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: 481850

Station: CODY 12 SE, WY

Climate Division: WY 4

NWS Call Sign:

Elevation: 5,248 Feet Lat: 44°25N Lon: 108°54W

									r	Tempe	eratur	re (°F)									
	Mea	n (1)						Extr	emes					Degree Base To	Days (1) emp 65		Mean	Numb	er of I	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	35.9	9.9	22.9	65	1974	17	33.1	1986	-35	1963	12	8.5	1979	1306	0	.0	.0	3.9	10.3	29.6	8.0
Feb	40.1	14.6	27.4	68	1995	25	37.1	1991	-40	1989	2	9.3	1989	1054	0	.0	.0	6.8	6.3	27.1	4.6
Mar	46.7	22.1	34.4	75	1986	28	42.7	1986	-25	1965	25	26.9	1996	949	0	.0	.0	14.0	3.6	27.3	1.2
Apr	55.4	29.8	42.6	84+	2000	29	51.3	1987	0+	1975	9	32.6	1975	672	0	.0	.0	20.6	1.0	19.0	.1
May	64.5	38.5	51.5	90	1969	28	56.7	1987	10	1967	4	46.9	1995	422	3	.0	.0	28.0	.1	6.4	.0
Jun	75.6	46.6	61.1	98+	1988	25	70.8	1988	29+	1979	8	55.0	1998	172	55	.0	2.4	29.7	.0	.3	.0
Jul	83.7	52.5	68.1	102	1989	4	73.0	1998	30	1978	21	60.0	1993	59	155	.1	7.8	31.0	.0	@	.0
Aug	82.5	50.8	66.7	102	1979	5	73.4	1971	31	1992	25	61.8	1987	82	135	.1	5.7	31.0	.0	@	.0
Sep	71.1	40.2	55.7	97	1983	1	65.3	1998	7+	1984	26	49.3	1986	308	29	.0	.8	28.2	.1	5.1	.0
Oct	58.7	29.8	44.3	88	2001	2	49.7	1988	-5+	1991	31	39.6	1984	644	0	.0	.0	24.0	.9	18.7	.2
Nov	44.2	19.1	31.7	73+	1999	13	44.4	1999	-23	1985	22	14.6	1985	1001	0	.0	.0	10.4	4.8	26.7	3.1
Dec	37.7	10.5	24.1	69	1999	1	32.4	1999	-42	1964	17	5.9	1983	1268	0	.0	.0	5.0	8.7	30.1	6.6
Ann	58.0	30.4	44.2	102+	Jul 1989	4	73.4	Aug 1971	-42	Dec 1964	17	5.9	Dec 1983	7937	377	.2	16.7	232.6	35.8	190.3	23.8

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 026-A

- (2) Derived from station's available digital record: 1949-2001
- (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: CODY 12 SE, WY COOP ID: 481850

Climate Division: WY 4 NWS Call Sign: Elevation: 5,248 Feet Lat: 44°25N Lon: 108°54W

										Pı	recipi	tation	(incl	nes)										
	Mea Medi		P	recipi	itatio	on Total					ean N of D	ays (3)	Proba		M	nonthly/ onthly/Ar	annual j indic	precipita ated am	babilit ation will nount vs Probal	ll be equ	els		ın 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	.38	.18	.90	1954	29	2.17	1975	.00+	1999	3.8	1.3	.1	.0	.00	.00	.03	.08	.15	.23	.33	.46	.65	.96	1.28
Feb	.24	.18	1.50	1955	3	1.24	1978	.00+	1999	2.5	.8	.0	.0	.00	.00	.00	.04	.09	.14	.21	.29	.41	.62	.82
Mar	.50	.50	1.25	1966	22	1.30	1973	.02+	1979	4.4	2.0	.1	.0	.06	.10	.17	.24	.31	.40	.49	.61	.76	1.02	1.27
Apr	.98	.80	3.40	1958	22	3.14	1999	.00	1982	5.8	2.7	.4	.1	.06	.16	.31	.46	.61	.78	.97	1.21	1.54	2.07	2.59
May	2.03	1.87	2.50	1950	28	6.83	1978	.13	1976	8.5	5.1	1.0	.2	.26	.43	.71	1.00	1.29	1.62	2.01	2.48	3.12	4.17	5.18
Jun	1.75	1.54	2.63	1968	9	5.50	1992	.36+	1990	7.9	4.8	.8	.3	.35	.50	.76	1.00	1.23	1.49	1.78	2.13	2.59	3.32	4.03
Jul	1.07	.79	1.70	1982	24	2.88	1987	.00	1996	5.7	3.0	.4	.1	.06	.16	.32	.48	.64	.83	1.05	1.32	1.69	2.30	2.89
Aug	.82	.74	1.00	1951	4	2.96	1972	.00	2000	5.2	2.9	.3	.0	.12	.23	.37	.48	.59	.71	.85	1.01	1.21	1.54	1.85
Sep	.94	.60	1.27	1996	17	3.00	1995	.00	1987	4.9	2.5	.5	.1	.04	.11	.24	.38	.53	.70	.90	1.15	1.50	2.08	2.65
Oct	.65	.44	1.22	1974	31	2.89	1971	.01	1987	3.5	2.1	.3	@	.04	.08	.16	.24	.34	.46	.60	.78	1.04	1.46	1.89
Nov	.41	.35	.80	1973	1	1.01	1978	.00+	1999	2.9	1.5	.1	.0	.00	.06	.14	.21	.27	.34	.42	.51	.63	.83	1.02
Dec	.30	.20	.66	1978	12	1.64	1978	.00	1986	2.6	1.3	.1	.0	.00	.01	.04	.08	.12	.18	.26	.36	.50	.75	1.01
Ann	10.07	9.87	3.40	Apr 1958	22	6.83	May 1978	.00+	Aug 2000	57.7	30.0	4.1	.8	6.23	6.93	7.85	8.56	9.21	9.84	10.49	11.23	12.13	13.46	14.63

⁺ 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: 1949-2001

⁽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: 481850

Station: CODY 12 SE, WY

Climate Division: WY 4 NWS Call Sign: Elevation: 5,248 Feet Lat: 44°25N Lon: 108°54W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1))					Extre	mes (2)							ow Fa					Depth esholo	
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	3.2	1.0	1	#	10.0	1972	12	13.0	1972	12	1975	26	4	1979	1.1	.9	.6	.2	.1	-9.9	-9.9	-9.9	-9.9
Feb	.8	.0	#	#	3.0	1976	29	3.0	1995	6	1978	28	1	1995	.6	.4	.1	.0	.0	.9	.5	.0	.0
Mar	1.1	#	#	#	6.0	1971	4	8.5	1971	6	1971	6	2	1971	.4	.3	.1	@	.0	.5	.1	.0	.0
Apr	1.1	.0	#	0	8.0	1974	12	8.0	1974	10	1974	13	7	1973	.5	.4	.1	.1	.0	.4	.2	.1	.1
May	.2	.0	0	0	4.0	1975	7	4.0	1975	0	0	0	0	0	.1	.1	@	.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	.2	.0	#	0	4.0	1995	20	4.0	1995	1	1995	20	#	1995	@	@	@	.0	.0	@	.0	.0	.0
Oct	.2	#	#	0	3.0	1971	18	3.0	1971	3	1971	18	#+	1997	.2	.2	@	.0	.0	.2	.1	.0	.0
Nov	2.1	.6	#	#	8.0	1973	1	8.0	1973	8	1973	1	1	1978	.7	.4	.2	.1	.0	.7	.2	.1	.0
Dec	2.9	1.5	#	#	5.0	1972	4	8.0	1972	10	2000	9	4	1972	.6	.4	.2	.1	.0	.4	.0	.0	.0
Ann	11.8	3.1	N/A	N/A	10.0	Jan 1972	12	13.0	Jan 1972	12	Jan 1975	26	7	Apr 1973	4.2	3.1	1.3	.5	.1	-9.9	-9.9	-9.9	-9.9

⁺ 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

Station: CODY 12 SE, WY

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: 481850

Climate Division: WY 4 NWS Call Sign: Elevation: 5,248 Feet Lat: 44°25N Lon: 108°54W

				Freez	ze 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((*)	
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/29	6/23	6/19	6/15	6/12	6/08	6/04	5/31	5/25
32	6/14	6/07	6/02	5/29	5/25	5/21	5/17	5/12	5/05
28	5/20	5/15	5/11	5/09	5/06	5/03	4/30	4/27	4/22
24	5/13	5/07	5/03	4/29	4/26	4/23	4/19	4/15	4/09
20	4/30	4/24	4/20	4/17	4/13	4/10	4/06	4/02	3/27
16	4/18	4/13	4/09	4/06	4/03	3/31	3/28	3/24	3/19
			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(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	8/21	8/26	8/30	9/02	9/06	9/09	9/12	9/16	9/21
32	9/06	9/10	9/13	9/15	9/18	9/20	9/23	9/26	9/30
28	9/12	9/17	9/19	9/22	9/24	9/27	9/29	10/02	10/06
24	9/19	9/24	9/29	10/02	10/05	10/09	10/12	10/16	10/22
20	9/30	10/06	10/11	10/14	10/18	10/22	10/26	10/30	11/05
16	10/05	10/12	10/16	10/20	10/24	10/28	11/01	11/05	11/12
		1	•	Freeze F	ree Period		1	1	•
Tomp (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	109	101	95	90	85	80	75	70	61
32	138	130	124	119	115	110	106	100	92
28	162	155	149	145	141	137	132	127	120
24	184	176	171	166	162	157	153	147	139
20	214	205	198	192	187	182	176	170	161
16	229	220	214	208	203	198	193	186	177

^{*} 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: 481850

Station: CODY 12 SE, WY

Climate Division: WY 4 NWS Call Sign: Elevation: 5,248 Feet Lat: 44°25N Lon: 108°54W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1306	1054	949	672	422	172	59	82	308	644	1001	1268	7937		
60	1151	914	794	525	280	88	19	32	197	490	851	1113	6454		
57	1058	830	701	440	206	52	9	17	142	398	761	1020	5634		
55	996	774	639	386	163	34	4	10	111	338	706	958	5119		
50	844	644	490	260	79	10	0	2	51	201	566	810	3957		
32	363	240	92	20	0	0	0	0	0	5	176	339	1235		

Base		Cooling Degree Days (1)														
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann			
32	80	110	167	338	604	874	1119	1075	710	384	166	94	5721			
55	0	0	0	13	54	218	410	372	131	4	5	0	1207			
57	0	0	0	8	35	176	353	317	103	2	0	0	994			
60	0	0	0	3	16	122	270	239	68	0	0	0	718			
65	0	0	0	0	3	55	155	135	29	0	0	0	377			
70	0	0	0	0	0	19	75	61	10	0	0	0	165			

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (M	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan														Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	7	17	58	164	377	643	878	837	496	204	44	4	7	24	82	246	623	1266	2144	2981	3477	3681	3725	3729
45	0 1 16 83 240 494 723 682 358 110 17												0	1	17	100	340	834	1557	2239	2597	2707	2724	2724
50	0 0 2 36 134 350 568 529 233 45 0												0	0	2	38	172	522	1090	1619	1852	1897	1897	1897
55	0	0	0	10	58	225	416	375	133	13	0	0	0	0	0	10	68	293	709	1084	1217	1230	1230	1230
60	0 0 0 0 18 117 271 232 59 1 0										0	0	0	0	0	18	135	406	638	697	698	698	698	
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	6 2 21 55 128 242 403 557 535 336 174 41												2	23	78	206	448	851	1408	1943	2279	2453	2494	2503

(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

- 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