

Climatography of the United States

No. 20

1971-2000

Station: MELLEN 4 NE, WI

COOP ID: 475286

Climate Division: WI 2

NWS Call Sign:

Elevation: 1,300 Feet Lat: 46° 22N

Lon: 90° 39W

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	19.3	-3.0	8.2	55+	1987	14	18.7	1990	-49	1950	30	-3.6	1977	1764	0	.0	.0	.3	26.4	31.0	17.1
Feb	26.1	2.2	14.2	63	1976	25	31.0	1998	-46	1996	3	3.9	1989	1425	0	.0	.0	.7	18.7	27.8	12.7
Mar	36.6	14.7	25.7	73+	2000	8	34.2	1973	-35	1962	1	17.8	1996	1221	0	.0	.0	4.7	10.2	28.9	5.5
Apr	50.5	27.9	39.2	89+	1987	19	46.1	1987	-6	1972	8	32.4	1975	774	0	.0	.0	16.0	1.4	20.9	.2
May	65.0	39.9	52.5	92	1964	22	61.9	1977	15	1966	9	45.3	1997	410	21	.0	.1	28.2	.1	7.6	.0
Jun	73.0	49.4	61.2	96	1995	19	65.7	1976	25	1948	15	55.4	1982	151	36	.0	1.0	29.8	.0	.7	.0
Jul	77.4	54.9	66.2	98+	1988	28	69.9	1983	32	1988	1	59.8	1992	59	94	.0	1.8	31.0	.0	@	.0
Aug	75.1	53.0	64.1	101	1948	24	68.4	1995	31	1967	22	58.7	1977	102	73	.0	.9	31.0	.0	@	.0
Sep	65.7	44.1	54.9	98	1976	8	61.2	1998	22+	2001	28	48.7	1974	308	5	.0	.1	29.0	.0	3.0	.0
Oct	54.0	33.6	43.8	87	1992	3	50.5	1973	6	1976	28	37.8	1976	657	0	.0	.0	20.3	.4	14.6	.0
Nov	37.1	21.1	29.1	73+	1999	9	37.5	1999	-20+	1976	30	20.7	1995	1077	0	.0	.0	5.0	9.7	26.3	1.5
Dec	23.8	5.4	14.6	61	1982	3	24.9	1997	-36	1976	30	2.5	1976	1562	0	.0	.0	.3	23.1	30.8	11.2
Ann	50.3	28.6	39.5	101	Aug 1948	24	69.9	Jul 1983	-49	Jan 1950	30	-3.6	Jan 1977	9510	229	.0	3.9	196.3	90.0	191.6	48.2

+ 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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Climatology 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: MELLE 4 NE, WI

COOP ID: 475286

Climate Division: WI 2

NWS Call Sign:

Elevation: 1,300 Feet Lat: 46°22N

Lon: 90°39W

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	1.60	1.51	1.15+	1996	18	3.40	1997	.53	1984	13.7	4.8	.5	.1	.52	.67	.90	1.09	1.27	1.46	1.67	1.91	2.22	2.71	3.16
Feb	.99	.93	1.08	1999	12	2.27	1981	.18	1993	9.4	3.6	.3	@	.24	.33	.48	.61	.73	.87	1.02	1.20	1.43	1.81	2.15
Mar	2.06	2.05	1.41	1996	25	4.74	1976	.35	1999	10.3	5.1	1.3	.3	.57	.77	1.06	1.32	1.57	1.84	2.13	2.47	2.92	3.63	4.28
Apr	2.27	2.40	3.28	1960	23	4.38	1985	.42+	1997	10.6	5.7	1.4	.2	.72	.94	1.26	1.53	1.79	2.06	2.36	2.71	3.17	3.87	4.52
May	3.14	3.34	3.12	1951	27	5.07	1973	1.03	1990	11.5	7.1	1.9	.6	1.37	1.65	2.04	2.36	2.67	2.97	3.30	3.67	4.14	4.86	5.51
Jun	3.97	3.74	2.60	1974	10	6.70	1981	1.60	1982	13.9	8.2	2.7	.8	1.64	2.00	2.51	2.93	3.33	3.73	4.16	4.66	5.30	6.26	7.14
Jul	4.32	4.16	7.05	1949	3	9.48	1999	.95	1976	11.6	7.9	3.3	.9	1.15	1.56	2.18	2.73	3.27	3.83	4.46	5.21	6.18	7.70	9.13
Aug	3.85	3.72	3.80	1978	23	8.08	1977	.53	1991	12.5	7.1	2.4	.7	1.24	1.61	2.15	2.61	3.05	3.51	4.01	4.60	5.36	6.54	7.63
Sep	3.73	3.22	3.42	1951	12	7.01	1990	1.00	2000	13.5	7.9	2.4	.8	1.30	1.65	2.16	2.60	3.01	3.44	3.90	4.44	5.13	6.21	7.19
Oct	3.13	2.60	2.33	1982	20	6.47	1982	1.13	1976	13.1	6.9	1.9	.6	1.12	1.42	1.84	2.20	2.54	2.89	3.27	3.71	4.28	5.15	5.95
Nov	2.69	2.12	3.25	1975	10	8.23	1991	.57	1981	12.3	5.8	1.7	.4	.60	.84	1.24	1.60	1.95	2.33	2.76	3.27	3.94	5.01	6.02
Dec	1.61	1.36	1.54	1982	28	3.91	1982	.24	1994	13.4	5.2	.5	.1	.46	.61	.84	1.04	1.24	1.44	1.67	1.94	2.28	2.83	3.33
Ann	33.36	32.29	7.05	Jul 1949	3	9.48	Jul 1999	.18	Feb 1993	145.8	75.3	20.3	5.5	24.27	26.05	28.31	30.03	31.55	33.01	34.53	36.19	38.21	41.13	43.64

+ 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: MELLENE 4 NE, WI

COOP ID: 475286

Climate Division: WI 2

NWS Call Sign:

Elevation: 1,300 Feet

Lat: 46° 22N

Lon: 90° 39W

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	23.0	21.0	16	15	23.0	1999	3	46.8	1996	42	1997	10	31+	1997	13.1	6.7	2.7	1.3	.4	30.5	30.5	29.9	24.0
Feb	14.1	13.5	19	17	18.0	1983	3	30.6	1972	43	1971	12	39	1971	8.3	4.2	1.4	.6	.1	27.6	27.5	27.0	23.3
Mar	16.8	14.9	15	12	19.0	1996	25	40.5	1976	46	1976	13	33+	1979	7.6	4.3	1.8	1.1	.3	27.5	25.6	24.0	18.6
Apr	6.1	4.6	3	3	10.5	1984	30	18.4	1983	36	1975	1	17	1996	2.9	1.7	.8	.2	.1	11.3	9.0	6.5	3.2
May	.6	.0	#	0	5.0	1997	12	6.0	1997	14	1984	1	1	1984	.4	.2	.1	@	.0	.4	.2	.1	.1
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	.1	.0	#	0	4.0	1995	22	4.0	1995	4	1995	22	#	1995	@	@	@	.0	.0	.1	.1	.0	.0
Oct	2.3	.5	#	0	13.0	1987	21	13.0	1987	13	1987	21	1	1987	1.1	.6	.3	.1	@	.7	.4	.2	.0
Nov	15.2	12.5	3	2	14.0	1975	10	47.0	1991	24	1991	30	9	1975	8.0	3.7	1.5	.9	.2	14.6	8.7	5.0	1.4
Dec	20.7	20.2	9	8	18.0	1996	19	40.2	1985	30+	1996	20	20	1991	11.4	6.7	2.5	1.0	.2	28.1	24.8	20.6	9.1
Ann	98.9	87.2	N/A	N/A	23.0	Jan 1999	3	47.0	Nov 1991	46	Mar 1976	13	39	Feb 1971	52.8	28.1	11.1	5.2	1.3	140.8	126.8	113.3	79.7

+ 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:

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No. 20 1971-2000

Station: MELLEN 4 NE, WI

COOP ID: 475286

Climate Division: WI 2

NWS Call Sign:

Elevation: 1,300 Feet

Lat: 46° 22N

Lon: 90° 39W

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	6/29	6/23	6/19	6/16	6/12	6/09	6/06	6/02	5/27
32	6/19	6/13	6/08	6/05	6/01	5/29	5/25	5/21	5/15
28	6/06	5/31	5/26	5/22	5/18	5/14	5/10	5/06	4/29
24	5/17	5/12	5/09	5/06	5/03	4/30	4/28	4/24	4/20
20	5/04	4/29	4/25	4/22	4/19	4/16	4/12	4/09	4/03
16	4/19	4/15	4/12	4/10	4/07	4/05	4/03	3/31	3/27
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	8/21	8/27	8/31	9/04	9/08	9/11	9/15	9/19	9/26
32	9/08	9/12	9/15	9/17	9/19	9/22	9/24	9/27	10/01
28	9/19	9/23	9/25	9/27	9/29	10/01	10/03	10/05	10/08
24	10/06	10/11	10/14	10/17	10/20	10/22	10/25	10/29	11/02
20	10/13	10/19	10/23	10/26	10/29	11/01	11/05	11/09	11/14
16	10/26	10/30	11/02	11/04	11/07	11/09	11/12	11/15	11/19
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	115	105	98	92	87	81	75	68	59
32	130	123	118	113	109	105	101	96	89
28	155	147	142	137	133	129	124	119	111
24	190	183	177	173	169	165	160	155	148
20	217	209	203	197	193	188	183	177	168
16	229	224	220	216	213	210	206	202	196

* 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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of the United States
No. 20
1971-2000**

Station: MELLEN 4 NE, WI

COOP ID: 475286

Climate Division: WI 2 NWS Call Sign: Elevation: 1,300 Feet Lat: 46° 22N Lon: 90° 39W

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	1764	1425	1221	774	410	151	59	102	308	657	1077	1562	9510
60	1609	1285	1066	625	286	69	13	36	180	506	927	1407	8009
57	1516	1201	973	538	223	37	4	16	119	418	837	1314	7196
55	1454	1145	911	481	186	23	0	8	86	362	777	1252	6685
50	1299	1005	756	345	109	6	0	0	31	238	629	1097	5515
32	753	535	272	41	4	0	0	0	0	16	187	568	2376

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	12	34	74	258	638	875	1059	993	687	382	100	29	5141
55	0	0	0	7	107	208	346	288	82	15	0	0	1053
57	0	0	0	4	82	162	288	234	55	9	0	0	834
60	0	0	0	2	52	104	203	161	27	3	0	0	552
65	0	0	0	0	21	36	94	73	5	0	0	0	229
70	0	0	0	0	7	8	27	21	0	0	0	0	63

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	19	126	423	661	836	774	480	198	29	0	0	0	19	145	568	1229	2065	2839	3319	3517	3546	3546
45	0	0	4	72	290	512	681	619	335	109	11	0	0	0	4	76	366	878	1559	2178	2513	2622	2633	2633
50	0	0	0	33	185	371	526	464	211	51	2	0	0	0	0	33	218	589	1115	1579	1790	1841	1843	1843
55	0	0	0	14	106	240	373	314	116	21	0	0	0	0	0	14	120	360	733	1047	1163	1184	1184	1184
60	0	0	0	5	52	135	232	183	55	5	0	0	0	0	0	5	57	192	424	607	662	667	667	667
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	18	95	279	415	537	486	282	118	15	0	0	0	18	113	392	807	1344	1830	2112	2230	2245	2245

(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/normal/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.

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| <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 |
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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