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

COOP ID: 422607

Station: ESKDALE, UT

Climate Division: UT 1

NWS Call Sign:

Elevation: 4,980 Feet Lat: 39°07N Lon: 113°57W

	Max Min Daily(2) Mean Daily(2) Mean Mean Mean Mean 100 90 50 32 32 Jan 41.1 14.9 28.0 71 1969 7 38.1 1998 -23 1971 6 18.1 1979 1147 0 .0 .0 8.2 6.8 29.0 Feb 47.4 20.1 33.8 75 1986 26 42.1 1995 -31+ 1989 6 24.8 1989 875 0 .0 .0 13.2 2.7 25.3 Mar 57.0 27.9 42.5 81 1997 20 49.6 1989 -8 1976 5 35.0 1976 700 0 .0 .0 23.7 .2 22.2																					
	Mea	n (1)						Extr	emes						•		Mean Number of Days (3)					
Month			Mean	-	Year	Day	Month(1)	Year		Year	Day	Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0	
Jan	41.1	14.9	28.0	71	1969	7	38.1	1998	-23	1971	6	18.1	1979	1147	0	.0	.0	8.2	6.8	29.0	3.7	
Feb	47.4	20.1	33.8	75	1986	26	42.1	1995	-31+	1989	6	24.8	1989	875	0	.0	.0	13.2	2.7	25.3	1.4	
Mar	57.0	27.9	42.5	81	1997	20	49.6	1989	-8	1976	5	35.0	1976	700	0	.0	.0	23.7	.2	22.2	.1	
Apr	65.8	34.1	50.0	87+	1990	15	58.4	1989	7	1967	2	42.8	1975	458	7	.0	.0	27.6	.0	14.3	.0	
May	75.0	42.3	58.7	95	2000	29	63.0	1992	21+	1972	1	54.3	1983	222	25	.0	1.0	30.7	.0	4.0	.0	
Jun	85.7	51.1	68.4	102	1974	14	72.9	1986	25	1976	14	62.7	1995	53	154	.4	11.2	30.0	.0	.4	.0	
Jul	92.7	58.0	75.4	105	1973	5	78.1	1989	32	1970	1	72.3	1993	1	322	2.0	24.2	31.0	.0	.0	.0	
Aug	90.8	55.9	73.4	102	2000	1	76.7	2000	33	1968	23	68.9	1976	4	263	.6	20.1	31.0	.0	.0	.0	
Sep	81.2	45.5	63.4	98+	1990	13	68.1	1990	20	1970	27	58.8	1985	108	58	.0	4.6	29.9	.0	2.1	.0	
Oct	68.4	34.1	51.3	89	1996	10	57.5	1988	-3	1971	30	46.0	1984	429	2	.0	.0	29.5	.1	14.0	@	
Nov	52.6	23.7	38.2	79	1980	7	44.3	1995	-5	1976	28	30.7	2000	805	0	.0	.0	18.5	.7	24.9	.2	
Dec	42.1	14.9	28.5	71	1977	2	37.2	1996	-20+	1990	23	21.1	1972	1131	0	.0	.0	7.6	5.1	29.1	2.7	
Ann	66.7	35.2	51.0	105	Jul 1973	5	78.1	Jul 1989	-31+	Feb 1989	6	18.1	Jan 1979	5933	831	3.0	61.1	280.9	15.6	165.3	8.1	

⁺ Also occurred on an earlier date(s)

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Issue Date: February 2004 035-A

- (2) Derived from station's available digital record: 1966-2001
- (3) Derived from 1971-2000 serially complete daily data

[@] Denotes mean number of days greater than 0 but less than .05

⁽¹⁾ From the 1971-2000 Monthly Normals

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: ESKDALE, UT COOP ID: 422607

Climate Division: UT 1 NWS Call Sign: Elevation: 4,980 Feet Lat: 39°07N Lon: 113°57W

										Pı	recipi	tation	(incl	nes)										
		ans/	P	recipi	itatio	on Total Extremes					Mean Number of Days (3) Probability that the monthly/annual precipitation will be equal to or le indicated amount Monthly/Annual Precipitation vs Probability Levels These values were determined from the incomplete gamma distribution											in the		
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	.29	.21	1.60	1987	5	1.77	1987	.00+	1989	2.9	.7	.1	@	.00	.02	.06	.11	.16	.21	.28	.36	.47	.67	.86
Feb	.37	.23	1.27	1998	24	2.38	1998	.00	1972	3.5	1.1	.1	@	.00	.02	.06	.11	.17	.24	.33	.44	.61	.88	1.17
Mar	.68	.61	1.34	1975	14	2.03	1975	.00+	1997	5.1	2.3	.1	.1	.00	.00	.15	.27	.39	.52	.67	.85	1.10	1.51	1.91
Apr	.60	.54	1.47	1967	12	2.18	1994	.00	1992	4.2	1.8	.2	.0	.01	.05	.13	.21	.31	.42	.56	.73	.98	1.40	1.81
May	.86	.69	2.61	1991	31	3.35	1991	.00+	1974	5.0	2.4	.3	.1	.00	.10	.26	.40	.54	.69	.87	1.07	1.36	1.82	2.26
Jun	.60	.43	1.54	1991	1	2.28	1995	.00+	1996	3.2	1.5	.3	.1	.00	.00	.00	.10	.22	.36	.52	.74	1.04	1.57	2.09
Jul	.58	.35	2.30	1985	22	3.26	1985	.00+	2000	3.5	1.6	.2	@	.00	.00	.04	.12	.22	.35	.50	.70	.98	1.47	1.96
Aug	.59	.45	1.32	1984	14	2.40	1984	.00+	1995	3.8	1.6	.3	.1	.00	.02	.08	.16	.26	.37	.52	.71	.98	1.45	1.93
Sep	.76	.57	1.15	1975	12	3.57	1982	.00+	1979	4.1	2.1	.5	@	.00	.00	.17	.30	.43	.57	.75	.96	1.23	1.70	2.16
Oct	.71	.53	1.17	1981	16	2.24	1981	.00	1989	4.2	1.9	.4	.1	.02	.06	.15	.25	.37	.50	.66	.86	1.14	1.62	2.10
Nov	.40	.27	.77	1996	22	1.40	1978	.00+	1999	3.0	1.2	.1	.0	.00	.00	.07	.14	.22	.30	.39	.51	.67	.93	1.18
Dec	.19	.16	1.02	1966	6	.83	1990	.00+	2000	2.7	.7	.0	.0	.00	.00	.02	.06	.10	.14	.19	.25	.33	.46	.59
Ann	6.63	6.77	2.61	May 1991	31	3.57	Sep 1982	.00+	Dec 2000	45.2	18.9	2.6	.5	3.34	3.89	4.65	5.25	5.81	6.36	6.95	7.62	8.46	9.71	10.83

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

[#] 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: 1966-2001

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

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

COOP ID: 422607

Station: ESKDALE, UT

Climate Division: UT 1 NWS Call Sign: Elevation: 4,980 Feet Lat: 39°07N Lon: 113°57W

			Snow Fall Snow Depth Median Highest Monthly Snow Fall Highest Monthly Snow Depth Highest Monthly Snow Fall Highest Monthly Snow Depth Highest Monthly Snow Depth Highest Monthly Snow Depth Highest Monthly Snow Depth Highest Monthly Mean Snow Depth Hig																				
		Snow Fall Snow Depth Median Med															Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1))					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Fall	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	2.9	1.3	#	#	8.0	1987	5	15.1	1987	8	1987	5	4	1987	1.8	1.1	.3	.1	.0	4.3	1.7	1.1	.0
Feb	2.3	.2	#	0	7.5	1990	18	14.5	1990	13	1990	19	3	1990	1.2	.8	.3	@	.0	1.8	.6	.3	.0
Mar	2.0	.0	#	0	8.0	1984	30	8.0	1984	6	1990	12	2	1976	1.0	.8	.4	.1	.0	1.0	.3	.1	.0
Apr	.8	.0	#	0	5.0	1999	30	5.0	1999	1	1991	12	#+	1997	.4	.3	.1	@	.0	.1	.0	.0	.0
May	.6	.0	0	0	16.0	1975	20	16.0	1975	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	1	1982	26	#	1982	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.4	.0	#	0	3.0	1990	7	4.5	1990	4	2000	30	#+	2000	.3	.2	@	.0	.0	@	.0	.0	.0
Nov	1.2	.0	#	0	8.2	1983	21	11.3	1983	8	1983	21	1	1983	.3	.3	.1	@	.0	.6	.3	.1	.0
Dec	2.5	.6	#	0	6.2	1984	19	10.5	1988	6+	1984	19	1	1991	1.0	.7	.1	.1	.0	1.4	.5	.1	.0
Ann	12.7	2.1	N/A	N/A	16.0	May 1975	20	16.0	May 1975	13	Feb 1990	19	4	Jan 1987	6.0	4.2	1.3	.3	@	9.2	3.4	1.7	.0

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

[@] 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

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

COOP ID: 422607

Lon: 113°57W

Lat: 39°07N

Station: ESKDALE, UT

Climate Division: UT 1 NWS Call Sign:

NWS Call Sign: Elevation: 4,980 Feet

				Freez	e Data								
			Spri	ng Freeze D	ates (Month/	Day)							
Probability of later date in spring (thru Jul 31) than indicated (**) 10 20 30 40 50 502 5726 5722 5717 32 6710 6704 5717 5711 5705 5723 5716 5711 5705 28 5724 5717 5711 5706 5702 4727 4722 4718 4713 4708 4703 3726 20 4726 4718 4713 4708 4704 4708 4714 4708 4713 4708 20 4726 4718 4713 4708 4704 4714 4708 4713 4708 32 4705 4718 4713 4708 4704 4714 4708 4715 32 4718 4718 4713 4708 4714 4708 4718 47													
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	6/18	6/12	6/08	6/05	6/02	5/29	5/26	5/22	5/17				
32	6/10	6/04	5/30	5/27	5/23	5/19	5/16	5/11	5/05				
28	5/24	5/17	5/11	5/06	5/02	4/27	4/22	4/17	4/09				
24	5/10	5/02	4/27	4/22	4/18	4/13	4/08	4/03	3/26				
20	4/26	4/18	4/13	4/08	4/04	3/30	3/25	3/20	3/12				
16	4/13	4/05	3/30	3/25	3/21	3/16	3/11	3/05	2/25				
			Fal	l Freeze Da	tes (Month/D	ay)							
Tomp (F)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)					
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	9/02	9/07	9/10	9/13	9/16	9/18	9/21	9/24	9/29				
32	9/13	9/17	9/20	9/23	9/25	9/28	10/01	10/04	10/08				
28	9/21	9/26	10/01	10/04	10/07	10/11	10/14	10/18	10/24				
24	10/02	10/07	10/11	10/14	10/18	10/21	10/24	10/28	11/02				
20	10/20	10/24	10/27	10/29	10/31	11/03	11/05	11/08	11/12				
16	10/24	10/30	11/02	11/06	11/09	11/12	11/15	11/19	11/24				
				Freeze F	ree Period								
Tomn (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)						
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90				
36	126	119	114	109	105	101	97	92	84				
32	147	139	134	129	125	120	115	110	102				
28	187	177	170	164	158	152	146	139	129				
24	208	199	193	187	182	177	172	165	156				
20	237	228	221	215	210	205	199	192	183				
16	261	251	244	238	232	227	221	214	204				

^{*} 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.

Complete documentation available from:

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

COOP ID: 422607

Lon: 113°57W

Station: ESKDALE, UT

Climate Division: UT 1

Elevation: 4,980 Feet Lat: 39°07N

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1147	875	700	458	222	53	1	4	108	429	805	1131	5933
60	992	735	549	323	117	16	0	0	41	285	655	976	4689
57	899	651	461	251	72	7	0	0	19	209	565	883	4017
55	837	595	405	209	49	4	0	0	10	165	507	821	3602
50	692	463	275	123	15	0	0	0	1	79	365	666	2679
32	247	102	23	3	0	0	0	0	0	0	43	199	617

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	123	151	345	542	827	1091	1345	1282	940	597	228	91	7562
55	0	0	15	58	163	405	632	569	260	48	2	0	2152
57	0	0	9	40	124	348	570	507	209	31	0	0	1838
60	0	0	3	22	76	267	477	414	141	13	0	0	1413
65	0	0	0	7	25	154	322	263	58	2	0	0	831
70	0	0	0	0	5	71	174	131	15	0	0	0	396

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (N	(Ionthly)								Growi	ng Degre	ee Units (Accumu	lated Mo	nthly)			
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	16	44	144	303	564	840	1091	1032	698	358	91	17	16	60	204	507	1071	1911	3002	4034	4732	5090	5181	5198
45	2 10 65 185 415 690 936 877 549 230 38												2	12	77	262	677	1367	2303	3180	3729	3959	3997	4001
50	0 1 25 95 272 541 781 722 403 123 9												0	1	26	121	393	934	1715	2437	2840	2963	2972	2972
55	0	0	4	40	155	394	626	567	266	50	0	0	0	0	4	44	199	593	1219	1786	2052	2102	2102	2102
60	0	0	0	12	66	258	471	413	148	12	0	0	0	0	0	12	78	336	807	1220	1368	1380	1380	1380
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	/86 24 55 138 244 395 535 677 650 476 295 96 24												24	79	217	461	856	1391	2068	2718	3194	3489	3585	3609

(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

NWS Call Sign:

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

- c. Snow Tables
 - 1. Snow Climatology
 - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

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