

Climatology of the United States

No. 20

1971-2000

Station: DEARBORN, MI

COOP ID: 202015

Climate Division: MI10

NWS Call Sign:

Elevation: 605 Feet Lat: 42° 19N Lon: 83° 14W

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	33.2	16.1	24.7	62+	1965	8	35.0	1990	-20	1994	19	13.4	1977	1251	0	.0	.0	1.4	15.9	29.0	3.2
Feb	36.6	18.2	27.4	71	2000	27	36.1	1998	-12	1985	3	17.1	1978	1053	0	.0	.0	2.4	11.8	25.1	1.8
Mar	46.8	26.8	36.8	81+	1986	31	44.0	1973	-4	1996	3	29.9	1978	875	0	.0	.0	10.7	3.6	22.9	.2
Apr	59.6	36.8	48.2	90	1990	26	53.7	1985	10	1982	7	42.4	1975	506	1	.0	@	22.9	.2	10.2	.0
May	72.3	47.3	59.8	93+	1962	17	67.2	1991	23	1978	1	51.7	1997	220	58	.0	.4	30.6	.0	.9	.0
Jun	81.3	56.9	69.1	104	1988	26	73.4	1991	36+	1980	10	65.6	1992	29	152	.1	3.1	30.0	.0	.0	.0
Jul	85.7	61.6	73.7	102+	1988	8	77.4	1988	41	2001	2	69.5	2000	1	269	.2	5.5	31.0	.0	.0	.0
Aug	84.0	60.2	72.1	102	2001	9	76.5	1988	40+	1982	29	67.5	1992	12	232	.1	3.4	31.0	.0	.0	.0
Sep	76.6	52.1	64.4	99+	1954	5	68.7	1978	29+	1993	30	59.2	1993	88	69	.0	1.0	30.0	.0	.3	.0
Oct	64.0	40.7	52.4	91	1963	6	60.6	1971	19+	1974	21	47.3	1988	399	7	.0	.0	27.7	.0	5.5	.0
Nov	50.4	32.1	41.3	76+	1968	1	47.8	1975	4	1958	30	33.4	1996	713	0	.0	.0	13.6	.9	16.6	.0
Dec	38.4	22.1	30.3	69+	1998	7	39.0	1982	-9+	1977	11	19.1	1989	1077	0	.0	.0	3.2	9.9	26.6	1.2
Ann	60.7	39.2	50.0	104	Jun 1988	26	77.4	Jul 1988	-20	Jan 1994	19	13.4	Jan 1977	6224	788	.4	13.4	234.5	42.3	137.1	6.4

+ 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: 1952-2001

(3) Derived from 1971-2000 serially complete daily data

023-A

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: DEARBORN, MI

COOP ID: 202015

Climate Division: MI10

NWS Call Sign:

Elevation: 605 Feet Lat: 42°19N

Lon: 83°14W

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	2.00	1.98	1.68	1967	27	4.30	1993	.70	1984	10.9	5.3	.9	.3	.61	.80	1.08	1.33	1.56	1.81	2.08	2.39	2.80	3.44	4.03
Feb	1.88	1.42	1.85	1998	18	5.19	1990	.09	1987	9.1	4.8	1.0	.3	.26	.41	.68	.94	1.22	1.52	1.87	2.30	2.87	3.82	4.73
Mar	2.64	2.47	1.90	1974	8	5.14	1974	.30	1999	10.5	6.5	1.8	.3	.82	1.07	1.44	1.76	2.07	2.40	2.75	3.17	3.70	4.54	5.31
Apr	3.28	3.08	2.05	2000	21	6.08	1977	.84	1971	11.9	7.7	2.0	.5	1.39	1.68	2.10	2.44	2.76	3.09	3.43	3.83	4.34	5.11	5.81
May	2.91	3.02	2.39	1991	26	6.55	1997	.81	1994	9.7	5.9	1.8	.4	1.02	1.30	1.70	2.03	2.35	2.68	3.04	3.46	4.00	4.82	5.58
Jun	3.60	3.71	2.98	1972	21	6.69	1999	.68	1988	9.8	6.7	2.5	.9	1.34	1.68	2.16	2.57	2.95	3.34	3.77	4.26	4.89	5.86	6.75
Jul	3.09	3.08	3.98	1957	8	6.75	1987	.58	1974	9.7	5.6	2.3	.8	.81	1.10	1.55	1.94	2.33	2.74	3.19	3.73	4.43	5.53	6.56
Aug	2.86	2.94	2.79	1956	4	6.32	1975	.35	1996	9.0	5.7	1.8	.6	.80	1.07	1.48	1.84	2.19	2.56	2.96	3.44	4.06	5.03	5.94
Sep	3.50	3.49	3.93	1990	7	6.77	1990	.71	1991	9.6	6.4	2.5	.8	1.17	1.50	1.98	2.40	2.80	3.21	3.65	4.18	4.85	5.90	6.86
Oct	2.55	2.52	2.64	1981	1	5.85	1981	.36	1982	9.9	5.4	1.6	.5	.81	1.06	1.41	1.72	2.01	2.32	2.65	3.05	3.55	4.34	5.06
Nov	2.76	2.61	1.60	1985	10	6.03	1982	.85	1980	10.9	6.8	1.7	.3	.96	1.22	1.60	1.92	2.22	2.54	2.88	3.28	3.79	4.58	5.31
Dec	2.51	2.29	2.50	1965	25	4.55	1987	.78	1976	12.5	6.6	1.5	.2	.86	1.10	1.44	1.74	2.02	2.31	2.62	2.99	3.46	4.19	4.86
Ann	33.58	33.34	3.98	Jul 1957	8	6.77	Sep 1990	.09	Feb 1987	123.5	73.4	21.4	5.9	25.55	27.14	29.16	30.68	32.02	33.31	34.63	36.08	37.83	40.35	42.51

+ 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: 1952-2001

(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: DEARBORN, MI

COOP ID: 202015

Climate Division: MI10

NWS Call Sign:

Elevation: 605 Feet

Lat: 42° 19N

Lon: 83° 14W

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	9.6	8.2	4	3	14.0	1992	14	31.0	1978	24	1999	13	13	1999	6.8	3.3	.9	.3	@	17.6	13.4	9.9	1.7
Feb	7.6	6.2	4	3	8.0	1982	1	23.3	1982	24	1982	9	18	1982	5.4	2.9	.8	.2	.0	13.5	10.1	6.9	1.4
Mar	4.6	3.5	1	#	7.5	1996	20	9.7	1982	16	1982	5	7	1978	2.9	1.5	.5	.1	.0	4.2	1.9	.6	.0
Apr	.7	.0	#	0	5.0	1993	2	5.0	1993	5	1993	2	#+	1996	.5	.2	.1	@	.0	.5	.1	@	.0
May	.0	.0	0	0	.0	0	0	.0	0	0	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	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.1	.0	#	0	1.2	1989	19	1.7	1989	1	1989	20	#+	1989	.1	@	.0	.0	.0	.1	.0	.0	.0
Nov	1.6	.7	#	#	6.5	1977	26	6.9	1977	7	1977	26	1	1997	1.2	.7	.2	.1	.0	1.4	.6	.2	.0
Dec	7.5	6.2	2	1	10.0	1977	9	24.5	1975	18	1974	2	9	2000	5.8	2.5	.7	.3	.1	9.2	4.6	2.1	.2
Ann	31.7	24.8	N/A	N/A	14.0	Jan 1992	14	31.0	Jan 1978	24+	Jan 1999	13	18	Feb 1982	22.7	11.1	3.2	1.0	.1	46.5	30.7	19.7	3.3

+ 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: DEARBORN, MI

COOP ID: 202015

Climate Division: MI10

NWS Call Sign:

Elevation: 605 Feet

Lat: 42° 19N

Lon: 83° 14W

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	5/29	5/24	5/20	5/17	5/13	5/10	5/07	5/03	4/27
32	5/17	5/12	5/08	5/05	5/02	4/29	4/26	4/23	4/17
28	4/28	4/25	4/22	4/20	4/18	4/15	4/13	4/11	4/07
24	4/22	4/17	4/14	4/11	4/09	4/06	4/04	3/31	3/27
20	4/10	4/05	4/01	3/29	3/26	3/24	3/21	3/17	3/12
16	3/30	3/26	3/23	3/20	3/18	3/15	3/13	3/10	3/05
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	9/15	9/20	9/23	9/26	9/29	10/02	10/04	10/08	10/12
32	9/26	10/01	10/06	10/09	10/13	10/16	10/19	10/24	10/29
28	10/10	10/15	10/18	10/21	10/24	10/27	10/30	11/02	11/07
24	10/21	10/27	10/31	11/04	11/07	11/10	11/14	11/18	11/24
20	10/29	11/05	11/10	11/14	11/18	11/22	11/26	12/01	12/08
16	11/14	11/19	11/23	11/27	11/30	12/03	12/07	12/11	12/16
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	157	150	145	141	138	134	130	125	119
32	185	177	172	167	162	158	153	148	140
28	208	201	196	192	189	185	181	176	169
24	232	225	220	216	211	207	203	198	191
20	261	252	246	241	236	231	226	220	211
16	278	271	265	261	257	252	248	242	235

* 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

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

Station: DEARBORN, MI

COOP ID: 202015

Climate Division: MI10

NWS Call Sign:

Elevation: 605 Feet Lat: 42°19N Lon: 83°14W

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	1251	1053	875	506	220	29	1	12	88	399	713	1077	6224
60	1096	913	720	361	128	7	0	1	30	265	563	922	5006
57	1003	829	627	281	86	3	0	0	13	196	475	829	4342
55	941	773	566	232	63	1	0	0	7	156	417	767	3923
50	786	633	422	127	25	0	0	0	1	78	283	621	2976
32	294	207	70	1	0	0	0	0	0	0	22	192	786

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	67	78	218	487	861	1113	1291	1243	972	631	299	138	7398
55	0	0	1	27	212	424	578	530	289	73	4	0	2138
57	0	0	0	17	172	366	516	468	235	51	2	0	1827
60	0	0	0	7	122	280	423	376	162	27	0	0	1397
65	0	0	0	1	58	152	269	232	69	7	0	0	788
70	0	0	0	0	22	59	131	116	20	1	0	0	349

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	3	11	84	270	606	863	1030	982	717	376	126	20	3	14	98	368	974	1837	2867	3849	4566	4942	5068	5088
45	0	2	42	161	455	713	875	827	567	246	64	7	0	2	44	205	660	1373	2248	3075	3642	3888	3952	3959
50	0	0	20	89	311	563	720	672	420	141	24	3	0	0	20	109	420	983	1703	2375	2795	2936	2960	2963
55	0	0	7	44	193	415	565	517	283	67	10	0	0	0	7	51	244	659	1224	1741	2024	2091	2101	2101
60	0	0	2	21	100	276	410	364	166	27	0	0	0	0	2	23	123	399	809	1173	1339	1366	1366	1366
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	4	53	163	372	560	697	657	452	220	63	8	0	4	57	220	592	1152	1849	2506	2958	3178	3241	3249

(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