

Climatography of the United States

No. 20

1971-2000

Station: GREER, AZ

COOP ID: 023683

Climate Division: AZ 2

NWS Call Sign:

Elevation: 8,490 Feet Lat: 34°00N

Lon: 109°28W

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	41.5	15.7	28.6	65	1971	30	34.7	1986	-24	1971	6	23.3	1979	1129	0	.0	.0	5.0	4.3	30.7	1.9
Feb	44.0	17.9	31.0	65	1981	19	36.7	1996	-13+	1985	1	26.8	1979	954	0	.0	.0	6.7	2.7	27.9	.8
Mar	48.6	21.7	35.2	70	1971	26	41.8	1972	-15	1966	3	29.6	1973	925	0	.0	.0	15.1	.9	29.7	.2
Apr	56.4	26.9	41.7	75	2000	27	47.3	1989	-4	1975	2	35.0	1983	701	0	.0	.0	24.1	.2	24.2	@
May	65.0	33.6	49.3	83+	2000	30	55.0	2000	8	1967	1	46.2	1995	487	0	.0	.0	30.3	.0	13.1	.0
Jun	74.7	41.5	58.1	89	1974	20	62.6	1974	24	1967	6	54.9	1983	216	8	.0	.0	30.0	.0	1.9	.0
Jul	75.5	47.5	61.5	90	1971	13	64.0	1971	34	1964	26	58.9	1986	115	7	.0	@	31.0	.0	.0	.0
Aug	72.4	46.6	59.5	87	1997	27	62.4	1995	33	1968	15	57.4	1987	171	1	.0	.0	31.0	.0	.0	.0
Sep	68.2	41.3	54.8	80+	1979	7	59.1	1997	20	1965	29	50.7	1985	309	0	.0	.0	29.9	.0	1.5	.0
Oct	59.5	31.8	45.7	77	1979	6	49.4	1979	8	1972	31	40.0	1984	600	0	.0	.0	27.6	.1	16.0	.0
Nov	49.1	22.6	35.9	74	1980	9	42.2	1999	-12	1976	28	29.5	2000	875	0	.0	.0	14.9	1.5	28.0	.3
Dec	42.7	16.9	29.8	63+	1980	27	36.0	1977	-20	1978	9	24.4	1997	1091	0	.0	.0	7.1	3.9	30.6	1.3
Ann	58.1	30.3	44.3	90	Jul 1971	13	64.0	Jul 1971	-24	Jan 1971	6	23.3	Jan 1979	7573	16	.0	@	252.7	13.6	203.6	4.5

+ 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

Issue Date: February 2004

(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

041-A

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: GREER, AZ

COOP ID: 023683

Climate Division: AZ 2

NWS Call Sign:

Elevation: 8,490 Feet Lat: 34°00N

Lon: 109°28W

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	1.49	1.16	1.47	1963	19	4.84	1974	.07	1972	6.5	3.7	.7	.1	.11	.20	.39	.60	.82	1.09	1.40	1.81	2.36	3.30	4.23
Feb	1.37	1.40	1.56	1958	25	3.87	1980	.07	1984	7.0	4.3	.6	.1	.22	.34	.54	.72	.92	1.13	1.38	1.67	2.07	2.72	3.33
Mar	1.58	1.61	1.58	2000	23	3.64	1981	.00	1972	7.1	4.4	.8	.1	.17	.37	.63	.86	1.09	1.34	1.61	1.95	2.39	3.10	3.78
Apr	.90	.82	.83	1961	8	3.33	1988	.07	1982	5.0	2.9	.3	.0	.08	.14	.26	.39	.52	.68	.86	1.09	1.41	1.94	2.45
May	.91	.72	1.40	1978	6	5.55	1992	.00+	2000	5.1	2.5	.4	@	.00	.00	.06	.19	.35	.54	.78	1.10	1.55	2.32	3.11
Jun	.94	.76	1.31	1986	24	3.68	1972	.00+	1989	4.7	2.6	.6	.1	.00	.00	.07	.21	.37	.57	.82	1.14	1.60	2.38	3.17
Jul	3.77	3.73	2.12	1999	22	7.21	1999	.92	1995	16.3	10.1	1.9	.5	1.34	1.69	2.20	2.64	3.05	3.48	3.94	4.48	5.16	6.23	7.20
Aug	4.46	3.92	2.27	1992	24	10.76	1987	1.30	1997	18.1	11.3	2.5	.6	1.51	1.93	2.55	3.07	3.57	4.09	4.66	5.32	6.16	7.48	8.69
Sep	2.48	1.99	3.38	1994	3	6.26	1983	.00	2000	10.3	5.4	1.4	.4	.30	.60	1.02	1.38	1.73	2.12	2.54	3.06	3.74	4.82	5.85
Oct	2.14	1.72	2.61	1959	30	7.20	1972	.00+	1999	6.5	4.3	1.5	.4	.00	.10	.38	.70	1.05	1.47	1.97	2.61	3.51	5.04	6.57
Nov	1.62	1.29	2.10	1974	2	5.51	1978	.02	1999	5.2	3.5	1.0	.3	.13	.23	.44	.66	.91	1.20	1.54	1.97	2.56	3.57	4.56
Dec	1.53	1.29	2.41	1961	9	5.89	1984	.01	1996	5.7	3.4	.7	.2	.05	.12	.28	.47	.71	1.00	1.35	1.82	2.50	3.67	4.85
Ann	23.19	21.82	3.38	Sep 1994	3	10.76	Aug 1987	.00+	Sep 2000	97.5	58.4	12.4	2.8	14.62	16.20	18.27	19.87	21.31	22.71	24.18	25.82	27.83	30.77	33.36

+ 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: 1948-2001

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

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

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1971-2000

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151 Patton Avenue
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Station: GREER, AZ

COOP ID: 023683

Climate Division: AZ 2

NWS Call Sign:

Elevation: 8,490 Feet

Lat: 34°00N

Lon: 109°28W

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	19.1	15.1	8	10	18.0	1988	18	49.5	1985	38	1979	30	19	1988	5.7	4.9	2.3	1.4	.4	20.4	17.7	16.6	11.7
Feb	14.5	13.2	9	7	29.0	1987	25	40.3	1997	45+	1987	26	27	1983	5.2	4.3	2.1	1.1	.3	18.4	16.3	13.9	6.1
Mar	19.1	15.3	5	4	17.0	2000	23	45.0	1983	40	1987	1	20	1987	4.9	4.5	2.8	1.5	.3	10.4	8.6	6.4	2.6
Apr	7.7	4.0	1	#	16.0	1984	26	31.0	1983	16	1999	2	6	1983	2.3	2.2	1.0	.4	.1	2.6	1.9	1.5	.5
May	.8	.0	#	0	6.0	1990	2	8.7	1990	6	1990	2	#+	1998	.4	.3	.1	@	.0	.1	@	@	.0
Jun	.1	.0	#	0	1.0	1985	4	2.0	1985	1	1985	4	#+	1986	.1	.1	.0	.0	.0	@	.0	.0	.0
Jul	.0	.0	#	0	.0	0	0	.0	0	#	1996	6	#	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Aug	.0	.0	#	0	.0	0	0	.0	0	2	1987	26	#+	1987	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.0	.0	#	0	1.0	1986	24	1.0	1986	#	1987	5	#	1987	@	@	.0	.0	.0	.0	.0	.0	.0
Oct	1.4	.0	#	0	7.0	1986	12	8.0+	1994	16	1996	27	2	1996	.6	.5	.2	.1	.0	.4	.1	@	.0
Nov	11.8	8.2	1	1	16.0	1975	29	30.0	1982	24	1975	29	8	2000	3.2	2.8	1.4	.8	.1	5.3	2.7	1.4	.2
Dec	17.2	13.0	5	3	17.0	1984	13	53.0	1984	30	1987	25	15	1982	4.1	3.7	1.9	1.2	.3	14.7	10.3	7.6	4.7
Ann	91.7	68.8	N/A	N/A	29.0	Feb 1987	25	53.0	Dec 1984	45+	Feb 1987	26	27	Feb 1983	26.5	23.3	11.8	6.5	1.5	72.3	57.6	47.4	25.8

+ 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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Climate Division: AZ 2

NWS Call Sign:

Elevation: 8,490 Feet

Lat: 34° 00N

Lon: 109° 28W

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	6/27	6/23	6/21	6/19	6/17	6/15	6/13	6/10	6/07
32	6/22	6/16	6/12	6/09	6/05	6/02	5/30	5/26	5/20
28	6/13	6/08	6/03	5/31	5/27	5/24	5/20	5/16	5/10
24	5/26	5/20	5/16	5/12	5/09	5/05	5/02	4/27	4/21
20	5/11	5/04	4/30	4/26	4/22	4/18	4/14	4/10	4/03
16	4/30	4/23	4/17	4/12	4/08	4/03	3/30	3/24	3/16
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	9/01	9/06	9/10	9/13	9/17	9/20	9/23	9/27	10/03
32	9/17	9/21	9/24	9/26	9/29	10/01	10/04	10/07	10/11
28	9/28	10/02	10/05	10/08	10/10	10/12	10/15	10/18	10/22
24	10/08	10/12	10/16	10/18	10/21	10/24	10/27	10/30	11/04
20	10/11	10/16	10/20	10/23	10/25	10/28	10/31	11/04	11/09
16	10/19	10/24	10/27	10/30	11/02	11/05	11/08	11/11	11/16
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	109	103	99	95	91	88	84	79	73
32	135	128	123	119	115	110	106	101	94
28	155	148	143	139	135	131	127	122	115
24	185	178	173	169	164	160	156	151	144
20	209	201	195	190	186	181	176	171	163
16	236	226	219	213	207	202	196	189	179

* 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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Station: GREER, AZ

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Climate Division: AZ 2

NWS Call Sign:

Elevation: 8,490 Feet Lat: 34°00N Lon: 109°28W

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	1129	954	925	701	487	216	115	171	309	600	875	1091	7573
60	974	814	770	551	335	102	21	48	168	445	725	936	5889
57	881	730	677	461	249	55	4	13	101	354	635	843	5003
55	819	674	615	404	197	33	1	4	66	295	575	781	4464
50	664	534	462	267	93	6	0	0	15	165	427	626	3259
32	150	99	60	13	0	0	0	0	0	2	51	131	506

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	44	69	157	302	536	782	914	853	681	425	166	63	4992
55	0	0	0	3	20	125	202	143	57	5	0	0	555
57	0	0	0	0	10	87	143	90	32	2	0	0	364
60	0	0	0	0	3	43	68	32	10	0	0	0	156
65	0	0	0	0	0	8	7	1	0	0	0	0	16
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	0	2	27	115	301	549	675	615	454	210	42	0	0	2	29	144	445	994	1669	2284	2738	2948	2990	2990
45	0	0	0	37	162	399	520	460	305	98	7	0	0	0	0	37	199	598	1118	1578	1883	1981	1988	1988
50	0	0	0	5	60	253	365	305	161	26	0	0	0	0	0	5	65	318	683	988	1149	1175	1175	1175
55	0	0	0	0	10	122	210	151	53	1	0	0	0	0	0	0	10	132	342	493	546	547	547	547
60	0	0	0	0	0	40	72	37	3	0	0	0	0	0	0	0	0	40	112	149	152	152	152	152
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	5	18	46	124	241	381	412	359	283	167	58	12	5	23	69	193	434	815	1227	1586	1869	2036	2094	2106

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
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">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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