

# Climatology of the United States

No. 20

1971-2000

Station: PONTIAC, IL

COOP ID: 116910

Climate Division: IL 5

NWS Call Sign:

Elevation: 650 Feet

Lat: 40° 53N

Lon: 88° 38W

## 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	29.9	13.8	21.9	69	1909	23	34.9	1990	-24	1927	15	7.5	1977	1339	0	.0	.0	1.7	17.2	29.1	5.6
Feb	35.7	18.3	27.0	72+	1996	27	39.0	1998	-23	1905	13	12.8	1979	1064	0	.0	.0	4.1	10.6	24.6	3.2
Mar	48.2	28.6	38.4	86+	1986	30	44.2	2000	-14	1943	8	29.9	1984	825	0	.0	.0	13.5	3.1	20.0	.1
Apr	61.5	38.7	50.1	92+	1986	26	56.7	1977	11	1982	7	44.8	1982	452	5	.0	@	24.6	.1	6.5	.0
May	73.1	49.6	61.4	102	1934	31	68.6	1977	24	1966	10	55.9	1997	191	77	.0	1.0	30.8	.0	.2	.0
Jun	82.1	59.8	71.0	105+	1934	27	76.0	1971	38+	1945	5	65.8	1982	19	197	.1	4.9	30.0	.0	.0	.0
Jul	84.7	63.6	74.2	108	1936	14	78.3	1983	45+	1985	16	70.9	1992	4	288	.1	7.2	31.0	.0	.0	.0
Aug	82.7	61.7	72.2	104+	1988	18	78.5	1995	40	1915	31	67.3	1992	19	243	.2	4.6	31.0	.0	.0	.0
Sep	77.0	53.5	65.3	103	1925	4	70.7	1998	26	1942	28	60.9	1993	80	87	.0	2.1	30.0	.0	.1	.0
Oct	64.8	41.9	53.4	94+	1922	3	60.7	1971	9	1925	30	46.4	1988	373	12	.0	@	28.4	.0	4.3	.0
Nov	48.7	31.0	39.9	82	1915	7	46.1	1999	-5+	1950	25	31.8	1976	755	0	.0	.0	14.0	2.2	17.0	.0
Dec	35.4	20.1	27.8	71	1982	3	37.1	1982	-23	1924	28	14.9	2000	1155	0	.0	.0	3.5	10.7	27.1	2.6
Ann	60.3	40.1	50.2	108	Jul 1936	14	78.5	Aug 1995	-24	Jan 1927	15	7.5	Jan 1977	6276	909	.4	19.8	242.6	43.9	128.9	11.5

+ 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](http://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: 1903-2001

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

068-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: PONTIAC, IL**

**COOP ID: 116910**

**Climate Division: IL 5**

**NWS Call Sign:**

**Elevation: 650 Feet**

**Lat: 40°53N**

**Lon: 88°38W**

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	1.63	1.33	1.97	1965	2	3.79	1979	.00	1984	8.6	4.4	.9	.2	.17	.37	.64	.88	1.11	1.37	1.66	2.01	2.47	3.21	3.91
Feb	1.44	1.21	2.55	1942	6	3.44	1997	.04	1987	7.2	3.9	.8	.2	.26	.39	.60	.80	1.00	1.22	1.46	1.76	2.16	2.80	3.41
Mar	2.82	2.71	3.80	1923	12	5.13	1976	.60	1981	9.8	6.7	1.9	.5	.90	1.17	1.56	1.90	2.23	2.56	2.94	3.37	3.93	4.80	5.60
Apr	3.41	3.51	2.70	1943	27	7.88	1981	.37	1971	11.0	7.4	2.5	.6	.95	1.28	1.77	2.19	2.61	3.05	3.53	4.10	4.84	6.01	7.09
May	3.83	3.55	4.76	1962	11	10.03	1995	.67	1992	11.3	7.8	2.9	.9	1.04	1.41	1.96	2.44	2.92	3.41	3.96	4.62	5.46	6.80	8.04
Jun	4.11	4.11	5.67	1973	17	11.60	1973	.27	1988	9.6	6.7	2.8	1.2	.69	1.04	1.64	2.21	2.79	3.42	4.14	5.02	6.19	8.08	9.89
Jul	4.07	3.92	4.26	1950	17	8.63	1992	.44	1991	8.9	6.4	2.9	1.0	.85	1.23	1.82	2.36	2.91	3.49	4.15	4.94	5.98	7.65	9.23
Aug	3.56	3.37	5.59	1943	3	8.65	1977	.31	1984	8.3	6.0	2.2	1.0	.43	.71	1.21	1.71	2.23	2.82	3.51	4.35	5.50	7.40	9.23
Sep	3.04	2.57	4.25	1933	26	7.53	1989	.05	1979	7.9	5.0	2.1	.9	.43	.68	1.11	1.53	1.98	2.46	3.03	3.72	4.65	6.17	7.64
Oct	2.67	2.30	2.96	1957	23	7.40	1991	.98	1992	8.2	5.3	2.0	.5	.78	1.04	1.42	1.75	2.07	2.40	2.77	3.21	3.77	4.65	5.47
Nov	3.02	2.55	4.42	1990	28	8.18	1985	.68	1999	9.9	6.4	1.9	.5	.74	1.02	1.46	1.85	2.24	2.65	3.11	3.65	4.36	5.49	6.54
Dec	2.51	2.09	5.50	1982	3	8.72	1982	.30	1995	9.7	5.4	1.5	.4	.59	.82	1.19	1.52	1.84	2.19	2.58	3.04	3.65	4.61	5.52
Ann	36.11	35.24	5.67	Jun 1973	17	11.60	Jun 1973	.00	Jan 1984	110.4	71.4	24.4	7.9	26.25	28.18	30.63	32.49	34.13	35.72	37.36	39.16	41.35	44.51	47.23

+ 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](http://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](http://www.ncdc.noaa.gov)

**Station: PONTIAC, IL**

**COOP ID: 116910**

**Climate Division: IL 5**

**NWS Call Sign:**

**Elevation: 650 Feet**

**Lat: 40°53N**

**Lon: 88°38W**

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	8.2	7.0	2	1	10.0	1999	3	30.5	1979	23	1999	11	13	1999	4.6	3.0	1.2	.4	@	14.3	9.7	5.3	2.1
Feb	5.1	4.0	2	#	7.0	1994	23	17.3	1994	19	1979	19	16	1979	3.4	1.7	.5	.2	.0	10.1	7.6	4.6	1.9
Mar	2.4	.7	#	#	8.0	1991	14	11.0	1991	9	1979	1	4	1978	1.5	.8	.4	.1	.0	2.9	1.7	1.1	.0
Apr	1.0	.0	#	0	12.0	1997	11	12.0	1997	10	1997	11	1	1997	.4	.3	.1	.1	@	.3	.1	@	@
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	#	0	.5	1980	28	.5	1980	#	1972	18	#	1972	@	.0	.0	.0	.0	.0	.0	.0	.0
Nov	1.7	.2	#	0	6.5	1974	14	6.5+	1980	6	1975	27	1	1977	1.0	.5	.2	.1	.0	1.1	.5	.2	.0
Dec	5.0	3.7	1	#	6.8	1973	19	19.5	1977	21	2000	30	8	2000	3.5	2.1	.8	.2	.0	7.1	3.4	2.2	1.2
Ann	23.4	15.6	N/A	N/A	12.0	Apr 1997	11	30.5	Jan 1979	23	Jan 1999	11	16	Feb 1979	14.4	8.4	3.2	1.1	@	35.8	23.0	13.4	5.2

+ 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

# Climatography of the United States

## No. 20 1971-2000

**Station: PONTIAC, IL**

**COOP ID: 116910**

**Climate Division: IL 5**

**NWS Call Sign:**

**Elevation: 650 Feet**

**Lat: 40° 53N**

**Lon: 88° 38W**

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	5/15	5/10	5/06	5/03	5/01	4/28	4/25	4/21	4/16
32	5/05	4/30	4/26	4/22	4/19	4/16	4/13	4/09	4/03
28	4/21	4/17	4/14	4/11	4/08	4/06	4/03	3/31	3/27
24	4/11	4/06	4/03	3/31	3/28	3/25	3/22	3/18	3/13
20	4/05	3/30	3/26	3/22	3/19	3/16	3/12	3/08	3/02
16	3/27	3/20	3/16	3/12	3/08	3/04	2/28	2/24	2/17
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	9/24	9/27	9/30	10/03	10/05	10/07	10/09	10/12	10/16
32	10/01	10/06	10/10	10/14	10/17	10/20	10/23	10/27	11/02
28	10/13	10/18	10/22	10/26	10/29	11/02	11/05	11/09	11/15
24	10/23	10/28	11/01	11/04	11/07	11/10	11/13	11/16	11/21
20	11/02	11/08	11/11	11/15	11/18	11/21	11/24	11/28	12/03
16	11/09	11/16	11/20	11/24	11/28	12/02	12/06	12/11	12/17
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	172	167	163	160	157	153	150	146	141
32	202	195	189	184	180	175	171	165	157
28	225	218	212	208	203	199	194	189	181
24	244	237	232	227	223	219	215	209	202
20	267	259	253	248	243	238	233	227	219
16	290	281	275	270	265	259	254	248	239

\* 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](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

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

**Station: PONTIAC, IL**

**COOP ID: 116910**

**Climate Division: IL 5**

**NWS Call Sign:**

**Elevation: 650 Feet**

**Lat: 40°53N**

**Lon: 88°38W**

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	1339	1064	825	452	191	19	4	19	80	373	755	1155	6276
60	1184	924	670	315	108	4	0	4	27	246	605	1000	5087
57	1091	840	579	242	71	1	0	0	11	181	517	907	4440
55	1029	786	523	198	51	1	0	0	6	144	460	848	4046
50	875	656	381	108	20	0	0	0	1	73	327	704	3145
32	387	256	64	1	0	0	0	0	0	0	42	267	1017

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	72	117	262	543	910	1168	1307	1247	997	663	278	135	7699
55	0	3	8	51	248	478	594	534	312	94	6	3	2331
57	0	0	2	35	206	419	532	472	258	69	3	0	1996
60	0	0	0	18	150	332	439	383	184	40	1	0	1547
65	0	0	0	5	77	197	288	243	87	12	0	0	909
70	0	0	0	1	32	92	152	133	29	2	0	0	441

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	5	27	129	346	692	952	1082	1019	783	443	136	26	5	32	161	507	1199	2151	3233	4252	5035	5478	5614	5640
45	0	6	69	228	538	802	927	864	633	302	74	9	0	6	75	303	841	1643	2570	3434	4067	4369	4443	4452
50	0	1	36	133	389	652	772	709	489	189	34	4	0	1	37	170	559	1211	1983	2692	3181	3370	3404	3408
55	0	0	14	68	255	502	617	554	343	105	13	0	0	0	14	82	337	839	1456	2010	2353	2458	2471	2471
60	0	0	4	29	149	357	462	399	217	48	2	0	0	0	4	33	182	539	1001	1400	1617	1665	1667	1667
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	15	81	212	429	633	739	688	503	266	74	10	0	15	96	308	737	1370	2109	2797	3300	3566	3640	3650

(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](http://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/normals/usnormals.html](http://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 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"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
|---|---|

## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normals.html](http://www.ncdc.noaa.gov/normals.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normals/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normals/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)