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: 057017

Station: RICO, CO

Climate Division: CO 2

NWS Call Sign:

Elevation: 8,800 Feet Lat: 37°43N Lon: 108°02W

									ŗ	Tempe	eratui	re (°F)									
	Mea	n (1)						Extr	emes						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	37.2	4.3	20.8	64	1992	30	28.7	1981	-36	1963	12	13.2	1979	1371	0	.0	.0	3.8	9.5	30.9	9.7
Feb	39.6	6.8	23.2	62+	1995	21	30.5	1995	-29	1985	1	17.6	1985	1171	0	.0	.0	4.5	6.1	28.2	6.7
Mar	43.0	12.8	27.9	66	1966	31	34.7	1999	-20	1962	14	22.1	1980	1151	0	.0	.0	8.2	2.4	30.9	2.9
Apr	48.9	19.4	34.2	75	1981	30	39.8	1989	-11	1980	1	28.0	1973	925	0	.0	.0	17.0	1.0	29.1	.5
May	59.0	27.8	43.4	80	1977	31	48.0	1996	4	1975	7	39.8	1975	670	0	.0	.0	27.3	@	25.5	.0
Jun	69.9	33.9	51.9	87+	1974	28	55.9	2000	18+	1984	22	48.7	1975	392	0	.0	.0	29.9	.0	11.6	.0
Jul	74.3	40.0	57.2	88	1973	5	60.5	1998	22	1984	3	54.0	1992	244	0	.0	.0	31.0	.0	1.9	.0
Aug	72.6	39.6	56.1	89	1978	1	60.2	2000	22+	1992	27	53.8	1975	276	0	.0	.0	31.0	.0	3.2	.0
Sep	66.1	32.1	49.1	84	1960	4	53.1	1998	10	1984	30	44.4	1990	481	0	.0	.0	29.5	.0	15.2	.0
Oct	57.2	23.9	40.6	80+	1980	3	45.2	1988	-2	1971	30	31.6	1984	758	0	.0	.0	24.5	.3	28.6	.1
Nov	44.5	13.1	28.8	72	1999	14	37.6	1999	-15	1984	27	23.1	2000	1087	0	.0	.0	9.8	3.8	29.9	2.5
Dec	38.7	5.8	22.3	61+	1980	16	32.9	1980	-27	1978	8	17.0	1972	1325	0	.0	.0	4.8	7.9	31.0	8.3
Ann	54.3	21.6	38.0	89	Aug 1978	1	60.5	Jul 1998	-36	Jan 1963	12	13.2	Jan 1979	9851	0	.0	.0	221.3	31.0	266.0	30.7

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 083-A

- (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

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

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Climate Division: CO 2 NWS Call Sign: Elevation: 8,800 Feet Lat: 37°43N Lon: 108°02W

										Pı	recipi	tation	(incl	nes)										
			P	recip	itatio	on Total	s			M	ean N	lumbo ays (3	_	Proba	bility th	nat the n		annual j			ies (1)	ıal to or	less tha	ın the
	Medi					Extremes	s			D	aily Pre	cipitatio	n		Th		-		-		bility Leve e gamma		on	
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	2.31	1.82	1.61	1978	15	7.57	1980	.46	1986	8.3	5.8	1.4	.4	.34	.53	.86	1.18	1.51	1.88	2.30	2.82	3.52	4.65	5.75
Feb	2.38	2.08	2.04	1987	26	7.19	1993	.27	1972	8.5	6.1	1.5	.4	.44	.65	1.00	1.33	1.65	2.01	2.42	2.90	3.55	4.60	5.60
Mar	2.73	2.50	1.60	1965	24	7.04	1991	.00	1997	10.3	8.1	1.5	.3	.28	.61	1.06	1.46	1.86	2.29	2.78	3.37	4.16	5.42	6.62
Apr	1.75	1.46	1.27	1986	2	4.30	1999	.25	2000	8.6	5.8	.9	.1	.37	.53	.79	1.02	1.26	1.50	1.79	2.12	2.57	3.28	3.96
May	1.78	1.91	1.35	1999	4	4.41	1992	.00+	1997	8.6	5.0	.9	.1	.00	.16	.47	.75	1.05	1.37	1.75	2.22	2.85	3.91	4.93
Jun	1.45	.78	1.80	1988	28	8.54	1988	.00+	2000	5.8	3.9	.7	.3	.00	.00	.23	.46	.71	1.00	1.35	1.79	2.39	3.42	4.44
Jul	2.85	2.53	1.50	1995	13	7.81	1981	.00	1993	10.7	8.1	1.4	.3	.49	.88	1.37	1.76	2.14	2.54	2.98	3.50	4.18	5.24	6.24
Aug	2.87	2.54	2.40	1957	31	7.77	1982	.00	1994	11.4	8.1	1.6	.3	.38	.74	1.23	1.64	2.05	2.48	2.96	3.54	4.30	5.51	6.66
Sep	2.37	1.96	2.07	1959	16	6.48	1986	.19	1979	9.1	6.1	1.4	.2	.37	.57	.92	1.24	1.58	1.95	2.38	2.90	3.59	4.73	5.81
Oct	2.18	1.96	2.80	1959	30	7.06	1972	.00+	1999	7.5	5.2	1.4	.3	.00	.44	.89	1.23	1.56	1.90	2.29	2.72	3.30	4.23	5.11
Nov	2.05	1.65	2.30	1965	25	6.23	1986	.00	1995	7.2	5.4	1.4	.2	.11	.30	.62	.92	1.24	1.60	2.02	2.53	3.23	4.39	5.51
Dec	1.96	1.58	2.95	1966	6	6.51	1983	.00	1995	7.9	5.4	1.1	.2	.09	.26	.55	.84	1.15	1.50	1.90	2.41	3.10	4.25	5.38
Ann	26.68	27.83	2.95	Dec 1966	6	8.54	Jun 1988	.00+	Jun 2000	103.9	73.0	15.2	3.1	13.83	16.02	18.99	21.36	23.53	25.69	27.98	30.57	33.80	38.64	42.96

⁺ 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: CO 2 NWS Call Sign: Elevation: 8,800 Feet Lat: 37°43N Lon: 108°02W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ians (1)	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	27.9	26.8	23	24	20.5	1978	15	89.0	1980	66	1980	20	48	1984	7.5	6.9	3.8	2.1	.7	25.5	24.4	23.6	23.2
Feb	29.7	26.8	26	28	21.0	1989	4	77.5	1993	86	1980	22	61	1993	7.4	7.0	4.0	2.1	.5	22.1	21.5	20.9	20.3
Mar	37.0	39.1	27	29	16.0	1978	1	81.0	1991	84	1980	28	74	1980	9.2	8.8	5.1	2.6	.5	23.6	22.6	21.4	19.8
Apr	20.0	20.0	13	5	11.5	1985	21	44.5	1975	89	1980	2	59	1980	5.6	5.3	2.4	1.0	.2	13.8	12.6	10.9	9.3
May	7.3	3.0	1	#	16.5	1982	13	24.5	1983	24	1980	1	4	1980	1.9	1.8	.9	.4	.1	2.2	1.5	.9	.5
Jun	.2	.0	#	0	3.0	1973	3	3.0	1973	3	1973	3	#+	1999	.1	.1	@	.0	.0	.1	@	.0	.0
Jul	.0	.0	#	0	.0	0	0	.0	0	#+	1999	30	#+	1999	.0	.0	.0	.0	.0	.0	.0	.0	.0
Aug	.0	.0	#	0	.0	0	0	.0	0	#+	1998	26	#+	1998	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.4	.0	#	0	5.5	1986	24	9.0	1986	6	1986	26	1	1986	.2	.2	@	@	.0	.1	.1	.1	.0
Oct	6.8	3.8	1	#	10.0	1974	29	36.0	1984	19	1984	19	7	1984	2.1	1.9	.8	.3	@	2.4	1.4	1.0	.6
Nov	25.0	22.5	4	4	16.0	1991	15	62.0	1985	38	1985	30	12	1991	6.2	5.6	3.2	1.8	.4	13.7	11.8	9.5	3.9
Dec	22.9	21.0	11	7	13.0	1975	13	50.0+	1972	58	1983	28	34	1972	6.8	6.2	3.4	1.6	.3	21.4	19.8	17.6	13.9
Ann	177.2	163.0	N/A	N/A	21.0	Feb 1989	4	89.0	Jan 1980	89	Apr 1980	2	74	Mar 1980	47.0	43.8	23.6	11.9	2.7	124.9	115.7	105.9	91.5

⁺ 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: 8,800 Feet

Lat: 37°43N Lon: 108°02W

				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	8/05	7/31	7/27	7/24	7/21	7/17	7/14	7/10	7/05
32	7/23	7/17	7/12	7/07	7/03	6/29	6/25	6/20	6/13
28	7/04	6/27	6/23	6/18	6/15	6/11	6/07	6/02	5/26
24	6/19	6/11	6/05	5/31	5/26	5/21	5/16	5/10	5/02
20	6/02	5/25	5/19	5/14	5/10	5/05	4/30	4/25	4/17
16	5/12	5/05	5/01	4/27	4/23	4/20	4/16	4/11	4/05
			Fal	ll Freeze Da	tes (Month/D	Day)			
Temp (F)		Pro	bability of ea	arlier date i	n fall (beginn	ning Aug 1) t	han indicate	d(*)	
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	7/26	7/31	8/05	8/09	8/13	8/16	8/20	8/25	8/31
32	8/04	8/12	8/18	8/22	8/27	9/01	9/05	9/11	9/19
28	8/25	8/31	9/04	9/08	9/12	9/15	9/19	9/23	9/30
24	9/03	9/09	9/14	9/19	9/23	9/27	10/01	10/06	10/13
20	9/20	9/26	10/01	10/05	10/09	10/12	10/16	10/21	10/27
16	9/30	10/07	10/13	10/17	10/21	10/25	10/30	11/04	11/11
•				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	52	42	35	28	22	16	10	3	0
32	89	77	68	61	54	47	40	31	19
28	119	108	101	94	88	82	76	68	58
24	158	145	135	127	119	111	103	93	80
20	186	174	165	158	151	144	137	128	116
16	211	200	193	186	180	174	167	159	149

^{*} 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.

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				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree 1	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1371	1171	1151	925	670	392	244	276	481	758	1087	1325	9851
60	1216	1031	996	775	515	247	104	133	331	603	937	1170	8058
57	1123	947	903	685	422	168	48	70	245	510	847	1077	7045
55	1061	891	841	625	361	123	23	40	192	449	787	1015	6408
50	906	751	686	476	216	43	1	5	86	302	637	860	4969
32	358	260	184	79	3	0	0	0	0	15	165	318	1382

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	10	13	56	144	356	598	779	747	510	280	68	16	3577
55	0	0	0	0	1	31	89	74	12	0	0	0	207
57	0	0	0	0	0	16	52	42	5	0	0	0	115
60	0	0	0	0	0	5	15	12	1	0	0	0	33
65	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0

										Gro	wing	Degre	e Uni	ts (2)											
Base														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 0 0 37 161 381 549 504 292 106 10												0	0	0	37	198	579	1128	1632	1924	2030	2040	2040	
45	0 0 0 4 58 237 394 349 155 31 0											0	0	0	0	4	62	299	693	1042	1197	1228	1228	1228	
50	0	0	0	0	6	111	239	198	54	1	0	0	0	0	0	0	6	117	356	554	608	609	609	609	
55	0	0	0	0	0	30	95	67	9	0	0	0	0	0	0	0	0	30	125	192	201	201	201	201	
60	0	0	0	0	0	1	13	4	0	0	0	0	0	0	0	0	0	1	14	18	18	18	18	18	
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)												
50/86	1/86 3 1 23 64 173 320 395 367 258 147 34 4											4	3	4	27	91	264	584	979	1346	1604	1751	1785	1789	

(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

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