# 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: 476859

Lon: 90°17W

**Station: PRENTICE NO. 2, WI** 

**Climate Division: WI 2** 

**NWS Call Sign:** 

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 19.3 -3.2 8.1 54 1973 25 19.5 1990 -45+1982 17 -2.7 1977 1767 0 .0 .0 .1 27.1 30.9 17.1 Jan 26.0 2.0 14.0 59 1976 24 30.3 1998 -47+1996 3 3.5 1989 1428 0 .0 .0 .5 19.0 27.8 11.9 Feb Mar 37.0 15.3 26.2 74 2000 8 35.7 2000 -44 1962 17.7 1996 1205 0 .0 .0 4.3 10.2 28.0 5.2 28.8 1975 .3 Apr 51.9 40.4 90 1952 28 46.6 1998 -6 1972 8 34.3 741 0 .0 .0 17.4 1.5 19.6 May 65.6 40.2 52.9 89+ 1959 2 60.5 1998 14 1966 10 47.0 1983 394 19 .0 .0 29.2 @ 7.4 .0 48.8 30 21 2 54.0 73.3 61.1 93 1963 65.9 +1995 1964 1982 155 37 .0 .2 29.9 .0 .9 0. Jun Jul 77.5 53.6 65.6 99 14 70.2 1999 28 1972 4 59.2 1992 68 1.0 31.0 (a) 1995 .0 .0 0. 1977 75.4 51.6 63.5 98 1964 2 68.5 1995 26 1976 29 58.2 110 63 .0 .4 31.0 .0 .3 .0 Aug 7 Sep 66.2 42.8 54.5 93 1976 61.3 1998 15 1967 29 48.8 1993 321 6 .0 .1 28.9 .0 4.4 .0 54.4 27 37.3 1987 Oct 32.6 43.5 89 1976 1 50.9 1971 -1 1976 667 0 .0 .0 20.8 .3 16.1 (a) 37.1 20.2 28.7 70+ 2000 2 36.4 1999 -27+ 1976 30 19.5 1995 1090 0 .0 .0 4.4 10.5 Nov 26.6 1.6 Dec 23.6 4.8 14.2 64 1998 3 23.5 1997 -43 1983 19 2.3 1983 1575 0 .0 .0 .3 24.1 30.7 11.2 Jul Jul Feb Jan 28.1 39.4 99 1995 14 70.2 1999 -47+ 1996 3 -2.7 1977 9521 209 .0 1.7 197.8 92.7 192.7 47.3 50.6 Ann

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

Issue Date: February 2004 092-A

(1) From the 1971-2000 Monthly Normals

Elevation: 1,540 Feet Lat: 45°31N

- (2) Derived from station's available digital record: 1948-2001
- (3) Derived from 1971-2000 serially complete daily data

<sup>+</sup> Also occurred on an earlier date(s)

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

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Station: PRENTICE NO. 2, WI

Climate Division: WI 2 NWS Call Sign: Elevation: 1,540 Feet Lat: 45°31N Lon: 90°17W

										Pı	recipi	tation	(incl	hes)										
	M	ans/	P	recip	itatio	on Total	s			M	ean N	Numbo Pays (3		Precipitation Probabilities (1)  Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
		ans(1)				Extremes	5			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	.94	.71	1.20	1953	15	2.23	1997	.05	1981	7.7	3.4	.2	.0	.16	.24	.38	.51	.64	.78	.94	1.14	1.40	1.83	2.24
Feb	.67	.58	1.07	1999	12	1.96	1971	.03	1997	5.8	2.2	.1	@	.08	.13	.22	.32	.42	.53	.66	.82	1.04	1.40	1.75
Mar	1.47	1.31	1.66	1973	11	3.25	1973	.21	1978	7.7	3.9	.7	.2	.23	.36	.57	.77	.98	1.21	1.47	1.79	2.22	2.91	3.57
Apr	2.26	2.19	2.10	1981	4	4.38	1977	.11	1980	9.2	5.4	1.3	.3	.51	.72	1.05	1.35	1.65	1.96	2.32	2.75	3.31	4.20	5.05
May	3.33	3.31	2.48	1951	16	8.41	1973	.57	1986	10.0	7.0	2.3	.7	1.03	1.34	1.81	2.22	2.61	3.02	3.47	3.99	4.67	5.73	6.71
Jun	4.09	3.98	3.60	1968	21	7.73	2000	1.31	1983	11.8	7.9	2.8	.8	1.80	2.17	2.68	3.09	3.48	3.87	4.29	4.77	5.37	6.29	7.12
Jul	4.04	3.70	3.49	1949	4	8.89	1999	.92	1998	11.0	7.5	2.7	1.0	1.58	1.95	2.48	2.93	3.34	3.77	4.23	4.76	5.44	6.48	7.43
Aug	4.19	3.89	3.72	1960	28	10.37	1995	1.60	1976	10.7	7.3	3.1	1.0	1.61	2.00	2.56	3.02	3.46	3.91	4.39	4.95	5.66	6.76	7.76
Sep	4.28	3.70	4.06	1994	13	10.97	1994	.66	1976	11.5	7.8	2.6	1.1	.99	1.38	2.01	2.57	3.13	3.72	4.39	5.19	6.23	7.89	9.45
Oct	2.68	2.54	2.50	1966	15	5.17	1995	.60	1976	9.8	5.5	1.6	.5	.98	1.23	1.59	1.89	2.18	2.48	2.80	3.17	3.65	4.38	5.06
Nov	1.98	1.78	2.20	1975	10	7.23	1991	.23	1976	8.9	4.9	1.2	.3	.41	.59	.88	1.14	1.41	1.70	2.02	2.41	2.92	3.75	4.52
Dec	1.06	1.03	1.25	1953	4	2.83	1984	.31	1986	8.5	4.1	.3	.1	.27	.37	.52	.66	.80	.94	1.10	1.28	1.53	1.91	2.28
Ann	30.99	32.17	4.06	Sep 1994	13	10.97	Sep 1994	.03	Feb 1997	112.6	66.9	18.9	6.0	21.07	22.96	25.39	27.25	28.91	30.53	32.20	34.05	36.31	39.60	42.46

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

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

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

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**COOP ID: 476859** 

**Station: PRENTICE NO. 2, WI** 

Climate Division: WI 2 NWS Call Sign: Elevation: 1,540 Feet Lat: 45°31N Lon: 90°17W

										Snov	w (incl	hes)													
						Sn	ow To	tals							Mean Number of Days (1)										
	Means/Medians (1)					Extremes (2)											Snow Fall >= Thresholds						ı İs		
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	13.0	11.5	12	11	7.0	1996	19	28.9	1971	34	1997	31	22	1996	7.5	4.9	1.9	.4	.0	30.2	28.2	28.2	14.8		
Feb	8.5	7.9	14	12	12.0	1971	5	23.2	1971	34	1997	2	28+	1997	5.2	3.2	1.0	.2	@	-9.9	-9.9	-9.9	-9.9		
Mar	8.8	7.5	7	3	12.0	1989	4	25.0	1989	35	1972	7	22	1996	4.7	3.1	1.2	.4	.1	13.4	11.8	10.8	6.6		
Apr	3.8	3.3	1	#	12.0	1982	20	15.5	1982	20	1996	4	9	1996	2.1	1.2	.4	.1	@	2.9	1.9	1.1	.2		
May	.2	.0	#	0	3.8	1979	5	3.8	1979	2	1979	5	#+	1997	.1	.1	@	.0	.0	.1	.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	1.0	1995	22	1.0	1995	0	0	0	0	0	@	@	.0	.0	.0	.0	.0	.0	.0		
Oct	.9	.0	#	0	4.5	1986	14	5.0	1982	5	1986	14	#+	1997	.7	.5	.1	.0	.0	.2	.1	@	.0		
Nov	4.3	3.4	1	1	10.5	1978	17	13.7	1978	11	1991	24	4	1978	4.1	2.7	.7	.2	@	5.7	3.3	1.4	.3		
Dec	11.2	10.2	5	4	10.0	1985	2	29.0	1985	22	1996	31	13	1995	7.5	5.0	1.1	.3	@	24.2	20.1	15.1	4.0		
Ann	50.7	43.8	N/A	N/A	12.0+	Mar 1989	4	29.0	Dec 1985	35	Mar 1972	7	28+	Feb 1997	31.9	20.7	6.4	1.6	.1	-9.9	-9.9	-9.9	-9.9		

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

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

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

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**Climate Division: WI 2** 

**NWS Call Sign:** 

Lat: 45°31N Elevation: 1,540 Feet

				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 (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	7/05	6/28	6/23	6/19	6/15	6/11	6/07	6/02	5/27							
32	6/18	6/13	6/09	6/06	6/03	5/31	5/28	5/24	5/19							
28	6/08	6/01	5/27	5/23	5/19	5/15	5/10	5/05	4/28							
24	5/18	5/13	5/09	5/06	5/03	4/30	4/27	4/23	4/18							
20	5/03	4/28	4/24	4/21	4/18	4/15	4/12	4/08	4/02							
16	4/22	4/18	4/15	4/12	4/10	4/07	4/05	4/02	3/29							
			Fal	l Freeze Da	tes (Month/D	ay)	•									
Tomp (F)		Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	8/08	8/15	8/21	8/25	8/30	9/03	9/08	9/13	9/21							
32	8/26	9/01	9/05	9/09	9/12	9/16	9/19	9/24	9/30							
28	9/09	9/15	9/19	9/22	9/25	9/28	10/01	10/05	10/10							
24	9/21	9/26	9/30	10/04	10/07	10/10	10/14	10/18	10/23							
20	10/03	10/08	10/12	10/15	10/18	10/21	10/24	10/27	11/01							
16	10/12	10/17	10/22	10/25	10/29	11/01	11/05	11/09	11/15							
			•	Freeze F	ree Period		•									
Town (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)									
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	111	99	90	82	75	68	60	51	38							
32	125	116	110	105	100	96	90	84	76							
28	155	146	139	134	128	123	118	111	102							
24	180	172	166	161	157	152	147	141	133							
20	206	198	192	187	182	178	172	167	158							
16	224	216	210	206	201	197	192	186	179							

<sup>\*</sup> 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.

Complete documentation available from:

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Climate Division: WI 2 NWS Call Sign: Elevation: 1,540 Feet Lat: 45°31N Lon: 90°17W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1767	1428	1205	741	394	155	68	110	321	667	1090	1575	9521		
60	1612	1288	1050	593	270	72	16	40	194	515	940	1420	8010		
57	1519	1204	957	507	207	39	6	18	132	427	850	1327	7193		
55	1457	1148	895	451	171	24	1	9	98	371	790	1265	6680		
50	1302	1008	741	321	96	6	0	1	39	244	641	1110	5509		
32	756	535	268	39	2	0	0	0	0	16	194	584	2394		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	12	31	86	289	650	872	1040	976	675	372	94	31	5128
55	0	0	0	11	106	206	327	272	83	13	0	0	1018
57	0	0	0	7	80	161	270	218	57	8	0	0	801
60	0	0	0	3	50	104	187	148	29	3	0	0	524
65	0	0	0	0	19	37	84	63	6	0	0	0	209
70	0	0	0	0	6	9	22	16	0	0	0	0	53

	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 N													Nov	Dec									
40	0	0	21	140	435	652	810	746	461	191	23	1	0	0	21	161	596	1248	2058	2804	3265	3456	3479	3480
45	0	0	6	75	295	504	655	591	322	103	8	0	0	0	6	81	376	880	1535	2126	2448	2551	2559	2559
50	0	0	0	35	182	359	500	437	206	46	2	0	0	0	0	35	217	576	1076	1513	1719	1765	1767	1767
55	0	0	0	14	100	229	347	290	111	17	0	0	0	0	0	14	114	343	690	980	1091	1108	1108	1108
60	0	0	0	5	47	123	209	160	51	2	0	0	0	0	0	5	52	175	384	544	595	597	597	597
Base				Gro	wing De	gree Unit	s for Co	rn (Mont	thly)						Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	0	0	14	104	280	410	523	474	282	120	13	0	0	0	14	118	398	808	1331	1805	2087	2207	2220	2220

(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

#### 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