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: ELOY 4 NE, AZ **COOP ID: 022807**

Climate Division: AZ 6 **NWS Call Sign:** **Elevation: 1,545 Feet** **Lat: 32˚47N** **Lon: 111˚31W**

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	67.9	36.2	52.1	87+	1971	21	57.0	1986	13	1971	4	48.0	1979	401	0	.0	.0	30.8	.0	9.2	.0
Feb	72.4	40.2	56.3	91	1957	14	60.9	1996	19	1955	20	51.8	1998	249	5	.0	.1	27.9	.0	3.2	.0
Mar	77.8	44.6	61.2	98	1988	26	70.1	1972	23+	1991	29	54.4	1973	169	52	.0	1.8	31.0	.0	1.0	.0
Apr	86.8	49.4	68.1	103+	2000	28	75.0	1989	27+	1998	2	61.3	1998	69	162	.8	10.4	30.0	.0	.1	.0
May	95.6	58.7	77.2	114	1951	26	82.5	1984	29	1999	11	72.9	1998	4	381	7.2	23.6	31.0	.0	.1	.0
Jun	104.8	67.1	86.0	119	1990	26	90.9	1974	44	1955	5	81.9	1998	0	628	22.7	29.6	30.0	.0	.0	.0
Jul	105.8	73.9	89.9	117+	2001	2	92.7	1977	60+	1997	1	87.0	1986	0	770	27.9	31.0	31.0	.0	.0	.0
Aug	103.1	73.2	88.2	116	1994	2	91.4	1994	54	1990	15	83.2	1990	0	718	24.2	30.7	31.0	.0	.0	.0
Sep	99.2	66.7	83.0	111+	2000	18	87.7	2000	38+	1989	22	77.9	1996	0	538	14.4	28.6	30.0	.0	.0	.0
Oct	89.4	54.8	72.1	107	1978	1	77.2	1978	30	1991	29	67.2	1971	21	241	3.0	15.2	31.0	.0	.2	.0
Nov	76.6	41.8	59.2	94	2001	3	65.5	1999	22+	2001	28	52.4	2000	202	29	.0	.7	30.0	.0	3.3	.0
Dec	67.9	36.0	52.0	85+	1999	1	59.2	1977	15+	1974	25	46.9	1974	407	2	.0	.0	30.6	.0	9.7	.0
Ann	87.3	53.6	70.4	119	Jun 1990	26	92.7	Jul 1977	13	Jan 1971	4	46.9	Dec 1974	1522	3526	100.2	171.7	364.3	.0	26.8	.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: 1951-2001

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

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: ELOY 4 NE, AZ **COOP ID: 022807**

Climate Division: AZ 6 **NWS Call Sign:** **Elevation: 1,545 Feet** **Lat: 32°47N** **Lon: 111°31W**

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	.95	.53	3.06	1956	29	5.77	1993	.00+	1999
Feb	1.05	.53	1.61	1986	1	5.76	1998	.00+	1990
Mar	1.10	.97	1.58	1954	22	3.36	1983	.00+	1997
Apr	.27	.16	1.51	1988	16	2.26	1988	.00+	2000
May	.26	.03	1.28	1982	4	1.61	1982	.00+	2000
Jun	.16	.00	.71	2000	18	1.48	1972	.00+	1999
Jul	1.09	.93	1.90	1990	15	4.03	1984	.00+	2000
Aug	1.66	1.55	3.13	1990	14	5.65	1990	.00	1973
Sep	.94	.68	1.76	1985	18	4.20	1983	.00+	2000
Oct	1.05	.69	2.26	1983	1	4.72	1972	.00+	1999
Nov	.83	.68	1.47	1993	15	3.17	1993	.00+	1999
Dec	1.24	.64	1.62	1982	10	4.47	1984	.00+	2000
Ann	10.60	9.74	3.13	Aug 1990	14	5.77	Jan 1993	.00+	Dec 2000

Mean Number of Days (3)

Month	Daily Precipitation >= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	3.6	2.1	.6	.2
Feb	3.3	2.2	.7	.2
Mar	3.4	2.6	.8	.1
Apr	1.4	.8	.1	@
May	1.1	.7	.2	@
Jun	.7	.5	.1	.0
Jul	3.5	2.3	.6	.3
Aug	4.9	3.3	1.1	.3
Sep	2.8	2.1	.8	.3
Oct	2.7	2.1	.6	.2
Nov	2.3	1.8	.6	.2
Dec	3.1	2.2	1.1	.3
Ann	32.8	22.7	7.3	2.1

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	.00	.10	.25	.46	.73	1.10	1.63	2.59	3.56
Feb	.00	.00	.02	.14	.32	.54	.83	1.22	1.80	2.81	3.87
Mar	.00	.00	.16	.35	.55	.78	1.05	1.38	1.84	2.58	3.33
Apr	.00	.00	.00	.00	.04	.13	.22	.34	.50	.77	1.03
May	.00	.00	.00	.00	.00	.04	.12	.25	.45	.80	1.16
Jun	.00	.00	.00	.00	.00	.00	.00	.05	.21	.54	.90
Jul	.00	.00	.31	.50	.69	.89	1.11	1.39	1.74	2.32	2.88
Aug	.20	.40	.68	.92	1.16	1.41	1.70	2.04	2.50	3.22	3.91
Sep	.00	.00	.00	.21	.44	.66	.92	1.23	1.64	2.33	2.98
Oct	.00	.00	.04	.19	.38	.61	.89	1.26	1.79	2.70	3.65
Nov	.00	.00	.06	.21	.37	.56	.77	1.04	1.42	2.04	2.68
Dec	.00	.00	.03	.19	.40	.67	1.01	1.47	2.13	3.29	4.50
Ann	4.54	5.50	6.83	7.93	8.95	9.99	11.10	12.38	13.99	16.45	18.67

\+ 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: 1951-2001
(3) Derived from 1971-2000 serially complete daily data

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

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

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: ELOY 4 NE, AZ **COOP ID: 022807**

Climate Division: AZ 6 **NWS Call Sign:** **Elevation: 1,545 Feet** **Lat: 32°47N** **Lon: 111°31W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	#	.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
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	#	1987	17	#	1987	0	0	0	0	0
Feb	.0	0	0	.0	0	0	0	0	0	0
Mar	.0	0	0	.0	0	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	#	1974	25	#	1974	#	1974	25	#	1974
Ann	#+	Jan 1987	17	#+	Jan 1987	#	Dec 1974	25	#	Dec 1974

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

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

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: ELOY 4 NE, AZ **COOP ID: 022807**

Climate Division: AZ 6 **NWS Call Sign:** **Elevation: 1,545 Feet** **Lat: 32˚47N** **Lon: 111˚31W**

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	4/19	4/10	4/03	3/28	3/23	3/17	3/11	3/05	2/23
32	4/05	3/23	3/14	3/06	2/27	2/19	2/12	2/02	1/21
28	3/08	2/25	2/16	2/08	2/01	1/25	1/16	1/04	0/00
24	2/25	2/09	1/29	1/18	1/07	12/26	12/08	0/00	0/00
20	1/14	12/28	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

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	10/21	10/28	11/03	11/08	11/12	11/17	11/22	11/27	12/05
32	10/31	11/08	11/15	11/20	11/25	11/30	12/05	12/12	12/20
28	11/15	11/22	11/28	12/03	12/08	12/12	12/18	12/26	0/00
24	11/25	12/09	12/19	12/29	1/08	1/20	2/11	0/00	0/00
20	12/27	1/19	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	276	261	251	242	234	226	217	207	193
32	315	297	286	277	268	260	251	241	226
28	>365	>365	331	316	306	297	289	279	267
24	>365	>365	>365	>365	>365	>365	333	320	308
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:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

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: ELOY 4 NE, AZ **COOP ID: 022807**

Climate Division: AZ 6 **NWS Call Sign:** **Elevation: 1,545 Feet** **Lat: 32˚47N** **Lon: 111˚31W**

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	401	249	169	69	4	0	0	0	0	21	202	407	1522
60	250	131	83	26	0	0	0	0	0	5	103	263	861
57	167	79	45	13	0	0	0	0	0	1	62	186	553
55	120	51	28	8	0	0	0	0	0	0	42	143	392
50	39	11	8	1	0	0	0	0	0	0	11	62	132
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	622	681	906	1083	1400	1618	1793	1741	1528	1243	817	618	14050
55	29	88	221	400	687	928	1080	1028	838	531	169	48	6047
57	14	59	176	346	625	868	1018	966	778	469	129	29	5477
60	4	27	121	269	532	778	925	873	688	380	80	13	4690
65	0	5	52	162	381	628	770	718	538	241	29	2	3526
70	0	0	16	83	241	478	615	563	389	130	6	0	2521

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	391	474	650	836	1131	1363	1542	1493	1296	997	590	381	391	865	1515	2351	3482	4845	6387	7880	9176	10173	10763	11144
45	242	331	495	686	976	1213	1387	1338	1146	842	440	239	242	573	1068	1754	2730	3943	5330	6668	7814	8656	9096	9335
50	119	194	342	536	821	1063	1232	1183	996	688	297	113	119	313	655	1191	2012	3075	4307	5490	6486	7174	7471	7584
55	36	89	202	388	666	913	1077	1028	846	536	176	37	36	125	327	715	1381	2294	3371	4399	5245	5781	5957	5994
60	1	25	92	255	511	763	922	873	696	387	83	2	1	26	118	373	884	1647	2569	3442	4138	4525	4608	4610
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	285	331	427	540	694	802	935	925	798	632	411	283	285	616	1043	1583	2277	3079	4014	4939	5737	6369	6780	7063

(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.
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