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: 421588

Station: COALVILLE, UT

Climate Division: UT 5

NWS Call Sign:

Elevation: 5,550 Feet Lat: 40°55N Lon: 111°24W

									r	Гетре	eratur	e (°F)									
	Mea	n (1)						Extr	emes					- C	Days (1) emp 65		Mean	Numb	er of D	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	36.0	11.2	23.6	60+	1953	12	30.7	1999	-30	1963	12	15.5	1989	1283	0	.0	.0	2.2	9.8	30.1	6.1
Feb	41.7	14.4	28.1	68+	1963	5	35.3	2000	-33+	1982	5	19.5	1989	1035	0	.0	.0	5.6	4.2	27.1	4.0
Mar	50.5	22.4	36.5	76+	1986	28	42.3	1986	-20	1964	7	30.2	1976	885	0	.0	.0	16.6	.4	27.9	.4
Apr	59.2	27.5	43.4	84+	1992	29	49.1	1992	10+	1960	17	37.0	1975	650	0	.0	.0	24.6	.0	22.7	.0
May	69.0	34.3	51.7	91	1984	29	55.7	2000	15	1972	1	47.0	1975	414	0	.0	.1	30.0	.0	11.3	.0
Jun	78.9	40.3	59.6	99	1954	23	64.4	1988	26+	1949	15	54.8	1975	181	18	.0	2.9	29.9	.0	2.5	.0
Jul	86.0	45.9	66.0	100+	1998	19	69.6	1998	31+	1950	31	59.3	1993	54	83	.1	9.4	31.0	.0	.1	.0
Aug	84.3	44.5	64.4	100	2000	1	70.0	2000	24+	1974	21	60.8	1975	88	70	@	6.8	31.0	.0	.6	.0
Sep	76.1	36.5	56.3	95	1950	3	60.4	1998	14	1985	30	52.1	1986	268	7	.0	.8	29.9	.0	9.1	.0
Oct	64.6	27.3	46.0	86	1996	10	50.8	1988	5	1991	31	40.8	1984	591	0	.0	.0	28.0	.2	23.3	.0
Nov	48.1	19.7	33.9	77	1965	1	40.6	1999	-17	1955	16	26.4	2000	934	0	.0	.0	13.7	2.5	27.2	1.1
Dec	37.2	12.1	24.7	65	1969	21	31.6	1995	-27	1972	10	15.3	1990	1252	0	.0	.0	3.2	8.2	29.8	4.8
					Aug			Aug		Feb			Dec								
Ann	61.0	28.0	44.5	100+	2000	1	70.0	2000	-33+	1982	5	15.3	1990	7635	178	.1	20.0	245.7	25.3	211.7	16.4

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 022-A

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

⁽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

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Climate Division: UT 5 NWS Call Sign: Elevation: 5,550 Feet Lat: 40°55N Lon: 111°24W

										Pı	ecipi	tation	(incl	hes)												
	Me	ans/	P	recipi	itatio	on Total	s			M		Numbo Pays (3	-	Proba	ability tl		nonthly/	annual indic	precipita cated an		ll be equ		less tha	an the		
	Medi					Extreme	5			D	aily Pre	cipitatio	n		Th		•		•	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	1.31	1.07	.98	1963	31	4.37	1980	.09	1984	9.9	4.4	.4	.0	.20	.31	.50	.68	.87	1.07	1.31	1.60	1.99	2.62	3.22		
Feb	1.22	1.15	1.45	1950	7	2.86	1980	.36	1984	8.6	4.1	.3	.0	.36	.48	.65	.80	.95	1.10	1.27	1.47	1.72	2.12	2.49		
Mar	1.62	1.47	1.02	1987	16	2.94	1983	.61	1999	10.4	5.2	.6	@	.63	.78	1.00	1.17	1.34	1.51	1.70	1.91	2.18	2.60	2.98		
Apr	1.84	1.88	1.49	1974	2	3.92	1986	.16	1977	9.5	5.6	.7	.1	.44	.61	.88	1.12	1.36	1.61	1.89	2.22	2.66	3.36	4.01		
May	2.02	1.88	1.72	1985	10	3.72	1995	.16	1972	10.4	5.8	.9	.2	.55	.74	1.04	1.29	1.54	1.80	2.09	2.44	2.89	3.59	4.24		
Jun	1.13	.98	1.17	1983	1	3.99	1998	.03	1994	5.8	3.2	.5	.1	.06	.12	.26	.41	.58	.79	1.04	1.36	1.81	2.58	3.35		
Jul	1.00	.97	2.06	1969	30	2.25	1995	.00	1978	6.4	3.2	.3	@	.10	.21	.38	.52	.67	.83	1.01	1.24	1.53	2.01	2.46		
Aug	1.08	.74	2.60	1986	21	3.71	1986	.00	1985	6.7	2.9	.3	@	.04	.13	.28	.44	.61	.81	1.04	1.32	1.72	2.38	3.03		
Sep	1.37	1.24	1.59	1982	26	6.13	1982	.00	1974	7.0	3.4	.7	.1	.05	.16	.35	.55	.76	1.01	1.31	1.68	2.19	3.04	3.88		
Oct	1.61	1.52	1.37	1985	7	3.61	1981	.00	1978	7.1	4.2	1.0	.1	.16	.35	.62	.85	1.09	1.34	1.63	1.98	2.45	3.20	3.92		
Nov	1.62	1.39	1.30	1958	15	3.51	1988	.05	1976	8.8	4.9	.8	.0	.33	.47	.71	.93	1.15	1.38	1.65	1.97	2.39	3.07	3.71		
Dec	1.15	1.03	1.65	1964	23	3.57	1996	.01	1976	8.4	3.9	.2	.0	.06	.13	.27	.42	.60	.81	1.06	1.38	1.84	2.62	3.40		
Ann	16.97	17.13	2.60	Aug 1986	21	6.13	Sep 1982	.00+	Aug 1985	99.0	50.8	6.7	.6	10.70	11.86	13.37	14.54	15.58	16.61	17.68	18.87	20.34	22.49	24.37		

⁺ 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: 1948-2001

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

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Climate Division: UT 5 NWS Call Sign: Elevation: 5,550 Feet Lat: 40°55N Lon: 111°24W

										Snov	w (incl	nes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	yS (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa			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	14.4	15.2	4	2	12.0	1975	8	24.0	1975	29	1993	14	22	1993	5.0	4.6	2.5	.9	.1	11.8	8.4	5.1	3.2
Feb	14.6	15.0	4	1	12.0	1973	11	29.0	1980	28	1989	8	20	1989	4.3	4.0	2.0	1.1	.2	9.4	7.6	5.6	2.9
Mar	11.1	10.0	1	#	12.0	1980	21	37.0	1985	16	1993	2	6	1980	3.2	3.1	1.6	.7	.1	2.4	1.4	.9	.2
Apr	4.9	3.8	#	0	10.0	1974	2	20.0	1986	5	1986	13	#+	1999	1.7	1.5	.6	.3	.1	.1	.1	.1	.0
May	2.3	.0	#	0	10.0	1983	11	26.0	1975	2	1983	11	#+	1999	.5	.4	.3	.2	@	.2	.0	.0	.0
Jun	.1	.0	#	0	2.0	1998	17	2.0	1998	#	1998	17	#	1998	@	@	.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	.4	.0	#	0	9.0	2000	23	10.0	2000	4	2000	23	#+	2000	.1	.1	@	@	.0	.1	@	.0	.0
Oct	1.8	.0	#	0	12.0	1971	28	15.0	1971	3	1997	24	2	1998	.6	.5	.3	.2	@	.2	.1	.0	.0
Nov	9.4	6.1	1	#	14.0	1986	9	32.0	1988	10	1994	28	4	1994	3.0	2.7	1.5	.6	.2	5.2	2.8	1.6	.1
Dec	11.7	10.0	3	2	16.0	1983	24	30.5	1996	14+	1996	5	10	1983	4.1	3.8	2.2	1.0	.2	13.8	6.6	3.6	.6
Ann	70.7	60.1	N/A	N/A	16.0	Dec 1983	24	37.0	Mar 1985	29	Jan 1993	14	22	Jan 1993	22.5	20.7	11.0	5.0	.9	43.2	27.0	16.9	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

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Elevation: 5,550 Feet Lat: 40°55N Lon: 111°24W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	(Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated((*)	
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	7/20	7/14	7/09	7/05	7/01	6/27	6/23	6/18	6/11
32	7/04	6/28	6/23	6/19	6/16	6/12	6/08	6/04	5/28
28	6/06	6/01	5/28	5/24	5/21	5/17	5/14	5/10	5/04
24	5/19	5/14	5/10	5/07	5/05	5/02	4/29	4/25	4/20
20	5/03	4/28	4/25	4/22	4/19	4/16	4/13	4/09	4/04
16	4/22	4/15	4/10	4/05	4/01	3/28	3/24	3/19	3/12
			Fal	l Freeze Da	tes (Month/D	Day)			•
Tomp (F)		Pro	bability of ea	arlier date ii	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	8/05	8/11	8/15	8/19	8/22	8/25	8/29	9/02	9/08
32	8/20	8/26	8/30	9/02	9/06	9/09	9/12	9/16	9/22
28	9/04	9/09	9/13	9/16	9/18	9/21	9/24	9/28	10/03
24	9/11	9/17	9/21	9/25	9/29	10/03	10/07	10/11	10/17
20	9/29	10/04	10/08	10/11	10/15	10/18	10/21	10/25	10/30
16	10/13	10/18	10/22	10/25	10/28	10/31	11/04	11/07	11/13
•			•	Freeze F	ree Period		•		
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	81	71	63	57	51	46	39	32	22
32	107	98	92	86	81	76	70	64	54
28	141	134	129	124	120	116	111	106	99
24	171	163	157	152	147	142	137	131	122
20	199	192	186	182	178	174	169	164	157
16	236	227	220	214	209	204	198	192	183

^{*} 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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Lon: 111°24W

Station: COALVILLE, UT

Climate Division: UT 5

				Deg	ree Days to	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	1283	1035	885	650	414	181	54	88	268	591	934	1252	7635
60	1128	895	730	500	265	80	10	27	144	436	784	1097	6096
57	1035	811	637	413	185	41	2	10	87	344	694	1004	5263
55	973	755	575	356	138	23	0	5	57	285	634	942	4743
50	818	615	422	226	54	4	0	0	14	155	486	787	3581
32	313	187	47	8	0	0	0	0	0	1	90	273	919

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	53	76	185	348	609	827	1053	1005	729	434	146	44	5509
55	0	0	0	7	34	161	340	297	96	4	0	0	939
57	0	0	0	3	18	118	279	240	66	1	0	0	725
60	0	0	0	0	5	68	195	164	33	0	0	0	465
65	0	0	0	0	0	18	83	70	7	0	0	0	178
70	0	0	0	0	0	2	20	18	1	0	0	0	41

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (M	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	0	5	53	167	389	608	824	785	512	238	40	3	0	5	58	225	614	1222	2046	2831	3343	3581	3621	3624
45													0	0	11	86	329	788	1457	2087	2455	2573	2580	2580
50	0 0 0 24 126 312 514 475 228 40 0											0	0	0	0	24	150	462	976	1451	1679	1719	1719	1719
55	0	0	0	3	43	177	359	322	108	4	0	0	0	0	0	3	46	223	582	904	1012	1016	1016	1016
60	0	0	0	0	6	76	208	176	33	0	0	0	0	0	0	0	6	82	290	466	499	499	499	499
Base	e Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	50/86 0 15 67 171 311 444 553 539 407 256 64 5												0	15	82	253	564	1008	1561	2100	2507	2763	2827	2832

(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