U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BURGESS JUNCTION, WY **COOP ID: 481220**

Climate Division: WY 5 **NWS Call Sign:** **Elevation: 8,040 Feet** **Lat: 44˚47N** **Lon: 107˚31W**

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	25.4	4.6	15.0	55+	1986	15	22.8	1981	-44	1963	11	4.2	1979	1550	0	.0	.0	.2	21.1	30.8	10.8
Feb	28.6	5.9	17.3	55	1963	6	25.5	1992	-45+	1989	3	6.2	1989	1338	0	.0	.0	.3	16.3	28.2	8.5
Mar	33.6	9.9	21.8	54+	1993	24	29.4	1992	-24	1987	29	13.7	1971	1324	0	.0	.0	1.4	12.4	30.6	5.6
Apr	40.1	16.2	28.2	67+	2000	29	34.6	1992	-18	1973	9	20.5	1975	1106	0	.0	.0	6.2	6.6	28.5	2.1
May	49.8	26.1	38.0	73+	1969	28	44.6	1994	-4	1984	1	31.8	1983	839	0	.0	.0	18.7	1.3	20.3	@
Jun	61.4	34.3	47.9	87	1988	21	55.9	1988	5	1978	12	42.6	1998	515	0	.0	.0	26.3	.0	9.1	.0
Jul	69.3	38.7	54.0	86	1966	17	58.5	1989	21+	1972	3	48.6	1992	345	3	.2	3.1	30.8	.0	3.0	.0
Aug	67.9	37.6	52.8	88	1985	7	58.4	2000	20	1978	19	48.6	1978	384	5	.0	.0	30.6	.0	3.1	.0
Sep	57.3	29.9	43.6	80	1978	8	51.5	1998	-5	1985	30	38.0	1985	641	0	.0	.0	23.7	1.0	17.5	@
Oct	45.9	21.6	33.8	72	2001	1	38.0	1992	-22	1991	31	27.4	1984	970	0	.0	.0	13.8	4.1	27.9	.8
Nov	32.8	11.7	22.3	64	1999	16	33.7	1999	-25	1986	10	12.8	1985	1283	0	.0	.0	2.5	13.3	29.3	5.5
Dec	27.1	6.1	16.6	54	1969	1	25.1	1980	-48+	1990	21	2.9	1983	1500	0	.0	.0	.1	19.5	30.8	9.6
Ann	44.9	20.2	32.6	88	Aug 1985	7	58.5	Jul 1989	-48+	Dec 1990	21	2.9	Dec 1983	11795	8	.2	3.1	154.6	95.6	259.1	42.9

\+ 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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1960-2001

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BURGESS JUNCTION, WY

COOP ID: 481220

Climate Division: WY 5 **NWS Call Sign:** **Elevation: 8,040 Feet** **Lat: 44˚47N** **Lon: 107˚31W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	1.51	1.45	1.22	1975	19	4.48	1975	.29	1993
Feb	1.31	1.35	.95	1978	20	2.61	1971	.38	1973
Mar	2.19	1.96	2.23	1977	30	5.07	1984	.51	1978
Apr	2.76	2.27	2.74	1978	28	6.07	1974	.54	1987
May	2.48	1.99	2.12	1975	7	7.68	1981	.13	1998
Jun	2.34	2.03	2.05	1993	8	6.18	1992	.13	1971
Jul	1.62	1.26	1.23	1990	21	4.52	1997	.15	1982
Aug	1.45	1.32	1.87	1976	2	3.86	1976	.12	1975
Sep	1.95	1.77	2.05	1994	15	4.15	1985	.40+	1979
Oct	2.07	1.88	1.76	1974	31	5.67	1994	.65	1973
Nov	1.51	1.38	1.11	1991	14	3.05	1991	.57	1997
Dec	1.56	1.54	.80	1982	2	3.16	1982	.11	1986
Ann	22.75	22.60	2.74	Apr 1978	28	7.68	May 1981	.11	Dec 1986

Mean Number of Days (3)

Month	Daily Precipitation >= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	10.6	5.8	.4	.1
Feb	8.9	4.5	.4	.0
Mar	11.1	7.3	.8	@
Apr	11.3	7.7	1.0	.3
May	10.1	6.6	1.1	.3
Jun	9.5	6.0	1.0	.2
Jul	6.8	3.8	.7	.1
Aug	6.7	3.6	.6	.1
Sep	7.0	4.6	1.1	.1
Oct	7.8	5.9	1.0	.2
Nov	9.7	5.2	.4	@
Dec	10.5	6.0	.3	.0
Ann	110.0	67.0	8.8	1.4

Precipitation Probabilities (1)

Probability that the monthly/annual precipitation will be equal to or less than the indicated amount

Monthly/Annual Precipitation vs Probability Levels
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.45	.59	.80	.99	1.17	1.36	1.57	1.81	2.13	2.63	3.09
Feb	.46	.59	.77	.91	1.06	1.20	1.36	1.55	1.79	2.15	2.49
Mar	.84	1.04	1.33	1.57	1.80	2.04	2.29	2.58	2.95	3.52	4.04
Apr	.82	1.09	1.48	1.82	2.15	2.49	2.86	3.31	3.88	4.78	5.61
May	.53	.76	1.12	1.45	1.78	2.13	2.53	3.01	3.64	4.64	5.59
Jun	.49	.70	1.05	1.36	1.67	2.01	2.39	2.84	3.45	4.41	5.31
Jul	.24	.37	.61	.83	1.06	1.32	1.62	1.98	2.46	3.26	4.02
Aug	.30	.43	.64	.83	1.03	1.24	1.48	1.76	2.14	2.74	3.31
Sep	.65	.84	1.11	1.34	1.56	1.79	2.04	2.33	2.70	3.28	3.81
Oct	.67	.87	1.16	1.40	1.64	1.89	2.16	2.47	2.88	3.51	4.09
Nov	.66	.80	.98	1.14	1.28	1.42	1.58	1.76	1.98	2.32	2.63
Dec	.37	.51	.74	.95	1.15	1.36	1.60	1.89	2.26	2.85	3.41
Ann	17.28	18.36	19.73	20.76	21.67	22.54	23.44	24.42	25.61	27.31	28.78

\+ 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: 1960-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: BURGESS JUNCTION, WY **COOP ID: 481220**

Climate Division: WY 5 **NWS Call Sign:** **Elevation: 8,040 Feet** **Lat: 44°47N** **Lon: 107°31W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	30.5	27.8	30	31
Feb	23.0	18.5	33	32
Mar	37.6	33.1	34	33
Apr	35.9	32.0	27	27
May	14.1	8.0	9	7
Jun	4.1	2.8	#	#
Jul	.1	.0	#	0
Aug	.0	.0	#	0
Sep	8.4	7.0	1	#
Oct	23.9	20.0	3	2
Nov	24.6	22.0	10	9
Dec	31.6	28.9	20	19
Ann	233.8	200.1	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	22.0	2000	12	66.0	1994	62	1990	5	46+	1998
Feb	23.0	2000	26	46.9	1971	72	1986	23	61	1994
Mar	20.0	1987	27	81.3	1996	73+	1996	21	56	1985
Apr	30.0	1973	20	87.1	1991	82	1991	17	48	1985
May	16.0	1975	7	48.0	1975	71	1984	1	35	1984
Jun	7.0	1975	9	15.0	1976	15	1972	2	2	1971
Jul	2.0	1972	1	2.0	1972	2	1972	3	#+	1997
Aug	.2	1985	13	.2	1985	#+	1992	24	#+	1992
Sep	8.0	1989	9	23.0	1984	15	1984	28	3	1985
Oct	24.0	1996	26	60.0	1971	34	1996	29	9	1994
Nov	25.0	1984	26	49.0	1989	38	1992	10	27	1989
Dec	20.0	1989	14	80.0	1989	73	1989	17	48	1989
Ann	30.0	Apr 1973	20	87.1	Apr 1991	82	Apr 1991	17	61	Feb 1994

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	10.2	9.3	4.1	1.8	.4
Feb	8.2	7.6	3.5	1.6	.2
Mar	10.7	10.1	4.7	2.6	.7
Apr	10.0	9.5	4.5	2.4	.6
May	5.0	4.7	1.9	.8	.3
Jun	1.4	1.2	.6	.3	.0
Jul	.1	.1	.0	.0	.0
Aug	@	.0	.0	.0	.0
Sep	2.5	2.3	1.2	.6	.0
Oct	6.5	6.0	3.5	1.7	.3
Nov	9.0	8.4	3.6	1.6	.3
Dec	9.9	9.2	4.7	2.1	.5
Ann	73.5	68.4	32.3	15.5	3.3

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	29.1	28.9	27.1	26.1
Feb	27.0	27.0	26.7	26.0
Mar	29.4	29.3	28.8	26.3
Apr	28.4	28.4	28.3	26.6
May	14.5	12.6	10.4	7.2
Jun	2.3	1.7	.9	.1
Jul	.1	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	2.9	1.6	1.0	.4
Oct	13.5	9.2	6.6	2.4
Nov	26.3	23.1	19.7	10.7
Dec	30.1	29.1	27.1	23.9

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

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

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

(2) Derived from 1971-2000 daily data

-9/-9.9 represents missing values

Annual statistics for Mean/Median snow depths are not appropriate

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BURGESS JUNCTION, WY **COOP ID: 481220**

Climate Division: WY 5 **NWS Call Sign:** **Elevation: 8,040 Feet** **Lat: 44˚47N** **Lon: 107˚31W**

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	8/03	7/31	7/29	7/27	7/25	7/23	7/21	7/18	7/15
32	7/29	7/23	7/19	7/16	7/12	7/09	7/05	7/01	6/26
28	7/18	7/11	7/05	6/30	6/26	6/22	6/17	6/12	6/04
24	7/02	6/24	6/18	6/13	6/08	6/04	5/29	5/24	5/15
20	6/06	5/30	5/26	5/22	5/18	5/15	5/11	5/06	4/30
16	5/29	5/23	5/18	5/14	5/10	5/06	5/02	4/27	4/21

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	7/28	7/31	8/03	8/05	8/08	8/10	8/13	8/16	8/20
32	7/31	8/05	8/10	8/14	8/18	8/21	8/25	8/30	9/05
28	8/15	8/21	8/26	8/29	9/02	9/06	9/10	9/14	9/21
24	9/01	9/05	9/08	9/10	9/13	9/15	9/18	9/21	9/25
20	9/06	9/11	9/15	9/18	9/21	9/24	9/27	9/30	10/05
16	9/13	9/19	9/23	9/27	9/30	10/04	10/07	10/11	10/17

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	30	25	20	17	14	10	7	3	0
32	65	55	48	41	36	30	24	16	6
28	94	85	78	73	67	62	56	49	40
24	121	112	106	101	96	91	85	79	71
20	152	143	136	130	125	119	114	107	97
16	172	162	154	148	143	137	131	123	113

***** 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/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BURGESS JUNCTION, WY **COOP ID: 481220**

Climate Division: WY 5 **NWS Call Sign:** **Elevation: 8,040 Feet** **Lat: 44˚47N** **Lon: 107˚31W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1550	1338	1324	1106	839	515	345	384	641	970	1283	1500	11795
60	1395	1198	1185	956	684	369	206	245	493	815	1133	1345	10024
57	1302	1114	1092	866	591	287	138	175	406	722	1043	1252	8988
55	1240	1058	1030	806	530	236	102	136	350	660	983	1190	8321
50	1085	918	875	656	382	132	34	61	223	506	833	1035	6740
32	537	422	336	173	39	1	0	0	7	76	318	496	2405

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	11	8	19	57	223	477	681	644	356	130	26	19	2651
55	0	0	0	0	1	22	70	67	9	0	0	0	169
57	0	0	0	0	0	13	44	44	5	0	0	0	106
60	0	0	0	0	0	5	19	21	1	0	0	0	46
65	0	0	0	0	0	0	3	5	0	0	0	0	8
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	0	16	130	296	531	484	195	52	0	0	0	0	0	16	146	442	973	1457	1652	1704	1704	1704
45	0	0	0	2	59	177	379	338	101	13	0	0	0	0	0	2	61	238	617	955	1056	1069	1069	1069
50	0	0	0	0	21	81	234	196	33	0	0	0	0	0	0	0	21	102	336	532	565	565	565	565
55	0	0	0	0	5	29	120	86	9	0	0	0	0	0	0	0	5	34	154	240	249	249	249	249
60	0	0	0	0	0	1	48	29	0	0	0	0	0	0	0	0	0	1	49	78	78	78	78	78
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	0	0	0	16	91	195	359	317	163	53	2	0	0	0	0	16	107	302	661	978	1141	1194	1196	1196

(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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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