jan 1979	.1	@	@	.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

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: 029645

Lon: 114°08W

Station: YUCCA 1 NNE, AZ

Climate Division: AZ 1 NWS Call Sign:

NWS Call Sign: Elevation: 1,950 Feet Lat: 34°53N

				Freez	ze Data										
			Spri	ng Freeze D	ates (Month/	/Day)									
Temp (F)		P	robability of	later date i	n spring (thr	ru Jul 31) tha	n indicated	(*)							
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	4/28	4/18	4/10	4/04	3/29	3/23	3/17	3/09	2/27						
32	4/05	3/26	3/18	3/12	3/06	3/01	2/22	2/15	2/05						
28	3/06	2/20	2/10	2/02	1/24	1/16	1/06	12/23	0/00						
24	2/05	1/23	1/12	12/30	12/10	0/00	0/00	0/00	0/00						
20	1/17	12/28	0/00	0/00	0/00	0/00	0/00	0/00	0/00						
16	12/30	0/00	0/00	0/00	0/00	0/00	0/00	0/00	0/00						
<u></u>			Fal	l Freeze Da	tes (Month/D	Day)		II.							
To (E)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	10/31	11/05	11/09	11/12	11/15	11/18	11/21	11/25	11/30						
32	11/12	11/17	11/20	11/24	11/26	11/29	12/02	12/06	12/11						
28	11/17	11/27	12/04	12/10	12/16	12/22	12/30	1/11	0/00						
24	12/08	12/24	1/07	1/24	0/00	0/00	0/00	0/00	0/00						
20	12/29	1/28	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						
1		1	1	Freeze F	ree Period	1	1	1	1						
Tomp (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days))							
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	265	253	244	237	230	223	216	207	195						
32	298	286	278	271	264	258	251	242	231						
28	>365	>365	>365	340	320	308	298	287	274						
24	>365	>365	>365	>365	>365	>365	>365	350	326						
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.

Derived from 1971-2000 serially complete daily data

Complete

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: 029645

Station: YUCCA 1 NNE, AZ

Climate Division: AZ 1 NWS Call Sign: Elevation: 1,950 Feet Lat: 34°53N Lon: 114°08W

	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	470	317	259	117	20	0	0	0	0	46	252	469	1950		
60	321	188	157	55	6	0	0	0	0	14	142	323	1206		
57	237	123	108	31	2	0	0	0	0	6	92	241	840		
55	187	88	80	20	1	0	0	0	0	3	66	192	637		
50	92	26	31	6	0	0	0	0	0	0	22	99	276		
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	553	608	801	987	1309	1578	1824	1774	1502	1177	757	554	13424
55	27	52	168	317	597	888	1111	1061	812	467	133	34	5667
57	15	31	134	268	536	828	1049	999	752	408	99	20	5139
60	6	12	90	202	447	738	956	906	662	323	60	9	4411
65	0	2	37	114	307	588	801	751	512	200	20	0	3332
70	0	0	13	52	188	439	646	596	366	105	4	0	2409

										Gro	wing l	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (M	Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec											Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	287	381	532	729	1035	1299	1534	1482	1224	894	488	282	287	668	1200	1929	2964	4263	5797	7279	8503	9397	9885	10167
45	155	242	378	579	880	1149	1379	1327	1074	741	342	153	155	397	775	1354	2234	3383	4762	6089	7163	7904	8246	8399
50	60	124	235	429	725	999	1224	1172	924	586	210	59	60	184	419	848	1573	2572	3796	4968	5892	6478	6688	6747
55	15	48	123	291	570	849	1069	1017	774	433	107	11	15	63	186	477	1047	1896	2965	3982	4756	5189	5296	5307
60	1	9	52	173	420	699	914	862	624	293	38	0	1	10	62	235	655	1354	2268	3130	3754	4047	4085	4085
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	166	230	327	456	664	811	970	947	789	566	300	170	166	396	723	1179	1843	2654	3624	4571	5360	5926	6226	6396

(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