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

COOP ID: 478110

Station: STANLEY, WI

Climate Division: WI 1

NWS Call Sign: Elevation: 1,090 Feet Lat: 44°58N Lon: 90°56W

									r	Tempe	eratui	re (°F)									
	Mea	n (1)						Extr	emes						Days (1) emp 65		Mean	Numb	er of D	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	19.6	4	9.6	53	1981	26	21.0	1990	-46	1951	30	-2.8	1977	1719	0	.0	.0	@	25.3	30.9	15.4
Feb	26.2	4.6	15.4	57	1981	18	29.3	1998	-37	1951	9	4.8	1989	1388	0	.0	.0	.5	17.6	27.6	9.5
Mar	38.4	18.1	28.3	84	1986	30	38.0	1973	-41	1962	1	20.5	1975	1139	0	.0	.0	5.0	7.9	26.9	3.0
Apr	53.9	31.2	42.6	89	1980	22	49.4	1977	0	1956	30	36.3	1975	673	0	.0	.0	19.9	.5	16.1	.0
May	66.8	42.5	54.7	91	1959	2	62.4	1977	19+	1967	3	48.9	1983	344	23	.0	@	30.2	.0	3.6	.0
Jun	75.4	52.2	63.8	94+	1987	15	68.9	1991	29	1972	10	58.0	1982	103	66	.0	.8	30.0	.0	.2	.0
Jul	79.5	56.9	68.2	99+	1995	15	72.1+	1988	38+	1984	7	62.8	1992	37	135	.0	2.6	31.0	.0	.0	.0
Aug	77.2	54.9	66.1	104	1964	2	70.6	1988	31	1950	20	62.2	1977	65	97	.1	1.3	31.0	.0	.0	.0
Sep	68.1	45.1	56.6	97	1976	7	61.9	1998	19	1956	20	51.1	1993	262	10	.0	.2	29.6	.0	1.8	.0
Oct	56.4	34.4	45.4	91	1976	1	51.9	1971	8	1962	26	39.7	1988	609	0	.0	@	23.8	.1	13.1	.0
Nov	38.6	21.5	30.1	75	1975	4	37.8	1999	-16	1956	23	22.4	1995	1049	0	.0	.0	6.1	7.5	25.5	1.4
Dec	24.2	6.7	15.5	63	2001	6	24.5	1997	-39	1983	19	1.9	1983	1536	0	.0	.0	.3	22.1	30.6	9.8
Ann	52.0	30.6	41.4	104	Aug 1964	2	72.1+	Jul 1988	-46	Jan 1951	30	-2.8	Jan 1977	8924	331	.1	4.9	207.4	81.0	176.3	39.1

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 109-A

- (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

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

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Station: STANLEY, WI

Climate Division: WI 1 NWS Call Sign: Elevation: 1,090 Feet Lat: 44°58N Lon: 90°56W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total						ays (3	5)	Proba	ability th		nonthly/	annual j	precipita ated am	babilit ation will nount vs Probal	ll be equ		less tha	in the
	Medi	ans(1)				Extremes	•			1	aily Pre	стриацо	n		Th	ese value	s were de	ermined	from the i	incomplet	te gamma	distribut	ion	
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	.99	.83	.81	1997	5	2.41	1997	.03	1981	8.5	3.5	.2	.0	.16	.24	.38	.52	.66	.82	.99	1.21	1.50	1.97	2.42
Feb	.80	.63	.87+	1998	2	2.12	1971	.07	1987	6.5	2.5	.2	.0	.12	.19	.30	.41	.52	.65	.80	.97	1.21	1.60	1.97
Mar	1.61	1.62	1.68	1973	11	3.82	1977	.03	1978	7.6	4.1	.8	.2	.23	.36	.59	.82	1.05	1.31	1.60	1.97	2.46	3.27	4.04
Apr	2.65	2.66	2.12	1954	30	4.86	1975	.41	1997	10.0	6.5	1.6	.4	.92	1.17	1.54	1.84	2.14	2.44	2.77	3.15	3.65	4.41	5.11
May	3.49	3.02	2.86	1989	29	7.61	1973	.67	1986	10.5	6.8	2.2	.7	.81	1.13	1.64	2.10	2.56	3.04	3.58	4.23	5.07	6.42	7.69
Jun	4.21	3.88	4.53	1980	5	12.25	1980	.93	1995	11.1	7.5	3.0	1.0	1.09	1.49	2.10	2.64	3.17	3.73	4.34	5.08	6.03	7.54	8.96
Jul	4.04	3.99	3.91	1959	8	8.76	1999	.22	1974	11.1	6.7	2.6	1.1	.83	1.20	1.79	2.33	2.88	3.46	4.12	4.92	5.97	7.64	9.23
Aug	4.52	4.23	3.88	2001	2	9.38	1980	1.23	1976	10.5	6.9	3.2	1.2	1.64	2.06	2.68	3.19	3.68	4.18	4.72	5.36	6.17	7.42	8.56
Sep	3.76	3.33	4.27	2000	11	13.00	1986	.52	1976	11.0	6.8	2.3	.9	.64	.97	1.52	2.04	2.56	3.14	3.79	4.59	5.65	7.37	9.01
Oct	2.24	2.09	2.34	1966	15	5.35	1979	.10	1976	9.3	5.5	1.1	.5	.52	.73	1.06	1.35	1.64	1.95	2.30	2.71	3.25	4.11	4.92
Nov	2.17	1.65	2.11	1991	2	8.15	1991	.17	1976	9.0	4.8	1.4	.2	.38	.58	.89	1.19	1.49	1.82	2.19	2.64	3.25	4.22	5.14
Dec	1.11	.94	1.24	1965	12	2.72	1972	.22	1986	8.9	3.8	.3	@	.24	.34	.51	.65	.80	.96	1.14	1.35	1.63	2.08	2.50
Ann	31.59	31.19	4.53	Jun 1980	5	13.00	Sep 1986	.03+	Jan 1981	114.0	65.4	18.9	6.2	19.92	22.08	24.89	27.07	29.03	30.94	32.94	35.16	37.90	41.91	45.43

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

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

[#] 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

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COOP ID: 478110

Station: STANLEY, WI

Climate Division: WI 1 NWS Call Sign:

Elevation: 1,090 Feet Lat: 44°58N

t: 44°58N Lon: 90°56W

		Hand Median Mean Median																					
		Snow Fall Snow Depth Median Med															Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa			Snow Depth >= Thresholds			
Month	Snow Fall Fall Depth Depth Mean Median Mean Median Fall Fall Fall Mean Median Fall Fall Fall Fall Fall Fall Fall Fa					Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	11.1	11.0	12	12	9.0	1971	4	27.4	1971	31+	1982	31	24	1979	7.8	4.6	1.5	.6	.0	-9.9	-9.9	-9.9	-9.9
Feb	7.2	5.9	15	14	9.0	1971	5	20.5	1971	43	1971	16	40	1971	4.6	2.9	.8	.2	.0	-9.9	-9.9	-9.9	-9.9
Mar	7.6	4.0	5	2	12.0	1989	3	29.5	1989	41	1971	4	28	1971	3.4	2.0	1.0	.6	@	8.6	7.3	5.5	3.9
Apr	2.4	1.1	#	#	8.0	1993	1	13.0	1993	13	1975	1	3	1975	1.5	1.0	.3	@	.0	1.2	.8	.7	.2
May	.0	.0	0	0	.5	1973	2	.5	1973	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	#	1993	29	#	1993	#	1987	2	#	1987	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.5	.0	#	0	4.0	1992	20	4.0	1992	2	1986	14	#+	1997	.3	.2	@	.0	.0	.1	.0	.0	.0
Nov	4.2	3.0	1	#	7.0	1971	26	12.4	1978	13	1983	30	8	1991	3.6	2.4	.7	.4	.0	3.7	2.0	1.5	.6
Dec	10.2	7.8	6	4	12.0	1985	1	24.9	1972	23	1972	31	18	1985	7.4	4.8	1.3	.2	@	23.7	20.2	16.0	7.6
Ann	43.2	32.8	N/A	N/A	12.0+	Mar 1989	3	29.5	Mar 1989	43	Feb 1971	16	40	Feb 1971	28.6	17.9	5.6	2.0	@	-9.9	-9.9	-9.9	-9.9

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

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

[@] 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

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Climate Division: WI 1 NWS Call Sign:

Elevation: 1,090 Feet Lat: 4

Lat: 44°58N Lon: 90°56W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	(Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated((*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	6/14	6/08	6/04	6/01	5/28	5/25	5/21	5/17	5/11
32	6/03	5/28	5/24	5/20	5/17	5/13	5/09	5/05	4/29
28	5/14	5/10	5/06	5/03	5/01	4/28	4/25	4/22	4/17
24	5/01	4/26	4/22	4/19	4/17	4/14	4/11	4/07	4/02
20	4/19	4/15	4/12	4/10	4/07	4/05	4/02	3/31	3/27
16	4/15	4/11	4/07	4/05	4/02	3/31	3/28	3/25	3/20
			Fal	ll Freeze Da	tes (Month/D	Day)			
Tomp (F)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/05	9/08	9/11	9/13	9/15	9/17	9/19	9/22	9/25
32	9/11	9/16	9/20	9/23	9/26	9/29	10/02	10/05	10/10
28	9/23	9/27	9/30	10/02	10/05	10/07	10/09	10/12	10/16
24	10/02	10/07	10/11	10/15	10/18	10/21	10/24	10/28	11/03
20	10/14	10/19	10/23	10/26	10/29	11/01	11/04	11/08	11/13
16	10/24	10/30	11/03	11/07	11/10	11/13	11/17	11/21	11/27
•		•		Freeze F	ree Period		•		1
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	130	123	118	113	109	105	100	95	88
32	156	148	142	136	131	126	121	115	106
28	174	168	164	160	156	153	149	144	138
24	205	198	192	188	184	179	175	170	163
20	223	217	212	208	204	200	196	191	185
16	245	237	231	226	221	216	211	205	197

^{*} 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.

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Climate Division: WI 1 NWS Call Sign: Elevation: 1,090 Feet Lat: 44°58N Lon: 90°56W

				Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree	Days (1)										
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann					
65	1719	1388	1139	673	344	103	37	65	262	609	1049	1536	8924					
60	1564	1248	984	526	226	39	8	17	144	457	899	1381	7493					
57	1471	1164	891	441	168	18	1	6	90	369	809	1288	6716					
55	1409	1108	829	386	135	10	0	2	63	313	749	1226	6230					
50	1254	968	676	262	69	2	0	0	19	192	600	1071	5113					
32	710	494	222	22	0	0	0	0	0	7	167	555	2177					

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	15	30	106	339	702	953	1122	1056	738	421	107	42	5631
55	0	0	0	14	124	273	409	345	110	14	0	0	1289
57	0	0	0	8	95	221	348	286	78	8	0	0	1044
60	0	0	0	4	60	152	261	205	42	3	0	0	727
65	0	0	0	0	23	66	135	97	10	0	0	0	331
70	0	0	0	0	7	18	53	32	1	0	0	0	111

										Gro	wing	Degre	e Uni	ts (2)										
Base	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec															Growi	ng Degre	ee Units (Accumu	lated Mo	onthly)			
														Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	0	0	28	183	506	743	908	842	547	241	31	2	0	0	28	211	717	1460	2368	3210	3757	3998	4029	4031
45												0	0	0	11	114	474	1067	1820	2507	2909	3046	3059	3059
50												0	0	0	4	56	286	731	1329	1861	2127	2193	2196	2196
55	0	0	0	22	130	304	444	381	152	25	0	0	0	0	0	22	152	456	900	1281	1433	1458	1458	1458
60	0	0	0	8	65	176	293	233	75	7	0	0	0	0	0	8	73	249	542	775	850	857	857	857
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	50/86 0 0 19 128 316 468 596 542 331 150 22											0	0	0	19	147	463	931	1527	2069	2400	2550	2572	2572

(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

- c. Snow Tables
 - 1. Snow Climatology
 - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

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