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: CADIZ, OH **COOP ID: 331152**

Climate Division: OH 7 **NWS Call Sign:** **Elevation: 1,260 Feet** **Lat: 40˚16N** **Lon: 81˚00W**

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	34.0	18.4	26.2	73	1906	21	35.7	1990	-24	1994	19	12.0	1977	1202	0	.0	.0	3.9	13.3	27.5	2.4
Feb	38.5	21.3	29.9	79	1948	13	38.0	1998	-17	1918	5	19.2	1978	983	0	.0	.0	6.4	9.2	22.9	1.4
Mar	48.9	29.6	39.3	86	1929	25	47.9	1973	-6	1980	2	30.6	1984	799	0	.0	.0	15.4	2.7	19.4	.1
Apr	60.0	39.7	49.9	92	1925	24	55.0	1985	5	1923	1	45.3	1989	456	1	.0	.0	24.9	.1	7.7	.0
May	70.2	50.6	60.4	96	1911	28	67.5	1991	23	1970	7	54.0	1997	201	57	.0	.0	30.8	.0	.5	.0
Jun	78.1	58.9	68.5	101	1933	21	72.1	1971	20	1915	29	64.8	1992	30	136	.0	.9	30.0	.0	.0	.0
Jul	81.9	63.0	72.5	104+	1936	10	76.1	1999	42+	1973	12	68.5	2000	3	235	@	2.8	31.0	.0	.0	.0
Aug	80.6	61.4	71.0	106	1918	6	75.6	1995	40+	1986	29	67.2	1992	13	199	.0	1.9	31.0	.0	.0	.0
Sep	74.5	54.5	64.5	100+	1953	3	68.4	1971	28	1942	29	60.8	1974	84	69	.0	.7	30.0	.0	.0	.0
Oct	63.1	42.3	52.7	91+	1939	10	60.1	1971	15	1925	29	45.5	1987	391	10	.0	.0	28.6	.0	3.8	.0
Nov	50.3	33.3	41.8	82	1961	3	47.7	1975	-2	1929	30	34.3	1976	695	0	.0	.0	16.1	1.3	14.4	.0
Dec	39.2	23.9	31.6	75	1982	3	39.9	1982	-26	1914	21	18.3	1989	1038	0	.0	.0	6.8	8.0	24.8	.8
Ann	59.9	41.4	50.7	106	Aug 1918	6	76.1	Jul 1999	-26	Dec 1914	21	12.0	Jan 1977	5895	707	@	6.3	254.9	34.6	121.0	4.7

\+ 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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1903-2001

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

Issue Date: February 2004

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: CADIZ, OH **COOP ID: 331152**

Climate Division: OH 7 **NWS Call Sign:** **Elevation: 1,260 Feet** **Lat: 40˚16N** **Lon: 81˚00W**

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	2.83	2.54	2.14	1937	22	6.32	1999	.72	1981
Feb	2.43	2.39	1.87	1975	24	4.47	1975	.29	1978
Mar	3.16	3.20	2.98	1945	6	4.89	1993	1.25	1979
Apr	3.38	3.46	2.22	1961	26	7.27	1981	.65	1971
May	4.16	4.86	2.92	1971	6	7.64	1983	1.09	1991
Jun	4.33	4.20	5.00	1990	15	9.65	1989	1.10	1999
Jul	4.38	3.43	3.34	1935	4	10.10	1980	1.38	1995
Aug	4.15	3.83	2.86	1934	16	12.18	1980	1.30	1989
Sep	3.21	2.99	3.52	1922	1	6.08	1996	.76	1984
Oct	2.51	2.58	2.52	1968	19	5.32	1983	.17	1982
Nov	3.18	2.91	2.90+	1985	5	12.70	1985	.55	1976
Dec	2.99	2.75	2.40	1914	4	7.78	1990	1.38	1993
Ann	40.71	39.79	5.00	Jun 1990	15	12.70	Nov 1985	.17	Oct 1982

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	13.3	7.1	1.5	.3
Feb	10.9	6.1	1.3	.3
Mar	12.6	8.0	1.7	.3
Apr	12.8	8.7	2.1	.4
May	12.9	8.8	2.9	.7
Jun	11.4	8.2	3.1	.9
Jul	10.8	7.7	3.1	1.1
Aug	9.6	6.7	2.7	1.2
Sep	9.3	6.3	2.3	.9
Oct	9.8	6.0	1.5	.4
Nov	12.1	7.4	1.9	.4
Dec	13.3	7.2	1.6	.4
Ann	138.8	88.2	25.7	7.3

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	.88	1.15	1.55	1.89	2.23	2.57	2.95	3.39	3.96	4.85	5.68
Feb	.72	.95	1.30	1.60	1.89	2.19	2.53	2.92	3.43	4.23	4.97
Mar	1.49	1.77	2.14	2.45	2.73	3.01	3.32	3.66	4.09	4.75	5.33
Apr	1.24	1.56	2.01	2.39	2.76	3.13	3.53	4.00	4.60	5.52	6.37
May	1.36	1.75	2.33	2.83	3.30	3.80	4.33	4.97	5.78	7.04	8.20
Jun	1.26	1.67	2.29	2.83	3.35	3.89	4.49	5.20	6.11	7.54	8.88
Jul	1.43	1.85	2.46	2.98	3.48	4.00	4.57	5.23	6.08	7.41	8.63
Aug	1.32	1.71	2.29	2.79	3.28	3.77	4.32	4.96	5.79	7.08	8.27
Sep	.98	1.28	1.74	2.13	2.51	2.90	3.34	3.85	4.50	5.53	6.48
Oct	.60	.84	1.21	1.53	1.86	2.20	2.59	3.04	3.64	4.59	5.49
Nov	.92	1.23	1.68	2.07	2.46	2.86	3.30	3.82	4.50	5.55	6.54
Dec	1.37	1.63	2.00	2.29	2.57	2.84	3.14	3.48	3.90	4.55	5.13
Ann	30.65	32.64	35.17	37.07	38.75	40.37	42.03	43.86	46.06	49.24	51.97

\+ 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: 1903-2001
(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: CADIZ, OH **COOP ID: 331152**

Climate Division: OH 7 **NWS Call Sign:** **Elevation: 1,260 Feet** **Lat: 40°16N** **Lon: 81°00W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	11.4	11.5	2	#
Feb	6.3	5.0	1	#
Mar	4.8	4.0	#	#
Apr	1.1	.0	#	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	.1	.0	0	0
Nov	1.7	1.0	#	0
Dec	6.3	6.5	1	#
Ann	31.7	28.0	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	8.0	1979	25	27.0	1979	10	1996	14	6	1994
Feb	6.0	1984	29	13.5	1979	12	1985	15	11	1985
Mar	10.0	1993	14	18.5	1993	12	1993	14	1	1999
Apr	8.0	1987	4	19.0	1987	9	1987	5	#+	1992
May	.0	0	0	.0	0	0	0	0	0	0
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	.0	0	0	.0	0	0	0	0	0	0
Oct	2.0	1993	31	2.0	1993	0	0	0	0	0
Nov	8.0	1980	18	10.5	1980	3	1995	17	1	1995
Dec	7.0	1974	1	18.0	1974	11	1974	2	9	1974
Ann	10.0	Mar 1993	14	27.0	Jan 1979	12+	Mar 1993	14	11	Feb 1985

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	5.9	4.5	1.3	.4	.0
Feb	3.4	2.7	1.0	.2	.0
Mar	2.5	2.0	.7	.2	@
Apr	.4	.2	.2	.1	.0
May	.0	.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	@	@	.0	.0	.0
Nov	1.4	.9	.1	@	.0
Dec	4.1	2.7	.7	.2	.0
Ann	17.7	13.0	4.0	1.1	@

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	-9.9	-9.9	-9.9	-9.9
Feb	4.2	2.1	.3	.0
Mar	1.9	.3	.0	.0
Apr	.2	.0	.0	.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	.0	.0	.0	.0
Nov	.5	.0	.0	.0
Dec	4.4	.8	.4	.0
Ann	-9.9	-9.9	-9.9	-9.9

+ 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

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: CADIZ, OH **COOP ID: 331152**

Climate Division: OH 7 **NWS Call Sign:** **Elevation: 1,260 Feet** **Lat: 40˚16N** **Lon: 81˚00W**

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	5/23	5/18	5/14	5/11	5/08	5/04	5/01	4/27	4/22
32	5/09	5/05	5/02	4/29	4/27	4/24	4/22	4/19	4/14
28	4/29	4/24	4/21	4/18	4/15	4/13	4/10	4/06	4/02
24	4/18	4/14	4/11	4/08	4/05	4/03	3/31	3/28	3/24
20	4/11	4/06	4/03	3/31	3/28	3/25	3/23	3/19	3/14
16	4/04	3/29	3/25	3/21	3/18	3/14	3/11	3/06	3/01

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	9/22	9/26	9/30	10/03	10/05	10/08	10/11	10/14	10/19
32	10/04	10/09	10/12	10/15	10/18	10/21	10/23	10/27	11/01
28	10/15	10/21	10/25	10/28	10/31	11/03	11/06	11/10	11/16
24	10/26	10/31	11/04	11/07	11/10	11/14	11/17	11/21	11/26
20	11/07	11/13	11/17	11/21	11/24	11/28	12/01	12/06	12/12
16	11/19	11/25	11/29	12/03	12/06	12/10	12/13	12/18	12/23

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	169	162	158	154	150	146	142	138	131
32	192	186	181	177	173	170	166	161	154
28	218	211	206	202	198	194	190	185	179
24	242	234	228	223	218	214	209	203	195
20	263	255	249	245	240	236	231	225	218
16	285	277	272	267	263	258	254	248	241

***** 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: CADIZ, OH **COOP ID: 331152**

Climate Division: OH 7 **NWS Call Sign:** **Elevation: 1,260 Feet** **Lat: 40˚16N** **Lon: 81˚00W**

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	1202	983	799	456	201	30	3	13	84	391	695	1038	5895
60	1047	843	644	313	112	7	0	1	29	260	546	883	4685
57	954	759	556	235	72	2	0	0	12	193	458	790	4031
55	892	703	498	188	51	1	0	0	6	154	402	731	3626
50	744	566	360	95	18	0	0	0	1	79	271	587	2721
32	281	167	54	0	0	0	0	0	0	0	20	181	703

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	102	108	278	536	879	1096	1255	1209	975	641	315	166	7560
55	0	0	9	34	217	407	542	496	291	83	7	3	2089
57	0	0	5	21	176	348	480	434	237	59	3	0	1763
60	0	0	0	8	123	262	387	342	164	33	1	0	1320
65	0	0	0	1	57	136	235	199	69	10	0	0	707
70	0	0	0	0	20	48	103	90	18	1	0	0	280

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	31	45	146	342	645	866	1015	976	752	426	170	51	31	76	222	564	1209	2075	3090	4066	4818	5244	5414	5465
45	8	19	87	221	492	716	860	821	602	289	97	22	8	27	114	335	827	1543	2403	3224	3826	4115	4212	4234
50	0	4	46	134	345	566	705	666	453	172	46	8	0	4	50	184	529	1095	1800	2466	2919	3091	3137	3145
55	0	0	20	72	219	419	550	511	314	92	18	1	0	0	20	92	311	730	1280	1791	2105	2197	2215	2216
60	0	0	4	33	119	277	396	356	187	37	5	0	0	0	4	37	156	433	829	1185	1372	1409	1414	1414
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	9	26	97	208	384	569	692	661	471	247	92	27	9	35	132	340	724	1293	1985	2646	3117	3364	3456	3483

(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