U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RICE LAKE, WI **COOP ID: 477132**

Climate Division: WI 1 **NWS Call Sign:** **Elevation: 1,103 Feet** **Lat: 45˚25N** **Lon: 91˚47W**

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	19.0	-1.2	8.9	52	1981	25	21.4	1990	-43+	1982	17	-2.1	1982	1740	0	.0	.0	@	25.6	30.8	16.0
Feb	26.0	5.9	16.0	55	1981	18	30.3	1998	-37+	1996	2	5.8	1989	1375	0	.0	.0	.5	17.5	27.5	9.9
Mar	37.5	19.8	28.7	80	1986	31	38.7	1973	-38	1962	1	19.1	1996	1126	0	.0	.0	5.1	8.1	27.0	3.6
Apr	53.9	33.0	43.5	90	1980	22	51.1	1977	2	1995	4	37.8	1995	647	1	.0	@	20.6	.6	16.1	.0
May	67.2	45.3	56.3	90+	2001	16	65.2	1977	15	1967	3	49.9	1983	307	36	.0	.0	30.4	.0	3.5	.0
Jun	76.1	54.1	65.1	98	1963	30	70.3	1988	28	1972	10	60.5	1985	86	89	.0	1.1	30.0	.0	.1	.0
Jul	80.1	58.8	69.5	100	1988	15	74.0	1988	36	1969	1	62.9	1992	29	167	@	2.9	31.0	.0	.0	.0
Aug	77.9	56.4	67.2	100+	1988	17	71.8	1988	34	1974	30	62.5	1992	52	120	.1	1.3	31.0	.0	.0	.0
Sep	68.1	47.1	57.6	95	1976	7	63.5	1998	22	1981	28	51.7	1993	242	19	.0	.2	29.5	.0	2.1	.0
Oct	56.3	36.2	46.3	87	1976	1	52.8	1971	9+	1981	26	41.2	1987	582	0	.0	.0	23.6	.2	12.1	.0
Nov	37.7	22.6	30.2	71+	1978	3	38.0	1999	-22	1976	30	21.9	1995	1045	0	.0	.0	5.2	9.3	25.8	1.3
Dec	23.2	6.6	14.9	60	2001	6	24.9	1997	-40	1983	19	2.2	1983	1554	0	.0	.0	.3	23.2	30.8	10.1
Ann	51.9	32.1	42.0	100+	Aug 1988	17	74.0	Jul 1988	-43+	Jan 1982	17	-2.1	Jan 1982	8785	432	.1	5.5	207.2	84.5	175.8	40.9

\+ 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/normals/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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RICE LAKE, WI

COOP ID: 477132

Climate Division: WI 1 **NWS Call Sign:** **Elevation: 1,103 Feet** **Lat: 45˚25N** **Lon: 91˚47W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	1.08	.88	1.46	1996	18	2.96	1982	.03	1981
Feb	.77	.64	1.20	1967	15	2.32	1981	.10	1997
Mar	1.83	1.60	1.89	1991	23	3.80	1976	.39	1978
Apr	2.61	2.61	3.00	1954	26	5.32	1975	.16	1987
May	3.12	2.93	2.05	1971	24	5.96	1973	.83	1976
Jun	4.31	3.91	3.86	1951	24	8.24	1972	1.57	1987
Jul	3.88	3.42	3.04	1965	23	8.34	1999	1.10	1975
Aug	4.64	4.75	5.51	1960	27	10.17	1989	.71	1976
Sep	4.17	3.79	2.55	1994	15	8.30	1985	1.47	1976
Oct	2.50	2.31	2.45	1968	9	5.08	1982	.62	1976
Nov	2.05	1.51	2.48	1991	1	6.27	1991	.22	1976
Dec	1.07	.98	1.62	1982	28	3.46	1982	.24	1976
Ann	32.03	32.67	5.51	Aug 1960	27	10.17	Aug 1989	.03	Jan 1981

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	9.0	3.6	.2	@
Feb	6.5	2.6	.3	@
Mar	8.3	4.3	1.0	.3
Apr	10.0	5.8	1.7	.5
May	11.5	6.9	2.2	.5
Jun	11.9	7.5	2.9	1.0
Jul	10.9	6.8	2.7	1.1
Aug	10.5	7.2	3.1	1.3
Sep	10.9	6.9	2.9	1.2
Oct	9.3	5.5	1.6	.5
Nov	8.9	4.5	1.3	.6
Dec	8.4	3.1	.4	.1
Ann	116.1	64.7	20.3	7.1

Precipitation Probabilities (1)

Probability that the monthly/annual precipitation will be equal to or less than the indicated amount

Monthly/Annual Precipitation vs Probability Levels
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.18	.27	.43	.57	.73	.89	1.08	1.32	1.63	2.13	2.61
Feb	.11	.18	.29	.40	.51	.63	.77	.94	1.16	1.54	1.89
Mar	.47	.65	.91	1.15	1.38	1.62	1.89	2.21	2.63	3.29	3.91
Apr	.57	.81	1.20	1.54	1.89	2.26	2.67	3.17	3.82	4.86	5.85
May	1.15	1.44	1.86	2.21	2.55	2.89	3.26	3.69	4.24	5.09	5.86
Jun	1.61	2.01	2.59	3.07	3.53	4.00	4.51	5.10	5.85	7.00	8.06
Jul	1.30	1.67	2.20	2.66	3.10	3.55	4.04	4.62	5.36	6.51	7.57
Aug	1.57	2.01	2.65	3.20	3.72	4.25	4.84	5.52	6.40	7.76	9.01
Sep	1.49	1.88	2.45	2.93	3.38	3.85	4.36	4.95	5.71	6.88	7.95
Oct	.67	.91	1.27	1.59	1.90	2.23	2.59	3.01	3.57	4.45	5.27
Nov	.26	.43	.72	1.01	1.31	1.64	2.03	2.51	3.16	4.22	5.25
Dec	.21	.31	.47	.61	.76	.91	1.09	1.30	1.58	2.03	2.46
Ann	22.93	24.69	26.95	28.66	30.18	31.65	33.17	34.84	36.87	39.81	42.35

\+ 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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: RICE LAKE, WI **COOP ID: 477132**

Climate Division: WI 1 **NWS Call Sign:** **Elevation: 1,103 Feet** **Lat: 45°25N** **Lon: 91°47W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	12.2	11.4	11	10
Feb	7.4	6.1	12	9
Mar	8.8	6.3	5	3
Apr	2.7	1.4	#	#
May	.0	.0	#	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	#	.0	0	0
Oct	.6	.0	#	0
Nov	5.6	4.3	1	1
Dec	10.5	9.1	5	4
Ann	47.8	38.6	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	8.5	1988	20	32.6	1982	44	1982	26	26	1982
Feb	10.0	1971	5	22.0	1971	45	1971	15	38	1971
Mar	13.0	1996	25	35.6	1985	33	1972	10	20	1971
Apr	14.0	1982	20	15.8	1982	10	1975	2	2	1996
May	.5	1989	6	.5+	1991	#+	1989	6	#+	1989
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	#	1985	24	#+	1985	0	0	0	0	0
Oct	4.0	1987	22	4.0	1987	3	1991	31	#+	1997
Nov	12.0	1991	1	19.7	1985	15	1985	30	5	1991
Dec	12.0	1985	1	22.2	1985	28	1985	5	22	1985
Ann	14.0	Apr 1982	20	35.6	Mar 1985	45	Feb 1971	15	38	Feb 1971

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	8.2	4.7	1.2	.4	.0
Feb	4.9	2.9	.6	.1	@
Mar	3.9	2.5	1.1	.7	.1
Apr	1.4	1.0	.2	.1	@
May	.1	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.3	.2	.1	.0	.0
Nov	3.5	2.4	.7	.2	.1
Dec	6.9	3.7	.9	.3	.1
Ann	29.2	17.4	4.8	1.8	.3

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	29.0	25.4	23.2	13.5
Feb	25.0	22.8	20.3	13.2
Mar	14.2	10.4	7.1	4.0
Apr	1.6	.7	.4	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.2	.1	.0	.0
Nov	6.8	3.3	2.0	.3
Dec	23.7	18.5	12.1	4.7
Ann	100.5	81.2	65.1	35.7

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RICE LAKE, WI **COOP ID: 477132**

Climate Division: WI 1 **NWS Call Sign:** **Elevation: 1,103 Feet** **Lat: 45˚25N** **Lon: 91˚47W**

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	6/12	6/06	6/02	5/30	5/27	5/23	5/20	5/16	5/10
32	6/02	5/27	5/22	5/18	5/14	5/11	5/07	5/02	4/25
28	5/20	5/13	5/08	5/04	4/30	4/26	4/21	4/16	4/09
24	5/05	4/30	4/26	4/22	4/19	4/16	4/12	4/08	4/03
20	4/24	4/19	4/16	4/14	4/11	4/08	4/06	4/03	3/29
16	4/17	4/12	4/09	4/05	4/03	3/31	3/28	3/24	3/19

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	9/05	9/09	9/12	9/14	9/16	9/19	9/21	9/24	9/28
32	9/14	9/18	9/21	9/23	9/26	9/28	10/01	10/04	10/08
28	9/20	9/25	9/28	10/01	10/04	10/07	10/09	10/13	10/17
24	9/30	10/06	10/10	10/14	10/17	10/21	10/24	10/28	11/03
20	10/13	10/19	10/23	10/27	10/30	11/02	11/06	11/10	11/16
16	10/21	10/26	10/30	11/03	11/06	11/09	11/13	11/17	11/22

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	134	126	121	116	112	108	103	98	91
32	155	148	143	138	134	129	125	119	112
28	182	174	167	162	157	152	146	140	131
24	209	200	192	186	181	175	169	162	152
20	225	217	211	206	201	196	191	185	177
16	242	234	227	222	217	212	206	200	191

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: RICE LAKE, WI **COOP ID: 477132**

Climate Division: WI 1 **NWS Call Sign:** **Elevation: 1,103 Feet** **Lat: 45˚25N** **Lon: 91˚47W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1740	1375	1126	647	307	86	29	52	242	582	1045	1554	8785
60	1585	1235	971	501	199	31	6	14	133	431	895	1399	7400
57	1492	1151	878	418	146	14	0	4	85	345	805	1306	6644
55	1430	1095	816	365	116	8	0	2	60	291	745	1244	6172
50	1275	955	664	245	58	1	0	0	19	176	598	1089	5080
32	730	481	217	19	0	0	0	0	0	6	173	566	2192

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	12	31	114	363	752	993	1162	1091	768	447	118	35	5886
55	0	0	0	19	155	311	449	379	137	19	0	0	1469
57	0	0	0	12	124	257	387	320	103	11	0	0	1214
60	0	0	0	6	83	184	300	236	61	4	0	0	874
65	0	0	0	1	36	89	167	120	19	0	0	0	432
70	0	0	0	0	13	29	76	45	4	0	0	0	167

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	0	29	191	530	759	921	853	548	240	30	1	0	0	29	220	750	1509	2430	3283	3831	4071	4101	4102
45	0	0	10	104	382	609	766	698	401	136	8	0	0	0	10	114	496	1105	1871	2569	2970	3106	3114	3114
50	0	0	2	50	251	459	611	543	268	64	2	0	0	0	2	52	303	762	1373	1916	2184	2248	2250	2250
55	0	0	0	21	144	314	456	388	164	28	0	0	0	0	0	21	165	479	935	1323	1487	1515	1515	1515
60	0	0	0	7	69	188	306	240	81	5	0	0	0	0	0	7	76	264	570	810	891	896	896	896
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	0	0	19	133	332	484	607	551	334	145	15	0	0	0	19	152	484	968	1575	2126	2460	2605	2620	2620

(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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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