

# Climatography of the United States

No. 20

1971-2000

Station: PICKSTOWN, SD

COOP ID: 396574

Climate Division: SD 9

NWS Call Sign:

Elevation: 1,490 Feet Lat: 43°04N Lon: 98°32W

## 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	30.5	8.9	19.7	70	1981	24	31.5	1990	-28	1966	29	4.9	1978	1406	0	.0	.0	3.2	16.6	30.4	8.4
Feb	36.7	15.3	26.0	78	1995	22	35.5	1999	-25+	1996	3	11.2	1978	1091	0	.0	.0	6.4	11.3	26.4	4.3
Mar	47.2	24.5	35.9	89	1978	30	42.0	2000	-17	1960	4	28.5	1996	904	0	.0	.0	13.8	4.6	23.8	.7
Apr	59.9	35.7	47.8	96+	1980	21	55.9	1981	5	1975	3	41.5	1983	519	3	.0	.3	23.7	.5	10.5	.0
May	71.5	47.4	59.5	102	1967	25	66.9	1977	20	1967	3	54.1	1995	212	40	.0	.6	30.6	.0	.9	.0
Jun	81.7	57.0	69.4	108	1988	21	76.3	1988	37+	1998	4	64.2	1998	40	171	.4	5.7	30.0	.0	.0	.0
Jul	87.5	62.7	75.1	111	1954	13	80.5	1974	43	1971	30	66.7	1992	9	322	1.9	12.2	31.0	.0	.0	.0
Aug	86.2	60.9	73.6	107	2000	15	80.4	1983	40	1950	20	67.2	1992	17	282	.9	11.1	31.0	.0	.0	.0
Sep	76.8	50.3	63.6	103+	1976	6	69.6	1978	27+	1989	23	57.3	1993	126	83	.2	4.4	29.8	.0	.6	.0
Oct	63.7	38.4	51.1	95+	1997	2	54.6	1973	13	1991	30	47.0	1976	433	1	.0	.3	27.0	.1	6.3	.0
Nov	45.2	24.9	35.1	84	1999	9	47.5	1999	-13	1959	14	22.4	1985	899	0	.0	.0	11.8	5.3	22.5	.6
Dec	33.8	13.3	23.6	73	1998	3	32.1	1999	-26	1989	22	5.8	1983	1285	0	.0	.0	4.0	13.2	30.0	5.0
Ann	60.1	36.6	48.4	111	Jul 1954	13	80.5	Jul 1974	-28	Jan 1966	29	4.9	Jan 1978	6941	902	3.4	34.6	242.3	51.6	151.4	19.0

+ 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

080-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: PICKSTOWN, SD**

**COOP ID: 396574**

**Climate Division: SD 9**

**NWS Call Sign:**

**Elevation: 1,490 Feet Lat: 43°04N**

**Lon: 98°32W**

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	.43	.38	1.24	1994	27	1.26	1994	.02+	1989	4.8	1.3	.2	@	.03	.05	.11	.17	.23	.31	.40	.52	.68	.96	1.23
Feb	.55	.37	1.26	1971	19	1.62	1971	.01	1982	5.2	1.4	.2	@	.04	.08	.15	.23	.31	.41	.52	.66	.86	1.20	1.53
Mar	1.61	1.00	2.26	1987	17	7.70	1987	.07	1994	7.2	3.6	.9	.3	.15	.26	.47	.70	.94	1.22	1.55	1.96	2.53	3.47	4.40
Apr	2.77	2.32	2.17	1971	22	6.99	1984	.39	1980	10.1	5.9	1.8	.6	.51	.75	1.16	1.54	1.92	2.34	2.81	3.38	4.14	5.37	6.54
May	3.70	3.22	3.07	1995	27	9.48	1996	.77	1989	10.5	6.9	2.5	1.0	1.00	1.35	1.88	2.35	2.81	3.29	3.82	4.46	5.28	6.57	7.78
Jun	3.48	3.05	3.04	1967	19	8.70	1984	.37	1995	9.5	6.5	2.4	.9	.85	1.18	1.69	2.14	2.59	3.06	3.59	4.22	5.04	6.34	7.56
Jul	2.82	2.58	2.57	1989	14	6.88	1993	.49	1974	8.8	5.5	2.1	.6	.78	1.04	1.45	1.81	2.15	2.52	2.92	3.40	4.02	5.00	5.90
Aug	2.47	2.25	3.55	1961	18	5.81	1985	.17	1983	6.9	4.1	1.7	.7	.48	.70	1.07	1.40	1.74	2.10	2.51	3.00	3.66	4.71	5.71
Sep	2.28	1.77	3.65	1987	15	6.97	1986	.40	1974	7.0	4.2	1.2	.5	.31	.50	.82	1.14	1.47	1.84	2.26	2.78	3.49	4.63	5.74
Oct	1.76	1.71	2.08	1995	5	5.08	1982	.10	1999	6.1	3.6	1.2	.3	.16	.28	.51	.76	1.02	1.33	1.69	2.15	2.77	3.81	4.84
Nov	1.02	.98	1.97	2000	1	3.40	2000	.00+	1980	5.6	2.4	.5	.2	.00	.12	.31	.47	.64	.82	1.03	1.27	1.61	2.16	2.69
Dec	.48	.42	.88	1955	4	1.42	1982	.00+	1991	4.7	1.5	.1	.0	.00	.05	.13	.21	.28	.37	.47	.60	.77	1.05	1.32
Ann	23.37	22.78	3.65	Sep 1987	15	9.48	May 1996	.00+	Dec 1991	86.4	46.9	14.8	5.1	13.97	15.67	17.91	19.66	21.23	22.79	24.41	26.23	28.48	31.79	34.71

+ 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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**Climate Division: SD 9**

**NWS Call Sign:**

**Elevation: 1,490 Feet**

**Lat: 43°04N**

**Lon: 98°32W**

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	4.0	2.0	3	3	10.0	1976	2	12.1	1979	15	1979	30	8	1979	3.1	1.5	.2	.2	@	14.5	6.8	1.8	.0
Feb	3.9	2.9	3	1	11.0	1997	3	15.0	1999	16	1993	26	12	1979	2.9	1.2	.4	.1	@	8.2	3.5	1.4	.0
Mar	4.8	4.0	1	1	10.0	1977	3	17.5	1984	13	1977	5	4	1984	2.8	1.5	.4	.2	@	5.2	2.6	.9	.2
Apr	1.6	.0	#	#	7.0	1994	28	12.5	1995	11	1998	1	1+	1998	.7	.6	.2	.1	.0	.9	.4	.2	.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	#	.0	#	0	#	1984	25	#	1984	#	1984	25	#	1984	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.5	.0	#	0	7.8	1982	20	7.8	1982	5	1982	20	#+	1999	.2	.2	@	@	.0	.1	.1	@	.0
Nov	2.9	1.6	1	#	9.5	1975	20	12.0	1975	14	2000	16	5	1975	2.2	1.2	.5	.2	.0	3.3	1.8	1.0	.4
Dec	4.4	3.5	3	2	8.2	2000	11	9.8+	1983	14	1983	31	10	1983	3.3	1.3	.4	.2	.0	11.3	4.4	1.4	.3
Ann	22.1	14.0	N/A	N/A	11.0	Feb 1997	3	17.5	Mar 1984	16	Feb 1993	26	12	Feb 1979	15.2	7.5	2.1	1.0	@	43.5	19.6	6.7	.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	5/21	5/17	5/14	5/12	5/10	5/07	5/05	5/02	4/28
32	5/14	5/09	5/06	5/03	4/30	4/28	4/25	4/21	4/16
28	5/02	4/28	4/24	4/22	4/19	4/16	4/14	4/10	4/06
24	4/18	4/14	4/12	4/10	4/08	4/06	4/04	4/02	3/30
20	4/15	4/10	4/06	4/03	4/01	3/29	3/26	3/22	3/18
16	4/04	3/30	3/26	3/23	3/20	3/17	3/14	3/11	3/06
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	9/15	9/19	9/22	9/25	9/27	9/29	10/02	10/05	10/09
32	9/22	9/27	10/01	10/04	10/07	10/09	10/12	10/16	10/21
28	9/30	10/05	10/09	10/12	10/15	10/18	10/22	10/25	10/31
24	10/16	10/21	10/25	10/28	10/30	11/02	11/05	11/09	11/13
20	10/18	10/23	10/27	10/31	11/03	11/06	11/10	11/14	11/20
16	10/29	11/04	11/09	11/12	11/16	11/19	11/23	11/27	12/03
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	158	151	147	143	140	136	133	128	122
32	177	171	166	162	158	155	151	146	140
28	195	189	185	182	179	175	172	168	162
24	222	216	212	208	205	201	197	193	187
20	239	231	225	221	216	211	206	201	193
16	265	256	250	245	240	235	230	223	215

\* 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	1406	1091	904	519	212	40	9	17	126	433	899	1285	6941
60	1251	951	749	378	116	11	0	3	55	284	749	1130	5677
57	1158	871	656	300	74	4	0	1	28	203	659	1037	4991
55	1096	820	595	253	52	2	0	0	17	156	605	975	4571
50	948	689	450	152	18	0	0	0	3	68	467	828	3623
32	462	296	85	4	0	0	0	0	0	0	119	356	1322

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	79	129	204	478	851	1121	1336	1288	947	591	210	94	7328
55	1	9	1	37	190	432	623	575	274	33	7	0	2182
57	0	4	0	24	150	374	561	514	226	18	0	0	1871
60	0	0	0	12	99	292	468	423	162	6	0	0	1462
65	0	0	0	3	40	171	322	282	83	1	0	0	902
70	0	0	0	0	12	83	191	163	34	0	0	0	483

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	6	29	98	291	622	901	1106	1065	735	379	81	6	6	35	133	424	1046	1947	3053	4118	4853	5232	5313	5319
45	0	7	46	181	470	751	951	910	585	249	39	1	0	7	53	234	704	1455	2406	3316	3901	4150	4189	4190
50	0	2	19	104	323	602	796	755	439	145	14	0	0	2	21	125	448	1050	1846	2601	3040	3185	3199	3199
55	0	0	6	55	201	453	641	601	306	72	3	0	0	0	6	61	262	715	1356	1957	2263	2335	2338	2338
60	0	0	0	26	107	308	486	447	190	26	0	0	0	0	0	26	133	441	927	1374	1564	1590	1590	1590
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	7	31	78	190	379	582	736	707	455	239	60	10	7	38	116	306	685	1267	2003	2710	3165	3404	3464	3474

(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)