

# Climatography of the United States

No. 20

1971-2000

Station: HAZELTON, ID

COOP ID: 104140

Climate Division: ID 7

NWS Call Sign:

Elevation: 4,060 Feet Lat: 42°36N

Lon: 114°08W

## 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	34.9	18.1	26.5	60	1953	25	35.1	1998	-27	1962	22	16.2	1979	1194	0	.0	.0	1.4	10.5	29.6	2.2
Feb	41.7	22.2	32.0	71	1992	29	40.6	1992	-17+	1996	3	21.9	1985	926	0	.0	.0	6.9	4.2	25.9	1.1
Mar	51.2	28.2	39.7	78+	1986	27	47.0	1992	-2	1993	1	30.4	1985	784	0	.0	.0	18.3	.5	23.7	.1
Apr	60.6	33.4	47.0	91	1992	30	53.3	1992	9	1987	20	39.5	1975	540	0	.0	.1	26.1	.0	13.9	.0
May	69.3	41.2	55.3	95+	1986	31	62.5	1992	20	1967	1	50.7	1975	315	13	.0	.8	30.2	.0	3.1	.0
Jun	79.5	48.6	64.1	102+	1990	30	71.1	1986	32+	1981	14	59.0	1998	113	84	.3	5.1	29.9	.0	.1	.0
Jul	88.1	54.2	71.2	106	2000	31	75.7	1985	33	1981	8	63.7	1993	20	211	1.3	15.2	31.0	.0	.0	.0
Aug	87.4	52.1	69.8	106	1990	7	73.9	1991	32	1965	31	65.1+	1976	34	181	.9	13.8	31.0	.0	.0	.0
Sep	77.2	42.6	59.9	100	1987	1	65.7	1998	20	1965	19	54.3	1985	194	41	@	3.2	29.9	.0	2.2	.0
Oct	64.5	33.2	48.9	91	1992	1	56.2	1988	10	1971	29	44.8	1984	502	0	.0	.0	28.2	.1	13.5	.0
Nov	46.5	25.2	35.9	77	1999	6	44.3	1999	-15	1955	16	27.0	1985	874	0	.0	.0	12.0	2.8	24.1	.3
Dec	36.2	18.3	27.3	71	1995	2	33.4	1977	-23	1990	24	13.9	1985	1170	0	.0	.0	2.2	9.5	29.5	2.2
Ann	61.4	34.8	48.1	106+	Jul 2000	31	75.7	Jul 1985	-27	Jan 1962	22	13.9	Dec 1985	6666	530	2.5	38.2	247.1	27.6	165.6	5.9

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

Issue Date: February 2004

(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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# 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: HAZELTON, ID

COOP ID: 104140

Climate Division: ID 7

NWS Call Sign:

Elevation: 4,060 Feet Lat: 42°36N

Lon: 114°08W

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	1.24	1.12	1970	27	3.70	1998	.13	1992	7.9	4.8	.5	.0	.22	.34	.54	.73	.94	1.16	1.41	1.72	2.13	2.81	3.45
Feb	1.02	.78	1.46	1986	18	4.88	1986	.05	1991	6.5	3.2	.1	@	.08	.15	.28	.42	.57	.75	.97	1.23	1.61	2.23	2.85
Mar	1.11	1.08	.94	1993	18	2.90	1993	.06	1992	6.8	3.8	.4	.0	.14	.23	.39	.54	.70	.88	1.09	1.35	1.70	2.28	2.83
Apr	.80	.88	1.02	1981	20	1.83	1999	.04	1977	5.6	2.7	.3	@	.08	.14	.25	.36	.48	.62	.78	.97	1.24	1.69	2.13
May	1.14	.93	1.15	1959	1	2.95	1998	.05	1974	6.7	3.6	.5	@	.14	.23	.39	.55	.72	.91	1.13	1.40	1.76	2.36	2.95
Jun	.67	.49	.98	1963	10	1.74	1993	.00+	2000	4.4	2.4	.2	.0	.00	.08	.20	.31	.42	.54	.67	.83	1.06	1.42	1.77
Jul	.21	.12	.67	1977	22	1.16	1977	.00+	2000	2.0	.9	@	.0	.00	.00	.00	.00	.06	.11	.18	.26	.37	.56	.74
Aug	.29	.16	.97	1968	20	1.39	1983	.00+	2000	2.6	1.0	.1	.0	.00	.00	.02	.07	.12	.19	.26	.36	.49	.71	.93
Sep	.64	.47	1.30	1978	6	2.47	1978	.00+	1999	3.4	2.0	.3	@	.00	.00	.11	.21	.32	.45	.60	.80	1.06	1.51	1.95
Oct	.72	.72	1.52	1975	26	2.37	1975	.00+	1988	4.2	2.4	.2	@	.00	.08	.21	.33	.44	.57	.72	.89	1.14	1.53	1.91
Nov	1.29	1.21	1.27	2001	29	3.57	1988	.00	1993	7.4	4.2	.4	.1	.12	.27	.48	.67	.87	1.07	1.31	1.59	1.98	2.59	3.18
Dec	1.27	.83	1.40	1964	23	5.28	1996	.00+	1986	7.9	4.1	.5	@	.00	.07	.26	.45	.66	.91	1.20	1.56	2.08	2.93	3.78
Ann	10.57	9.78	1.52	Oct 1975	26	5.28	Dec 1996	.00+	Aug 2000	65.4	35.1	3.5	.1	6.63	7.35	8.30	9.03	9.69	10.33	11.01	11.76	12.68	14.03	15.22

+ 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: 1948-2001

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

Complete documentation available from:

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## 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: HAZELTON, ID

COOP ID: 104140

Climate Division: ID 7

NWS Call Sign:

Elevation: 4,060 Feet

Lat: 42°36N

Lon: 114°08W

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	5.1	3.5	1	1	9.0	1996	19	20.0	1996	12	1982	23	7	1982	3.0	1.8	.6	.2	.0	-9.9	-9.9	-9.9	-9.9
Feb	2.9	1.8	#	#	5.5	1972	24	12.5	1972	7	1972	26	2	1976	1.3	.9	.3	.1	.0	2.5	1.1	.3	.0
Mar	1.3	.0	#	0	6.0	1974	2	10.0	1974	5	1978	12	5	1978	.8	.5	.2	@	.0	.6	.1	.0	.0
Apr	.2	.0	#	0	2.0	1975	6	3.1	1975	3	1999	9	#+	1999	.2	@	.0	.0	.0	.0	.0	.0	.0
May	.3	.0	#	0	8.0	1975	4	8.0	1975	4	1975	4	#	1975	.1	@	@	@	.0	.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	0	1.0	1978	18	1.0	1978	0	0	0	0	0	@	@	.0	.0	.0	.0	.0	.0	.0
Oct	.1	.0	#	0	2.0	1971	31	2.0	1971	1	1971	31	#+	1972	.1	@	.0	.0	.0	.1	.0	.0	.0
Nov	3.1	1.5	#	0	8.0	1977	22	15.3	1984	5	1975	30	1	1994	1.7	1.0	.4	.2	.0	1.8	.4	.1	.0
Dec	3.4	2.3	1	#	6.0	1996	21	10.7	1984	10	1983	5	4	1994	3.0	1.8	.6	.1	.0	-9.9	-9.9	-9.9	-9.9
Ann	16.4	9.1	N/A	N/A	9.0	Jan 1996	19	20.0	Jan 1996	12	Jan 1982	23	7	Jan 1982	10.2	6.0	2.1	.6	.0	-9.9	-9.9	-9.9	-9.9

+ 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/normals/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normals/usnormals.html)

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**NWS Call Sign:**

**Elevation: 4,060 Feet**

**Lat: 42°36N**

**Lon: 114°08W**

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	6/25	6/18	6/13	6/09	6/05	6/01	5/28	5/23	5/16
32	5/30	5/24	5/20	5/16	5/13	5/09	5/05	5/01	4/25
28	5/13	5/08	5/05	5/02	4/29	4/26	4/23	4/20	4/15
24	5/02	4/24	4/19	4/15	4/11	4/07	4/02	3/28	3/21
20	4/21	4/11	4/04	3/29	3/23	3/17	3/11	3/04	2/23
16	3/24	3/15	3/08	3/03	2/26	2/21	2/15	2/09	1/31
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	9/01	9/06	9/09	9/12	9/15	9/17	9/20	9/24	9/28
32	9/11	9/16	9/19	9/22	9/25	9/28	10/01	10/04	10/09
28	9/18	9/25	9/30	10/04	10/08	10/12	10/16	10/21	10/28
24	10/07	10/12	10/15	10/18	10/21	10/24	10/27	10/30	11/04
20	10/14	10/20	10/25	10/28	11/01	11/04	11/08	11/12	11/18
16	11/03	11/08	11/11	11/14	11/17	11/19	11/22	11/26	12/01
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	128	118	112	106	101	96	90	84	75
32	159	151	145	140	135	130	125	119	111
28	188	179	172	166	161	156	150	143	134
24	219	210	203	198	193	187	182	175	166
20	257	245	236	229	222	215	207	199	187
16	290	281	274	268	263	258	252	245	236

\* 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:  
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of the United States  
No. 20  
1971-2000**

**Station: HAZELTON, ID**

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**Elevation: 4,060 Feet    Lat: 42°36N    Lon: 114°08W**

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	1194	926	784	540	315	113	20	34	194	502	874	1170	6666
60	1039	786	629	396	191	48	3	8	101	350	724	1015	5290
57	946	702	537	314	132	25	0	3	61	265	634	922	4541
55	884	646	477	263	99	15	0	1	41	214	574	860	4074
50	731	515	336	155	40	3	0	0	11	107	434	705	3037
32	259	141	33	3	0	0	0	0	0	1	78	226	741

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	88	139	272	453	721	961	1214	1171	837	522	194	80	6652
55	0	0	3	23	107	285	501	459	188	22	1	0	1589
57	0	0	1	14	78	235	440	398	148	12	0	0	1326
60	0	0	0	6	44	169	349	311	98	4	0	0	981
65	0	0	0	0	13	84	211	181	41	0	0	0	530
70	0	0	0	0	2	31	105	87	12	0	0	0	237

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	21	89	237	482	726	979	933	611	300	56	5	0	21	110	347	829	1555	2534	3467	4078	4378	4434	4439
45	0	2	30	129	334	577	824	778	462	177	18	0	0	2	32	161	495	1072	1896	2674	3136	3313	3331	3331
50	0	0	6	61	208	428	669	623	320	84	1	0	0	0	6	67	275	703	1372	1995	2315	2399	2400	2400
55	0	0	0	20	112	290	514	470	195	25	0	0	0	0	0	20	132	422	936	1406	1601	1626	1626	1626
60	0	0	0	5	44	173	360	318	95	5	0	0	0	0	0	5	49	222	582	900	995	1000	1000	1000
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	22	74	179	312	453	610	583	412	240	47	3	0	22	96	275	587	1040	1650	2233	2645	2885	2932	2935

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