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: ALTAMONT, UT **COOP ID: 420074**

Climate Division: UT 6 **NWS Call Sign:** **Elevation: 6,370 Feet** **Lat: 40˚21N** **Lon: 110˚17W**

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	31.6	7.0	19.3	59	1990	11	29.4	1981	-24	1971	6	8.8	1979	1416	0	.0	.0	.4	16.1	30.9	8.1
Feb	36.4	11.6	24.0	69	1986	27	32.8	1995	-29	1989	7	14.2	1989	1148	0	.0	.0	2.0	9.0	28.1	4.0
Mar	47.2	21.7	34.5	74+	1986	29	41.4	1986	-11	1962	1	28.8	1976	947	0	.0	.0	12.5	1.8	29.2	.4
Apr	56.9	28.7	42.8	86	1992	29	50.2	1992	5	1975	3	35.8	1975	668	0	.0	.0	22.8	.2	20.9	.0
May	66.1	37.1	51.6	87	1989	7	56.8	1992	16	1975	7	46.9	1995	417	1	.0	.0	29.7	.0	7.6	.0
Jun	76.1	45.1	60.6	94	1961	22	65.6	1977	25	2001	13	55.0	1998	174	42	.0	.5	29.9	.0	.9	.0
Jul	82.9	51.8	67.4	97	1989	8	70.5	1989	34	1982	6	62.0	1993	36	108	.0	2.4	31.0	.0	.0	.0
Aug	81.3	50.7	66.0	95	1958	12	70.4	2000	28	1992	26	62.3	1993	54	84	.0	1.0	31.0	.0	@	.0
Sep	72.1	42.2	57.2	90	1990	14	61.7	1990	19	1985	30	52.4	1971	244	8	.0	@	29.7	.0	3.1	.0
Oct	59.6	31.6	45.6	80	1991	14	52.2	1988	0+	1971	30	40.8	1984	603	0	.0	.0	26.6	.4	16.4	.1
Nov	43.6	19.0	31.3	69	1978	5	37.5	1995	-8	1955	16	25.1	2000	1011	0	.0	.0	9.1	4.3	29.2	.5
Dec	33.2	9.6	21.4	64	1977	3	32.2	1980	-32+	1990	21	11.9	1978	1352	0	.0	.0	.9	13.8	30.8	5.0
Ann	57.3	29.7	43.5	97	Jul 1989	8	70.5	Jul 1989	-32+	Dec 1990	21	8.8	Jan 1979	8070	243	.0	3.9	225.6	45.6	197.1	18.1

\+ 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: 1953-2001

(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: ALTAMONT, UT

COOP ID: 420074

Climate Division: UT 6 **NWS Call Sign:** **Elevation: 6,370 Feet** **Lat: 40˚21N** **Lon: 110˚17W**

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	.69	.52	.68	1962	20	2.37	1980	.01	1972
Feb	.64	.67	1.40	1968	14	1.63	1990	.00	1972
Mar	.64	.55	.85	1993	29	1.52	1978	.00+	1999
Apr	.73	.63	.90	1973	18	3.14	1999	.08	1982
May	1.01	.87	1.14	1995	25	3.81	1995	.00	1974
Jun	.71	.49	1.44	1998	17	2.34+	1998	.00+	1980
Jul	.85	.73	1.00	1998	26	2.39	1987	.09	1978
Aug	.86	.82	1.37	1997	5	2.24	1997	.00	1985
Sep	1.07	1.04	1.05	1985	12	3.09	1997	.00+	1987
Oct	1.04	.82	1.28	1960	9	3.15	1994	.00	1995
Nov	.62	.52	1.30	1985	26	2.12	1985	.00+	1986
Dec	.54	.42	2.01	1966	27	1.53	1983	.00+	1989
Ann	9.40	9.57	2.01	Dec 1966	27	3.81	May 1995	.00+	Mar 1999

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	5.1	2.6	.1	.0
Feb	4.3	2.4	.2	.0
Mar	4.8	2.6	.1	.0
Apr	4.3	2.2	.3	.0
May	6.7	3.4	.3	@
Jun	4.3	2.1	.3	@
Jul	5.5	2.8	.3	@
Aug	5.8	2.7	.2	.1
Sep	5.7	3.2	.4	.1
Oct	5.2	3.2	.5	.0
Nov	4.1	2.2	.2	.1
Dec	3.9	1.9	.1	.0
Ann	59.7	31.3	3.0	.3

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	.05	.10	.19	.28	.39	.51	.65	.84	1.09	1.52	1.95
Feb	.01	.05	.13	.22	.32	.44	.59	.78	1.04	1.50	1.96
Mar	.00	.00	.18	.31	.42	.54	.67	.83	1.04	1.35	1.66
Apr	.06	.11	.21	.31	.42	.55	.70	.89	1.15	1.58	2.01
May	.10	.22	.39	.54	.68	.84	1.02	1.24	1.53	2.00	2.44
Jun	.00	.05	.16	.27	.39	.52	.68	.87	1.14	1.60	2.04
Jul	.12	.19	.31	.43	.56	.69	.85	1.04	1.31	1.73	2.14
Aug	.10	.21	.35	.47	.60	.73	.88	1.06	1.29	1.67	2.03
Sep	.00	.15	.36	.53	.70	.89	1.10	1.34	1.67	2.21	2.73
Oct	.04	.13	.28	.43	.59	.78	1.00	1.28	1.66	2.30	2.92
Nov	.00	.06	.16	.26	.36	.48	.61	.77	.99	1.35	1.70
Dec	.00	.00	.13	.22	.31	.42	.54	.69	.88	1.21	1.52
Ann	5.45	6.15	7.09	7.82	8.49	9.14	9.83	10.61	11.56	12.98	14.23

\+ 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: 1953-2001
(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: ALTAMONT, UT **COOP ID: 420074**

Climate Division: UT 6 **NWS Call Sign:** **Elevation: 6,370 Feet** **Lat: 40°21N** **Lon: 110°17W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	10.5	9.1	6	6
Feb	8.1	6.0	7	6
Mar	3.3	1.5	2	#
Apr	1.8	.5	#	#
May	.1	.0	#	0
Jun	.0	.0	#	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.9	.0	#	0
Nov	4.8	3.7	#	#
Dec	7.2	7.0	3	2
Ann	36.7	27.8	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	11.0	1996	25	29.8	1980	20	1979	26	18	1979
Feb	8.5	1989	4	24.0+	1990	20	1993	24	16+	1993
Mar	5.0	1975	27	14.0	1975	22	1979	3	11	1978
Apr	5.0	1997	24	16.0	1997	6	1973	18	1	1997
May	2.0	1978	17	2.0	1978	2	1978	17	#+	1993
Jun	1.0	1998	17	1.0	1998	1	1998	17	#	1998
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	8.0	1971	27	8.5	1984	6	1971	30	3	1998
Nov	11.5	1973	3	20.0	1978	14	1978	12	3	1978
Dec	8.0	1973	30	21.3	1983	17	1978	19	11	1978
Ann	11.5	Nov 1973	3	29.8	Jan 1980	22	Mar 1979	3	18	Jan 1979

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	4.4	3.9	1.3	.4	@
Feb	3.2	3.0	.9	.3	.0
Mar	2.3	2.0	.4	.1	.0
Apr	1.0	.9	.3	@	.0
May	@	@	.0	.0	.0
Jun	@	@	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.6	.5	.3	.1	.0
Nov	2.3	1.9	.6	.2	@
Dec	3.4	2.9	.9	.3	.0
Ann	17.2	15.1	4.7	1.4	@

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	16.8	14.3	9.8	4.3
Feb	16.9	14.1	12.1	7.9
Mar	4.8	3.1	2.4	1.3
Apr	.7	.1	.0	.0
May	@	.0	.0	.0
Jun	@	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.4	.2	@	.0
Nov	2.7	.7	.2	.0
Dec	10.6	5.8	3.6	.0
Ann	52.9	38.3	28.1	13.5

+ 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: ALTAMONT, UT **COOP ID: 420074**

Climate Division: UT 6 **NWS Call Sign:** **Elevation: 6,370 Feet** **Lat: 40˚21N** **Lon: 110˚17W**

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	6/10	6/07	6/03	5/30	5/24
32	6/20	6/15	6/11	6/08	6/05	6/01	5/29	5/25	5/20
28	6/07	6/01	5/27	5/23	5/19	5/16	5/12	5/07	5/01
24	5/11	5/06	5/03	4/29	4/27	4/24	4/21	4/17	4/12
20	5/05	4/30	4/26	4/22	4/19	4/16	4/12	4/08	4/03
16	4/22	4/15	4/10	4/05	4/02	3/29	3/24	3/19	3/13

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	8/31	9/05	9/08	9/12	9/14	9/17	9/21	9/24	9/29
32	9/06	9/12	9/16	9/19	9/22	9/26	9/29	10/03	10/09
28	9/14	9/20	9/25	9/29	10/02	10/06	10/10	10/15	10/21
24	10/01	10/07	10/11	10/14	10/17	10/20	10/24	10/28	11/02
20	10/12	10/17	10/21	10/24	10/27	10/30	11/02	11/06	11/11
16	10/21	10/26	10/30	11/02	11/04	11/07	11/10	11/13	11/18

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	120	111	105	100	95	90	85	79	71
32	134	125	119	114	109	104	99	93	85
28	162	153	146	141	135	130	124	118	108
24	195	187	182	177	173	168	164	158	151
20	217	208	201	196	191	185	180	174	165
16	243	234	227	221	216	211	205	198	189

***** 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: ALTAMONT, UT **COOP ID: 420074**

Climate Division: UT 6 **NWS Call Sign:** **Elevation: 6,370 Feet** **Lat: 40˚21N** **Lon: 110˚17W**

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	1416	1148	947	668	417	174	36	54	244	603	1011	1352	8070
60	1261	1008	792	519	271	87	6	11	126	449	861	1197	6588
57	1168	924	699	434	193	50	2	3	74	359	771	1104	5781
55	1106	868	637	379	148	32	0	1	49	302	711	1042	5275
50	951	728	485	252	64	8	0	0	12	177	561	887	4125
32	432	281	84	17	0	0	0	0	0	4	124	362	1304

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	39	56	160	340	607	858	1095	1053	754	424	103	33	5522
55	0	0	0	12	42	200	383	341	112	9	0	0	1099
57	0	0	0	7	25	158	322	281	78	4	0	0	875
60	0	0	0	2	10	104	233	197	40	1	0	0	587
65	0	0	0	0	1	42	108	84	8	0	0	0	243
70	0	0	0	0	0	11	30	21	1	0	0	0	63

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	36	153	372	627	855	815	523	216	16	0	0	2	38	191	563	1190	2045	2860	3383	3599	3615	3615
45	0	0	10	74	235	478	700	660	379	111	3	0	0	0	10	84	319	797	1497	2157	2536	2647	2650	2650
50	0	0	0	25	125	333	545	505	245	43	0	0	0	0	0	25	150	483	1028	1533	1778	1821	1821	1821
55	0	0	0	4	51	206	390	353	126	7	0	0	0	0	0	4	55	261	651	1004	1130	1137	1137	1137
60	0	0	0	0	10	98	242	204	43	0	0	0	0	0	0	0	10	108	350	554	597	597	597	597
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	5	44	131	261	408	551	519	343	173	26	0	0	5	49	180	441	849	1400	1919	2262	2435	2461	2461

(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