

# Climatography of the United States

No. 20

1971-2000

Station: QUARTZSITE, AZ

COOP ID: 026865

Climate Division: AZ 5

NWS Call Sign:

Elevation: 875 Feet Lat: 33°40N Lon: 114°14W

Temperature (°F)																					
Mean (1)				Extremes										Degree Days (1) Base Temp 65		Mean Number of 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	65.4	40.1	52.8	87	1971	20	57.4	1986	15+	1971	5	48.0	1979	380	0	.0	.0	30.7	.0	6.5	.0
Feb	71.1	45.1	58.1	89+	1996	9	63.0	1996	22+	1965	12	54.5	1998	203	9	.0	.2	27.8	@	1.5	.0
Mar	76.9	50.2	63.6	97+	1997	21	69.1	1972	24	1971	3	57.3	1973	123	78	.0	2.6	31.0	.0	.1	.0
Apr	85.6	56.4	71.0	106	1996	26	78.6	1989	35+	1975	2	63.8	1975	37	216	1.5	11.0	30.0	.0	.0	.0
May	93.9	65.4	79.7	112+	2001	31	87.0	1997	40	1967	1	73.8	1977	4	459	8.0	23.6	31.0	.0	.0	.0
Jun	104.0	74.3	89.2	121+	1994	29	93.8	1994	54+	1971	2	84.8	1998	0	725	21.7	29.0	30.0	.0	.0	.0
Jul	107.7	81.8	94.8	122	1995	28	98.7	1973	66	1970	6	92.1	1993	0	923	29.2	31.0	31.0	.0	.0	.0
Aug	105.8	80.4	93.1	119	1993	1	98.0	1995	53	1970	26	89.7	1979	0	871	28.2	30.9	31.0	.0	.0	.0
Sep	100.0	73.1	86.6	115	1973	7	90.6	1995	47	1971	24	81.3	1986	0	646	18.2	28.2	30.0	.0	.0	.0
Oct	88.2	59.7	74.0	106+	1996	9	80.2	1988	35	1970	28	68.7	1971	17	294	3.7	15.9	31.0	.0	@	.0
Nov	74.1	46.0	60.1	93+	1988	6	67.4	1995	27	1994	20	54.5	2000	188	39	.0	.4	30.0	.0	.9	.0
Dec	64.9	38.7	51.8	83	1995	1	56.6	1980	19	1990	25	47.5	1990	409	1	.0	.0	30.6	.0	5.9	.0
Ann	86.5	59.3	72.9	122	Jul 1995	28	98.7	Jul 1973	15+	Jan 1971	5	47.5	Dec 1990	1361	4261	110.5	172.8	364.1	@	14.9	.0

+ Also occurred on an earlier date(s)

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

Complete documentation available from: [www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1959-2001

(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

**Station: QUARTZSITE, AZ**

**COOP ID: 026865**

**Climate Division: AZ 5**

**NWS Call Sign:**

**Elevation: 875 Feet Lat: 33°40N**

**Lon: 114°14W**

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				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	.52	.33	.90	1995	25	3.05	1993	.00+	2000	2.0	1.0	.2	.0	.00	.00	.00	.07	.16	.27	.42	.62	.90	1.40	1.90
Feb	.51	.42	1.15	1993	8	1.95	1993	.00+	1997	3.2	1.5	.3	@	.00	.00	.03	.12	.21	.33	.46	.64	.88	1.28	1.70
Mar	.33	.22	1.20	1994	7	1.69	1992	.00+	1999	2.6	1.3	.1	@	.00	.00	.01	.05	.11	.18	.27	.40	.57	.88	1.21
Apr	.15	.03	.97	1965	3	1.18	1999	.00+	2000	1.2	.4	.1	.0	.00	.00	.00	.00	.01	.04	.09	.16	.27	.47	.68
May	.05	.00	.41	1994	25	.53	1992	.00+	2000	.6	.3	@	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.35
Jun	.03	.00	.27	1990	9	.27	1990	.00+	1998	.2	.1	.0	.0	**	**	**	**	**	**	**	**	**	**	**
Jul	.21	.09	1.17	1988	31	1.17	1988	.00+	2000	1.5	.8	.4	.1	.00	.00	.00	.01	.05	.10	.16	.24	.36	.57	.78
Aug	.61	.48	1.37	1996	11	3.00	1988	.00	1974	2.4	1.4	.5	.1	.02	.06	.14	.23	.33	.44	.58	.75	.99	1.39	1.79
Sep	.36	.21	1.67	1963	18	1.52	1976	.00+	2000	1.4	1.0	.2	.0	.00	.00	.00	.03	.10	.19	.30	.44	.63	.96	1.29
Oct	.33	.14	1.57	1972	6	2.10	1972	.00+	1999	1.8	.9	.2	.1	.00	.00	.00	.01	.06	.14	.24	.38	.58	.95	1.33
Nov	.14	.06	1.30	1969	10	.84	1998	.00+	2000	1.7	.9	.1	.0	.00	.00	.00	.00	.03	.07	.11	.17	.25	.40	.54
Dec	.27	.06	1.38	1997	22	1.95	1992	.00+	2000	2.5	1.1	.3	@	.00	.00	.00	.01	.04	.09	.16	.27	.45	.78	1.14
Ann	3.51	3.34	1.67	Sep 1963	18	3.05	Jan 1993	.00+	Dec 2000	21.1	10.7	2.4	.3	1.29	1.62	2.09	2.49	2.87	3.26	3.68	4.17	4.80	5.77	6.65

+ Also occurred on an earlier date(s)

# 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: 1959-2001

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

Complete documentation available from:  
[www.ncdc.noaa.gov/oa/climate/normals/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normals/usnormals.html)

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Station: QUARTZSITE, AZ

COOP ID: 026865

Climate Division: AZ 5

NWS Call Sign:

Elevation: 875 Feet

Lat: 33°40N

Lon: 114°14W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (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	0	0	0	0	0	0	.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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	.0	.0	N/A	N/A	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0

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

@ 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

Complete documentation available from:

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## No. 20 1971-2000

**Station: QUARTZSITE, AZ**

**COOP ID: 026865**

**Climate Division: AZ 5**

**NWS Call Sign:**

**Elevation: 875 Feet**

**Lat: 33° 40N**

**Lon: 114° 14W**

Freeze Data									
Spring Freeze Dates (Month/Day)									
Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	3/22	3/13	3/07	3/02	2/25	2/19	2/14	2/08	1/30
32	3/01	2/21	2/15	2/10	2/05	1/31	1/26	1/20	1/11
28	2/17	2/06	1/29	1/22	1/15	1/08	12/30	12/17	0/00
24	1/29	1/12	12/20	0/00	0/00	0/00	0/00	0/00	0/00
20	1/02	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
Fall Freeze Dates (Month/Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	11/11	11/15	11/18	11/21	11/23	11/26	11/29	12/02	12/06
32	11/13	11/20	11/25	11/29	12/03	12/07	12/11	12/16	12/23
28	12/02	12/10	12/15	12/20	12/25	12/31	1/06	1/19	0/00
24	12/17	12/29	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	1/06	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 Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	299	289	282	277	271	266	260	253	243
32	330	320	313	306	301	295	288	281	271
28	>365	>365	>365	>365	353	339	327	315	300
24	>365	>365	>365	>365	>365	>365	>365	>365	343
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 documentation available from:

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**No. 20**  
**1971-2000**

**Station: QUARTZSITE, AZ**

**COOP ID: 026865**

**Climate Division: AZ 5      NWS Call Sign:      Elevation: 875 Feet    Lat: 33° 40N    Lon: 114° 14W**

Degree Days to Selected Base Temperatures (°F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	380	203	123	37	4	0	0	0	0	17	188	409	1361
60	236	97	51	11	0	0	0	0	0	4	95	263	757
57	161	53	25	4	0	0	0	0	0	1	57	183	484
55	119	31	15	2	0	0	0	0	0	0	37	139	343
50	44	6	2	0	0	0	0	0	0	0	10	56	118
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	644	730	978	1169	1478	1715	1946	1894	1636	1300	840	615	14945
55	50	116	280	481	765	1025	1233	1181	946	587	188	40	6892
57	29	82	228	423	703	965	1171	1119	886	526	147	23	6302
60	11	43	161	340	610	875	1078	1026	796	436	95	9	5480
65	0	9	78	216	459	725	923	871	646	294	39	1	4261
70	0	1	28	121	316	575	768	716	496	174	11	0	3206

Growing Degree Units (2)																								
Base	Growing Degree Units (Monthly)												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	375	525	732	926	1234	1484	1710	1649	1400	1063	607	375	375	900	1632	2558	3792	5276	6986	8635	10035	11098	11705	12080
45	228	380	577	776	1079	1334	1555	1494	1250	908	457	232	228	608	1185	1961	3040	4374	5929	7423	8673	9581	10038	10270
50	106	243	422	626	924	1184	1400	1339	1100	753	310	110	106	349	771	1397	2321	3505	4905	6244	7344	8097	8407	8517
55	33	123	272	476	769	1034	1245	1184	950	598	183	32	33	156	428	904	1673	2707	3952	5136	6086	6684	6867	6899
60	3	47	148	333	614	884	1090	1029	800	445	81	0	3	50	198	531	1145	2029	3119	4148	4948	5393	5474	5474
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	255	331	457	589	781	924	1052	1021	882	676	385	249	255	586	1043	1632	2413	3337	4389	5410	6292	6968	7353	7602

(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](http://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.  
Complete documentation for the 1971-2000 Normals is available on the internet from:  
[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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 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.

- |   |   |
|---|---|
| <ol style="list-style-type: none"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)