

Climatography of the United States

No. 20

1971-2000

Station: PRESCOTT, AZ

COOP ID: 026796

Climate Division: AZ 3

NWS Call Sign:

Elevation: 5,205 Feet Lat: 34° 34N

Lon: 112° 26W

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	50.9	23.3	37.1	73+	1971	19	43.1	1986	-21	1937	22	30.7	1979	866	0	.0	.0	18.4	.5	28.4	.2
Feb	54.2	25.6	39.9	77	1986	27	46.1	1995	-12	1899	6	35.3	1985	703	0	.0	.0	19.8	.6	24.1	.1
Mar	57.9	29.7	43.8	81	1934	31	51.2	1972	2	1913	1	36.8	1973	657	0	.0	.0	24.7	.1	19.8	.0
Apr	65.2	35.2	50.2	87+	2000	27	57.6	1989	11+	1924	16	42.8	1975	449	5	.0	.0	27.7	.0	10.1	.0
May	73.8	42.8	58.3	97	1910	29	65.4	1984	5	1899	3	51.5	1980	249	42	.0	.6	30.8	.0	1.8	.0
Jun	84.6	51.2	67.9	103+	1994	30	72.7	1994	25	1899	2	63.0	1982	54	141	.2	8.3	30.0	.0	.0	.0
Jul	88.3	58.5	73.4	105	1925	17	76.3	1996	34	1912	3	70.3	1982	1	260	.3	14.0	31.0	.0	.0	.0
Aug	85.7	57.0	71.4	102	1905	6	75.9	1995	32	1968	23	67.8	1976	8	205	.0	6.7	31.0	.0	.0	.0
Sep	80.8	50.1	65.5	98+	1950	1	69.1	1997	26	1903	16	60.6	1986	65	78	.0	1.8	30.0	.0	.1	.0
Oct	71.4	39.1	55.3	92+	1980	3	61.0	1988	13	1935	31	49.4	1971	313	11	.0	.2	30.4	.0	5.6	.0
Nov	59.6	28.5	44.1	83	1933	16	51.2	1995	-1	1931	24	39.1	2000	629	0	.0	.0	25.0	@	21.5	.0
Dec	51.6	23.3	37.5	78	1926	2	43.6	1980	-9+	1931	13	31.6	1990	855	0	.0	.0	19.4	.7	28.4	.2
Ann	68.7	38.7	53.7	105	Jul 1925	17	76.3	Jul 1996	-21	Jan 1937	22	30.7	Jan 1979	4849	742	.5	31.6	318.2	1.9	139.8	.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: 1898-2001

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

071-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: PRESCOTT, AZ

COOP ID: 026796

Climate Division: AZ 3

NWS Call Sign:

Elevation: 5,205 Feet Lat: 34°34N

Lon: 112°26W

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	1.58	1.19	2.90	1911	10	5.91	1980	.00	1972	6.4	3.8	.8	.3	.02	.10	.27	.49	.74	1.04	1.41	1.90	2.59	3.78	4.99
Feb	1.87	1.41	3.81	1937	7	6.59	1980	.00	1984	6.2	3.6	1.4	.4	.08	.23	.51	.78	1.07	1.41	1.80	2.29	2.97	4.09	5.20
Mar	1.91	1.57	3.21	1938	3	6.35	1991	.00+	1997	7.3	4.3	1.0	.4	.00	.08	.34	.61	.93	1.30	1.75	2.33	3.14	4.52	5.89
Apr	.76	.63	3.40	1917	17	2.85	1988	.00+	1993	3.9	2.1	.4	.1	.00	.00	.14	.27	.40	.55	.72	.95	1.25	1.76	2.25
May	.64	.57	1.30	1922	10	2.35	1992	.00+	2000	3.6	2.0	.3	.0	.00	.00	.00	.17	.31	.45	.62	.83	1.10	1.57	2.01
Jun	.40	.16	1.35	1954	26	2.46	1972	.00+	1998	2.3	1.2	.2	.0	.00	.00	.00	.00	.06	.17	.31	.48	.72	1.13	1.54
Jul	2.87	3.10	2.96	1970	24	5.75	1974	.00	1993	9.3	5.9	1.9	.8	.24	.56	1.03	1.45	1.88	2.35	2.89	3.54	4.42	5.84	7.19
Aug	3.28	2.81	3.15	1960	22	10.51	1971	.30	1996	10.2	6.1	2.3	.8	.55	.83	1.31	1.76	2.22	2.73	3.30	4.00	4.93	6.45	7.89
Sep	2.07	1.88	3.08	1983	24	10.02	1983	.00+	2000	6.0	3.9	1.3	.4	.00	.11	.39	.70	1.05	1.45	1.93	2.53	3.39	4.83	6.26
Oct	1.28	.91	2.40	1916	6	7.82	1972	.00+	1999	4.4	2.7	.9	.3	.00	.00	.19	.39	.61	.87	1.18	1.58	2.13	3.07	4.01
Nov	1.25	.87	4.28	1919	27	5.97	1978	.00+	1999	4.2	2.3	.8	.3	.00	.00	.10	.28	.50	.76	1.09	1.51	2.12	3.14	4.19
Dec	1.28	.75	3.13	1951	30	4.37	1982	.00	1999	5.1	3.0	.8	.2	.01	.06	.20	.36	.56	.81	1.12	1.52	2.11	3.13	4.17
Ann	19.19	19.38	4.28	Nov 1919	27	10.51	Aug 1971	.00+	Sep 2000	68.9	40.9	12.1	4.0	11.93	13.26	15.01	16.36	17.58	18.77	20.01	21.40	23.11	25.62	27.83

+ 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: 1898-2001

(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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151 Patton Avenue
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www.ncdc.noaa.gov

Station: PRESCOTT, AZ

COOP ID: 026796

Climate Division: AZ 3

NWS Call Sign:

Elevation: 5,205 Feet

Lat: 34° 34N

Lon: 112° 26W

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	3.7	1.8	#	#	10.0	1982	22	18.1	1982	10	1982	22	2	1982	1.9	1.1	.4	.2	@	2.7	1.2	.4	@
Feb	5.6	3.0	#	#	15.0	1987	24	32.5	1987	26	1987	25	4	1985	1.9	1.2	.7	.2	.1	1.3	.7	.4	.2
Mar	6.3	4.3	#	#	12.0	1981	6	34.2	1973	12+	1987	1	2	1973	2.4	1.8	.9	.3	@	1.8	.9	.3	.1
Apr	1.8	.3	#	#	8.0	1978	8	9.5	1977	8	1978	8	1	1977	.9	.5	.1	.1	.0	.5	.2	.2	.0
May	.0	.0	#	0	.4	1978	1	.4	1978	#	1978	1	#	1978	.1	.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	.3	.0	#	0	2.5	1974	30	2.5	1974	2	1974	30	#+	1994	.3	.1	.0	.0	.0	.1	.0	.0	.0
Nov	1.4	.0	#	0	8.5	1991	30	8.5+	1991	9	1991	30	1	1985	.7	.4	.2	.1	.0	.3	.2	.1	.0
Dec	2.8	1.0	#	#	7.5	1972	9	12.1	1971	8	1972	9	4	1984	1.6	1.1	.3	.1	.0	2.9	.9	.3	.0
Ann	21.9	10.4	N/A	N/A	15.0	Feb 1987	24	34.2	Mar 1973	26	Feb 1987	25	4+	Feb 1985	9.8	6.2	2.6	1.0	.1	9.6	4.1	1.7	.3

+ 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: PRESCOTT, AZ

COOP ID: 026796

Climate Division: AZ 3

NWS Call Sign:

Elevation: 5,205 Feet

Lat: 34°34N

Lon: 112°26W

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	6/07	6/01	5/27	5/24	5/20	5/17	5/13	5/09	5/03
32	5/23	5/18	5/14	5/10	5/07	5/04	5/01	4/27	4/22
28	5/16	5/08	5/02	4/28	4/23	4/18	4/13	4/08	3/31
24	5/04	4/24	4/16	4/10	4/04	3/29	3/22	3/15	3/04
20	4/07	3/27	3/20	3/13	3/07	3/01	2/23	2/15	2/04
16	3/26	3/13	3/05	2/25	2/18	2/11	2/03	1/25	1/13
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	9/20	9/26	9/29	10/02	10/05	10/08	10/12	10/15	10/20
32	9/30	10/06	10/10	10/14	10/18	10/21	10/25	10/29	11/04
28	10/07	10/14	10/18	10/22	10/26	10/30	11/03	11/08	11/14
24	10/20	10/26	10/30	11/03	11/06	11/09	11/12	11/16	11/22
20	10/31	11/06	11/11	11/14	11/18	11/21	11/25	11/30	12/06
16	11/12	11/20	11/26	12/01	12/06	12/11	12/16	12/22	12/30
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	160	152	147	142	138	133	128	123	115
32	189	180	173	168	162	157	152	145	136
28	219	207	199	192	185	179	172	163	152
24	251	239	230	222	215	208	200	191	179
20	296	282	272	263	255	247	238	228	214
16	333	316	305	296	288	280	271	261	247

* 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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of the United States
No. 20
1971-2000**

Station: PRESCOTT, AZ

COOP ID: 026796

Climate Division: AZ 3 NWS Call Sign: Elevation: 5,205 Feet Lat: 34° 34N Lon: 112° 26W

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	866	703	657	449	249	54	1	8	65	313	629	855	4849
60	711	563	505	314	149	17	0	0	18	189	480	700	3646
57	618	479	417	241	102	8	0	0	6	129	392	607	2999
55	556	423	361	199	76	4	0	0	3	97	336	545	2600
50	401	288	232	112	31	1	0	0	0	40	208	395	1708
32	30	9	11	1	0	0	0	0	0	0	5	34	90

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	187	230	378	547	816	1077	1282	1220	1003	721	366	203	8030
55	0	0	14	55	179	391	569	507	316	104	7	0	2142
57	0	0	8	37	143	335	507	445	259	75	3	0	1812
60	0	0	3	20	97	254	414	352	181	42	1	0	1364
65	0	0	0	5	42	141	260	205	78	11	0	0	742
70	0	0	0	0	14	60	119	88	21	2	0	0	304

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	50	94	181	342	588	854	1048	989	777	488	177	51	50	144	325	667	1255	2109	3157	4146	4923	5411	5588	5639
45	7	33	89	213	438	704	893	834	627	343	89	8	7	40	129	342	780	1484	2377	3211	3838	4181	4270	4278
50	0	3	32	113	291	554	738	679	477	211	25	0	0	3	35	148	439	993	1731	2410	2887	3098	3123	3123
55	0	0	1	42	165	408	583	524	329	105	0	0	0	0	1	43	208	616	1199	1723	2052	2157	2157	2157
60	0	0	0	8	70	265	428	370	187	35	0	0	0	0	0	8	78	343	771	1141	1328	1363	1363	1363
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	74	109	155	254	388	550	681	648	500	342	171	78	74	183	338	592	980	1530	2211	2859	3359	3701	3872	3950

(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