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: 332786

Station: FINDLAY AP, OH

Climate Division: OH 1 NWS Call Sign: FDY

Elevation: 800 Feet Lat: 41°01N Lon: 83°40W

									ŗ	Tempe	eratui	re (°F)										
	Mea	n (1)			Extremes											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	31.5	17.5	24.5	70	1950	25	34.9	1990	-20	1994	19	9.4	1977	1255	0	.0	.0	2.3	16.0	27.8	3.9	
Feb	35.2	20.4	27.8	72+	2000	26	37.4	1998	-14+	1982	10	12.4	1978	1041	0	.0	.0	3.5	12.3	23.4	2.2	
Mar	46.7	29.2	38.0	80+	1986	31	45.1	1973	-12	1984	9	27.9	1984	839	0	.0	.0	11.8	4.1	20.0	.2	
Apr	58.7	38.5	48.6	86+	1987	21	55.5	1985	10	1982	7	43.1	1975	492	1	.0	.0	23.2	.2	7.5	.0	
May	70.1	49.5	59.8	94	1988	31	67.3	1991	28+	1974	7	53.3	1997	223	62	.0	.5	30.6	.0	.3	.0	
Jun	78.8	58.8	68.8	104	1988	25	72.4	1991	39+	1998	6	63.9	1972	34	147	.1	2.2	30.0	.0	.0	.0	
Jul	82.6	62.6	72.6	102	1988	7	77.0	1988	44	1988	1	69.8	2000	4	239	.1	4.7	31.0	.0	.0	.0	
Aug	80.3	60.3	70.3	102	1951	31	75.9	1995	38	1965	29	66.3	1976	23	189	.0	2.1	31.0	.0	.0	.0	
Sep	74.1	53.0	63.6	100	1953	2	68.6	1978	30	1995	23	58.5	1975	102	58	.0	.9	30.0	.0	.1	.0	
Oct	62.0	42.1	52.1	90+	1953	3	59.5	1971	21+	1976	28	45.6	1976	408	8	.0	.0	27.6	.0	3.9	.0	
Nov	48.4	33.1	40.8	79+	1987	2	45.8	1975	0	1958	30	32.5	1976	728	0	.0	.0	13.5	2.0	14.9	.0	
Dec	36.4	23.1	29.8	70	1998	6	37.8	1982	-18	1989	22	17.1	1989	1093	0	.0	.0	4.2	10.8	25.3	1.3	
Ann	58.7	40.7	49.7	104	Jun 1988	25	77.0	Jul 1988	-20	Jan 1994	19	9.4	Jan 1977	6242	704	.2	10.4	238.7	45.4	123.2	7.6	

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 033-A

- (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

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

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COOP ID: 332786

Station: FINDLAY AP, OH

Climate Division: OH 1 NWS Call Sign: FDY Elevation: 800 Feet Lat: 41°01N Lon: 83°40W

										Pı	recipit	tation	(incl	nes)										
		Precipitation Totals Means/ Medians(1) Extremes								Mean Number of Days (3) Daily Precipitation				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	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	1.82	1.61	2.55	1978	26	4.63	1978	.49	1981	12.0	4.7	1.0	.1	.54	.71	.97	1.19	1.41	1.64	1.89	2.18	2.56	3.16	3.71
Feb	1.70	1.63	1.86	1976	16	4.42	1990	.34	1978	9.5	4.4	.8	.1	.36	.52	.77	.99	1.22	1.46	1.73	2.06	2.49	3.18	3.83
Mar	2.48	2.28	1.60	1985	28	6.18	1973	.68	1981	11.8	6.7	1.3	.3	.82	1.05	1.40	1.69	1.98	2.27	2.59	2.96	3.45	4.19	4.88
Apr	3.15	3.10	2.37	1979	13	6.00	1984	.84	1985	12.7	7.7	1.9	.4	1.11	1.40	1.84	2.20	2.55	2.90	3.29	3.75	4.33	5.23	6.05
May	3.68	3.63	3.64	1997	25	9.06	1997	.79	1988	11.7	7.4	2.3	.8	1.31	1.66	2.16	2.58	2.98	3.40	3.85	4.37	5.04	6.07	7.02
Jun	4.14	3.77	4.89	1981	13	10.86	1981	.34	1988	11.1	7.1	2.9	1.0	1.03	1.41	2.02	2.55	3.08	3.64	4.26	5.00	5.97	7.51	8.94
Jul	3.86	3.50	3.91	1966	12	9.17	1992	.27	1974	9.4	6.4	3.0	.9	1.04	1.41	1.97	2.45	2.93	3.43	3.99	4.65	5.51	6.85	8.11
Aug	3.74	3.90	4.37	1981	31	7.60	1975	.31	1996	9.1	6.4	2.6	1.1	.76	1.09	1.64	2.14	2.65	3.19	3.81	4.55	5.52	7.08	8.57
Sep	2.76	2.31	3.87	1959	1	9.09	1972	.66	1994	8.7	6.1	1.7	.5	.60	.86	1.26	1.63	1.99	2.38	2.82	3.35	4.04	5.15	6.19
Oct	2.14	1.92	2.10	1950	9	5.22	1983	.52	1974	9.0	5.2	1.2	.3	.72	.92	1.22	1.47	1.71	1.96	2.23	2.55	2.96	3.59	4.17
Nov	2.70	2.07	1.78	1993	14	7.02	1983	.26	1976	11.1	6.4	1.9	.3	.67	.92	1.31	1.66	2.01	2.37	2.78	3.27	3.90	4.91	5.85
Dec	2.38	2.31	1.24	1967	21	6.77	1990	.89	1998	12.1	5.9	1.6	.2	.93	1.15	1.47	1.73	1.97	2.22	2.49	2.81	3.20	3.81	4.37
Ann	34.55	34.78	4.89	Jun 1981	13	10.86	Jun 1981	.26	Nov 1976	128.2	74.4	22.2	6.0	24.80	26.70	29.12	30.95	32.58	34.15	35.77	37.57	39.74	42.88	45.60

⁺ 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: 1948-2001

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

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Station: FINDLAY AP, OH

Climate Division: OH 1 NWS Call Sign: FDY Elevation: 800 Feet

COOP ID: 332786

Lon: 83°40W

Snow (inches) **Snow Totals** Mean Number of Days (1) **Snow Fall Snow Depth** Means/Medians (1) Extremes (2) >= Thresholds >= Thresholds Highest Highest Highest Highest Monthly Snow Snow Snow Snow Monthly Daily **Daily** Fall Fall Depth Depth Year Year Year Day Year 0.1 1.0 3.0 5.0 10.0 1 3 5 10 Month Day Mean Snow Snow Snow Median Median Mean Mean Snow Fall Fall Depth Depth Jan 7.9 7.5 2 2 12.0 1982 31 22.7 1978 17+ 1978 31 8+ 1978 6.3 3.1 .8 .2 @ 14.4 9.0 5.8 1.2 5.2 4.9 2 5 .2 3.7 Feb 6.0 1976 12.4 1988 19 1978 6 13 1978 4.3 1.8 .6 .0 10.7 6.4 1.6 3.1 2.5 8 13.4 1984 14 1984 13 4+ 1984 2.5 .3 .9 Mar # 1 6.0 1984 1.4 .1 .0 3.8 1.4 .3 .7 # 0 5 9.2 1982 1982 1982 .7 .2 .1 @ .0 .5 .2 @ Apr # 5.0 1982 6 6 .0 May .0 .0 # 0 .7 1989 .7 1989 1989 7 # 2000 .0 .0 .0 .0 .0 @ 0. 0. 0. .0 .0 0 .0 0 0 .0 0 0 0 0 # 1989 .0 .0 .0 .0 .0 .0 .0 0. .0 Jun .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 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 Sep .0 1993 30 1993 Oct .1 .0 0 0 2.7 3.0 0 0 0 0 0 .1 .0 .0 0. .0 .0 .0 0. .0

#

N/A

.3

3.7

18.9

1.2

5.6

23.8

Nov

Dec

Ann

0

0

N/A

2.4

9.4

12.0

1981

1974

Jan

1982

20

31

4.4

16.5

22.7

1972

1973

Jan

1978

3

14+

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(a)

.8

7.3

37.5

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20.3

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12.0

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.3

3.4

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1.9

9.0

1.6

4.0

19.5

1997

1977

Feb

1978

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

.0

.6

2.4

Lat: 41°01N

1997

1977

Feb

1978

16

12

6

#

4

13

⁺ 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

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1971-2000

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Station: FINDLAY AP, OH

Climate Division: OH 1 NWS Call Sign: FDY

NWS Call Sign: FDY Elevation: 800 Feet Lat: 41°01N 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 (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	5/16	5/12	5/09	5/07	5/04	5/02	4/29	4/26	4/22							
32	5/07	5/03	4/30	4/27	4/25	4/22	4/20	4/16	4/12							
28	4/22	4/18	4/15	4/13	4/11	4/08	4/06	4/03	3/30							
24	4/15	4/11	4/07	4/05	4/02	3/30	3/28	3/24	3/20							
20	4/07	4/02	3/29	3/26	3/23	3/20	3/17	3/14	3/09							
16	3/30	3/24	3/20	3/16	3/13	3/09	3/05	3/01	2/23							
			Fal	l Freeze Da	tes (Month/D	Oay)										
Temp (F)		Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90							
36	9/23	9/27	9/30	10/02	10/05	10/07	10/10	10/13	10/17							
32	9/28	10/04	10/07	10/11	10/13	10/16	10/20	10/23	10/28							
28	10/11	10/17	10/21	10/24	10/27	10/30	11/02	11/06	11/12							
24	10/23	10/29	11/03	11/07	11/10	11/14	11/18	11/22	11/28							
20	11/10	11/15	11/20	11/23	11/27	11/30	12/04	12/08	12/14							
16	11/17	11/24	11/28	12/02	12/05	12/09	12/13	12/17	12/23							
				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	169	163	159	156	153	150	146	142	137							
32	189	183	178	174	171	167	164	159	153							
28	220	213	207	203	199	195	190	185	178							
24	244	236	231	226	222	217	212	207	199							
20	270	262	257	252	248	243	239	233	225							
16	288	281	276	271	267	263	259	254	246							

^{*} 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.

Complete documentation available from:

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COOP ID: 332786

Climate Division: OH 1 NWS Call Sign: FDY Elevation: 800 Feet Lat: 41°01N Lon: 83°40W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1255	1041	839	492	223	34	4	23	102	408	728	1093	6242		
60	1100	901	684	347	131	8	0	4	37	274	578	938	5002		
57	1007	817	591	266	89	3	0	0	17	205	490	845	4330		
55	945	761	536	217	65	2	0	0	9	165	432	783	3915		
50	796	631	393	113	26	0	0	0	1	86	298	640	2984		
32	322	228	69	1	0	0	0	0	0	0	27	212	859		

Base						Cooling Degree Days (1)													
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann						
32	90	111	253	499	862	1103	1258	1188	946	623	289	142	7364						
55	0	0	7	26	215	415	545	475	265	74	4	0	2026						
57	0	0	0	15	176	356	483	413	213	52	2	0	1710						
60	0	0	0	6	125	271	390	325	143	28	0	0	1288						
65	0	0	0	1	62	147	239	189	58	8	0	0	704						
70	0	0	0	0	24	58	109	90	15	1	0	0	297						

	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													Aug	Sep	Oct	Nov	Dec							
40	13	28	108	294	624	879	1027	958	724	402	141	35	13	41	149	443	1067	1946	2973	3931	4655	5057	5198	5233
45	3	8	63	179	469	729	872	803	574	264	76	12	3	11	74	253	722	1451	2323	3126	3700	3964	4040	4052
50	0	2	30	103	327	579	717	648	428	156	34	4	0	2	32	135	462	1041	1758	2406	2834	2990	3024	3028
55	0	0	10	49	203	432	562	493	287	78	13	1	0	0	10	59	262	694	1256	1749	2036	2114	2127	2128
60	0	0	4	20	111	289	407	341	170	33	2	0	0	0	4	24	135	424	831	1172	1342	1375	1377	1377
Base				Gro	wing De	gree Unit	s for Co	rn (Mont	hly)						Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	2	11	66	165	366	573	700	643	451	220	70	15	2	13	79	244	610	1183	1883	2526	2977	3197	3267	3282

(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