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

COOP ID: 332791

Station: FINDLAY WPCC, OH

Climate Division: OH 1

NWS Call Sign:

Elevation: 768 Feet Lat: 41°03N Lon: 83°40W

	Max Min Daily(2) Mean Daily(2) Mean																				
	Mea	n (1)						Extr	emes				•		Mean	Numb	er of D	Days (3)			
Month			Mean	U	Year	Day	Month(1)	Year		Year	Day	Month(1)	Year	Heating	Cooling	>=	>=	>=	<=	<=	Min <= 0
Jan	31.5	17.4	24.5	72	1950	25	35.0	1990	-20+	1994	19	8.4	1977	1257	0	.0	.0	2.3	16.2	28.1	3.7
Feb	35.5	20.4	28.0	73+	2000	26	38.2	1998	-14+	1963	26	12.7	1978	1038	0	.0	.0	3.6	12.1	24.0	2.3
Mar	46.9	29.1	38.0	82	1938	22	45.3	1973	-15	1948	12	27.2	1984	837	0	.0	.0	12.1	3.7	20.5	.1
Apr	59.2	38.8	49.0	89+	1948	26	54.2	1985	8	1982	7	43.7	1975	482	1	.0	.0	23.7	.2	7.1	.0
May	71.1	50.1	60.6	95	1962	17	68.6	1991	25	1966	10	54.5	1997	207	71	.0	.5	30.7	.0	.5	.0
Jun	79.8	59.6	69.7	104	1988	25	73.8	1991	38+	1954	6	64.4	1985	33	174	.1	2.9	30.0	.0	.0	.0
Jul	83.5	63.6	73.6	104	1936	14	78.1	1999	43	1945	11	69.9	1979	5	269	.2	5.0	31.0	.0	.0	.0
Aug	81.0	61.5	71.3	102	1951	31	78.0	1995	38	1965	29	67.1	1979	20	214	.0	2.4	31.0	.0	.0	.0
Sep	74.5	54.2	64.4	102	1939	15	69.1	1998	29+	1959	18	59.5	1975	87	67	.0	.8	30.0	.0	@	.0
Oct	62.3	42.9	52.6	92	1939	8	60.1	1971	15	1952	21	45.1	1976	398	13	.0	.0	27.3	.0	3.3	.0
Nov	48.2	33.1	40.7	80	1950	1	46.4	1994	-3	1958	30	31.2	1976	731	0	.0	.0	13.3	2.0	15.7	.0
Dec	36.1	23.0	29.6	70	1998	6	36.6	1998	-18	1989	22	17.4	1989	1099	0	.0	.0	3.9	11.0	25.5	1.3
Ann	59.1	41.1	50.2	104+	Jun 1988	25	78.1	Jul 1999	-20+	Jan 1994	19	8.4	Jan 1977	6194	809	.3	11.6	238.9	45.2	124.7	7.4

⁺ Also occurred on an earlier date(s)

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

Issue Date: February 2004 034-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1936-2001
- (3) Derived from 1971-2000 serially complete daily data

[@] Denotes mean number of days greater than 0 but less than .05

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Station: FINDLAY WPCC, OH COOP ID: 332791

Climate Division: OH 1 NWS Call Sign: Elevation: 768 Feet Lat: 41°03N Lon: 83°40W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recip	itatio	on Total						ays (3)	Proba	bility th		nonthly/	annual j indic	ated am	ation wi	ies (1)		less tha	ın the
	Medi	ans(1)				Extremes	3			П	aily Pre	cipitatio	n		Th	ese value	s were det	ermined	from the i	incomplet	te gamma	distributi	on	
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	2.17	1.92	1.98	1937	14	4.63	1982	.59	1981	12.2	5.7	1.1	.2	.68	.89	1.20	1.46	1.71	1.97	2.26	2.60	3.03	3.71	4.33
Feb	2.03	1.93	1.98	1959	10	4.96	1990	.39	1987	9.8	5.3	1.3	.2	.55	.74	1.03	1.29	1.54	1.80	2.10	2.44	2.90	3.60	4.27
Mar	2.69	2.37	2.60	1948	21	5.66	1973	.72	1981	11.7	6.8	1.8	.3	1.00	1.25	1.61	1.92	2.20	2.50	2.82	3.19	3.66	4.39	5.05
Apr	3.22	3.01	2.10	1979	13	6.53	1984	.81	1985	12.1	7.5	1.9	.5	1.17	1.47	1.91	2.27	2.62	2.98	3.37	3.82	4.40	5.29	6.10
May	3.88	4.05	3.80	1997	25	9.46	1997	.86	1988	12.3	7.6	2.4	1.0	1.49	1.85	2.36	2.79	3.20	3.61	4.06	4.58	5.24	6.26	7.19
Jun	4.25	3.88	4.47	1981	13	10.29	1981	.56	1988	11.3	7.7	3.2	1.0	1.22	1.62	2.23	2.76	3.27	3.81	4.40	5.10	6.01	7.44	8.76
Jul	3.90	4.03	3.94	1953	22	8.96	1992	.37	1974	9.7	6.2	3.1	1.1	1.08	1.45	2.01	2.50	2.98	3.48	4.04	4.70	5.55	6.90	8.15
Aug	4.12	4.25	5.62	1981	31	8.22	1981	.34	1996	9.7	6.3	2.9	1.3	.86	1.24	1.84	2.39	2.94	3.53	4.20	5.00	6.06	7.75	9.36
Sep	2.83	2.45	6.25	1959	1	8.47	1972	.70	1987	8.8	5.9	1.7	.7	.66	.93	1.34	1.71	2.08	2.47	2.91	3.43	4.12	5.21	6.23
Oct	2.33	1.97	3.38	1941	6	5.45	1983	.51	1974	9.6	5.6	1.4	.3	.73	.95	1.28	1.56	1.83	2.11	2.42	2.79	3.26	3.99	4.67
Nov	2.73	2.16	2.14	1958	17	6.65	1982	.28	1976	10.9	6.5	1.8	.3	.68	.94	1.34	1.69	2.04	2.41	2.82	3.31	3.95	4.96	5.90
Dec	2.76	2.86	1.43	1978	3	7.36	1990	.88	1998	12.3	6.3	1.8	.2	1.15	1.40	1.75	2.04	2.31	2.59	2.89	3.23	3.66	4.32	4.92
Ann	36.91	36.86	6.25	Sep 1959	1	10.29	Jun 1981	.28	Nov 1976	130.4	77.4	24.4	7.1	27.00	28.94	31.41	33.28	34.93	36.53	38.17	39.98	42.17	45.34	48.07

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

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

[#] 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: 1936-2001

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

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COOP ID: 332791

Station: FINDLAY WPCC, OH

Climate Division: OH 1 NWS Call Sign: Elevation: 768 Feet Lat: 41°03N Lon: 83°40W

		Snow (inches) Snow Totals Extremes (2)																					
						Sno	ow To	tals									Mea	ın Nu	mber	of Day	VS (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa					Depth eshold	
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	9.8	8.0	3	2	15.2	1982	31	37.7	1978	20	1978	31	12	1977	7.5	3.1	1.0	.4	.1	14.4	8.3	4.2	.5
Feb	6.3	5.5	2	2	8.4	1984	27	17.0	1979	23	1978	6	14	1978	4.5	2.1	.8	.2	.0	11.4	7.2	4.0	1.0
Mar	4.3	4.0	#	#	7.0	1984	8	10.2	1993	12	1984	8	5	1984	3.1	1.4	.5	.2	.0	2.7	1.1	.4	.0
Apr	1.3	.2	#	#	6.1	1982	5	12.5	1982	4	1994	6	1	1982	.9	.4	.1	@	.0	.5	.2	.0	.0
May	.1	.0	0	0	1.9	1989	7	1.9	1989	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	.2	.0	#	0	3.2	1993	30	3.2	1993	#+	2000	7	#+	2000	.1	.1	@	.0	.0	.0	.0	.0	.0
Nov	1.4	.7	#	#	3.6	1997	13	6.3	1980	4	1997	13	1	1997	1.6	.6	.1	.0	.0	.8	.1	.0	.0
Dec	6.4	5.1	1	#	12.0	1974	1	22.4	1977	12	1977	11	3+	2000	5.0	1.8	.5	.2	.1	6.5	3.0	1.0	.2
Ann	29.8	23.5	N/A	N/A	15.2	Jan 1982	31	37.7	Jan 1978	23	Feb 1978	6	14	Feb 1978	22.7	9.5	3.0	1.0	.2	36.3	19.9	9.6	1.7

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

Complete documentation available from: www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

[@] 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

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Elevation: 768 Feet Lat: 41°03N Lon: 83°40W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated(*)	
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/15	5/10	5/07	5/05	5/02	4/30	4/27	4/24	4/20
32	5/11	5/06	5/02	4/29	4/26	4/23	4/20	4/17	4/12
28	4/26	4/22	4/18	4/16	4/13	4/10	4/08	4/04	3/31
24	4/14	4/10	4/07	4/05	4/02	3/31	3/28	3/25	3/21
20	4/04	3/30	3/27	3/24	3/21	3/19	3/16	3/13	3/08
16	4/01	3/26	3/21	3/17	3/14	3/10	3/07	3/02	2/24
			Fal	l Freeze Da	tes (Month/D	ay)			
Temp (F)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/22	9/26	9/29	10/02	10/04	10/07	10/10	10/13	10/17
32	10/01	10/07	10/11	10/14	10/18	10/21	10/24	10/29	11/03
28	10/12	10/18	10/22	10/25	10/29	11/01	11/04	11/09	11/14
24	10/21	10/28	11/01	11/05	11/09	11/13	11/17	11/22	11/28
20	11/06	11/12	11/16	11/20	11/24	11/27	12/01	12/06	12/12
16	11/16	11/23	11/28	12/03	12/07	12/11	12/16	12/21	12/28
				Freeze F	ree Period				
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	171	165	161	158	154	151	147	143	137
32	199	190	184	178	174	169	163	157	148
28	221	213	207	203	198	193	188	183	175
24	242	234	229	224	220	216	211	206	199
20	268	261	255	251	247	242	238	233	225
16	292	284	277	272	267	263	257	251	243

^{*} 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.

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Climate Division: OH 1 NWS Call Sign: Elevation: 768 Feet Lat: 41°03N Lon: 83°40W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1257	1038	837	482	207	33	5	20	87	398	731	1099	6194
60	1102	898	682	337	119	9	0	4	30	269	581	944	4975
57	1009	814	592	258	79	4	0	0	13	203	494	851	4317
55	947	758	535	209	58	2	0	0	7	165	437	789	3907
50	801	628	393	108	22	0	0	0	1	89	305	647	2994
32	330	228	71	1	0	0	0	0	0	1	31	220	882

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	97	114	257	510	886	1130	1287	1217	970	639	291	144	7542
55	0	0	8	28	231	442	574	504	287	90	6	0	2170
57	0	0	3	17	190	384	512	442	233	66	3	0	1850
60	0	0	0	7	138	299	419	353	160	38	1	0	1415
65	0	0	0	1	71	174	269	214	67	13	0	0	809
70	0	0	0	0	29	80	137	110	18	3	0	0	377

										Gro	wing]	Degre	e Uni	ts (2)										
Base	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov 10 13 28 112 303 649 898 1050 974 740 407 133 15 4 9 65 190 495 748 895 819 590 271 72															Growi	ng Degre	ee Units (Accumu	lated Mo	onthly)			
	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	13	28	112	303	649	898	1050	974	740	407	133	35	13	41	153	456	1105	2003	3053	4027	4767	5174	5307	5342
45	4	9	65	190	495	748	895	819	590	271	72	10	4	13	78	268	763	1511	2406	3225	3815	4086	4158	4168
50												4	0	3	33	142	487	1085	1825	2489	2929	3089	3121	3125
55	0	0	12	54	217	450	585	509	302	82	12	0	0	0	12	66	283	733	1318	1827	2129	2211	2223	2223
60	0	0	3	23	124	307	430	357	179	36	1	0	0	0	3	26	150	457	887	1244	1423	1459	1460	1460
Base	Base Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	lly)	•		
50/86	4	12	68	177	388	595	718	659	461	227	68	14	4	16	84	261	649	1244	1962	2621	3082	3309	3377	3391

(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

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

- c. Snow Tables
 - 1. Snow Climatology
 - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

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