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: LAKETOWN, UT **COOP ID: 424856**

Climate Division: UT 5 **NWS Call Sign:** **Elevation: 5,980 Feet** **Lat: 41˚50N** **Lon: 111˚19W**

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	30.8	10.9	20.9	59	1990	9	30.0	1999	-37	1962	22	8.0	1979	1369	0	.0	.0	.4	15.2	30.3	5.6
Feb	34.2	11.0	22.6	60+	1981	19	30.3	2000	-34	1985	1	11.6	1985	1188	0	.0	.0	.9	10.2	27.7	6.1
Mar	42.5	20.0	31.3	69	1986	29	38.3	1986	-21	1964	8	21.4	1976	1045	0	.0	.0	6.8	2.3	29.3	1.2
Apr	53.3	27.6	40.5	80	1994	21	45.8	1987	0	1973	8	34.2	1984	737	0	.0	.0	19.6	.1	22.1	@
May	63.6	35.2	49.4	85+	1954	20	54.5	1992	16	1972	1	45.0	1975	483	0	.0	.0	28.6	.0	9.3	.0
Jun	73.9	41.8	57.9	96	1988	25	64.0	1988	24+	1962	7	53.2	1998	232	17	.0	.4	30.0	.0	1.6	.0
Jul	81.8	47.7	64.8	95	1960	20	69.1	1988	31+	1955	8	57.2	1993	80	73	.0	1.7	31.0	.0	@	.0
Aug	80.3	46.4	63.4	94+	1979	4	67.7	2000	22	1962	31	59.4	1974	102	51	.0	.7	31.0	.0	.4	.0
Sep	70.7	38.8	54.8	90+	1990	12	59.7	1990	17+	1962	9	50.0	1986	311	4	.0	.1	29.3	.0	5.0	.0
Oct	58.2	29.8	44.0	82+	1963	4	50.3	1988	5	1961	31	38.1	1984	652	0	.0	.0	25.7	.3	19.3	.0
Nov	42.0	21.3	31.7	66+	1980	7	39.5	1995	-17	1955	16	25.8	2000	1000	0	.0	.0	7.8	4.0	27.2	.5
Dec	32.9	13.6	23.3	62	1995	1	30.0	1995	-27	1990	21	15.3	1990	1293	0	.0	.0	1.2	13.3	29.9	2.6
Ann	55.4	28.7	42.1	96	Jun 1988	25	69.1	Jul 1988	-37	Jan 1962	22	8.0	Jan 1979	8492	145	.0	2.9	212.3	45.4	202.1	16.0

\+ 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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

(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: LAKETOWN, UT

COOP ID: 424856

Climate Division: UT 5 **NWS Call Sign:** **Elevation: 5,980 Feet** **Lat: 41°50N** **Lon: 111°19W**

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	1.07	.81	.86	1950	18	3.58	1980	.15	1983
Feb	.91	.69	1.08	1986	17	4.25	1986	.00	1991
Mar	1.14	1.01	1.05	1994	19	2.94	1995	.25	1992
Apr	1.28	1.24	1.10+	1957	23	3.70	1999	.00+	1987
May	1.44	1.24	1.19	1983	11	3.16	1980	.00	1972
Jun	1.05	.66	1.90	1995	9	4.21	1998	.00	1994
Jul	.85	.83	.97	1976	31	2.22	1993	.00	1988
Aug	.92	.63	2.47	1977	18	5.13	1983	.00+	1996
Sep	1.23	1.04	1.45	1965	6	4.65	1982	.03	1974
Oct	1.27	1.41	1.44	1998	3	2.77	1981	.00+	1988
Nov	1.13	1.04	1.75	2001	22	2.84	1996	.00	1976
Dec	1.02	.82	1.37+	1964	22	3.48	1996	.00+	1986
Ann	13.31	12.60	2.47	Aug 1977	18	5.13	Aug 1983	.00+	Aug 1996

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	6.0	3.8	.2	.0
Feb	5.5	3.0	.4	@
Mar	6.5	3.9	.4	.1
Apr	5.7	3.9	.8	.1
May	7.2	4.8	.5	.1
Jun	4.8	3.2	.4	.1
Jul	4.0	2.5	.4	.0
Aug	3.4	2.2	.6	.1
Sep	4.5	3.5	.7	.1
Oct	4.8	3.4	.6	.1
Nov	6.4	3.5	.5	@
Dec	5.7	3.6	.2	.0
Ann	64.5	41.3	5.7	.7

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	.13	.22	.37	.52	.68	.85	1.06	1.31	1.65	2.21	2.75
Feb	.06	.15	.29	.43	.57	.72	.90	1.12	1.42	1.91	2.39
Mar	.32	.43	.59	.74	.88	1.02	1.18	1.37	1.61	2.00	2.35
Apr	.00	.00	.54	.76	.95	1.15	1.37	1.63	1.94	2.45	2.92
May	.27	.47	.72	.92	1.10	1.30	1.52	1.77	2.10	2.61	3.09
Jun	.05	.13	.29	.44	.61	.79	1.01	1.29	1.66	2.29	2.90
Jul	.06	.15	.29	.42	.55	.69	.85	1.05	1.31	1.75	2.16
Aug	.00	.06	.20	.35	.50	.68	.88	1.14	1.50	2.10	2.69
Sep	.08	.15	.30	.47	.65	.87	1.14	1.48	1.96	2.77	3.57
Oct	.00	.19	.44	.65	.85	1.06	1.31	1.59	1.98	2.60	3.20
Nov	.20	.35	.55	.70	.85	1.01	1.18	1.39	1.65	2.07	2.47
Dec	.00	.16	.36	.53	.69	.86	1.05	1.28	1.58	2.08	2.55
Ann	7.24	8.30	9.71	10.83	11.86	12.87	13.94	15.15	16.65	18.89	20.88

\+ 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: 1948-2001
(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: LAKETOWN, UT **COOP ID: 424856**

Climate Division: UT 5 **NWS Call Sign:** **Elevation: 5,980 Feet** **Lat: 41°50N** **Lon: 111°19W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	11.0	8.5	6	5
Feb	10.2	9.0	6	6
Mar	7.4	4.5	2	#
Apr	4.9	3.0	#	#
May	.8	.0	#	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	#	0
Sep	.6	.0	#	0
Oct	1.2	.0	#	0
Nov	5.2	4.5	1	1
Dec	11.4	10.0	3	2
Ann	52.7	39.5	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	9.0	1972	12	31.5	1993	27	1971	14	17	1993
Feb	15.0	1995	14	29.0	1995	25	1995	14	17	1993
Mar	11.0	1985	3	25.0	1998	22	1998	7	11	1998
Apr	9.0	1996	18	17.0+	1997	9	1973	7	4	1973
May	11.5	1983	11	11.5	1983	7	1983	12	#+	2000
Jun	1.0	1990	1	1.0	1990	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	#	1991	6	#	1991
Sep	6.0	1984	24	6.0	1984	3	1978	18	#+	2000
Oct	8.0	1971	27	16.0	1971	13	1971	29	2	1971
Nov	9.0	1994	2	13.0	1978	9+	1996	16	3	1994
Dec	8.0	1994	31	39.0	1996	15	1983	4	12	1983
Ann	15.0	Feb 1995	14	39.0	Dec 1996	27	Jan 1971	14	17+	Feb 1993

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	4.6	4.3	1.6	.4	.0
Feb	3.8	3.4	1.1	.4	@
Mar	3.0	2.8	1.1	.3	@
Apr	1.6	1.5	.7	.3	.0
May	.3	.2	.1	@	@
Jun	.1	@	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.2	.2	.1	.1	.0
Oct	.5	.5	.2	.1	.0
Nov	2.7	2.4	.9	.3	.0
Dec	4.3	4.0	1.5	.6	.0
Ann	21.1	19.3	7.3	2.5	@

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	18.5	13.9	11.1	4.6
Feb	17.9	14.2	11.2	5.5
Mar	5.3	3.9	3.2	1.8
Apr	1.1	.8	.6	.0
May	@	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.1	@	.0	.0
Oct	.4	.2	.1	.1
Nov	5.4	2.7	1.2	.0
Dec	15.8	10.6	6.2	.5
Ann	64.5	46.3	33.6	12.5

+ 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: LAKETOWN, UT **COOP ID: 424856**

Climate Division: UT 5 **NWS Call Sign:** **Elevation: 5,980 Feet** **Lat: 41˚50N** **Lon: 111˚19W**

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	7/06	7/02	6/29	6/26	6/23	6/19	6/15	6/10
32	6/25	6/19	6/15	6/11	6/08	6/04	6/01	5/27	5/21
28	6/02	5/27	5/23	5/20	5/17	5/13	5/10	5/06	4/30
24	5/18	5/12	5/08	5/04	5/01	4/27	4/23	4/19	4/13
20	5/04	4/27	4/22	4/18	4/14	4/10	4/06	4/01	3/25
16	4/25	4/16	4/10	4/05	3/31	3/26	3/21	3/15	3/06

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	8/13	8/19	8/24	8/28	8/31	9/04	9/08	9/12	9/18
32	8/27	9/02	9/07	9/10	9/14	9/17	9/21	9/26	10/02
28	9/15	9/20	9/24	9/27	9/30	10/03	10/06	10/10	10/15
24	9/21	9/27	10/02	10/06	10/10	10/13	10/17	10/22	10/28
20	10/07	10/13	10/18	10/22	10/25	10/29	11/02	11/06	11/12
16	10/23	10/28	11/01	11/04	11/07	11/10	11/13	11/17	11/22

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	94	84	77	71	66	60	54	47	38
32	126	116	109	103	98	92	86	79	69
28	158	151	145	140	136	131	126	121	113
24	188	179	172	167	161	156	150	144	135
20	221	212	205	199	193	188	182	175	166
16	250	240	233	226	220	214	208	200	190

***** 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: LAKETOWN, UT **COOP ID: 424856**

Climate Division: UT 5 **NWS Call Sign:** **Elevation: 5,980 Feet** **Lat: 41˚50N** **Lon: 111˚19W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1369	1188	1045	737	483	232	80	102	311	652	1000	1293	8492
60	1214	1048	890	587	331	123	22	32	181	497	850	1138	6913
57	1121	964	797	498	247	75	8	12	118	406	760	1045	6051
55	1059	908	735	442	195	50	3	6	84	347	700	983	5512
50	904	768	583	306	92	13	0	0	28	213	551	828	4286
32	391	307	148	28	0	0	0	0	0	6	123	301	1304

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	45	43	126	281	540	776	1016	972	683	377	113	30	5002
55	0	0	0	5	22	136	306	265	77	5	0	0	816
57	0	0	0	1	12	101	249	210	51	2	0	0	626
60	0	0	0	0	3	59	170	137	24	0	0	0	393
65	0	0	0	0	0	17	73	51	4	0	0	0	145
70	0	0	0	0	0	3	18	11	0	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	0	14	112	326	554	788	751	472	195	20	3	0	0	14	126	452	1006	1794	2545	3017	3212	3232	3235
45	0	0	0	47	189	404	633	596	331	89	0	0	0	0	0	47	236	640	1273	1869	2200	2289	2289	2289
50	0	0	0	16	90	265	478	441	198	28	0	0	0	0	0	16	106	371	849	1290	1488	1516	1516	1516
55	0	0	0	0	26	143	325	291	97	3	0	0	0	0	0	0	26	169	494	785	882	885	885	885
60	0	0	0	0	1	52	178	149	29	0	0	0	0	0	0	0	1	53	231	380	409	409	409	409
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	0	0	16	100	232	373	522	503	332	163	19	0	0	0	16	116	348	721	1243	1746	2078	2241	2260	2260

(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