

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: MORMON FLAT, AZ

1971-2000

COOP ID: 025700

Climate Division: AZ 6

NWS Call Sign:

Elevation: 1,705 Feet Lat: 33° 33N

Lon: 111° 27W

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	64.7	41.5	53.1	82+	2000	26	59.3	1986	20	1937	22	48.1	1979	371	2	.0	.0	30.3	.0	2.1	.0
Feb	69.2	43.8	56.5	90	1986	27	62.1	1995	22	1933	8	51.5	1990	247	9	.0	@	27.8	.0	.9	.0
Mar	73.8	47.3	60.6	97	1988	26	69.4	1972	20	1971	2	54.3	1973	196	58	.0	1.0	30.9	.0	.2	.0
Apr	82.3	53.1	67.7	103	1943	30	74.7	1989	31	1933	19	61.0	1975	83	164	.5	7.3	30.0	.0	.1	.0
May	91.6	62.0	76.8	114	1934	10	82.8	1997	34	1980	1	67.7	1980	12	377	4.0	20.1	31.0	.0	.0	.0
Jun	102.1	70.9	86.5	120	1970	26	90.3	1994	49	1973	22	82.9	1998	0	644	20.6	29.0	30.0	.0	.0	.0
Jul	104.0	76.6	90.3	118+	1958	13	94.6	1971	55	1985	17	87.3	1992	0	785	26.1	30.9	31.0	.0	.0	.0
Aug	102.2	75.8	89.0	116+	1944	4	93.0	1994	57	1975	20	85.3	1979	0	744	23.6	30.3	31.0	.0	.0	.0
Sep	97.2	70.7	84.0	115+	1950	2	87.6	1997	50+	1979	17	78.7	1985	0	569	11.5	27.3	30.0	.0	.0	.0
Oct	86.5	60.3	73.4	108	1934	6	77.9	1988	36	1971	30	67.7	1984	21	280	1.6	12.2	31.0	.0	.0	.0
Nov	73.0	48.0	60.5	94+	1999	7	67.6	1999	27	1976	28	53.5	1972	186	51	.0	.4	29.8	.0	.2	.0
Dec	64.3	40.9	52.6	83+	1958	4	61.0	1980	20	1978	9	47.7	1971	388	4	.0	.0	30.3	.0	2.0	.0
Ann	84.2	57.6	70.9	120	Jun 1970	26	94.6	Jul 1971	20+	Dec 1978	9	47.7	Dec 1971	1504	3687	87.9	158.5	363.1	.0	5.5	.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

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1923-2001

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

057-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: MORMON FLAT, AZ

COOP ID: 025700

Climate Division: AZ 6

NWS Call Sign:

Elevation: 1,705 Feet Lat: 33°33N

Lon: 111°27W

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	1.66	1.41	2.75	1993	8	8.93	1993	.00+	2000	5.2	3.4	1.2	.2	.00	.05	.23	.46	.73	1.05	1.46	1.99	2.75	4.07	5.40
Feb	1.50	1.44	1.48	1965	7	5.07	1980	.00+	1984	5.0	3.2	1.3	.2	.00	.09	.32	.55	.80	1.08	1.42	1.85	2.44	3.43	4.41
Mar	1.99	1.95	2.09	1926	30	6.47	1991	.00+	1984	5.5	4.0	1.4	.4	.00	.00	.27	.57	.91	1.32	1.81	2.44	3.31	4.82	6.33
Apr	.51	.30	2.15	1941	12	2.92	1988	.00+	2000	2.4	1.3	.4	.1	.00	.00	.00	.02	.11	.23	.39	.59	.89	1.41	1.94
May	.41	.23	1.40	1941	2	2.07	1979	.00+	2000	1.9	1.1	.2	.1	.00	.00	.00	.00	.07	.18	.31	.49	.73	1.15	1.57
Jun	.10	.02	1.99	1949	18	.75	1972	.00+	1995	.8	.3	@	.0	.00	.00	.00	.00	.00	.01	.05	.10	.19	.33	.48
Jul	1.41	1.24	2.45	1992	24	5.01	1984	.00+	1995	4.9	2.7	.9	.2	.00	.07	.27	.48	.71	.99	1.31	1.73	2.31	3.29	4.26
Aug	1.84	1.99	4.49	1930	8	4.41	1983	.22	1994	6.6	3.8	1.0	.3	.23	.37	.63	.89	1.16	1.47	1.82	2.25	2.84	3.82	4.76
Sep	1.14	.86	4.20	1970	6	3.47	1985	.00+	2000	3.7	2.1	.8	.2	.00	.00	.20	.41	.62	.85	1.12	1.45	1.89	2.61	3.31
Oct	1.42	.63	3.68	1959	30	9.40	1972	.00+	1999	3.8	2.6	.8	.4	.00	.00	.00	.18	.43	.75	1.15	1.69	2.46	3.81	5.17
Nov	1.17	.89	2.35	1931	22	3.48	1982	.00+	1999	3.4	2.2	.9	.3	.00	.09	.27	.46	.65	.87	1.13	1.45	1.89	2.63	3.35
Dec	1.42	.83	3.20	1978	18	5.42	1978	.00+	1999	4.4	2.8	1.0	.3	.00	.00	.12	.30	.53	.82	1.19	1.68	2.39	3.65	4.92
Ann	14.57	12.79	4.49	Aug 1930	8	9.40	Oct 1972	.00+	Sep 2000	47.6	29.5	9.9	2.7	6.81	8.08	9.83	11.25	12.56	13.88	15.28	16.89	18.91	21.96	24.70

+ 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: 1923-2001

(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

Station: MORMON FLAT, AZ

COOP ID: 025700

Climate Division: AZ 6

NWS Call Sign:

Elevation: 1,705 Feet

Lat: 33°33N

Lon: 111°27W

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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Apr	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
May	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	#	.0	0	0	#	1974	26	#	1974	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Ann	#	.0	N/A	N/A	#	Dec 1974	26	#	Dec 1974	0	0	0	0	0	.0	.0	.0	.0	.0	.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/normal/usnormals.html

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

Station: MORMON FLAT, AZ

COOP ID: 025700

Climate Division: AZ 6

NWS Call Sign:

Elevation: 1,705 Feet

Lat: 33°33N

Lon: 111°27W

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	4/12	3/30	3/20	3/12	3/04	2/24	2/16	2/06	1/23
32	3/17	2/28	2/16	2/05	1/26	1/15	1/03	12/18	0/00
28	1/30	1/07	12/13	0/00	0/00	0/00	0/00	0/00	0/00
24	12/13	0/00	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
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	11/10	11/18	11/23	11/28	12/02	12/07	12/12	12/17	12/25
32	11/27	12/05	12/11	12/17	12/22	12/27	1/02	1/11	0/00
28	12/15	12/30	1/16	0/00	0/00	0/00	0/00	0/00	0/00
24	0/00	0/00	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	317	302	291	282	273	264	255	244	229
32	>365	>365	>365	348	327	312	299	285	267
28	>365	>365	>365	>365	>365	>365	>365	>365	337
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

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normal/usnormals.html

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

Station: MORMON FLAT, AZ

COOP ID: 025700

Climate Division: AZ 6 NWS Call Sign: Elevation: 1,705 Feet Lat: 33° 33N Lon: 111° 27W

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	371	247	196	83	12	0	0	0	0	21	186	388	1504
60	231	136	108	34	3	0	0	0	0	6	99	248	865
57	159	87	67	19	1	0	0	0	0	2	61	176	572
55	121	59	45	12	0	0	0	0	0	1	42	137	417
50	47	16	15	2	0	0	0	0	0	0	13	60	153
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	654	686	885	1071	1389	1634	1808	1767	1559	1282	854	639	14228
55	61	101	217	393	676	944	1095	1054	869	570	206	63	6249
57	38	73	177	340	614	884	1033	992	809	509	165	40	5674
60	17	37	125	265	524	794	940	899	719	420	113	19	4872
65	2	9	58	164	377	644	785	744	569	280	51	4	3687
70	0	1	21	88	247	494	630	589	419	164	17	0	2670

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	430	492	645	839	1141	1406	1570	1532	1328	1047	634	426	430	922	1567	2406	3547	4953	6523	8055	9383	10430	11064	11490
45	279	350	490	689	986	1256	1415	1377	1178	892	485	276	279	629	1119	1808	2794	4050	5465	6842	8020	8912	9397	9673
50	146	215	340	540	831	1106	1260	1222	1028	738	344	148	146	361	701	1241	2072	3178	4438	5660	6688	7426	7770	7918
55	58	108	204	395	677	956	1105	1067	878	583	213	54	58	166	370	765	1442	2398	3503	4570	5448	6031	6244	6298
60	16	38	102	258	523	806	950	912	728	432	112	12	16	54	156	414	937	1743	2693	3605	4333	4765	4877	4889
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	245	297	398	535	728	861	978	968	857	682	385	243	245	542	940	1475	2203	3064	4042	5010	5867	6549	6934	7177

(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