

Climatography of the United States

No. 20

1971-2000

Station: POLLOCK, SD

COOP ID: 396712

Climate Division: SD 2

NWS Call Sign:

Elevation: 1,635 Feet Lat: 45° 54N

Lon: 100° 17W

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	23.2	.3	11.8	63	1958	8	24.8	1983	-40+	1972	15	-2.1	1978	1652	0	.0	.0	.5	21.2	30.9	15.2
Feb	30.7	8.2	19.5	71+	1992	29	31.1	1998	-47	1994	9	2.6	1979	1277	0	.0	.0	2.7	14.8	27.6	9.0
Mar	41.6	19.3	30.5	79	1986	28	38.5	1986	-31	1995	8	20.6	1996	1071	0	.0	.0	8.7	6.9	28.2	2.9
Apr	58.5	32.0	45.3	97	1980	21	53.2	1987	2	1997	8	38.0	1979	593	2	.0	.2	23.0	.7	16.3	.1
May	71.7	44.4	58.1	101	1969	27	64.1	1977	18+	1961	1	52.1	1979	244	28	.0	1.1	30.4	.0	2.4	.0
Jun	80.3	53.9	67.1	106+	1988	24	77.4	1988	28	1950	3	61.9	1993	69	131	.3	4.3	30.0	.0	.0	.0
Jul	86.7	59.1	72.9	109+	1975	28	78.7	1974	38	1950	13	64.4	1992	22	266	1.6	11.5	31.0	.0	.0	.0
Aug	85.7	57.2	71.5	108+	1960	22	77.4	1983	30	1950	20	64.6	1992	27	227	1.2	10.0	31.0	.0	.0	.0
Sep	74.9	46.2	60.6	105+	1978	5	66.4	1998	15	1991	19	55.8	1984	180	47	.3	2.5	29.6	.0	1.7	.0
Oct	60.3	33.8	47.1	95+	1997	2	50.8	1973	-5	1991	31	42.7	1991	557	0	.0	.1	25.5	.4	13.5	.1
Nov	39.5	19.1	29.3	79	1975	4	40.0	1999	-27	1985	28	16.2	1985	1071	0	.0	.0	7.1	8.8	27.8	2.2
Dec	26.9	5.7	16.3	68	1965	4	27.3	1997	-39	1983	23	-.6	1983	1509	0	.0	.0	1.2	18.7	30.8	10.4
Ann	56.7	31.6	44.2	109+	Jul 1975	28	78.7	Jul 1974	-47	Feb 1994	9	-2.1	Jan 1978	8272	701	3.4	29.7	220.7	71.5	179.2	39.9

+ 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

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: POLLOCK, SD

COOP ID: 396712

Climate Division: SD 2

NWS Call Sign:

Elevation: 1,635 Feet Lat: 45° 54N

Lon: 100° 17W

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	.39	.34	.98	1997	4	1.30	1997	.02	1974	5.1	1.1	@	.0	.05	.08	.14	.19	.25	.31	.38	.47	.59	.79	.98
Feb	.45	.34	.78	1951	28	2.27	1987	.02	1985	4.9	1.3	.1	.0	.06	.09	.16	.22	.29	.36	.44	.55	.69	.92	1.15
Mar	1.02	.65	1.59	1973	14	3.01	1977	.06	1999	6.2	2.6	.5	.2	.12	.20	.34	.48	.64	.81	1.00	1.25	1.59	2.14	2.68
Apr	1.66	1.40	2.90	1989	28	5.24	1989	.04	1987	7.2	3.7	.9	.2	.15	.27	.49	.72	.97	1.26	1.59	2.02	2.60	3.57	4.52
May	2.58	2.31	2.32	1958	13	6.48	1999	.29	1980	9.1	5.7	1.5	.6	.65	.89	1.26	1.60	1.92	2.27	2.66	3.12	3.72	4.67	5.56
Jun	2.98	2.57	3.23	1961	28	6.54	1971	.68	1989	9.3	6.0	2.1	.6	.85	1.13	1.56	1.93	2.29	2.67	3.09	3.59	4.23	5.24	6.17
Jul	2.34	1.74	3.30	1981	14	7.77	1981	.49	1976	7.9	4.8	1.4	.5	.43	.64	.98	1.30	1.62	1.97	2.37	2.85	3.49	4.51	5.49
Aug	2.10	1.79	3.60	1998	2	6.51	1998	.69	1976	7.1	4.0	1.2	.5	.60	.80	1.10	1.36	1.62	1.89	2.18	2.53	2.98	3.69	4.35
Sep	1.35	1.03	2.95	1970	7	4.25	1996	.07	1974	5.5	3.0	.7	.3	.16	.27	.46	.65	.85	1.07	1.33	1.65	2.09	2.80	3.50
Oct	1.48	.92	2.69	1980	16	4.38	1994	.10	1976	6.0	3.2	.7	.4	.10	.19	.38	.58	.81	1.07	1.39	1.80	2.36	3.31	4.26
Nov	.63	.60	1.39	1977	8	2.87	1977	.01	1980	5.7	1.9	.2	@	.03	.06	.13	.21	.31	.42	.57	.76	1.03	1.49	1.96
Dec	.36	.33	.81	1965	11	1.09	1972	.00	1986	5.4	1.1	.0	.0	.04	.08	.14	.19	.25	.30	.37	.44	.54	.71	.86
Ann	17.34	16.44	3.60	Aug 1998	2	7.77	Jul 1981	.00	Dec 1986	79.4	38.4	9.3	3.3	11.38	12.50	13.95	15.07	16.06	17.04	18.05	19.17	20.55	22.56	24.31

+ 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:
www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

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No. 20

1971-2000

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151 Patton Avenue
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Station: POLLOCK, SD

COOP ID: 396712

Climate Division: SD 2

NWS Call Sign:

Elevation: 1,635 Feet

Lat: 45° 54N

Lon: 100° 17W

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	6.9	5.0	5	3	8.5	1997	4	17.0	1997	26	1997	18	24	1997	4.2	2.8	.8	.2	.0	21.2	14.0	9.2	3.9
Feb	7.3	5.5	4	2	10.0	1995	26	26.5	1987	24	1997	17	23	1997	3.6	2.6	.8	.3	@	14.6	8.9	5.5	3.6
Mar	6.9	3.1	2	1	10.0	1982	19	20.8	1982	24	1997	18	17	1997	3.0	2.3	.9	.4	@	9.7	6.4	3.9	1.7
Apr	2.8	1.0	#	#	10.0	1995	11	15.5	1995	9	1986	14	2	1997	1.2	.8	.4	.2	@	1.4	.6	.4	.0
May	.2	.0	#	0	6.0	1991	3	6.0	1991	4	1991	3	#	1991	@	@	@	@	.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	0	0	.5	1984	23	.5+	1995	0	0	0	0	0	.1	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.6	.0	#	0	6.0	1992	15	6.0	1992	4	1992	15	#+	1997	.3	.2	.1	@	.0	.3	.2	.0	.0
Nov	5.9	4.7	1	#	9.0	1996	23	19.5	1985	16	1996	23	6	1996	3.4	2.7	.9	.3	.0	6.8	3.3	2.0	1.0
Dec	6.4	4.5	3	1	10.0	1988	26	21.0	1972	20	1996	31	16	1996	4.0	2.5	.5	.2	@	15.1	9.1	7.1	3.6
Ann	37.0	23.8	N/A	N/A	10.0+	Apr 1995	11	26.5	Feb 1987	26	Jan 1997	18	24	Jan 1997	19.8	13.9	4.4	1.6	@	69.1	42.5	28.1	13.8

+ 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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No. 20 1971-2000

Station: POLLOCK, SD

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Climate Division: SD 2

NWS Call Sign:

Elevation: 1,635 Feet

Lat: 45° 54N

Lon: 100° 17W

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	5/29	5/25	5/22	5/20	5/18	5/16	5/13	5/10	5/06
32	5/22	5/17	5/14	5/12	5/09	5/07	5/04	5/01	4/26
28	5/12	5/08	5/05	5/02	4/29	4/27	4/24	4/21	4/17
24	5/01	4/27	4/24	4/21	4/19	4/17	4/14	4/11	4/07
20	4/22	4/17	4/13	4/10	4/07	4/04	4/01	3/29	3/24
16	4/13	4/08	4/05	4/02	3/30	3/27	3/24	3/21	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	9/09	9/13	9/15	9/17	9/20	9/22	9/24	9/26	9/30
32	9/12	9/16	9/19	9/22	9/24	9/27	9/30	10/03	10/07
28	9/22	9/26	9/30	10/02	10/05	10/08	10/10	10/14	10/18
24	9/26	10/02	10/06	10/09	10/13	10/16	10/20	10/24	10/29
20	10/03	10/09	10/14	10/18	10/22	10/25	10/29	11/03	11/09
16	10/10	10/17	10/22	10/26	10/30	11/03	11/08	11/13	11/20
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	141	135	131	127	124	121	117	113	107
32	158	151	146	142	138	134	129	124	117
28	175	169	165	161	158	155	151	147	141
24	197	189	184	180	176	172	167	162	155
20	220	212	206	201	197	192	187	181	173
16	241	231	225	219	214	208	202	196	186

* 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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1971-2000**

Station: POLLOCK, SD

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Climate Division: SD 2 NWS Call Sign: Elevation: 1,635 Feet Lat: 45° 54N Lon: 100° 17W

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	1652	1277	1071	593	244	69	22	27	180	557	1071	1509	8272
60	1497	1137	916	450	138	23	6	6	89	403	921	1354	6940
57	1404	1053	823	370	90	11	1	2	51	313	831	1261	6210
55	1342	1003	761	320	65	5	0	1	33	256	771	1199	5756
50	1189	873	616	210	24	0	0	0	7	137	630	1047	4733
32	677	445	194	15	0	0	0	0	0	3	209	547	2090

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	49	93	146	414	806	1052	1267	1223	857	469	128	61	6565
55	0	6	0	29	159	367	554	511	200	10	0	0	1836
57	0	0	0	19	122	312	493	450	158	4	0	0	1558
60	0	0	0	9	77	235	405	362	106	1	0	0	1195
65	0	0	0	2	28	131	266	227	47	0	0	0	701
70	0	0	0	0	7	59	155	123	15	0	0	0	359

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	4	31	218	567	819	1029	978	621	263	26	0	0	4	35	253	820	1639	2668	3646	4267	4530	4556	4556
45	0	0	7	121	416	669	874	823	475	151	8	0	0	0	7	128	544	1213	2087	2910	3385	3536	3544	3544
50	0	0	1	63	280	519	719	668	332	70	0	0	0	0	1	64	344	863	1582	2250	2582	2652	2652	2652
55	0	0	0	25	162	374	564	514	210	28	0	0	0	0	0	25	187	561	1125	1639	1849	1877	1877	1877
60	0	0	0	9	79	233	411	360	115	6	0	0	0	0	0	9	88	321	732	1092	1207	1213	1213	1213
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	8	37	165	358	520	666	629	396	187	26	0	0	8	45	210	568	1088	1754	2383	2779	2966	2992	2992

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
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">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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