

# Climatography of the United States No. 20

National Climatic Data Center  
Federal Building  
151 Patton Avenue  
Asheville, North Carolina 28801  
www.ncdc.noaa.gov

Station: PLEASANT VALLEY R S, AZ

1971-2000

COOP ID: 026653

Climate Division: AZ 4

NWS Call Sign:

Elevation: 5,050 Feet Lat: 34°06N

Lon: 110°56W

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	54.9	21.4	38.2	78	1976	16	42.3	1986	-21	1979	30	31.2	1979	833	0	.0	.0	22.7	.2	28.1	.4
Feb	58.3	23.8	41.1	84	1979	13	45.2	1996	-8	1985	5	37.4	1975	671	0	.0	.0	23.4	.3	24.7	.2
Mar	62.1	27.2	44.7	84	1994	15	48.6	1972	-10	1966	3	39.9	1977	631	0	.0	.0	28.1	.0	25.7	@
Apr	69.4	30.6	50.0	88+	2000	27	56.2	1989	11	1970	15	44.5	1975	449	0	.0	.0	28.9	.0	19.5	.0
May	77.5	36.9	57.2	98	1984	31	62.3+	2000	17	1975	6	52.7	1980	257	15	.0	.9	31.0	.0	7.7	.0
Jun	87.6	44.5	66.1	103+	1994	29	70.5	1974	25	1980	1	61.9	1998	72	104	.6	12.0	30.0	.0	.7	.0
Jul	90.4	54.5	72.5	105	1995	28	75.5	1981	35	1973	23	70.1	1992	2	233	1.0	18.1	31.0	.0	.0	.0
Aug	87.9	54.8	71.4	100	1994	3	75.3	1981	36+	1980	31	67.5	1979	7	203	@	11.3	31.0	.0	.0	.0
Sep	83.7	47.4	65.6	97	1979	7	69.7	1997	25	1980	22	61.3	1985	58	73	.0	4.1	30.0	.0	.5	.0
Oct	74.5	36.3	55.4	94	1980	2	60.6	1988	10+	1980	31	50.4	1971	305	6	.0	.4	30.8	.0	10.3	.0
Nov	62.9	25.8	44.4	81+	1975	5	50.3	1995	-6	1975	30	38.8	2000	620	0	.0	.0	27.4	.0	25.8	@
Dec	55.6	21.5	38.6	76	1995	3	43.3	1980	-22	1990	23	33.9	1990	820	0	.0	.0	23.5	.3	28.1	.4
Ann	72.1	35.4	53.8	105	Jul 1995	28	75.5	Jul 1981	-22	Dec 1990	23	31.2	Jan 1979	4725	634	1.6	46.8	337.8	.8	171.1	1.0

+ 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: 1964-2001

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

069-A

# Climatology 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: PLEASANT VALLEY R S, AZ**

**COOP ID: 026653**

**Climate Division: AZ 4**

**NWS Call Sign:**

**Elevation: 5,050 Feet Lat: 34°06N**

**Lon: 110°56W**

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	2.32	1.92	2.45	1995	5	9.32	1993	.00	1972	6.2	4.2	1.6	.6	.02	.12	.36	.66	1.02	1.46	2.02	2.76	3.81	5.65	7.51
Feb	2.10	1.75	2.35	1994	8	7.20	1980	.00+	1984	5.9	4.2	1.3	.5	.00	.26	.65	.98	1.32	1.69	2.12	2.62	3.31	4.43	5.50
Mar	2.66	2.32	2.33	2000	8	7.86	1978	.00	1972	7.6	5.7	2.1	.5	.13	.36	.76	1.15	1.57	2.04	2.59	3.28	4.21	5.77	7.29
Apr	.85	.76	1.16	2001	6	2.29	1988	.00+	1993	4.0	2.5	.6	@	.00	.00	.20	.35	.49	.65	.84	1.07	1.37	1.88	2.37
May	.69	.40	1.08	1969	7	3.94	1992	.00+	2000	3.9	2.0	.3	@	.00	.00	.06	.15	.26	.40	.58	.81	1.15	1.75	2.36
Jun	.42	.24	.99	1994	21	2.58	1972	.00+	1998	2.5	1.3	.2	.0	.00	.00	.00	.00	.10	.21	.34	.51	.75	1.16	1.57
Jul	2.54	2.43	1.93	1978	25	6.75	1999	.05	1993	10.8	6.6	1.6	.3	.45	.67	1.05	1.39	1.75	2.13	2.57	3.10	3.81	4.95	6.04
Aug	3.29	2.85	3.06	1992	23	8.42	1988	.48	1973	11.8	7.1	2.0	.7	.98	1.29	1.76	2.16	2.55	2.96	3.41	3.94	4.63	5.70	6.70
Sep	2.02	1.59	2.50	1984	26	4.95	1984	.01	1973	6.5	3.9	1.4	.6	.15	.28	.55	.83	1.13	1.49	1.92	2.46	3.21	4.47	5.71
Oct	2.11	1.61	3.14	1983	1	12.00	1972	.00+	1999	4.6	3.4	1.1	.6	.00	.00	.37	.72	1.08	1.50	2.00	2.63	3.48	4.92	6.34
Nov	1.67	1.43	2.80	1978	11	5.09	1982	.00+	1999	4.3	2.9	1.1	.4	.00	.16	.45	.71	.99	1.29	1.65	2.08	2.67	3.65	4.60
Dec	1.88	1.23	2.35	1992	28	6.38	1992	.00	1999	5.1	3.7	1.3	.5	.02	.10	.29	.53	.83	1.19	1.64	2.23	3.09	4.57	6.08
Ann	22.55	21.33	3.14	Oct 1983	1	12.00	Oct 1972	.00+	May 2000	73.2	47.5	14.6	4.7	14.69	16.16	18.07	19.54	20.85	22.14	23.47	24.96	26.78	29.44	31.76

+ 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: 1964-2001

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

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

# 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](http://www.ncdc.noaa.gov)

**Station: PLEASANT VALLEY R S, AZ**

**COOP ID: 026653**

**Climate Division: AZ 4**

**NWS Call Sign:**

**Elevation: 5,050 Feet**

**Lat: 34°06N**

**Lon: 110°56W**

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	2.4	.0	#	0	8.6	1997	13	15.1	1997	10	1997	15	7	1974	.4	.4	.2	.2	.0	.2	.2	.1	.1
Feb	1.8	.0	#	0	16.0	1986	9	16.0	1986	4	1996	26	#+	1996	.3	.3	.2	.2	.1	.1	.1	.0	.0
Mar	.1	.0	#	0	.5	1996	13	.5	1996	7	1987	8	4	1987	.1	.0	.0	.0	.0	.0	.0	.0	.0
Apr	.6	.0	0	0	6.0	1994	27	9.5	1994	0	0	0	0	0	.1	.1	.1	.1	.0	.0	.0	.0	.0
May	.0	.0	0	0	.4	1995	7	.4	1995	0	0	0	0	0	.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	#	.0	0	0	#	1980	16	#+	1980	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	1.1	.0	#	0	10.0	1975	29	11.5	1975	10	1975	29	#+	1994	.1	.1	.1	.1	.1	@	@	@	@
Dec	.0	.0	#	0	.5	1971	29	.5+	1971	6	1971	14	#	1971	.1	.0	.0	.0	.0	.0	.0	.0	.0
Ann	6.0	.0	N/A	N/A	16.0	Feb 1986	9	16.0	Feb 1986	10+	Jan 1997	15	7	Jan 1974	1.2	.9	.6	.6	.2	.3	.3	.1	.1

+ 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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

**Station: PLEASANT VALLEY R S, AZ**

**COOP ID: 026653**

**Climate Division: AZ 4**

**NWS Call Sign:**

**Elevation: 5,050 Feet**

**Lat: 34° 06N**

**Lon: 110° 56W**

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	6/28	6/22	6/18	6/14	6/11	6/07	6/04	5/31	5/25
32	6/13	6/07	6/03	5/30	5/27	5/23	5/20	5/16	5/10
28	6/03	5/26	5/21	5/17	5/13	5/08	5/04	4/29	4/22
24	5/19	5/11	5/05	4/30	4/25	4/21	4/16	4/10	4/02
20	5/04	4/23	4/14	4/07	4/01	3/25	3/18	3/10	2/26
16	4/05	3/26	3/18	3/12	3/06	2/27	2/21	2/13	2/03
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	9/08	9/14	9/18	9/22	9/26	9/29	10/03	10/07	10/13
32	9/23	9/29	10/04	10/08	10/11	10/15	10/19	10/23	10/30
28	10/04	10/09	10/13	10/17	10/20	10/23	10/26	10/30	11/05
24	10/16	10/22	10/27	10/30	11/03	11/06	11/10	11/14	11/20
20	10/27	11/01	11/04	11/07	11/10	11/13	11/17	11/20	11/25
16	11/06	11/12	11/17	11/20	11/24	11/27	12/01	12/05	12/12
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	130	122	116	111	106	101	96	90	82
32	163	154	147	142	137	132	126	120	111
28	183	175	169	164	159	155	149	144	135
24	222	211	203	197	191	184	178	170	159
20	262	249	239	231	223	215	207	197	184
16	300	287	278	270	263	255	247	238	226

\* 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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

**Station: PLEASANT VALLEY R S, AZ**

**COOP ID: 026653**

**Climate Division: AZ 4      NWS Call Sign:      Elevation: 5,050 Feet    Lat: 34°06N      Lon: 110°56W**

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	833	671	631	449	257	72	2	7	58	305	620	820	4725
60	678	531	476	306	139	24	0	0	13	176	470	665	3478
57	585	447	384	227	87	10	0	0	4	114	381	572	2811
55	523	391	325	180	59	6	0	0	1	82	324	510	2401
50	368	254	189	88	17	0	0	0	0	28	193	356	1493
32	9	2	0	0	0	0	0	0	0	0	2	14	27

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	200	255	392	541	781	1022	1254	1219	1005	724	372	217	7982
55	0	0	4	31	127	338	541	506	317	93	4	0	1961
57	0	0	1	18	93	283	479	444	259	64	2	0	1643
60	0	0	0	7	52	206	386	351	178	32	0	0	1212
65	0	0	0	0	15	104	233	203	73	6	0	0	634
70	0	0	0	0	2	38	97	84	18	0	0	0	239

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	49	93	170	314	538	787	1015	974	767	474	161	50	49	142	312	626	1164	1951	2966	3940	4707	5181	5342	5392
45	5	25	67	176	384	637	860	819	617	327	63	4	5	30	97	273	657	1294	2154	2973	3590	3917	3980	3984
50	0	0	14	78	239	487	705	664	467	193	12	0	0	0	14	92	331	818	1523	2187	2654	2847	2859	2859
55	0	0	0	17	115	339	550	509	317	83	0	0	0	0	0	17	132	471	1021	1530	1847	1930	1930	1930
60	0	0	0	0	35	199	395	354	179	19	0	0	0	0	0	0	35	234	629	983	1162	1181	1181	1181
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	102	141	203	302	428	530	641	632	515	381	204	113	102	243	446	748	1176	1706	2347	2979	3494	3875	4079	4192

(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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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)