

# Climatography of the United States

No. 20

1971-2000

Station: TERRY, MT

COOP ID: 248165

Climate Division: MT 7

NWS Call Sign:

Elevation: 2,248 Feet Lat: 46° 48N

Lon: 105° 18W

## 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	28.0	2.3	15.2	62	1953	13	30.1	1981	-45	1954	20	-3.0	1979	1545	0	.0	.0	1.3	16.7	31.0	13.3
Feb	35.8	10.2	23.0	73	1992	28	34.8	1984	-41+	1982	4	5.4	1989	1176	0	.0	.0	5.2	11.0	27.7	7.6
Mar	47.0	19.9	33.5	79+	1993	25	43.2	1986	-35	1962	1	20.9	1996	979	0	.0	.0	13.7	5.1	28.9	2.7
Apr	59.9	31.1	45.5	93	1952	29	51.7	1987	-5	1986	15	38.0	1975	585	0	.0	.1	23.4	.7	18.3	.1
May	71.1	42.2	56.7	102	1988	30	62.5	1977	14	1954	3	51.1	1996	280	21	.1	1.4	29.7	.0	4.5	.0
Jun	80.9	52.3	66.6	110	1988	21	78.4	1988	30	1979	8	60.2	1998	89	137	.7	5.3	30.0	.0	.1	.0
Jul	88.7	57.0	72.9	109+	1995	30	76.2	2000	38+	1987	12	65.8	1993	17	261	3.0	13.4	31.0	.0	.0	.0
Aug	88.2	55.0	71.6	111	1995	8	78.3	1983	28	1988	28	64.3	1974	49	254	2.5	13.6	31.0	.0	.1	.0
Sep	75.6	42.9	59.3	106	1983	2	68.4	1998	15	1989	12	54.9	1986	224	51	.3	3.5	28.9	.0	5.3	.0
Oct	61.5	31.1	46.3	94+	1989	1	51.3	1979	-9	1991	30	42.4	1991	579	0	.0	.2	25.4	.6	19.9	.1
Nov	43.2	17.7	30.5	79	1987	1	39.7	1999	-31	1985	29	16.7	1985	1037	0	.0	.0	10.2	6.9	29.1	2.8
Dec	32.4	6.1	19.3	69	1979	5	30.3	1999	-43	1983	23	-2.2	1983	1419	0	.0	.0	2.5	14.9	30.9	10.3
Ann	59.4	30.7	45.0	111	Aug 1995	8	78.4	Jun 1988	-45	Jan 1954	20	-3.0	Jan 1979	7979	724	6.6	37.5	232.3	55.9	195.8	36.9

+ 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: 1949-2001

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

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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

**Station: TERRY, MT**

**COOP ID: 248165**

**Climate Division: MT 7**

**NWS Call Sign:**

**Elevation: 2,248 Feet Lat: 46° 48N**

**Lon: 105° 18W**

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	.31	.23	.41	1977	4	1.28	1971	.00+	1983	3.6	1.4	.0	.0	.00	.00	.06	.12	.17	.24	.31	.40	.52	.71	.90
Feb	.24	.17	.54	1973	12	.79	1978	.00+	1991	2.2	.5	@	.0	.00	.00	.00	.07	.12	.18	.24	.31	.41	.57	.72
Mar	.43	.33	.72	1983	6	1.53	1998	.00	1978	3.9	1.4	.1	.0	.02	.05	.11	.17	.24	.32	.41	.53	.69	.95	1.22
Apr	1.06	.74	1.62	1973	20	3.86	1989	.00+	1983	5.4	2.8	.4	.1	.00	.06	.22	.38	.55	.76	1.00	1.30	1.72	2.44	3.14
May	1.92	1.51	1.84	1989	29	4.63	1987	.10	1980	8.4	4.9	1.0	.2	.34	.50	.78	1.05	1.31	1.61	1.94	2.34	2.87	3.74	4.56
Jun	2.15	2.11	2.02	1999	6	5.04	1975	.27	1985	8.3	5.5	1.1	.2	.55	.76	1.07	1.34	1.62	1.90	2.22	2.60	3.09	3.87	4.60
Jul	1.55	1.17	2.37	1997	2	5.38	1993	.00	1984	6.7	3.5	.9	.3	.10	.25	.49	.72	.96	1.22	1.53	1.91	2.42	3.26	4.08
Aug	1.29	.95	2.42	1999	12	4.52	1999	.03	2000	4.8	2.9	.5	.3	.10	.19	.36	.53	.73	.96	1.23	1.57	2.04	2.82	3.60
Sep	1.28	.94	2.55	1973	3	4.67	1986	.00	1979	4.6	2.9	.8	.2	.02	.09	.25	.43	.63	.87	1.17	1.55	2.09	3.01	3.93
Oct	.94	.63	2.10	1971	2	4.60	1971	.01	1987	3.8	2.2	.6	.1	.03	.07	.17	.29	.43	.61	.83	1.11	1.53	2.24	2.97
Nov	.44	.31	.72	1952	1	1.85	1978	.00+	1999	3.3	1.7	.1	.0	.00	.00	.00	.08	.17	.27	.39	.55	.76	1.13	1.49
Dec	.24	.15	.50	1973	29	.84	1977	.00+	1997	2.9	1.1	.1	.0	.00	.00	.02	.07	.12	.17	.23	.30	.40	.56	.73
Ann	11.85	12.46	2.55	Sep 1973	3	5.38	Jul 1993	.00+	Nov 1999	57.9	30.8	5.6	1.4	6.18	7.15	8.46	9.50	10.45	11.40	12.41	13.55	14.96	17.08	18.97

+ 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: 1949-2001

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

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

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**Station: TERRY, MT**

**COOP ID: 248165**

**Climate Division: MT 7**

**NWS Call Sign:**

**Elevation: 2,248 Feet**

**Lat: 46° 48N**

**Lon: 105° 18W**

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	6.5	2.0	#	0	6.0	1971	11	27.0	1971	#	1983	27	#	1983	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
Feb	2.4	.0	0	0	3.0	1972	1	11.5	1972	0	0	0	0	0	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
Mar	.8	-99.9	0	0	2.5	1976	2	4.0	1972	0	0	0	0	0	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
Apr	#	#	0	0	#	1982	8	#+	1982	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
May	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.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	.5	.0	0	0	7.0	1984	24	7.0	1984	0	0	0	0	0	.1	.1	.1	.1	.0	.0	.0	.0	.0
Oct	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.4	#	#	0	3.0	1974	1	3.0	1974	3	2000	6	1	2000	.1	.1	.1	.0	.0	-9.9	-9.9	-9.9	-9.9
Dec	.5	.0	0	0	2.0	1971	19	2.0	1983	0	0	0	0	0	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9
Ann	11.1	-9.9	N/A	N/A	7.0	Sep 1984	24	27.0	Jan 1971	3	Nov 2000	6	1	Nov 2000	-9.9	-9.9	-9.9	-9.9	-9.9	-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:

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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	6/17	6/11	6/06	6/03	5/30	5/26	5/23	5/18	5/12
32	5/29	5/24	5/21	5/18	5/15	5/12	5/10	5/06	5/01
28	5/16	5/12	5/09	5/07	5/04	5/02	4/29	4/26	4/22
24	5/09	5/03	4/30	4/26	4/23	4/20	4/17	4/13	4/08
20	4/29	4/24	4/20	4/17	4/14	4/11	4/07	4/04	3/29
16	4/20	4/14	4/10	4/06	4/02	3/30	3/26	3/22	3/16
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	8/20	8/27	8/31	9/04	9/08	9/11	9/15	9/20	9/26
32	9/03	9/07	9/10	9/13	9/16	9/18	9/21	9/24	9/29
28	9/06	9/12	9/16	9/19	9/23	9/26	9/30	10/04	10/10
24	9/15	9/22	9/26	9/30	10/04	10/07	10/11	10/16	10/22
20	9/28	10/04	10/08	10/12	10/15	10/19	10/22	10/26	11/01
16	10/06	10/12	10/17	10/21	10/25	10/29	11/02	11/06	11/13
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	125	116	110	105	100	95	90	84	75
32	143	136	131	127	123	119	114	109	102
28	161	154	149	145	141	137	132	127	120
24	187	178	172	167	162	158	152	146	138
20	207	199	193	188	184	179	174	168	160
16	233	223	216	210	205	199	193	186	176

\* 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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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	1545	1176	979	585	280	89	17	49	224	579	1037	1419	7979
60	1391	1047	825	437	164	37	2	19	127	425	887	1264	6625
57	1302	968	735	353	109	20	0	10	83	335	797	1171	5883
55	1244	915	678	299	79	12	0	6	59	277	737	1109	5415
50	1101	787	533	182	29	3	0	1	20	154	600	968	4378
32	619	398	155	6	0	0	0	0	0	4	200	485	1867

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	97	146	199	411	764	1037	1267	1228	818	448	153	89	6657
55	9	20	9	14	130	359	554	520	187	9	0	0	1811
57	5	16	4	8	98	307	492	462	150	4	0	0	1546
60	1	12	1	2	60	234	402	379	105	1	0	0	1197
65	0	0	0	0	21	137	261	254	51	0	0	0	724
70	0	0	0	0	5	66	146	155	21	0	0	0	393

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	7	49	205	496	775	978	937	540	217	25	1	0	7	56	261	757	1532	2510	3447	3987	4204	4229	4230
45	0	0	16	114	349	625	823	782	398	122	5	0	0	0	16	130	479	1104	1927	2709	3107	3229	3234	3234
50	0	0	3	53	225	476	668	627	272	55	0	0	0	0	3	56	281	757	1425	2052	2324	2379	2379	2379
55	0	0	0	16	126	330	513	474	160	17	0	0	0	0	0	16	142	472	985	1459	1619	1636	1636	1636
60	0	0	0	5	54	204	362	329	84	4	0	0	0	0	0	5	59	263	625	954	1038	1042	1042	1042
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	16	65	174	326	480	607	586	375	199	38	2	0	16	81	255	581	1061	1668	2254	2629	2828	2866	2868

(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)