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: AMERICAN FALLS 3 NW, ID 1971-2000 COOP ID: 100227

Climate Division: ID 9 NWS Call Sign: Elevation: 4,405 Feet Lat: 42°47N Lon: 112°55W

	Temperature (°F) Mean (1) Extremes Degree Days (1) Mean Number of Days																				
	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	32.9	17.5	25.2	55+	1971	31	33.8	1994	-38	1949	25	13.6	1985	1235	0	.0	.0	.8	13.3	28.7	3.8
Feb	39.2	21.8	30.5	65+	1986	25	39.0	1992	-30	1985	1	19.0	1985	967	0	.0	.0	3.0	6.0	24.0	1.5
Mar	49.7	28.6	39.2	78	1986	28	46.6	1986	-11+	1985	4	26.3	1985	800	0	.0	.0	15.3	.7	21.7	.2
Apr	60.1	34.9	47.5	87	1992	29	54.4	1992	15+	1997	12	40.2	1975	526	0	.0	.0	25.5	@	11.6	.0
May	68.7	42.0	55.4	92+	1984	31	63.7	1992	21	1972	1	50.5	1975	312	12	.0	.1	30.0	.0	2.1	.0
Jun	78.2	48.9	63.6	103	1988	25	70.6	1988	29	1995	7	57.6	1998	124	80	.1	3.6	30.0	.0	.1	.0
Jul	86.3	54.5	70.4	102	1975	26	75.0	1988	36+	1997	3	63.9	1993	24	191	.2	13.0	31.0	.0	.0	.0
Aug	85.8	53.6	69.7	103+	1994	5	74.2	1994	33	1992	25	65.4	1976	25	171	.3	11.9	31.0	.0	.0	.0
Sep	75.4	45.3	60.4	95+	1990	14	67.8	1990	22	1970	25	55.5	1972	185	45	.0	2.0	29.8	.0	1.5	.0
Oct	61.8	36.4	49.1	87	1987	3	57.7	1988	10	1971	29	43.8	1984	495	2	.0	.0	27.0	.1	10.0	.0
Nov	44.1	27.3	35.7	71	1999	6	42.7	1999	-12	1976	27	27.3	2000	879	0	.0	.0	9.7	3.3	21.8	.3
Dec	33.8	18.7	26.3	62+	1995	1	32.5	1980	-23	1990	22	13.4	1985	1201	0	.0	.0	1.5	11.8	28.5	2.4
Ann	59.7	35.8	47.8	103+	Aug 1994	5	75.0	Jul 1988	-38	Jan 1949	25	13.4	Dec 1985	6773	501	.6	30.6	234.6	35.2	150.0	8.2

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 002-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

COOP ID: 100227

Station: AMERICAN FALLS 3 NW, ID

Climate Division: ID 9 NWS Call Sign: Elevation: 4,405 Feet Lat: 42°47N Lon: 112°55W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	on Total					lean N of D	ays (3	5)	Proba	ability th		nonthly/	annual j	precipita ated an		ll be equ		less tha	ın the
	Medi	ans(1)				Extreme	•			L 1	any Fie	стриацо	11		Th	ese value	s were de	termined	from the	incomplet	e gamma	distribut	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	1.10	.89	1.12	1970	27	3.54	1980	.19	1992	10.3	4.0	.2	@	.26	.37	.53	.67	.81	.96	1.13	1.33	1.60	2.01	2.41
Feb	.97	.83	1.00	1986	17	3.58	1986	.00	1997	8.1	3.3	.2	@	.10	.21	.38	.52	.66	.81	.99	1.20	1.48	1.93	2.36
Mar	1.35	1.18	1.40	1995	21	3.35	1989	.15	1992	9.5	4.4	.4	.1	.30	.43	.63	.81	.98	1.17	1.38	1.64	1.97	2.50	3.00
Apr	1.20	.99	.91	1965	23	3.13	1971	.13	1998	7.9	4.0	.5	.0	.19	.29	.47	.63	.80	.99	1.20	1.46	1.81	2.37	2.91
May	1.60	1.33	2.06	1987	16	4.17	1980	.13	1992	9.2	4.6	.7	.1	.26	.40	.63	.85	1.08	1.33	1.61	1.95	2.41	3.16	3.87
Jun	.95	.84	1.10	1993	5	3.49	1995	.08	1974	6.3	2.6	.4	.1	.13	.21	.34	.48	.61	.77	.94	1.16	1.45	1.93	2.39
Jul	.61	.40	1.05	1994	31	3.33	1984	.00+	1999	3.6	1.4	.3	@	.00	.00	.07	.16	.26	.38	.54	.74	1.02	1.51	2.00
Aug	.60	.50	1.24	1968	14	1.71	1982	.00+	1998	3.9	1.8	.2	@	.00	.03	.12	.21	.31	.42	.56	.74	.99	1.40	1.82
Sep	.84	.57	1.16	1982	26	3.22	1982	.00+	1987	5.1	2.5	.3	.1	.00	.04	.15	.27	.41	.57	.77	1.02	1.37	1.97	2.56
Oct	.95	.92	1.21	1974	24	2.53	1974	.00+	1988	5.5	2.6	.3	.1	.00	.14	.33	.48	.63	.79	.97	1.18	1.47	1.93	2.37
Nov	1.20	1.08	1.10	1971	14	3.29	1983	.00	1976	8.4	3.7	.3	.1	.18	.34	.54	.71	.87	1.05	1.24	1.47	1.77	2.25	2.70
Dec	1.06	.82	1.34	1964	23	4.60	1983	.11+	1989	9.1	3.6	.2	.0	.11	.18	.33	.48	.64	.82	1.03	1.29	1.66	2.26	2.85
Ann	12.43	12.06	2.06	May 1987	16	4.60	Dec 1983	.00+	Jul 1999	86.9	38.5	4.0	.6	7.20	8.13	9.37	10.33	11.21	12.08	12.98	14.00	15.27	17.13	18.78

⁺ 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: 100227

Station: AMERICAN FALLS 3 NW, ID

Climate Division: ID 9 NWS Call Sign: Elevation: 4,405 Feet Lat: 42°47N Lon: 112°55W

										Snov	w (incl	hes)											
						Sn	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	6.5	6.4	3	2	8.0	1993	11	14.2	2000	27	1993	14	14	1993	5.1	3.4	.6	.2	.0	14.8	8.4	5.2	1.9
Feb	4.6	3.0	2	#	6.0	1994	11	16.5	1994	14	1985	9	8	1993	3.0	2.3	.3	.2	.0	7.6	3.8	2.6	1.1
Mar	2.8	1.0	1	#	6.0	1975	26	11.8	1985	10	1993	4	5	1985	1.5	.9	.4	.1	.0	2.6	1.5	.8	.2
Apr	.6	.0	#	0	5.0	1974	10	6.5	1974	3+	1999	9	#+	1999	.3	.2	.1	.1	.0	.1	@	.0	.0
May	.5	.0	#	0	6.0	1975	4	6.0	1975	6	1975	4	#+	1995	.1	.1	.1	.1	.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	#	1983	19	#	1983	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	1.1	.0	#	0	10.0	1975	23	10.5	1975	4	1980	15	#+	1991	.6	.3	.1	@	@	.2	.1	.0	.0
Nov	3.2	1.9	#	#	9.0	1992	20	14.3	1992	10	1985	30	4	1985	2.4	1.6	.3	@	.0	3.4	1.8	1.0	.1
Dec	6.9	4.0	2	1	12.0	1983	4	46.0	1983	19	1983	6	8	1985	4.6	2.8	.6	.2	.1	8.3	2.8	1.1	.0
Ann	26.2	16.3	N/A	N/A	12.0	Dec 1983	4	46.0	Dec 1983	27	Jan 1993	14	14	Jan 1993	17.6	11.6	2.5	.9	.1	37.0	18.4	10.7	3.3

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

- (1) Derived from Snow Climatology and 1971-2000 daily data
- (2) Derived from 1971-2000 daily data

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

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: 100227

Lon: 112°55W

Lat: 42°47N

Station: AMERICAN FALLS 3 NW, ID

Climate Division: ID 9 NWS Call Sign:

				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	6/21	6/14	6/09	6/05	6/01	5/28	5/24	5/19	5/12
32	6/06	5/28	5/22	5/17	5/13	5/08	5/03	4/27	4/19
28	5/15	5/09	5/04	4/30	4/26	4/22	4/18	4/13	4/07
24	4/28	4/20	4/15	4/10	4/06	4/02	3/28	3/23	3/15
20	4/14	4/04	3/29	3/23	3/18	3/13	3/07	3/01	2/20
16	4/01	3/23	3/16	3/10	3/04	2/27	2/21	2/14	2/04
			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	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	8/29	9/04	9/09	9/12	9/16	9/19	9/23	9/28	10/04
32	9/12	9/18	9/22	9/26	9/29	10/02	10/06	10/10	10/16
28	9/24	9/30	10/04	10/08	10/12	10/15	10/19	10/24	10/30
24	10/06	10/13	10/17	10/21	10/25	10/28	11/01	11/06	11/12
20	10/19	10/25	10/29	11/02	11/05	11/08	11/12	11/16	11/21
16	10/31	11/06	11/11	11/15	11/18	11/22	11/26	11/30	12/07
1				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	134	124	118	112	106	101	95	88	78
32	175	162	153	146	139	131	124	115	103
28	198	188	180	174	168	162	156	148	138
24	232	221	214	207	201	195	188	181	170
20	265	253	245	238	231	224	217	209	197
16	291	280	272	265	258	251	245	236	225

^{*} 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:

Elevation: 4,405 Feet

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: 100227

Station: AMERICAN FALLS 3 NW, ID

Climate Division: ID 9 NWS Call Sign: Elevation: 4,405 Feet Lat: 42°47N Lon: 112°55W

	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	1235	967	800	526	312	124	24	25	185	495	879	1201	6773		
60	1080	827	646	385	186	55	5	5	96	347	729	1046	5407		
57	987	743	557	305	128	29	1	1	59	267	639	953	4669		
55	925	687	500	256	95	18	0	0	40	218	580	891	4210		
50	772	555	362	155	37	4	0	0	12	117	435	736	3185		
32	295	169	53	5	0	0	0	0	0	1	71	252	846		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	82	126	276	470	724	946	1190	1169	850	531	181	74	6619
55	0	0	10	31	106	274	477	456	200	35	0	0	1589
57	0	0	5	20	76	225	416	395	159	22	0	0	1318
60	0	0	1	10	42	161	327	305	106	9	0	0	961
65	0	0	0	0	12	80	191	171	45	2	0	0	501
70	0	0	0	0	2	29	92	74	13	0	0	0	210

										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 De													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	0	12	76	243	482	720	961	946	625	308	55	2	0	12	88	331	813	1533	2494	3440	4065	4373	4428	4430
45	0 0 23 129 336 570 806 791 478 185 17												0	0	23	152	488	1058	1864	2655	3133	3318	3335	3335
50	0 0 1 62 202 420 651 636 334 88 0												0	0	1	63	265	685	1336	1972	2306	2394	2394	2394
55	0	0	0	21	100	280	496	483	207	34	0	0	0	0	0	21	121	401	897	1380	1587	1621	1621	1621
60	0	0	0	4	42	159	344	330	103	6	0	0	0	0	0	4	46	205	549	879	982	988	988	988
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	0/86 0 6 59 166 307 452 612 603 410 212 33											0	0	6	65	231	538	990	1602	2205	2615	2827	2860	2860

(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