

# Climatography of the United States

No. 20

1971-2000

Station: IDAHO FALLS 16 SE, ID

COOP ID: 104456

Climate Division: ID10

NWS Call Sign:

Elevation: 5,850 Feet Lat: 43° 21N

Lon: 111° 47W

## Temperature (°F)

Mean (1)				Extremes										Degree Days (1) Base Temp 65		Mean Number 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	29.7	8.1	18.9	52	1981	2	27.1	1998	-51	1963	12	6.6	1979	1430	0	.0	.0	.1	17.0	30.1	7.1
Feb	34.5	12.0	23.3	58+	1963	7	31.5	1995	-40	1985	4	13.7	1985	1168	0	.0	.0	.8	9.2	27.3	4.3
Mar	41.1	20.0	30.6	68	1986	28	38.0	1986	-24	1966	3	21.8	1976	1067	0	.0	.0	5.5	3.1	27.9	1.1
Apr	50.7	26.6	38.7	78+	1994	20	45.6	1987	-6	1983	4	30.5	1975	791	0	.0	.0	16.9	.2	22.4	@
May	60.2	33.3	46.8	85	1986	31	52.5	1992	7	1966	23	41.3	1975	567	0	.0	.0	27.2	.0	11.4	.0
Jun	69.6	38.5	54.1	97	2001	30	60.9	1988	21	1995	7	49.8	1984	334	6	.0	.2	29.7	.0	2.8	.0
Jul	78.1	43.2	60.7	95+	2001	4	66.1	2000	28+	1988	7	53.6	1993	170	35	.0	1.0	31.0	.0	.5	.0
Aug	77.2	42.0	59.6	96	1981	1	67.7	2000	19	1992	26	54.1	1976	204	37	.0	.8	31.0	.0	1.0	.0
Sep	67.9	34.1	51.0	89+	2000	14	57.8	1990	7+	1999	28	44.2	1971	426	7	.0	.0	28.8	.0	8.4	.0
Oct	55.7	25.6	40.7	80+	1996	10	48.4	1988	-8	1970	27	34.4	1984	755	0	.0	.0	23.4	.4	21.2	.1
Nov	39.0	16.2	27.6	70+	1999	14	38.2	1999	-25	1993	25	20.8	1985	1123	0	.0	.0	6.2	7.1	27.5	1.9
Dec	30.0	7.7	18.9	56	1995	1	25.8	1980	-42	1972	5	9.3+	1990	1429	0	.0	.0	.4	16.3	30.1	6.1
Ann	52.8	25.6	39.2	97	Jun 2001	30	67.7	Aug 2000	-51	Jan 1963	12	6.6	Jan 1979	9464	85	.0	2.0	201.0	53.3	210.6	20.6

+ Also occurred on an earlier date(s)

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

Complete documentation available from: [www.ncdc.noaa.gov/oa/climate/normals/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normals/usnormals.html)

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1955-2001

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

052-A

# 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: IDAHO FALLS 16 SE, ID

COOP ID: 104456

Climate Division: ID10

NWS Call Sign:

Elevation: 5,850 Feet Lat: 43°21N

Lon: 111°47W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels These values were determined from 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	1.41	1.20	1.40	1969	21	3.87	1996	.11	1992	11.5	5.2	.2	.1	.28	.41	.61	.80	1.00	1.20	1.44	1.72	2.09	2.69	3.26
Feb	1.12	1.17	.86	1985	8	3.48	1986	.23	1988	9.2	4.4	.2	.0	.30	.41	.57	.71	.85	1.00	1.16	1.35	1.60	1.99	2.35
Mar	1.48	1.26	1.21	1995	21	3.87	1995	.18	1994	10.9	5.0	.3	.1	.47	.61	.82	1.00	1.17	1.35	1.54	1.77	2.06	2.52	2.94
Apr	1.43	1.45	1.29	1957	6	2.78	1978	.21	1987	9.8	5.1	.3	.0	.39	.53	.73	.91	1.09	1.28	1.48	1.72	2.04	2.54	3.00
May	2.03	1.63	2.19	1993	6	4.64	1993	.23	1992	11.6	6.5	.8	.1	.48	.67	.96	1.23	1.49	1.77	2.09	2.46	2.95	3.73	4.46
Jun	1.20	1.21	1.07	1962	15	2.34	1972	.35	1994	8.2	4.4	.2	.0	.37	.49	.66	.80	.94	1.09	1.25	1.44	1.68	2.06	2.42
Jul	1.06	.79	1.04	1984	25	3.03	1987	.00	1988	6.1	3.0	.4	@	.07	.17	.34	.49	.66	.84	1.05	1.31	1.66	2.24	2.80
Aug	.90	.79	.94	1976	23	2.20	1983	.11	1996	6.8	2.6	.4	.0	.13	.20	.33	.46	.59	.73	.89	1.09	1.36	1.81	2.23
Sep	1.13	1.01	1.00	1963	7	2.93	1982	.00+	1987	6.1	3.5	.5	.0	.00	.14	.35	.53	.71	.91	1.14	1.41	1.77	2.37	2.94
Oct	1.17	1.13	.92	1994	5	2.47	1975	.02	1988	6.9	3.9	.3	.0	.17	.27	.44	.60	.77	.95	1.17	1.43	1.77	2.34	2.89
Nov	1.59	1.48	2.10	1986	21	4.11	1988	.02	1976	10.3	4.8	.5	@	.26	.40	.63	.85	1.07	1.32	1.60	1.94	2.39	3.13	3.83
Dec	1.35	1.25	.98	1964	23	4.08	1996	.09	1976	9.9	4.7	.3	.0	.16	.26	.45	.64	.84	1.06	1.32	1.65	2.09	2.81	3.52
Ann	15.87	16.56	2.19	May 1993	6	4.64	May 1993	.00+	Jul 1988	107.3	53.1	4.4	.3	10.81	11.78	13.02	13.96	14.81	15.63	16.48	17.42	18.57	20.24	21.69

+ Also occurred on an earlier date(s)

# 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: 1955-2001

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

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

# 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](http://www.ncdc.noaa.gov)

Station: IDAHO FALLS 16 SE, ID

COOP ID: 104456

Climate Division: ID10

NWS Call Sign:

Elevation: 5,850 Feet

Lat: 43°21N

Lon: 111°47W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										Snow Fall >= Thresholds					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	15.9	15.6	10	8	10.5	1980	10	31.0	1971	34	1971	15	25	1993	10.0	6.3	1.9	.3	@	29.5	25.9	20.7	12.2
Feb	12.2	12.8	9	8	7.5	1985	8	20.2	1975	30	1996	3	24	1985	7.4	4.8	1.1	.2	.0	25.8	20.6	17.0	8.6
Mar	10.5	9.6	5	3	6.0	1997	2	22.6	1973	28	1985	6	22	1985	7.1	3.9	1.0	.3	.0	15.5	11.2	9.0	4.5
Apr	5.7	4.5	1	#	11.2	1983	3	17.3	1983	16	1985	1	3	1985	3.6	1.9	.5	.2	@	3.4	2.0	1.4	.2
May	1.7	1.5	#	0	6.2	1975	7	7.1	1975	6	1999	15	#+	1999	1.2	.6	.1	@	.0	.1	@	.0	.0
Jun	.2	.0	#	0	2.4	1976	13	3.7	1976	2	1976	13	#+	1995	.2	.1	.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	3.0	1978	18	3.0	1978	3	1978	18	#+	1997	.1	@	@	.0	.0	@	@	.0	.0
Oct	2.3	.7	#	#	8.0	1971	1	16.3	1975	6	1971	1	1	1998	1.8	.8	.2	.1	.0	1.1	.4	.1	.0
Nov	10.6	9.5	1	1	9.0	1990	5	26.0	1973	14	1975	30	3+	2000	6.5	3.8	1.0	.3	.0	9.7	5.4	2.8	.2
Dec	13.5	12.0	6	5	12.0	1988	23	29.3	1983	37	1971	15	24	1971	8.9	5.6	1.6	.8	@	21.9	17.1	11.0	5.3
Ann	72.7	66.2	N/A	N/A	12.0	Dec 1988	23	31.0	Jan 1971	37	Dec 1971	15	25	Jan 1993	46.8	27.8	7.4	2.2	@	107.0	82.6	62.0	31.0

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

@ 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

Complete documentation available from:

[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

# Climatography of the United States

## No. 20 1971-2000

**Station: IDAHO FALLS 16 SE, ID**

**COOP ID: 104456**

**Climate Division: ID10**

**NWS Call Sign:**

**Elevation: 5,850 Feet**

**Lat: 43°21N**

**Lon: 111°47W**

Freeze Data									
Spring Freeze Dates (Month/Day)									
Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	7/24	7/19	7/16	7/13	7/10	7/07	7/04	7/01	6/26
32	7/13	7/07	7/02	6/28	6/25	6/21	6/17	6/13	6/06
28	6/27	6/20	6/14	6/10	6/06	6/01	5/28	5/22	5/15
24	6/04	5/28	5/23	5/19	5/15	5/10	5/06	5/01	4/24
20	5/13	5/09	5/05	5/03	4/30	4/27	4/25	4/21	4/17
16	5/05	4/27	4/21	4/17	4/12	4/08	4/03	3/28	3/20
Fall Freeze Dates (Month/Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	8/03	8/08	8/12	8/16	8/19	8/22	8/25	8/29	9/03
32	8/11	8/18	8/22	8/26	8/30	9/02	9/06	9/11	9/17
28	8/26	9/01	9/06	9/09	9/13	9/16	9/20	9/24	9/30
24	9/06	9/12	9/16	9/19	9/23	9/26	9/30	10/04	10/10
20	9/07	9/14	9/19	9/23	9/27	10/01	10/06	10/11	10/17
16	9/24	10/01	10/06	10/10	10/14	10/18	10/23	10/28	11/04
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	58	52	47	43	39	35	31	26	20
32	90	81	75	70	65	60	55	49	40
28	124	115	109	104	99	93	88	82	73
24	161	150	143	136	131	125	118	111	100
20	175	167	160	155	150	145	139	133	124
16	215	204	197	191	185	179	172	165	155

\* 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:

[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

**Climatography  
of the United States  
No. 20  
1971-2000**

**Station: IDAHO FALLS 16 SE, ID**

**COOP ID: 104456**

**Climate Division: ID10      NWS Call Sign:      Elevation: 5,850 Feet    Lat: 43° 21N      Lon: 111° 47W**

Degree Days to Selected Base Temperatures (°F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1430	1168	1067	791	567	334	170	204	426	755	1123	1429	9464
60	1275	1028	912	641	414	204	81	110	293	600	973	1274	7805
57	1182	944	819	552	327	141	42	67	224	508	883	1181	6870
55	1120	888	757	495	272	106	25	46	183	448	823	1119	6282
50	965	748	603	357	154	41	6	15	100	307	673	964	4933
32	433	274	147	43	2	0	0	0	0	23	213	428	1563

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	26	30	103	241	458	662	888	856	571	291	80	21	4227
55	0	0	0	4	15	78	200	189	64	3	0	0	553
57	0	0	0	1	9	53	155	149	45	2	0	0	414
60	0	0	0	0	2	26	101	98	25	0	0	0	252
65	0	0	0	0	0	6	35	37	7	0	0	0	85
70	0	0	0	0	0	0	9	11	1	0	0	0	21

Growing Degree Units (2)																								
Base	Growing Degree Units (Monthly)												Growing Degree Units (Accumulated Monthly)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	0	0	12	97	281	492	713	684	405	158	19	0	0	0	12	109	390	882	1595	2279	2684	2842	2861	2861
45	0	0	0	42	156	344	558	529	272	70	1	0	0	0	0	42	198	542	1100	1629	1901	1971	1972	1972
50	0	0	0	14	67	211	403	374	152	19	0	0	0	0	0	14	81	292	695	1069	1221	1240	1240	1240
55	0	0	0	0	20	102	253	231	69	1	0	0	0	0	0	0	20	122	375	606	675	676	676	676
60	0	0	0	0	0	35	121	104	17	0	0	0	0	0	0	0	0	35	156	260	277	277	277	277
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	11	85	201	331	478	461	305	147	21	0	0	0	11	96	297	628	1106	1567	1872	2019	2040	2040

(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](http://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.  
Complete documentation for the 1971-2000 Normals is available on the internet from:  
[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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 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.

- |   |   |
|---|---|
| <ol style="list-style-type: none"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)