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: ANETH PLANT, UT **COOP ID: 420157**

Climate Division: UT 7 **NWS Call Sign:** **Elevation: 4,576 Feet** **Lat: 37˚15N** **Lon: 109˚20W**

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	42.2	20.5	31.4	64	1971	31	38.1	1980	-14	1977	12	21.2	1973	1043	0	.0	.0	6.7	4.3	29.0	.9
Feb	50.8	26.0	38.4	73	1972	21	46.2	1995	-7	1982	6	28.9	1974	746	0	.0	.0	14.5	1.3	24.0	.2
Mar	61.5	33.4	47.5	82+	1989	11	52.7	1972	15	1977	30	42.8	1973	544	0	.0	.0	28.2	.0	15.0	.0
Apr	70.3	39.9	55.1	90	1992	30	60.7	2000	15	1968	7	49.2	1983	309	12	.0	@	29.2	.0	5.2	.0
May	79.8	49.0	64.4	101	2000	30	70.0	2000	22	1968	7	58.8	1986	107	88	@	2.5	31.0	.0	.7	.0
Jun	91.2	57.7	74.5	109	1988	22	79.2	1974	38	1979	9	69.7	1986	8	292	2.7	19.1	30.0	.0	@	.0
Jul	96.4	63.1	79.8	109	1971	14	82.3	1996	38	1978	9	74.9	1986	0	457	7.7	27.2	31.0	.0	.0	.0
Aug	94.6	63.3	79.0	110+	1972	4	85.2	1974	44	1980	21	75.0	1980	0	432	4.4	25.6	31.0	.0	.0	.0
Sep	85.3	54.1	69.7	102	1974	9	73.3	1998	33	1978	21	63.2	1985	31	171	.1	8.3	30.0	.0	.0	.0
Oct	72.4	41.5	57.0	95	1962	9	61.1	1988	17+	1982	28	51.4	1980	262	12	.0	.1	30.6	.0	7.3	.0
Nov	55.6	29.3	42.5	76+	1967	1	47.3	1999	5	1976	28	35.7	1986	676	0	.0	.0	22.5	.1	20.1	.0
Dec	43.9	21.1	32.5	68+	1997	1	38.8	1977	-18	1987	14	24.3	1990	1008	0	.0	.0	7.6	2.6	29.0	1.0
Ann	70.3	41.6	56.0	110+	Aug 1972	4	85.2	Aug 1974	-18	Dec 1987	14	21.2	Jan 1973	4734	1464	14.9	82.8	292.3	8.3	130.3	2.1

\+ 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: 1959-2001

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

Issue Date: February 2004

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: ANETH PLANT, UT **COOP ID: 420157**

Climate Division: UT 7 **NWS Call Sign:** **Elevation: 4,576 Feet** **Lat: 37°15N** **Lon: 109°20W**

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	.91	.53	.99	1978	15	3.61	1993	.00+	1982
Feb	.79	.59	1.06	1993	22	2.58	1993	.00+	1999
Mar	.80	.60	1.30	1973	3	2.77	1973	.00+	1999
Apr	.66	.69	.95	1988	17	1.71	1994	.00+	1992
May	.49	.44	.85	1976	6	1.62	1992	.00+	2000
Jun	.23	.10	.55	1972	22	1.17	1973	.00+	1998
Jul	.66	.42	1.00	1969	21	1.97	1985	.00+	1994
Aug	.72	.68	1.60	1998	21	2.12	1999	.00+	1985
Sep	.69	.59	1.15	1976	25	2.47	1976	.00+	1979
Oct	1.13	.92	1.57	1969	22	5.47	1972	.00+	1999
Nov	.70	.52	1.02	1986	18	2.39	1986	.00+	1997
Dec	.74	.53	1.57	1972	5	2.66	1972	.00+	1998
Ann	8.52	8.19	1.60	Aug 1998	21	5.47	Oct 1972	.00+	May 2000

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	4.3	2.4	.3	.0
Feb	4.4	2.5	.3	@
Mar	4.2	2.5	.3	@
Apr	3.1	2.0	.2	.0
May	2.7	1.6	.1	.0
Jun	1.4	.5	.1	.0
Jul	3.4	2.0	.2	.0
Aug	4.0	2.3	.5	.1
Sep	3.9	2.2	.3	@
Oct	3.4	2.7	.5	.2
Nov	3.0	1.6	.3	@
Dec	3.3	1.8	.6	.1
Ann	41.1	24.1	3.7	.4

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	.00	.00	.07	.21	.37	.56	.80	1.11	1.55	2.30	3.07
Feb	.00	.00	.17	.30	.44	.59	.77	.99	1.28	1.77	2.25
Mar	.00	.00	.06	.21	.36	.54	.74	1.00	1.36	1.94	2.55
Apr	.00	.00	.00	.22	.36	.51	.67	.86	1.12	1.54	1.93
May	.00	.00	.12	.24	.34	.43	.53	.65	.80	1.03	1.27
Jun	.00	.00	.00	.00	.00	.10	.19	.30	.44	.66	.89
Jul	.00	.00	.12	.23	.35	.48	.63	.83	1.08	1.52	1.95
Aug	.00	.00	.22	.35	.47	.60	.74	.92	1.14	1.51	1.86
Sep	.00	.04	.14	.24	.35	.49	.65	.85	1.14	1.61	2.09
Oct	.00	.00	.25	.44	.63	.85	1.11	1.42	1.84	2.55	3.23
Nov	.00	.00	.12	.23	.35	.49	.66	.87	1.16	1.65	2.14
Dec	.00	.00	.02	.11	.24	.40	.60	.88	1.27	1.97	2.69
Ann	4.66	5.33	6.24	6.95	7.60	8.25	8.93	9.70	10.66	12.08	13.34

+ 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: 1959-2001
(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: ANETH PLANT, UT **COOP ID: 420157**

Climate Division: UT 7 **NWS Call Sign:** **Elevation: 4,576 Feet** **Lat: 37°15N** **Lon: 109°20W**

Snow (inches)

Snow Totals

Means/Medians (1)

Extremes (2)

Mean Number of Days (1)

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	.2	-99.9	1	0	.5	1978	23	1.0	1989	11	1974	11	7	1974	.7	.0	.0	.0	.0	.0	.0	.0	.0
Feb	.1	.0	#	0	.4	1990	15	.6	1990	#+	2000	29	#+	2000	.2	.0	.0	.0	.0	.0	.0	.0	.0
Mar	.0	.0	#	0	.0	0	0	.0	0	#	1990	13	#	1990	.0	.0	.0	.0	.0	.0	.0	.0	.0
Apr	#	.0	#	0	#	1987	11	#	1987	#	1995	24	#	1995	.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	.1	.0	0	0	1.0	1975	28	1.0	1975	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
Dec	.5	.0	#	0	3.0	1974	26	4.0	1974	3	1990	20	#	1990	.2	.2	.1	.0	.0	.0	.0	.0	.0
Ann	.9	-9.9	N/A	N/A	3.0	Dec 1974	26	4.0	Dec 1974	11	Jan 1974	11	7	Jan 1974	1.2	.3	.1	.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/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: ANETH PLANT, UT **COOP ID: 420157**

Climate Division: UT 7 **NWS Call Sign:** **Elevation: 4,576 Feet** **Lat: 37˚15N** **Lon: 109˚20W**

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	5/26	5/21	5/18	5/15	5/12	5/09	5/06	5/02	4/27
32	5/18	5/10	5/05	5/01	4/27	4/23	4/18	4/13	4/06
28	4/28	4/21	4/15	4/10	4/06	4/02	3/28	3/23	3/15
24	4/10	4/03	3/29	3/25	3/21	3/17	3/12	3/07	2/28
20	3/28	3/18	3/11	3/05	2/27	2/21	2/15	2/07	1/28
16	3/15	3/03	2/22	2/14	2/07	1/31	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	9/25	9/29	10/02	10/05	10/07	10/09	10/12	10/15	10/19
32	9/28	10/04	10/09	10/13	10/17	10/21	10/25	10/30	11/05
28	10/05	10/11	10/16	10/20	10/24	10/27	10/31	11/05	11/11
24	10/12	10/19	10/25	10/29	11/02	11/07	11/11	11/17	11/24
20	10/30	11/05	11/10	11/14	11/18	11/22	11/26	12/01	12/08
16	11/11	11/18	11/23	11/27	12/02	12/06	12/10	12/16	12/23

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	169	162	156	152	148	143	139	134	126
32	200	191	184	178	173	167	161	154	145
28	232	221	213	206	200	194	187	179	168
24	260	249	240	233	226	219	212	204	192
20	296	285	277	270	264	258	251	243	232
16	333	319	310	302	295	288	281	272	261

***** 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: ANETH PLANT, UT **COOP ID: 420157**

Climate Division: UT 7 **NWS Call Sign:** **Elevation: 4,576 Feet** **Lat: 37˚15N** **Lon: 109˚20W**

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	1043	746	544	309	107	8	0	0	31	262	676	1008	4734
60	888	606	393	188	44	1	0	0	6	142	526	853	3647
57	795	522	308	130	22	0	0	0	2	87	438	760	3064
55	735	472	254	98	12	0	0	0	0	60	380	698	2709
50	590	343	142	39	2	0	0	0	0	19	248	545	1928
32	176	51	2	0	0	0	0	0	0	0	13	123	365

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	156	229	481	693	1005	1274	1480	1454	1131	772	327	138	9140
55	2	6	20	101	304	584	767	741	441	119	4	0	3089
57	0	0	11	74	251	524	705	679	382	85	2	0	2713
60	0	0	3	41	180	435	612	586	297	46	0	0	2200
65	0	0	0	12	88	292	457	432	171	12	0	0	1464
70	0	0	0	2	33	168	303	282	79	2	0	0	869

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	6	66	240	446	736	1024	1225	1187	883	490	133	11	6	72	312	758	1494	2518	3743	4930	5813	6303	6436	6447
45	0	16	122	302	581	874	1070	1032	733	343	59	0	0	16	138	440	1021	1895	2965	3997	4730	5073	5132	5132
50	0	1	42	178	429	724	915	877	583	212	15	0	0	1	43	221	650	1374	2289	3166	3749	3961	3976	3976
55	0	0	8	85	288	575	760	722	437	109	2	0	0	0	8	93	381	956	1716	2438	2875	2984	2986	2986
60	0	0	0	27	160	425	605	567	297	43	0	0	0	0	0	27	187	612	1217	1784	2081	2124	2124	2124
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	12	60	190	308	477	637	761	750	571	352	110	14	12	72	262	570	1047	1684	2445	3195	3766	4118	4228	4242

(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