

Climatography of the United States No. 20

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: WISCONSIN DELLS, WI

1971-2000

COOP ID: 479319

Climate Division: WI 8

NWS Call Sign:

Elevation: 835 Feet

Lat: 43° 37N

Lon: 89° 46W

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	24.5	4.0	14.3	56	1973	26	26.8	1990	-43	1951	30	.3	1977	1574	0	.0	.0	.5	22.3	30.6	11.6
Feb	31.0	9.0	20.0	64	1999	12	32.8	1998	-37	1996	3	9.8	1979	1260	0	.0	.0	1.7	14.9	27.1	7.6
Mar	42.2	20.6	31.4	84	1986	29	39.3	2000	-29	1962	1	24.4	1975	1043	0	.0	.0	7.9	6.0	26.1	1.6
Apr	56.4	32.3	44.4	91+	1980	22	50.4	1985	5	1982	7	38.9	1975	621	0	.0	@	21.2	.4	14.9	.0
May	69.5	43.6	56.6	93+	1991	30	62.5	1991	22	1989	6	50.7	1997	290	28	.0	.2	30.5	.0	2.9	.0
Jun	78.2	53.3	65.8	99	1963	30	71.1	1991	31	1992	20	60.1	1982	74	97	@	2.0	30.0	.0	@	.0
Jul	81.9	58.1	70.0	101	1995	14	74.3	1983	41+	2001	2	65.1	1992	17	173	.1	3.4	31.0	.0	.0	.0
Aug	79.4	56.1	67.8	102+	1955	21	74.7	1995	37+	1986	27	63.7	1986	50	135	@	1.6	31.0	.0	.0	.0
Sep	70.9	47.1	59.0	98	1955	9	63.1	1994	24	1949	29	53.8	1975	201	20	.0	.5	29.8	.0	1.2	.0
Oct	59.2	35.4	47.3	90	1963	6	54.2	1971	9	1988	29	40.6+	1988	551	2	.0	.0	25.5	.0	10.4	.0
Nov	42.6	23.4	33.0	76	1964	3	39.8	1999	-11	1977	26	24.6	1976	959	0	.0	.0	8.6	5.2	22.9	.6
Dec	29.4	10.5	20.0	63+	2001	6	27.6	1982	-27	2000	26	7.4	1985	1397	0	.0	.0	1.1	17.5	29.8	6.3
Ann	55.4	32.8	44.1	102+	Aug 1955	21	74.7	Aug 1995	-43	Jan 1951	30	.3	Jan 1977	8037	455	.1	7.7	218.8	66.3	165.9	27.7

+ 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

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: WISCONSIN DELLS, WI

COOP ID: 479319

Climate Division: WI 8

NWS Call Sign:

Elevation: 835 Feet Lat: 43°37N

Lon: 89°46W

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	.99	.84	1.12	1950	25	2.05	1998	.00	1987	7.8	3.5	.4	.0	.12	.24	.41	.55	.69	.85	1.02	1.22	1.49	1.92	2.33
Feb	1.01	.93	1.80	1948	27	2.95	1971	.00+	1991	6.4	3.0	.5	@	.00	.07	.22	.38	.54	.73	.96	1.24	1.64	2.29	2.94
Mar	2.09	1.64	3.40	1998	31	6.05	1998	.29	1978	8.3	5.3	1.6	.3	.38	.56	.87	1.15	1.44	1.76	2.12	2.55	3.13	4.06	4.95
Apr	3.50	2.97	2.09	1958	5	7.44	1973	.75	1989	10.2	6.9	2.7	.7	1.15	1.48	1.97	2.38	2.78	3.19	3.64	4.17	4.85	5.90	6.87
May	3.50	3.44	2.55	2000	18	6.91	1973	.27	1981	9.6	6.8	2.4	1.0	1.00	1.34	1.84	2.27	2.70	3.14	3.63	4.21	4.96	6.14	7.23
Jun	4.20	4.35	3.00	2000	2	9.36	2000	.83	1992	9.6	7.2	2.7	1.4	1.08	1.47	2.08	2.62	3.15	3.71	4.34	5.07	6.04	7.56	8.98
Jul	4.10	4.00	4.91	1980	20	8.62	1999	1.63	1988	9.6	6.8	2.7	1.1	1.69	2.07	2.59	3.03	3.43	3.85	4.29	4.80	5.45	6.44	7.34
Aug	4.57	3.85	7.67	1980	7	14.13	1980	.98	1984	9.5	7.0	3.2	1.2	1.17	1.60	2.27	2.85	3.43	4.04	4.71	5.52	6.57	8.22	9.77
Sep	3.47	3.20	3.20	1992	15	11.06	1992	.30	1979	9.0	6.0	2.5	.8	.43	.71	1.20	1.68	2.19	2.76	3.42	4.24	5.34	7.16	8.92
Oct	2.30	2.32	2.12	1959	23	4.95	1995	.14	1975	8.0	5.3	1.7	.4	.65	.87	1.20	1.48	1.76	2.06	2.38	2.77	3.27	4.05	4.78
Nov	2.11	1.90	2.36	1961	2	5.79	1982	.04	1976	8.3	5.1	1.6	.4	.27	.44	.74	1.03	1.34	1.69	2.09	2.58	3.25	4.35	5.41
Dec	1.26	1.08	1.07	1959	27	3.09	2000	.20	1998	8.3	3.9	.5	.1	.27	.38	.57	.73	.90	1.08	1.29	1.53	1.85	2.37	2.86
Ann	33.10	33.97	7.67	Aug 1980	7	14.13	Aug 1980	.00+	Feb 1991	104.6	66.8	22.5	7.4	24.10	25.86	28.10	29.80	31.30	32.75	34.24	35.89	37.88	40.76	43.25

+ 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

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: WISCONSIN DELLS, WI

COOP ID: 479319

Climate Division: WI 8

NWS Call Sign:

Elevation: 835 Feet

Lat: 43°37N

Lon: 89°46W

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	8.8	5.7	7	6	9.0	1971	3	28.4	1979	28	1979	22	18	1982	4.5	3.0	1.0	.4	.0	20.9	16.3	12.8	5.0
Feb	8.8	7.9	6	6	8.0	1976	21	20.4	1976	20+	1979	19	17	1979	3.2	2.2	.7	.2	.0	18.3	13.6	10.4	6.0
Mar	7.1	5.6	2	1	14.0	1971	18	20.4	1971	21	1971	19	13	1971	2.4	1.6	.6	.3	@	8.4	5.6	4.4	1.7
Apr	2.1	1.0	#	#	12.0	1973	9	18.0	1973	15	1973	9	2	1973	1.0	.9	.2	.1	@	1.6	.8	.4	.1
May	#	.0	#	0	#	1997	1	#+	1997	#+	1997	1	#+	1997	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jun	.0	.0	#	0	.0	0	0	.0	0	#+	1996	7	#+	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Jul	.0	.0	#	0	.0	0	0	.0	0	#+	1996	28	#+	1996	.0	.0	.0	.0	.0	.0	.0	.0	.0
Aug	.0	.0	#	0	.0	0	0	.0	0	#+	1993	15	#+	1993	.0	.0	.0	.0	.0	.0	.0	.0	.0
Sep	.0	.0	#	0	.0	0	0	.0	0	#	1992	15	#	1992	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.3	.0	#	0	4.0	1990	10	4.0	1990	3	1997	27	#+	1997	.2	.1	.1	.0	.0	.1	@	.0	.0
Nov	2.7	1.0	1	#	5.0	1977	27	13.0	1977	10	1977	28	2	1996	1.4	.9	.2	@	.0	2.3	1.0	.5	.1
Dec	8.5	8.4	3	2	8.0	1996	24	23.2	1977	23	2000	24	10	2000	4.8	3.1	.9	.2	.0	16.5	11.1	5.6	1.0
Ann	38.3	29.6	N/A	N/A	14.0	Mar 1971	18	28.4	Jan 1979	28	Jan 1979	22	18	Jan 1982	17.5	11.8	3.7	1.2	@	68.1	48.4	34.1	13.9

+ 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

Climatography of the United States

No. 20 1971-2000

Station: WISCONSIN DELLS, WI

COOP ID: 479319

Climate Division: WI 8

NWS Call Sign:

Elevation: 835 Feet

Lat: 43°37N

Lon: 89°46W

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	6/10	6/04	5/31	5/27	5/24	5/20	5/17	5/12	5/06
32	5/30	5/24	5/20	5/17	5/14	5/11	5/07	5/03	4/28
28	5/11	5/07	5/03	5/01	4/28	4/25	4/22	4/19	4/14
24	4/25	4/21	4/18	4/16	4/14	4/11	4/09	4/06	4/02
20	4/17	4/13	4/10	4/08	4/06	4/04	4/01	3/29	3/26
16	4/11	4/07	4/04	4/01	3/30	3/27	3/24	3/21	3/17
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	9/16	9/18	9/21	9/23	9/25	9/28	10/02
32	9/20	9/25	9/28	9/30	10/03	10/05	10/08	10/11	10/15
28	9/25	9/30	10/04	10/08	10/11	10/14	10/17	10/21	10/27
24	10/05	10/11	10/15	10/18	10/21	10/24	10/28	11/01	11/06
20	10/16	10/21	10/25	10/29	11/01	11/04	11/07	11/11	11/17
16	10/28	11/02	11/06	11/10	11/13	11/16	11/19	11/23	11/29
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	139	132	127	123	119	115	111	107	100
32	161	154	149	145	141	137	133	128	122
28	185	178	173	169	165	161	157	152	145
24	213	205	199	194	190	185	180	175	167
20	227	221	216	212	208	204	200	196	189
16	250	242	237	232	227	223	218	213	205

* 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/normal/usnormals.html

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

Station: WISCONSIN DELLS, WI

COOP ID: 479319

Climate Division: WI 8 NWS Call Sign: Elevation: 835 Feet Lat: 43° 37N Lon: 89° 46W

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	1574	1260	1043	621	290	74	17	50	201	551	959	1397	8037
60	1419	1120	888	475	179	25	1	13	99	404	809	1242	6674
57	1326	1036	795	390	127	10	0	4	57	323	719	1149	5936
55	1264	980	733	337	97	6	0	2	38	273	660	1087	5477
50	1109	840	580	217	43	1	0	0	9	166	513	932	4410
32	585	390	149	10	0	0	0	0	0	6	113	433	1686

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	34	54	129	380	761	1013	1179	1108	809	480	143	59	6149
55	0	0	0	16	145	328	466	397	157	34	0	0	1543
57	0	0	0	10	112	273	404	338	117	22	0	0	1276
60	0	0	0	4	72	197	312	253	68	10	0	0	916
65	0	0	0	0	28	97	173	135	20	2	0	0	455
70	0	0	0	0	8	33	74	56	3	0	0	0	174

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	3	47	208	545	793	956	884	600	283	54	4	0	3	50	258	803	1596	2552	3436	4036	4319	4373	4377
45	0	0	21	118	392	643	801	729	451	170	21	2	0	0	21	139	531	1174	1975	2704	3155	3325	3346	3348
50	0	0	6	62	258	494	646	574	310	89	4	0	0	0	6	68	326	820	1466	2040	2350	2439	2443	2443
55	0	0	1	27	146	347	491	419	189	40	0	0	0	0	1	28	174	521	1012	1431	1620	1660	1660	1660
60	0	0	0	13	74	212	339	269	104	12	0	0	0	0	0	13	87	299	638	907	1011	1023	1023	1023
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	0	37	144	341	508	635	578	364	176	36	2	0	0	37	181	522	1030	1665	2243	2607	2783	2819	2821

(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