U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: FLORENCE, AZ **COOP ID: 023027**

Climate Division: AZ 6 **NWS Call Sign:** **Elevation: 1,505 Feet** **Lat: 33˚02N** **Lon: 111˚24W**

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	66.3	38.3	52.3	89	1940	30	56.9	1986	11	1913	6	47.3	1979	393	0	.0	.0	30.7	.0	5.5	.0
Feb	70.4	40.8	55.6	92	1963	7	60.8	1991	18	1964	7	51.3	1975	269	6	.0	.1	27.8	@	2.9	.0
Mar	74.5	44.3	59.4	99+	1972	9	66.7	1997	20	1971	2	51.7	1973	223	49	.0	1.6	31.0	.0	.8	.0
Apr	82.6	49.8	66.2	105+	1949	23	74.1	1989	23	1945	4	58.6	1975	100	136	.7	10.1	30.0	.0	@	.0
May	91.2	58.3	74.8	115	1910	31	82.2	1997	32	1967	1	69.8	1971	16	317	6.4	22.6	31.0	.0	.0	.0
Jun	100.8	67.3	84.1	118+	1974	23	89.0	1994	35	1965	1	79.9	1982	0	571	22.5	29.3	30.0	.0	.0	.0
Jul	102.4	75.5	89.0	119+	1985	3	91.8	2000	54+	1926	10	85.3	1984	0	742	26.9	30.9	31.0	.0	.0	.0
Aug	100.8	74.6	87.7	118	1975	4	91.9	1994	50	1910	28	84.0	1979	0	704	24.8	30.6	31.0	.0	.0	.0
Sep	96.8	68.5	82.7	117	1950	1	86.5	2000	41	1968	23	75.3	1985	0	530	14.2	28.1	30.0	.0	.0	.0
Oct	86.9	56.9	71.9	112+	1996	11	76.8	1988	30	1935	31	67.1	1982	30	244	2.7	15.1	31.0	.0	@	.0
Nov	74.3	44.3	59.3	97	1934	6	65.7+	1999	14	1928	30	53.7	2000	207	36	.0	.7	30.0	.0	1.5	.0
Dec	66.1	38.6	52.4	91	1939	7	58.2	1980	16	1970	31	47.1	1974	394	2	.0	.0	30.5	.0	5.6	.0
Ann	84.4	54.8	69.6	119+	Jul 1985	3	91.9	Aug 1994	11	Jan 1913	6	47.1	Dec 1974	1632	3337	98.2	169.1	364.0	@	16.3	.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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1892-2001

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

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Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	1.07	.86	1.67	1993	11	4.39	1993	.00+	1999
Feb	1.06	.88	1.42	1978	14	3.56	1998	.00+	1999
Mar	1.16	1.01	1.56	1954	22	3.48	1992	.00+	1999
Apr	.41	.17	1.60	1926	12	2.72	1988	.00+	1997
May	.26	.07	1.54	1944	10	2.23	1992	.00+	2000
Jun	.17	.00	2.01	1972	22	2.33	1972	.00+	1999
Jul	.93	.58	3.25	1988	29	3.31	1988	.00+	1997
Aug	1.22	1.31	2.83	1964	12	2.95	1990	.00	1994
Sep	.90	.70	2.36	1971	2	4.02	1983	.00+	2000
Oct	.90	.37	2.70	1972	19	5.75	1972	.00+	1999
Nov	.75	.56	2.50	1995	6	3.00	1978	.00+	1999
Dec	1.22	.90	2.53	1978	18	4.96	1984	.00+	2000
Ann	10.05	8.83	3.25	Jul 1988	29	5.75	Oct 1972	.00+	Dec 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	4.7	2.8	.6	.2
Feb	4.5	3.0	.8	.1
Mar	4.2	3.1	.6	.1
Apr	1.9	.9	.2	.1
May	1.5	.8	.1	@
Jun	.7	.4	.1	@
Jul	3.5	1.9	.5	.2
Aug	4.8	2.5	.9	.2
Sep	2.7	1.6	.6	.2
Oct	2.9	1.9	.6	.2
Nov	2.7	1.7	.8	.3
Dec	3.4	2.3	1.0	.3
Ann	37.5	22.9	6.8	1.9

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
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.00	.00	.10	.24	.42	.64	.91	1.28	1.80	2.72	3.65
Feb	.00	.00	.20	.37	.56	.77	1.01	1.32	1.74	2.44	3.14
Mar	.00	.00	.16	.36	.58	.82	1.10	1.46	1.95	2.75	3.56
Apr	.00	.00	.00	.00	.07	.17	.30	.47	.72	1.16	1.60
May	.00	.00	.00	.00	.00	.06	.15	.28	.46	.77	1.10
Jun	.00	.00	.00	.00	.00	.00	.00	.01	.16	.55	1.02
Jul	.00	.00	.15	.29	.45	.64	.87	1.15	1.55	2.22	2.89
Aug	.05	.15	.32	.50	.69	.91	1.17	1.50	1.95	2.70	3.44
Sep	.00	.00	.00	.14	.31	.51	.77	1.09	1.56	2.37	3.17
Oct	.00	.00	.00	.05	.23	.45	.72	1.08	1.59	2.48	3.36
Nov	.00	.00	.06	.17	.30	.46	.66	.91	1.28	1.90	2.53
Dec	.00	.00	.00	.08	.34	.64	1.02	1.49	2.17	3.33	4.48
Ann	4.17	5.08	6.37	7.44	8.43	9.45	10.54	11.79	13.38	15.80	18.01

\+ 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: 1892-2001
(3) Derived from 1971-2000 serially complete daily data

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Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	.0	.0	0	0
Feb	.0	.0	0	0
Mar	#	.0	0	0
Apr	.0	.0	0	0
May	.0	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.0	.0	0	0
Nov	.0	.0	0	0
Dec	#	.0	0	0
Ann	#	.0	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	.0	0	0	.0	0	0	0	0	0	0
Feb	.0	0	0	.0	0	0	0	0	0	0
Mar	#	1976	3	#	1976	0	0	0	0	0
Apr	.0	0	0	.0	0	0	0	0	0	0
May	.0	0	0	.0	0	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	.0	0	0	.0	0	0	0	0	0	0
Nov	.0	0	0	.0	0	0	0	0	0	0
Dec	#	1990	21	#	1990	0	0	0	0	0
Ann	#+	Dec 1990	21	#+	Dec 1990	0	0	0	0	0

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.0	.0	.0	.0	.0
Feb	.0	.0	.0	.0	.0
Mar	.0	.0	.0	.0	.0
Apr	.0	.0	.0	.0	.0
May	.0	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.0	.0	.0	.0	.0
Nov	.0	.0	.0	.0	.0
Dec	.0	.0	.0	.0	.0
Ann	.0	.0	.0	.0	.0

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.0	.0	.0	.0
Feb	.0	.0	.0	.0
Mar	.0	.0	.0	.0
Apr	.0	.0	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	.0	.0	.0	.0
Dec	.0	.0	.0	.0
Ann	.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

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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	4/20	4/08	3/31	3/25	3/18	3/12	3/05	2/25	2/13
32	3/23	3/12	3/03	2/24	2/18	2/11	2/04	1/26	1/15
28	2/24	2/11	2/02	1/25	1/16	1/07	12/26	0/00	0/00
24	2/08	1/21	12/29	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

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	11/01	11/07	11/11	11/14	11/17	11/20	11/23	11/27	12/03
32	11/12	11/19	11/23	11/27	12/01	12/05	12/09	12/13	12/20
28	11/25	12/03	12/09	12/14	12/20	12/26	1/05	0/00	0/00
24	12/26	1/09	0/00	0/00	0/00	0/00	0/00	0/00	0/00
20	0/00	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	281	268	259	251	243	236	228	218	205
32	325	312	302	294	286	278	270	260	246
28	>365	>365	>365	361	338	325	314	302	287
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.

Derived from 1971-2000 serially complete daily data

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Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	393	269	223	100	16	0	0	0	0	30	207	394	1632
60	248	150	130	44	4	0	0	0	0	8	111	251	946
57	171	96	85	24	1	0	0	0	0	3	69	176	625
55	128	68	60	16	0	0	0	0	0	2	47	134	455
50	50	18	22	4	0	0	0	0	0	0	14	56	164
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	630	661	849	1026	1325	1561	1765	1727	1520	1237	819	631	13751
55	45	85	197	352	612	871	1052	1014	830	525	176	52	5811
57	26	58	160	300	551	811	990	952	770	465	138	32	5253
60	10	28	111	230	461	721	897	859	680	377	90	14	4478
65	0	6	49	136	317	571	742	704	530	244	36	2	3337
70	0	0	18	67	195	422	587	549	383	137	10	0	2368

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	409	491	646	830	1121	1370	1561	1521	1318	1014	604	406	409	900	1546	2376	3497	4867	6428	7949	9267	10281	10885	11291
45	262	348	492	680	966	1220	1406	1366	1168	859	456	261	262	610	1102	1782	2748	3968	5374	6740	7908	8767	9223	9484
50	131	213	343	530	811	1070	1251	1211	1018	704	310	137	131	344	687	1217	2028	3098	4349	5560	6578	7282	7592	7729
55	44	103	203	385	656	920	1096	1056	868	551	182	53	44	147	350	735	1391	2311	3407	4463	5331	5882	6064	6117
60	9	37	98	245	501	770	941	901	718	401	91	8	9	46	144	389	890	1660	2601	3502	4220	4621	4712	4720
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	273	324	419	529	686	806	963	946	827	647	397	271	273	597	1016	1545	2231	3037	4000	4946	5773	6420	6817	7088

(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:
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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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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