

Climatography of the United States

No. 20

1971-2000

Station: FILLMORE, UT

COOP ID: 422828

Climate Division: UT 4

NWS Call Sign:

Elevation: 5,120 Feet Lat: 38° 58N

Lon: 112° 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	38.2	19.1	28.7	68	1956	4	37.3	2000	-23	1937	9	19.4	1984	1127	0	.0	.0	4.8	7.8	28.8	1.9
Feb	44.9	24.1	34.5	72+	1951	10	41.9	1995	-21	1933	10	25.3	1984	855	0	.0	.0	10.4	2.9	23.9	.5
Mar	54.1	31.1	42.6	78+	1943	28	49.2	1972	-6	1971	2	36.6	1976	695	0	.0	.0	21.8	.1	19.3	.1
Apr	62.2	36.7	49.5	88	1943	30	56.2	1992	12	1975	2	43.2	1975	470	3	.0	.0	26.5	.0	11.8	.0
May	71.5	44.1	57.8	93+	1934	6	63.1	2000	22+	1970	11	52.8	1995	247	24	.0	.3	30.5	.0	2.5	.0
Jun	82.3	52.7	67.5	104	1974	14	73.4	1974	24	1976	14	61.3	1998	61	135	.2	6.9	30.0	.0	.3	.0
Jul	89.0	59.7	74.4	107+	1931	21	77.0	1976	38	1968	1	69.9	1993	2	291	.9	20.1	31.0	.0	.0	.0
Aug	86.4	58.4	72.4	105	1933	13	75.3	2000	35	1968	23	68.8	1976	3	232	.2	15.1	31.0	.0	.0	.0
Sep	77.6	49.4	63.5	99	1934	4	68.7	1979	19	1965	18	58.0	1986	106	60	.0	2.4	29.9	.0	.8	.0
Oct	64.8	38.1	51.5	89	1954	9	58.5	1988	1	1971	30	46.4	1984	423	3	.0	.0	28.6	.1	8.1	.0
Nov	49.1	27.8	38.5	79+	1934	6	46.9	1999	-3	1931	24	30.3	1994	796	0	.0	.0	16.0	1.6	21.8	@
Dec	38.6	19.4	29.0	70	1939	10	37.3	1977	-19+	1932	13	19.4	1990	1115	0	.0	.0	5.1	6.7	28.6	1.5
Ann	63.2	38.4	50.8	107+	Jul 1931	21	77.0	Jul 1976	-23	Jan 1937	9	19.4+	Dec 1990	5900	748	1.3	44.8	265.6	19.2	145.9	4.0

+ 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/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

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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: FILLMORE, UT

COOP ID: 422828

Climate Division: UT 4

NWS Call Sign:

Elevation: 5,120 Feet Lat: 38°58N

Lon: 112°20W

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	1.42	1.20	1.90	1937	6	3.18	1974	.27	1972	7.5	4.1	.7	.1	.38	.51	.72	.90	1.08	1.26	1.47	1.71	2.03	2.54	3.01
Feb	1.39	1.20	1.58	1935	24	4.19	1998	.23	1972	7.8	4.3	.7	.1	.27	.40	.60	.79	.98	1.18	1.41	1.69	2.06	2.65	3.21
Mar	1.98	2.26	2.32	1940	11	3.74	1983	.06	1997	9.1	5.5	1.0	.1	.41	.60	.89	1.15	1.42	1.70	2.02	2.41	2.92	3.73	4.50
Apr	1.82	1.82	2.21	1957	22	4.05	1999	.21	1977	8.0	4.9	.8	.1	.38	.54	.81	1.06	1.30	1.56	1.86	2.22	2.68	3.44	4.15
May	1.68	1.57	2.08	1975	20	3.88	1995	.27	1990	7.6	4.0	1.1	.1	.31	.46	.71	.94	1.17	1.42	1.70	2.05	2.50	3.24	3.94
Jun	.70	.50	2.15	1990	11	2.95	1990	.00+	1996	3.9	2.1	.3	@	.00	.01	.07	.16	.27	.41	.59	.82	1.17	1.78	2.41
Jul	.80	.73	1.11	1980	1	1.99	1985	.00	1978	5.2	2.5	.3	@	.07	.16	.29	.40	.53	.66	.81	.99	1.24	1.63	2.02
Aug	.83	.79	1.62	1945	4	2.18	1984	.00	1996	6.4	2.8	.2	@	.07	.15	.29	.41	.54	.68	.83	1.03	1.29	1.71	2.11
Sep	1.09	.61	1.74	1982	27	5.05	1982	.00	1974	5.0	2.7	.6	.2	.01	.07	.19	.33	.51	.71	.97	1.30	1.78	2.60	3.43
Oct	1.69	1.46	1.65	2000	31	4.64	1994	.00	1995	6.4	4.1	.9	.2	.26	.48	.77	1.00	1.24	1.48	1.75	2.07	2.49	3.16	3.79
Nov	1.50	1.30	1.85	1947	20	4.79	1983	.15	1995	6.8	3.9	1.0	.1	.26	.40	.61	.82	1.03	1.26	1.51	1.83	2.25	2.92	3.56
Dec	1.21	1.07	2.00	1972	29	3.32	1972	.14	1980	6.5	3.7	.5	.1	.24	.35	.53	.69	.86	1.03	1.23	1.47	1.78	2.29	2.76
Ann	16.11	15.98	2.32	Mar 1940	11	5.05	Sep 1982	.00+	Aug 1996	80.2	44.6	8.1	1.1	10.16	11.26	12.70	13.80	14.80	15.78	16.79	17.93	19.32	21.37	23.16

+ 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

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Station: FILLMORE, UT

COOP ID: 422828

Climate Division: UT 4

NWS Call Sign:

Elevation: 5,120 Feet

Lat: 38° 58N

Lon: 112° 20W

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	14.1	13.4	5	3	12.5	1974	21	39.1	1974	22	1973	21	19	1973	5.3	4.4	1.8	.8	@	19.1	13.5	10.6	4.1
Feb	12.2	10.0	3	2	15.8	1976	5	34.5	1990	17	1973	2	11	1973	4.4	3.7	1.8	.8	.1	13.1	8.9	5.0	1.5
Mar	12.8	11.2	1	#	14.0	1973	28	35.1	1977	14	1985	29	5	1971	4.4	3.8	2.0	1.1	.2	4.8	2.8	1.5	.1
Apr	7.6	6.0	#	#	12.5	1999	1	25.8	1972	11	1972	13	1+	1999	2.6	2.2	1.1	.5	.1	1.2	.5	.2	@
May	2.2	.0	#	0	21.8	1975	20	31.6	1975	15	1975	20	1	1975	.6	.5	.2	.2	@	.2	.2	@	@
Jun	.1	.0	0	0	4.0	1990	1	4.0	1990	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	.2	.0	#	0	5.0	1978	18	5.0	1978	1	1971	30	#	1971	.1	.1	@	@	.0	@	.0	.0	.0
Oct	3.7	1.0	#	0	12.0	1971	28	30.4	1971	17	1971	29	2	1994	1.4	1.1	.4	.2	.1	.7	.4	.3	.2
Nov	11.0	8.5	1	1	15.0	1983	21	36.5	1983	19	1983	26	6	1994	3.5	3.1	1.6	.8	.1	7.9	4.5	2.8	.5
Dec	13.1	11.0	3	3	21.0	1987	23	43.5	1972	24	1972	29	10	1972	4.4	3.7	1.8	.7	.1	16.0	11.2	5.9	2.3
Ann	77.0	61.1	N/A	N/A	21.8	May 1975	20	43.5	Dec 1972	24	Dec 1972	29	19	Jan 1973	26.7	22.6	10.7	5.1	.7	63.0	42.0	26.3	8.7

+ 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:

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Climate Division: UT 4

NWS Call Sign:

Elevation: 5,120 Feet

Lat: 38° 58N

Lon: 112° 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	6/16	6/10	6/05	6/02	5/29	5/25	5/22	5/17	5/11
32	6/06	5/30	5/25	5/20	5/16	5/12	5/08	5/03	4/26
28	5/26	5/16	5/09	5/03	4/27	4/22	4/16	4/09	3/30
24	5/14	5/02	4/23	4/16	4/09	4/02	3/26	3/18	3/06
20	4/15	4/06	3/31	3/26	3/21	3/16	3/10	3/04	2/23
16	4/03	3/24	3/16	3/10	3/04	2/26	2/19	2/12	2/01
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	9/10	9/15	9/19	9/22	9/25	9/28	10/02	10/06	10/11
32	9/17	9/23	9/28	10/01	10/05	10/08	10/12	10/16	10/22
28	9/28	10/05	10/10	10/14	10/18	10/22	10/26	10/31	11/07
24	10/16	10/20	10/24	10/26	10/29	11/01	11/04	11/07	11/12
20	10/25	10/30	11/02	11/05	11/08	11/11	11/14	11/17	11/22
16	11/01	11/07	11/11	11/15	11/18	11/21	11/24	11/29	12/04
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	145	136	130	124	119	113	108	101	92
32	173	162	154	147	141	134	127	119	108
28	215	200	190	181	173	164	155	145	131
24	243	229	219	210	202	194	185	175	161
20	265	253	245	238	232	225	218	210	199
16	296	283	274	266	258	251	243	234	221

* 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:

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Climate Division: UT 4 NWS Call Sign: Elevation: 5,120 Feet Lat: 38°58N Lon: 112°20W

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	1127	855	695	470	247	61	2	3	106	423	796	1115	5900
60	972	715	541	331	138	20	0	0	42	282	646	960	4647
57	879	631	452	255	89	9	0	0	20	209	558	867	3969
55	817	575	396	210	63	5	0	0	11	166	501	805	3549
50	669	443	262	120	21	0	0	0	2	83	364	651	2615
32	224	92	17	1	0	0	0	0	0	1	51	193	579

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	120	161	345	524	800	1064	1312	1253	944	604	244	101	7472
55	0	0	11	43	150	379	599	540	265	56	4	0	2047
57	0	0	5	28	114	323	537	478	214	37	2	0	1738
60	0	0	1	14	70	244	444	385	146	18	0	0	1322
65	0	0	0	3	24	135	291	232	60	3	0	0	748
70	0	0	0	0	5	59	150	99	16	0	0	0	329

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	14	50	155	313	565	844	1093	1045	738	403	101	18	14	64	219	532	1097	1941	3034	4079	4817	5220	5321	5339
45	0	15	74	192	418	694	938	890	590	268	45	2	0	15	89	281	699	1393	2331	3221	3811	4079	4124	4126
50	0	1	29	101	275	544	783	735	445	154	13	0	0	1	30	131	406	950	1733	2468	2913	3067	3080	3080
55	0	0	4	46	160	398	628	580	305	71	0	0	0	0	4	50	210	608	1236	1816	2121	2192	2192	2192
60	0	0	0	15	73	264	473	425	179	23	0	0	0	0	0	15	88	352	825	1250	1429	1452	1452	1452
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	10	42	114	219	377	549	702	682	489	278	84	11	10	52	166	385	762	1311	2013	2695	3184	3462	3546	3557

(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.
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 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