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: 101514

Station: CASCADE 1 NW, ID

Climate Division: ID 4

NWS Call Sign:

Elevation: 4,896 Feet Lat: 44°31N Lon: 116°03W

									ŗ	Temp	eratui	re (°F)										
	Mea	n (1)						Extr	emes						Days (1) emp 65		Mean	Numb	nber 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	29.2	9.7	19.5	50	1976	28	26.6	1998	-36	1962	22	6.6	1979	1413	0	.0	.0	@	17.8	30.6	8.7	
Feb	34.7	12.5	23.6	58	1977	20	31.0	1995	-33+	1950	3	14.2	1985	1159	0	.0	.0	.9	8.8	27.9	5.5	
Mar	42.1	19.2	30.7	68	1978	29	37.0	1992	-25	1955	5	24.0	1976	1065	0	.0	.0	6.0	1.7	30.1	.8	
Apr	51.1	25.7	38.4	83	1977	24	44.0	1987	2+	1999	10	30.6	1975	798	0	.0	.0	17.6	.1	26.5	.0	
May	61.2	32.9	47.1	88+	1986	31	52.5	1993	15	1988	3	43.1	1999	557	0	.0	.0	27.3	.0	14.9	.0	
Jun	70.1	39.0	54.6	93+	1977	7	61.0	1977	21	1994	7	50.7	1993	322	7	.0	.5	29.7	.0	5.3	.0	
Jul	79.4	43.6	61.5	100	1960	20	66.4	1975	27+	1999	5	53.0	1993	162	53	.0	3.4	31.0	.0	1.1	.0	
Aug	79.3	42.0	60.7	100	1961	5	64.7	1994	24	1992	24	56.2	1985	169	34	.0	3.1	31.0	.0	1.7	.0	
Sep	69.3	33.8	51.6	94+	1950	3	57.1	1990	14+	1999	29	44.2	1985	409	6	.0	.2	29.0	.0	12.1	.0	
Oct	56.8	26.3	41.6	84+	1992	2	47.4	1988	5	1991	30	36.0	1984	726	0	.0	.0	23.7	.1	26.1	.0	
Nov	39.0	19.9	29.5	67+	1999	13	36.4	1999	-21	1985	23	20.8	1985	1066	0	.0	.0	3.5	6.0	28.2	.8	
Dec	29.8	11.3	20.6	52+	1999	1	27.6	1979	-36	1978	30	8.2	1985	1378	0	.0	.0	.2	18.2	30.3	5.7	
Ann	53.5	26.3	40.0	100+	Aug 1961	5	66.4	Jul 1975	-36+	Dec 1978	30	6.6	Jan 1979	9224	100	.0	7.2	199.9	52.7	234.8	21.5	

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 020-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

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: CASCADE 1 NW, ID

COOP ID: 101514

Climate Division: ID 4 NWS Call Sign: Elevation: 4,896 Feet Lat: 44°31N Lon: 116°03W

										Pı	recipit	tation	(incl	nes)										
	Mea	ans/	P	recipi	itatio	on Total					ean N of D	ays (3)	Proba	bility th		nonthly/	annual j indic	precipita ated am	nount	ies (1)		less tha	ın the
	Medi	ans(1)				LAttemes	•			-	any 11c	приши			Th	ese value	s were det	ermined	from the i	incomplet	te gamma	distributi	ion	
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	2.73	2.66	1.39	1997	1	5.39	1974	.21	1985	14.0	7.9	1.3	.2	.70	.96	1.36	1.71	2.05	2.42	2.82	3.30	3.93	4.92	5.84
Feb	2.48	2.27	1.45	1997	1	6.11	1986	.50+	1991	13.1	6.7	1.3	.1	.63	.86	1.22	1.54	1.86	2.19	2.56	3.00	3.58	4.49	5.34
Mar	2.20	1.89	1.19	1950	17	5.53	1995	.36	1992	13.6	7.0	.8	.0	.58	.79	1.11	1.39	1.67	1.95	2.27	2.65	3.15	3.93	4.66
Apr	1.87	1.73	1.23	1963	6	4.13	1996	.02	1977	12.3	5.8	.7	.0	.33	.50	.77	1.03	1.29	1.57	1.89	2.28	2.80	3.64	4.44
May	1.91	1.73	1.22	1995	6	5.48	1998	.17	1992	11.7	5.3	.9	.2	.40	.57	.85	1.11	1.36	1.64	1.95	2.32	2.81	3.60	4.34
Jun	1.65	1.48	1.64	1969	24	4.23	1993	.47	1994	9.7	4.9	.8	.0	.42	.57	.81	1.02	1.23	1.45	1.70	1.99	2.37	2.97	3.53
Jul	.69	.59	.71	1987	22	1.85	1983	.00+	1999	4.7	1.9	.3	.0	.00	.06	.17	.28	.39	.52	.67	.86	1.11	1.54	1.96
Aug	.69	.46	.92	1959	20	2.03	1975	.01	1973	5.1	2.1	.3	.0	.02	.06	.13	.22	.33	.45	.62	.83	1.13	1.65	2.18
Sep	1.04	.82	1.97	1959	14	3.48	1985	.00+	1987	6.3	3.3	.5	.0	.00	.00	.12	.27	.45	.66	.92	1.26	1.74	2.57	3.41
Oct	1.48	1.28	1.63	1962	14	5.09	1975	.00+	1987	8.0	3.9	.7	.1	.00	.21	.49	.73	.97	1.22	1.51	1.85	2.31	3.06	3.78
Nov	2.79	2.27	1.98	1996	19	7.55	1973	.10	1976	15.1	8.0	1.4	.2	.45	.69	1.10	1.48	1.88	2.31	2.81	3.41	4.22	5.53	6.79
Dec	3.06	2.59	2.73	1964	22	10.86	1996	.27	1986	13.9	8.1	1.8	.4	.51	.77	1.22	1.64	2.07	2.54	3.08	3.74	4.62	6.04	7.40
Ann	22.59	20.53	2.73	Dec 1964	22	10.86	Dec 1996	.00+	Jul 1999	127.5	64.9	10.8	1.2	14.39	15.91	17.90	19.44	20.81	22.16	23.57	25.13	27.05	29.87	32.34

⁺ 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

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: 101514

Station: CASCADE 1 NW, ID

Climate Division: ID 4 NWS Call Sign: Elevation: 4,896 Feet Lat: 44°31N Lon: 116°03W

										Snov	v (incl	hes)											
		Snow Totals															Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ans (1)						Extre	mes (2)							ow Fa					Depth eshold	
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	21.2	21.5	14	13	10.0	1977	3	42.0	1982	34	1993	2	30	1993	10.4	7.9	2.7	.9	.1	28.9	27.5	25.2	19.1
Feb	16.6	13.0	15	16	10.0	1994	24	48.0	1975	42	1999	23	31	1999	8.6	6.5	1.9	.7	@	26.5	25.2	23.7	17.9
Mar	9.0	5.5	9	8	9.0	1997	2	26.5	1975	37	1993	1	27	1999	5.7	4.1	1.0	.3	.0	21.5	17.6	14.0	9.4
Apr	3.4	2.5	1	#	5.0	1982	3	12.0	1982	20	1975	3	13	1975	2.5	1.7	.3	@	.0	3.6	2.0	1.6	1.1
May	.5	.0	#	0	4.0	1978	24	5.5	1978	3	2000	11	#+	2000	.4	.3	@	.0	.0	.1	@	.0	.0
Jun	#	.0	#	0	#	1995	6	#+	1995	#+	1995	6	#+	1995	.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	.1	.0	#	0	2.0	1986	27	2.0	1986	2	1986	27	#+	1986	.1	.1	.0	.0	.0	@	.0	.0	.0
Oct	1.4	.3	#	#	5.0	1985	23	6.5	1984	5	1984	29	1	1984	1.0	.6	@	@	.0	.8	.1	@	.0
Nov	12.8	9.5	2	2	8.0	1980	24	37.4	1994	19	1994	27	8	1994	7.2	5.2	1.7	.6	.0	12.1	7.1	4.7	1.2
Dec	20.4	19.6	8	7	12.0	1979	24	51.6	1996	30	1992	31	19	1971	9.8	7.6	2.6	.9	.1	25.8	19.9	14.6	8.7
Ann	85.4	71.9	N/A	N/A	12.0	Dec 1979	24	51.6	Dec 1996	42	Feb 1999	23	31	Feb 1999	45.7	34.0	10.2	3.4	.2	119.3	99.4	83.8	57.4

⁺ 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

Elevation: 4,896 Feet

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, North Carolina 28801 www.ncdc.noaa.gov

COOP ID: 101514

Lon: 116°03W

Lat: 44°31N

Station: CASCADE 1 NW, ID

Climate Division: ID 4

NWS Call Sign:

				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(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	7/28	7/22	7/18	7/14	7/11	7/08	7/04	6/30	6/24
32	7/15	7/10	7/06	7/02	6/29	6/26	6/22	6/18	6/13
28	7/03	6/25	6/19	6/14	6/10	6/05	5/31	5/25	5/17
24	6/05	5/28	5/22	5/17	5/12	5/07	5/02	4/26	4/18
20	5/14	5/07	5/02	4/28	4/24	4/20	4/16	4/11	4/04
16	4/17	4/12	4/08	4/05	4/02	3/30	3/27	3/23	3/18
•			Fal	l Freeze Da	tes (Month/D	ay)	•	•	•
To (E)		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	8/02	8/08	8/12	8/15	8/19	8/22	8/26	8/30	9/05
32	8/12	8/18	8/22	8/25	8/29	9/01	9/04	9/08	9/14
28	8/28	9/02	9/06	9/09	9/12	9/15	9/18	9/22	9/27
24	9/08	9/14	9/18	9/22	9/25	9/29	10/03	10/07	10/13
20	9/20	9/26	9/30	10/04	10/08	10/11	10/15	10/20	10/26
16	10/09	10/16	10/21	10/25	10/28	11/01	11/05	11/10	11/16
•			•	Freeze F	ree Period	•	•	•	•
Temp (F)			Probability	of longer th	an indicated :	freeze free p	eriod (Days)		
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	61	53	48	43	38	34	29	23	15
32	82	74	69	64	60	55	51	45	38
28	122	112	105	99	94	88	82	75	65
24	164	154	147	141	136	130	124	117	107
20	192	183	177	171	166	161	156	149	140
16	235	226	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:

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: 101514

Station: CASCADE 1 NW, ID

Climate Division: ID 4 NWS Call Sign: Elevation: 4,896 Feet Lat: 44°31N Lon: 116°03W

	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	1413	1159	1065	798	557	322	162	169	409	726	1066	1378	9224		
60	1258	1019	910	648	404	194	79	79	275	571	916	1223	7576		
57	1165	935	817	558	315	131	43	42	205	479	826	1130	6646		
55	1103	879	755	498	259	97	27	25	165	418	766	1068	6060		
50	948	739	600	356	140	35	7	5	84	274	616	913	4717		
32	419	262	124	33	1	0	0	0	0	8	155	392	1394		

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	29	27	83	225	467	675	914	888	587	305	79	37	4316
55	0	0	0	1	12	82	228	200	62	2	0	0	587
57	0	0	0	0	6	57	182	155	42	1	0	0	443
60	0	0	0	0	1	29	125	99	22	0	0	0	276
65	0	0	0	0	0	7	53	34	6	0	0	0	100
70	0	0	0	0	0	1	16	8	0	0	0	0	25

										Gro	wing 1	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (M	Ionthly)								Growi	ng Degre	ee Units (Accumu	lated Mo	nthly)			
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	0	0	4	76	262	463	692	672	382	131	10	0	0	0	4	80	342	805	1497	2169	2551	2682	2692	2692
45													0	0	0	23	166	485	1022	1540	1790	1846	1846	1846
50												0	0	0	0	6	71	263	648	1014	1152	1167	1167	1167
55	0	0	0	0	20	97	245	223	58	1	0	0	0	0	0	0	20	117	362	585	643	644	644	644
60	0	0	0	0	3	36	122	105	12	0	0	0	0	0	0	0	3	39	161	266	278	278	278	278
Base	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 0 13 81 210 328 474 476 316 148 8 0												0	0	13	94	304	632	1106	1582	1898	2046	2054	2054

(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