

Climatology of the United States

No. 20

1971-2000

Station: ALBUQUERQUE INTL AP, NM

COOP ID: 290234

Climate Division: NM 5

NWS Call Sign: ABQ

Elevation: 5,310 Feet Lat: 35° 03N

Lon: 106° 36W

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	47.6	23.8	35.7	69+	1971	31	41.3	1986	-17	1971	7	29.8	1977	914	0	.0	.0	13.8	1.9	27.9	.2
Feb	54.6	28.2	41.4	76	1986	25	49.3	1995	-6	1939	3	35.9	1973	670	0	.0	.0	20.5	.7	20.9	.0
Mar	62.4	33.7	48.1	85	1971	26	53.6	1972	8	1948	11	43.2	1977	525	0	.0	.0	28.4	.0	12.8	.0
Apr	70.6	40.5	55.6	89+	1965	22	61.4	1989	18	1936	2	49.9	1975	294	6	.0	.0	29.2	.0	4.0	.0
May	79.7	49.7	64.7	98	1951	27	71.5	1996	28+	1967	1	60.5	1978	85	70	.0	2.4	30.9	.0	.2	.0
Jun	90.2	59.4	74.8	107	1994	26	80.4	1994	40	1980	2	72.4	1992	4	297	2.4	17.3	30.0	.0	.0	.0
Jul	92.3	64.7	78.5	105+	1979	14	82.7	1980	52	1985	3	74.7	1986	0	417	2.5	22.3	31.0	.0	.0	.0
Aug	89.0	63.2	76.1	101+	1934	1	79.8	1995	50	1992	28	72.7	1974	0	343	.2	15.9	31.0	.0	.0	.0
Sep	82.2	56.0	69.1	100	1979	5	74.4	1998	35+	1936	27	65.9	1985	29	148	@	4.1	30.0	.0	.0	.0
Oct	70.7	43.8	57.3	91	1979	5	61.5	1979	21	1991	31	51.6	1984	248	9	.0	.1	30.1	.0	2.2	.0
Nov	57.1	31.6	44.4	77	1975	6	50.8	1995	-7	1976	29	39.4	2000	614	0	.0	.0	23.1	.2	15.7	.1
Dec	47.9	24.2	36.1	72	1958	4	40.9+	1995	-7	1990	23	31.9	1971	898	0	.0	.0	13.9	1.6	27.7	.1
Ann	70.4	43.2	56.8	107	Jun 1994	26	82.7	Jul 1980	-17	Jan 1971	7	29.8	Jan 1977	4281	1290	5.1	62.1	311.9	4.4	111.4	.4

+ 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: 1931-2001

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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	.49	.41	.87	1962	25	1.32	1978	.00	1976	4.6	1.8	.1	.0	.03	.07	.14	.21	.29	.38	.48	.60	.77	1.05	1.32	
Feb	.44	.34	.80	1993	28	1.82	1993	.00+	1999	4.1	1.7	.1	.0	.00	.04	.12	.19	.26	.34	.44	.55	.70	.95	1.20	
Mar	.61	.60	1.45	1998	15	2.34	1998	.02	1996	5.2	1.6	.2	@	.03	.06	.14	.22	.31	.42	.56	.73	.98	1.40	1.82	
Apr	.50	.31	1.66	1969	11	1.71	1990	.00+	2000	3.2	1.3	.2	@	.00	.00	.00	.08	.17	.28	.43	.61	.87	1.33	1.78	
May	.60	.53	1.02	1932	10	2.48	1979	.00	1998	4.8	2.1	.1	.0	.01	.03	.09	.17	.26	.38	.52	.71	.98	1.45	1.93	
Jun	.65	.51	1.91	1933	17	2.86	1996	.00	1975	4.1	1.6	.4	.1	.01	.03	.09	.17	.28	.40	.56	.77	1.07	1.59	2.13	
Jul	1.27	1.15	1.64	1961	8	2.63	1991	.08	1980	8.4	3.8	.5	.1	.25	.36	.55	.72	.90	1.08	1.29	1.55	1.89	2.43	2.94	
Aug	1.73	1.61	1.75	1980	14	3.29	1988	.27	1983	9.6	4.3	.9	.2	.42	.58	.83	1.05	1.28	1.51	1.78	2.09	2.50	3.15	3.76	
Sep	1.07	.98	1.92	1955	24	2.63	1988	.15	1998	6.1	2.9	.6	@	.21	.30	.46	.60	.75	.91	1.08	1.30	1.58	2.04	2.47	
Oct	1.00	.73	1.74	1969	22	3.08	1972	.00+	1995	5.2	2.8	.5	.1	.00	.05	.19	.34	.51	.70	.94	1.23	1.64	2.34	3.04	
Nov	.62	.53	1.41	1991	15	1.93	1991	.00+	1999	4.4	1.8	.2	@	.00	.08	.19	.29	.39	.50	.62	.77	.97	1.29	1.60	
Dec	.49	.35	.81	1958	29	1.49	1991	.00+	1996	4.2	1.6	.1	.0	.00	.02	.09	.16	.24	.33	.45	.60	.80	1.15	1.51	
Ann	9.47	9.79	1.92	Sep 1955	24	3.29	Aug 1988	.00+	Apr 2000	63.9	27.3	3.9	.5	5.93	6.58	7.43	8.08	8.68	9.25	9.86	10.53	11.36	12.57	13.64	

+ 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

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Lon: 106°36W

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	3.1	2.3	#	0	5.1	1973	31	9.5	1973	5+	1977	11	2	1977	2.5	1.0	.3	@	.0	2.4	.6	.1	.0
Feb	2.2	1.3	#	0	4.8	1986	7	10.3	1986	4+	1986	10	1	1986	2.1	.9	.1	.0	.0	1.3	.2	.0	.0
Mar	1.8	.9	#	0	8.5	1973	29	13.9	1973	8	1973	30	#	1999	1.8	.6	.1	.1	.0	.1	@	@	.0
Apr	.9	.0	#	0	6.6	1973	2	8.1	1973	9	1988	1	#	1997	.5	.3	.1	@	.0	.2	.1	@	.0
May	.0	.0	#	0	1.0	1979	3	1.0	1979	#+	1986	17	#	2000	.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	#	1971	18	#	1971	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.3	.0	#	0	3.2	1986	12	3.2	1986	3	1986	12	#	1996	.2	.1	@	.0	.0	.1	@	.0	.0
Nov	1.1	.8	#	0	4.3	1992	21	5.9	1992	5	1992	21	#	1997	1.1	.4	@	.0	.0	.5	.1	@	.0
Dec	2.6	1.5	#	0	7.4	1980	8	8.8	1997	5	1971	15	1	1971	2.4	.8	.2	.1	.0	2.0	.3	@	.0
Ann	12.0	6.8	N/A	N/A	8.5	Mar 1973	29	13.9	Mar 1973	9	Apr 1988	1	2	Jan 1977	10.7	4.1	.8	.2	.0	6.6	1.3	.1	.0

+ Also occurred on an earlier date(s) #Denotes trace amounts

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-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	5/16	5/10	5/06	5/02	4/28	4/25	4/21	4/17	4/11
32	5/03	4/27	4/23	4/19	4/16	4/13	4/09	4/05	3/30
28	4/23	4/17	4/12	4/08	4/05	4/01	3/29	3/24	3/18
24	4/09	3/31	3/25	3/20	3/15	3/10	3/05	2/26	2/18
20	3/30	3/18	3/10	3/02	2/24	2/17	2/10	2/01	1/21
16	3/08	2/25	2/18	2/11	2/05	1/30	1/24	1/15	1/03
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	10/08	10/12	10/16	10/18	10/21	10/23	10/26	10/29	11/02
32	10/13	10/18	10/22	10/25	10/28	10/31	11/03	11/06	11/11
28	10/22	10/27	10/31	11/03	11/06	11/09	11/12	11/16	11/21
24	11/07	11/11	11/14	11/16	11/18	11/20	11/23	11/26	11/30
20	11/14	11/19	11/22	11/25	11/28	12/01	12/04	12/07	12/12
16	11/25	12/01	12/05	12/09	12/12	12/16	12/20	12/25	1/03
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	198	190	184	179	174	170	165	159	151
32	220	211	205	199	194	189	183	177	168
28	242	233	226	220	215	209	203	196	187
24	277	267	260	253	248	242	235	228	218
20	307	295	287	280	274	268	261	254	243
16	>365	335	322	314	307	300	293	285	275

* 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)

Base	Heating Degree Days (1)												
	Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
65	914	670	525	294	85	4	0	0	29	248	614	898	4281
60	754	521	374	176	42	0	0	0	6	142	470	741	3226
57	661	437	288	119	20	0	0	0	2	89	382	648	2646
55	599	382	235	88	12	0	0	0	1	63	326	586	2292
50	446	252	125	32	2	0	0	0	0	21	199	432	1509
32	55	9	0	0	0	0	0	0	0	0	4	41	109

Cooling Degree Days (1)

Base	Cooling Degree Days (1)												
	Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
32	164	277	499	706	1014	1285	1441	1367	1112	783	377	164	9189
55	0	1	15	99	310	595	728	654	424	134	2	0	2962
57	0	0	7	68	254	535	666	592	366	95	1	0	2584
60	0	0	2	34	176	445	573	499	281	50	0	0	2060
65	0	0	0	6	70	297	417	343	148	9	0	0	1290
70	0	0	0	1	19	165	264	193	55	1	0	0	698

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	37	111	270	477	777	1053	1202	1129	880	546	181	37	37	148	418	895	1672	2725	3927	5056	5936	6482	6663	6700
45	3	38	150	337	622	903	1047	974	730	398	85	6	3	41	191	528	1150	2053	3100	4074	4804	5202	5287	5293
50	0	9	60	211	467	753	892	819	580	257	24	0	0	9	69	280	747	1500	2392	3211	3791	4048	4072	4072
55	0	0	17	105	319	603	737	664	432	140	0	0	0	0	17	122	441	1044	1781	2445	2877	3017	3017	3017
60	0	0	1	39	182	453	582	509	288	51	0	0	0	0	1	40	222	675	1257	1766	2054	2105	2105	2105
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	44	104	207	324	499	677	786	755	573	338	133	43	44	148	355	679	1178	1855	2641	3396	3969	4307	4440	4483

(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

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 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/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