

Climatology of the United States

No. 20

1971-2000

Station: WABASH, IN

COOP ID: 129138

Climate Division: IN 2

NWS Call Sign:

Elevation: 730 Feet Lat: 40°47N Lon: 85°49W

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	31.2	14.3	22.8	70	1950	26	34.2	1990	-24+	1984	21	7.7	1977	1310	0	.0	.0	2.2	16.1	28.9	5.8
Feb	35.8	17.0	26.4	74	1999	12	37.1	1998	-22+	1982	10	12.8	1978	1081	0	.0	.0	3.9	11.2	25.7	4.1
Mar	47.1	26.9	37.0	81	1986	31	44.0	1973	-13	1984	9	27.5	1984	869	0	.0	.0	12.1	3.2	22.3	.3
Apr	59.6	36.6	48.1	89	1977	19	53.9	1977	4	1982	7	42.6	1975	508	1	.0	.0	24.2	.1	10.8	.0
May	71.2	47.7	59.5	95	1977	20	66.4	1977	23	1968	6	54.1	1997	228	54	.0	.6	30.6	.0	1.3	.0
Jun	79.8	57.5	68.7	103	1988	26	72.5	1991	30	1969	4	63.7	1972	35	144	.1	3.2	30.0	.0	.0	.0
Jul	83.3	60.9	72.1	103+	1980	14	77.3	1999	41	1971	31	68.9	1971	7	228	.2	5.6	31.0	.0	.0	.0
Aug	81.0	58.7	69.9	100	1964	4	76.8	1995	34	1965	29	65.8	1992	24	174	.0	2.4	31.0	.0	.0	.0
Sep	75.4	51.0	63.2	100	1953	3	67.9	1998	27+	1959	18	56.9	1975	109	55	.0	1.2	30.0	.0	.4	.0
Oct	63.4	39.5	51.5	90+	1949	10	59.2	1971	17+	1988	30	44.9	1988	429	7	.0	@	28.5	.0	8.1	.0
Nov	48.9	31.1	40.0	86	1950	1	45.3	1999	-3	1950	25	32.7	1976	750	0	.0	.0	14.2	1.6	18.1	.0
Dec	36.3	20.4	28.4	70	1998	7	37.4	1982	-21+	1960	24	15.6	1989	1137	0	.0	.0	4.0	9.6	26.9	2.5
Ann	59.4	38.5	49.0	103+	Jun 1988	26	77.3	Jul 1999	-24+	Jan 1984	21	7.7	Jan 1977	6487	663	.3	13.0	241.7	41.8	142.5	12.7

+ 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

063-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: WABASH, IN

COOP ID: 129138

Climate Division: IN 2

NWS Call Sign:

Elevation: 730 Feet Lat: 40°47N

Lon: 85°49W

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	2.16	1.56	2.60	1950	4	6.83	1985	.69	1981	10.6	5.5	1.2	.4	.47	.67	.99	1.28	1.56	1.87	2.21	2.63	3.17	4.03	4.85
Feb	1.89	1.45	2.70	1959	10	5.97	1985	.31	1996	8.5	4.9	1.0	.4	.29	.45	.72	.98	1.26	1.55	1.89	2.31	2.87	3.78	4.66
Mar	2.73	2.65	2.08	1953	4	5.84	1977	.52	1999	9.8	6.6	1.9	.4	.85	1.11	1.49	1.82	2.15	2.48	2.84	3.27	3.83	4.69	5.49
Apr	3.53	3.43	2.91	1988	7	7.88	1972	1.05	1971	10.6	7.5	2.2	.6	1.40	1.72	2.19	2.57	2.93	3.30	3.70	4.16	4.74	5.64	6.45
May	4.06	4.17	2.76	1980	24	7.31	1991	.43	1988	11.6	8.5	2.8	.8	1.30	1.68	2.25	2.74	3.21	3.69	4.23	4.85	5.65	6.90	8.06
Jun	4.23	4.51	2.70+	1958	9	8.49	2000	.69	1988	10.9	8.3	2.9	1.0	1.49	1.89	2.47	2.96	3.42	3.90	4.42	5.03	5.80	7.00	8.10
Jul	4.14	3.54	4.78	1964	8	8.63	1992	1.05	1975	8.9	6.7	2.6	1.1	1.50	1.89	2.45	2.92	3.37	3.83	4.33	4.91	5.65	6.80	7.84
Aug	4.01	3.50	3.50	1973	15	9.02	1977	.90	1976	9.8	6.4	2.9	1.2	1.16	1.55	2.12	2.62	3.10	3.60	4.16	4.82	5.67	7.00	8.24
Sep	3.18	2.68	4.29	1950	1	9.30	1972	.40	1995	8.2	5.1	2.1	.9	.63	.91	1.38	1.81	2.24	2.71	3.24	3.87	4.72	6.06	7.35
Oct	2.80	2.38	3.20	1955	7	8.93	1991	1.21	1982	9.6	5.9	2.1	.5	.96	1.23	1.61	1.94	2.25	2.57	2.92	3.33	3.85	4.66	5.41
Nov	3.11	3.04	1.80	1992	2	6.72	1985	.71	1976	10.1	6.5	2.2	.7	.95	1.24	1.68	2.06	2.43	2.81	3.23	3.72	4.36	5.35	6.27
Dec	2.72	2.51	3.01	1967	22	6.07	1990	.25	1989	11.4	6.8	1.7	.5	.65	.91	1.30	1.66	2.01	2.38	2.79	3.29	3.94	4.97	5.93
Ann	38.56	38.18	4.78	Jul 1964	8	9.30	Sep 1972	.25	Dec 1989	120.0	78.7	25.6	8.5	31.04	32.57	34.49	35.91	37.17	38.36	39.58	40.92	42.52	44.80	46.75

+ 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

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Station: WABASH, IN

COOP ID: 129138

Climate Division: IN 2

NWS Call Sign:

Elevation: 730 Feet

Lat: 40°47N

Lon: 85°49W

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	7.1	7.8	2	1	8.0	1999	3	13.8	1997	14	1999	11	7	1981	3.5	2.7	.7	.2	.0	10.1	5.7	3.0	1.5
Feb	6.0	5.9	3	2	8.5	1984	28	9.8	1986	23	1982	13	19	1978	3.0	2.0	.6	.1	.0	6.9	2.5	1.0	.0
Mar	4.1	3.3	#	#	8.5	1999	9	12.5	1984	9	1999	9	2	1984	1.4	1.1	.4	.1	.0	2.5	1.0	.6	.0
Apr	.8	.0	#	0	7.0	1973	12	8.0	1973	9	1982	9	1	1982	.3	.2	.1	.1	.0	.2	.1	.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	#	.0	#	0	#	1992	20	#+	1992	#	1972	18	#	1972	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	1.4	.0	#	0	5.0	1975	27	8.0	1996	5	1975	27	1	1996	.8	.4	.2	@	.0	1.0	.3	@	.0
Dec	7.6	9.9	1	#	10.0	1973	20	23.5	1973	13	1973	23	5	2000	3.4	2.2	.7	.3	@	4.1	2.3	1.0	.3
Ann	27.0	26.9	N/A	N/A	10.0	Dec 1973	20	23.5	Dec 1973	23	Feb 1982	13	19	Feb 1978	12.4	8.6	2.7	.8	@	24.8	11.9	5.7	1.8

+ 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:

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Climate Division: IN 2

NWS Call Sign:

Elevation: 730 Feet

Lat: 40° 47N

Lon: 85° 49W

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	5/28	5/22	5/18	5/15	5/11	5/08	5/05	5/01	4/25
32	5/14	5/09	5/06	5/04	5/01	4/28	4/26	4/23	4/18
28	5/06	5/01	4/27	4/24	4/21	4/18	4/15	4/11	4/06
24	4/20	4/16	4/13	4/11	4/09	4/06	4/04	4/01	3/28
20	4/11	4/06	4/03	3/30	3/28	3/25	3/22	3/18	3/13
16	4/02	3/28	3/24	3/21	3/18	3/15	3/11	3/08	3/02
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	9/16	9/20	9/23	9/26	9/29	10/01	10/04	10/07	10/11
32	9/23	9/28	10/01	10/03	10/06	10/08	10/11	10/14	10/19
28	10/03	10/08	10/12	10/15	10/18	10/21	10/24	10/27	11/01
24	10/20	10/25	10/29	11/01	11/04	11/07	11/10	11/14	11/19
20	11/02	11/08	11/12	11/16	11/19	11/23	11/26	12/01	12/07
16	11/11	11/18	11/23	11/27	12/01	12/05	12/09	12/14	12/21
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	159	152	147	143	140	136	132	127	120
32	174	168	164	161	157	154	150	146	140
28	198	191	187	183	179	175	172	167	161
24	230	222	217	213	209	204	200	195	187
20	261	253	246	241	236	231	226	220	211
16	282	274	268	262	257	252	247	241	232

* 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

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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	1310	1081	869	508	228	35	7	24	109	429	750	1137	6487
60	1155	941	714	363	134	9	0	4	42	292	600	982	5236
57	1062	857	621	281	90	3	0	0	20	222	511	889	4556
55	1000	801	563	232	67	2	0	0	11	180	453	827	4136
50	847	667	421	126	26	0	0	0	2	96	315	685	3185
32	364	252	79	1	0	0	0	0	0	0	31	252	979

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	77	96	232	484	849	1099	1244	1173	935	602	270	138	7199
55	0	0	4	25	203	410	531	460	256	69	2	0	1960
57	0	0	0	15	165	352	469	398	205	48	1	0	1653
60	0	0	0	6	115	267	376	309	137	26	0	0	1236
65	0	0	0	1	54	144	228	174	55	7	0	0	663
70	0	0	0	0	20	57	106	78	13	1	0	0	275

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	9	18	98	290	617	878	1013	946	716	383	129	25	9	27	125	415	1032	1910	2923	3869	4585	4968	5097	5122
45	2	4	54	182	467	728	858	791	566	249	70	10	2	6	60	242	709	1437	2295	3086	3652	3901	3971	3981
50	0	0	26	103	322	578	703	636	421	146	28	3	0	0	26	129	451	1029	1732	2368	2789	2935	2963	2966
55	0	0	9	51	201	432	548	481	284	75	13	0	0	0	9	60	261	693	1241	1722	2006	2081	2094	2094
60	0	0	3	21	111	292	394	329	169	33	1	0	0	0	3	24	135	427	821	1150	1319	1352	1353	1353
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	13	71	181	383	574	683	627	457	243	74	13	0	13	84	265	648	1222	1905	2532	2989	3232	3306	3319

(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