

# Climatology of the United States

## No. 20

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

**Station: SNAKE CREEK POWERHOUSE, UT**

**1971-2000**

**COOP ID: 427909**

**Climate Division: UT 5**

**NWS Call Sign:**

**Elevation: 6,010 Feet Lat: 40°33N**

**Lon: 111°30W**

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	34.5	9.9	22.2	60	1967	27	29.0	1998	-28+	1930	22	13.3	1979	1327	0	.0	.0	1.1	12.2	30.7	6.5
Feb	39.4	12.4	25.9	63	1963	5	34.5	1995	-34	1982	5	18.3	1985	1094	0	.0	.0	2.6	5.9	27.8	4.5
Mar	48.0	21.4	34.7	72	1986	28	41.4	1986	-15	1948	11	28.0	1976	940	0	.0	.0	11.7	.7	29.0	.5
Apr	57.6	27.5	42.6	81	1992	30	48.3	1992	-4	1975	1	34.7	1975	674	0	.0	.0	22.5	@	23.5	@
May	67.4	34.4	50.9	89	1940	31	55.2	1992	14	1972	1	46.8	1982	438	0	.0	.0	29.4	.0	11.7	.0
Jun	77.5	40.1	58.8	96+	1954	23	64.2	1988	23	1941	9	53.5	1998	204	19	.0	1.3	30.0	.0	3.0	.0
Jul	84.9	45.9	65.4	102	2001	3	69.1	1989	30	1968	1	61.4	1993	61	72	@	5.5	31.0	.0	@	.0
Aug	83.6	45.2	64.4	98+	1966	17	69.2	2000	26	1964	30	60.5	1975	81	63	.0	4.1	31.0	.0	.5	.0
Sep	74.6	37.8	56.2	94	1990	13	61.8	1990	14	1958	24	52.0	1986	271	7	.0	.6	29.6	.0	6.5	.0
Oct	62.7	29.0	45.9	85+	1992	1	51.6	1988	5	1991	31	39.9	1984	594	0	.0	.0	26.6	.2	21.7	.0
Nov	46.1	20.1	33.1	71	1999	6	40.0	1995	-14	1955	16	25.4	2000	957	0	.0	.0	11.3	3.6	27.9	.7
Dec	35.9	11.5	23.7	65	1995	1	30.6	1995	-29+	1932	12	17.3	1978	1281	0	.0	.0	1.8	10.6	30.7	4.7
Ann	59.4	27.9	43.7	102	Jul 2001	3	69.2	Aug 2000	-34	Feb 1982	5	13.3	Jan 1979	7922	161	@	11.5	228.6	33.2	213.0	16.9

+ 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: 1928-2001

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

095-A

**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: SNAKE CREEK POWERHOUSE, UT**

**COOP ID: 427909**

**Climate Division: UT 5**

**NWS Call Sign:**

**Elevation: 6,010 Feet Lat: 40°33N**

**Lon: 111°30W**

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	2.88	2.53	2.53	1963	31	10.00	1980	.28	1992	10.6	7.2	1.7	.4	.55	.81	1.23	1.62	2.02	2.44	2.93	3.51	4.29	5.53	6.72
Feb	2.67	2.30	1.97	1963	1	9.85	1986	.62	1981	8.9	6.0	1.9	.5	.57	.81	1.21	1.56	1.92	2.30	2.73	3.25	3.93	5.02	6.04
Mar	1.90	1.72	1.59	1928	25	4.65	1978	.47	1999	9.3	5.4	.9	.3	.54	.72	1.00	1.23	1.46	1.71	1.97	2.29	2.70	3.34	3.93
Apr	1.61	1.63	1.23	1986	2	3.50	1978	.17	1981	9.0	5.1	.7	.1	.27	.41	.64	.86	1.09	1.34	1.62	1.96	2.41	3.15	3.86
May	1.89	1.68	1.46	1937	30	4.94	1995	.23	1972	9.1	5.5	1.1	.1	.33	.49	.77	1.02	1.29	1.58	1.90	2.30	2.83	3.69	4.51
Jun	.91	.62	1.39	1944	2	4.16	1998	.00+	1980	5.4	2.8	.3	.0	.00	.06	.20	.34	.49	.66	.86	1.12	1.47	2.07	2.65
Jul	1.08	.77	1.60	1982	28	3.28	1986	.00	1978	5.4	2.9	.4	.2	.01	.06	.18	.33	.50	.70	.96	1.30	1.77	2.60	3.44
Aug	1.20	1.07	1.06+	1959	19	2.46	1983	.06	1985	6.9	3.5	.5	.0	.21	.31	.49	.65	.82	1.00	1.21	1.47	1.81	2.36	2.89
Sep	1.52	1.29	1.42	1982	26	8.48	1982	.00	1974	7.1	4.0	.7	.2	.03	.13	.32	.53	.78	1.06	1.41	1.85	2.47	3.52	4.57
Oct	1.92	1.80	3.01	1969	18	4.66	1972	.00	1978	7.4	4.7	1.3	.2	.22	.46	.79	1.06	1.34	1.64	1.97	2.37	2.90	3.75	4.56
Nov	2.23	2.04	1.80	1955	14	5.12	1985	.08	1976	9.0	5.6	1.4	.4	.40	.60	.92	1.23	1.54	1.87	2.25	2.72	3.33	4.32	5.27
Dec	2.32	2.02	2.00	1955	23	8.25	1983	.09	1986	9.0	6.2	1.8	.1	.18	.33	.63	.95	1.30	1.71	2.20	2.82	3.68	5.12	6.55
Ann	22.13	21.81	3.01	Oct 1969	18	10.00	Jan 1980	.00+	Jun 1980	97.1	58.9	12.7	2.5	14.31	15.77	17.67	19.13	20.45	21.73	23.06	24.55	26.37	29.03	31.36

+ 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: 1928-2001

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

Complete documentation available from:  
[www.ncdc.noaa.gov/oa/climate/normals/usnormals.html](http://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: SNAKE CREEK POWERHOUSE, UT**

**COOP ID: 427909**

**Climate Division: UT 5**

**NWS Call Sign:**

**Elevation: 6,010 Feet**

**Lat: 40°33N**

**Lon: 111°30W**

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	28.3	24.0	23	22	23.0	1980	29	82.0	1980	65	1993	11	52	1984	7.9	7.3	4.4	2.6	.7	-9.9	-9.9	-9.9	-9.9
Feb	27.6	26.3	28	29	20.0	1979	21	65.0	1983	67	1993	24	53	1993	6.7	6.2	3.5	1.7	.7	-9.9	-9.9	-9.9	-9.9
Mar	16.3	12.5	20	20	11.0	1991	2	50.0	1975	60	1983	4	41	1983	4.4	4.1	1.8	.8	.1	-9.9	-9.9	-9.9	-9.9
Apr	3.0	1.5	2	#	6.0	1979	12	13.0	1975	35	1975	1	16	1975	1.2	1.1	.4	.2	.0	.8	.4	.3	.2
May	.7	.0	#	0	9.0	1975	20	9.0	1975	5+	1999	5	#+	1999	.2	.2	.2	.1	.0	.1	.1	.1	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	#	1995	8	#	1995	.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	#	1989	9	#	1989	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.2	.0	#	0	4.3	2000	23	4.3	2000	3	2000	23	#	2000	@	@	@	.0	.0	@	@	.0	.0
Oct	1.3	.0	#	0	17.0	1984	18	17.0	1984	26	1984	18	4	1984	.7	.6	.3	.1	@	.6	.4	.1	.0
Nov	15.1	14.0	3	2	15.0	1983	25	35.0	1988	26	1975	29	10	1994	3.9	3.6	2.0	1.3	.3	7.8	6.0	4.8	1.9
Dec	22.7	12.5	12	7	19.0	1981	29	100.0	1983	67	1983	26	48	1983	5.9	5.6	3.3	2.0	.3	23.5	21.5	17.8	13.0
Ann	115.2	90.8	N/A	N/A	23.0	Jan 1980	29	100.0	Dec 1983	67+	Feb 1993	24	53	Feb 1993	30.9	28.7	15.9	8.8	2.1	-9.9	-9.9	-9.9	-9.9

+ 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: SNAKE CREEK POWERHOUSE, UT**

**COOP ID: 427909**

**Climate Division: UT 5**

**NWS Call Sign:**

**Elevation: 6,010 Feet**

**Lat: 40°33N**

**Lon: 111°30W**

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	7/12	7/07	7/03	6/29	6/26	6/23	6/20	6/16	6/10
32	6/28	6/23	6/19	6/16	6/13	6/10	6/07	6/03	5/29
28	6/08	6/02	5/28	5/24	5/21	5/17	5/13	5/09	5/02
24	5/26	5/20	5/15	5/11	5/07	5/04	4/30	4/25	4/18
20	5/12	5/04	4/29	4/24	4/20	4/15	4/11	4/05	3/29
16	4/26	4/18	4/13	4/09	4/05	3/31	3/27	3/22	3/15
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	8/08	8/15	8/20	8/24	8/28	9/01	9/05	9/10	9/17
32	8/22	8/29	9/03	9/07	9/11	9/15	9/19	9/24	10/01
28	9/10	9/15	9/19	9/22	9/24	9/27	9/30	10/04	10/09
24	9/18	9/23	9/27	9/30	10/03	10/06	10/09	10/12	10/18
20	9/30	10/06	10/10	10/14	10/18	10/21	10/25	10/29	11/05
16	10/14	10/20	10/24	10/27	10/30	11/02	11/06	11/10	11/15
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	89	80	73	67	62	57	51	45	36
32	118	108	101	95	89	83	77	70	60
28	149	141	135	131	126	122	117	111	104
24	172	164	158	153	148	143	138	132	123
20	208	199	192	186	180	175	169	162	152
16	236	226	219	213	208	202	196	190	180

\* 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: SNAKE CREEK POWERHOUSE, UT**

**COOP ID: 427909**

**Climate Division: UT 5      NWS Call Sign:      Elevation: 6,010 Feet    Lat: 40° 33N      Lon: 111° 30W**

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	1327	1094	940	674	438	204	61	81	271	594	957	1281	7922
60	1172	954	785	524	289	101	13	22	149	440	807	1126	6382
57	1079	870	692	437	208	58	3	7	92	350	717	1033	5546
55	1017	814	630	381	161	37	1	3	63	292	657	971	5027
50	862	674	479	249	71	8	0	0	18	168	509	816	3854
32	335	223	81	13	0	0	0	0	0	3	99	284	1038

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	31	53	164	329	586	805	1034	1005	726	432	132	26	5323
55	0	0	0	7	34	152	322	295	99	8	0	0	917
57	0	0	0	3	19	113	262	237	68	4	0	0	706
60	0	0	0	0	6	67	179	159	35	1	0	0	447
65	0	0	0	0	0	19	72	63	7	0	0	0	161
70	0	0	0	0	0	3	15	13	1	0	0	0	32

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	0	2	34	140	347	567	792	765	493	220	32	1	0	2	36	176	523	1090	1882	2647	3140	3360	3392	3393
45	0	0	6	58	213	418	637	610	349	113	7	0	0	0	6	64	277	695	1332	1942	2291	2404	2411	2411
50	0	0	0	16	104	276	482	455	212	36	0	0	0	0	0	16	120	396	878	1333	1545	1581	1581	1581
55	0	0	0	1	32	151	328	302	104	6	0	0	0	0	0	1	33	184	512	814	918	924	924	924
60	0	0	0	0	2	57	179	161	32	0	0	0	0	0	0	0	2	59	238	399	431	431	431	431
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	8	46	137	273	414	532	516	373	211	44	1	0	8	54	191	464	878	1410	1926	2299	2510	2554	2555

(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](http://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](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)