## 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: SEYMOUR 2 N, IN 1971-2000 COOP ID: 127935

Climate Division: IN 8 NWS Call Sign: Elevation: 570 Feet Lat: 38°59N Lon: 85°54W

Temperature (°F)																							
	Mea	<b>n</b> (1)						Extr	emes					Degree Base To	•	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	36.9	19.0	28.0	73	1950	26	38.0	1990	-23+	1963	29	12.7	1977	1149	0	.0	.0	4.9	11.3	27.6	3.3		
Feb	42.5	22.1	32.3	76	2000	26	40.4	1976	-21	1951	2	18.0	1978	916	0	.0	.0	8.2	6.5	23.3	1.8		
Mar	53.1	30.7	41.9	84	1998	30	49.4	1973	-10	1980	3	35.1+	1996	716	0	.0	.0	18.1	1.2	19.5	.2		
Apr	64.3	40.0	52.2	90+	1954	26	57.3	1985	9	1982	7	47.5	1982	388	3	.0	.0	26.8	.0	6.9	.0		
May	74.0	50.8	62.4	95+	1949	6	69.1	1991	27	1963	1	57.2	1989	167	85	.0	.4	30.9	.0	.2	.0		
Jun	81.8	60.1	71.0	102	1953	21	74.9	1991	37+	1966	1	65.1	1992	22	200	@	3.7	30.0	.0	.0	.0		
Jul	85.3	63.6	74.5	106	1954	15	78.5	1999	47+	1962	27	71.3	1979	0	293	.1	7.3	31.0	.0	.0	.0		
Aug	84.0	60.9	72.5	102+	1953	30	77.4	1995	40+	1951	25	66.4	1992	14	246	.2	5.5	31.0	.0	.0	.0		
Sep	78.2	52.6	65.4	106	1953	3	70.3	1972	29	1983	24	60.2	1974	85	97	.0	2.0	30.0	.0	.3	.0		
Oct	67.2	40.5	53.9	95	1953	1	63.1	1971	15	1981	25	47.7	1987	364	19	.0	.1	29.8	.0	7.0	.0		
Nov	53.7	32.8	43.3	86	1950	1	49.0	1999	-2	1958	30	36.6	1976	653	0	.0	.0	18.0	.6	16.2	.0		
Dec	41.6	24.0	32.8	75	1982	3	42.9	1982	-22+	1989	22	18.5	1989	998	0	.0	.0	7.6	6.5	24.9	1.2		
Ann	63.6	41.4	52.5	106+	Jul 1954	15	78.5	Jul 1999	-23+	Jan 1963	29	12.7	Jan 1977	5472	943	.3	19.0	266.3	26.1	125.9	6.5		

<sup>+</sup> Also occurred on an earlier date(s)

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

Issue Date: February 2004 054-A

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

## 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: 127935** 

Station: SEYMOUR 2 N, IN

Climate Division: IN 8 NWS Call Sign: Elevation: 570 Feet Lat: 38°59N Lon: 85°54W

										Pı	ecipi	tation	(incl	nes)													
	Me	ans/	P	recip	itatio	on Total						ays (3	5)	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													
	Medi	ans(1)				Extremes	3			п	aily Pre	сірітатіо	n														
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	3.18	3.34	3.72	2000	4	5.76	1982	.32	1981	11.1	6.6	2.0	.6	.81	1.11	1.57	1.98	2.38	2.81	3.28	3.84	4.57	5.73	6.81			
Feb	2.84	2.26	2.75	1988	2	6.06	1999	.73	1992	9.2	5.9	2.1	.5	.78	1.05	1.46	1.81	2.17	2.53	2.94	3.42	4.05	5.04	5.96			
Mar	3.73	3.26	2.71	1963	5	8.39	1989	1.00	1994	10.7	7.7	2.7	.8	1.30	1.66	2.17	2.60	3.01	3.43	3.90	4.43	5.12	6.19	7.17			
Apr	4.72	4.08	5.78	1998	16	12.11	1998	1.14	1971	11.5	8.6	3.0	1.2	1.31	1.75	2.43	3.03	3.61	4.22	4.89	5.69	6.72	8.35	9.86			
May	5.01	4.07	4.25	1968	24	11.05	1990	1.88	1987	11.0	8.8	3.8	1.4	1.78	2.25	2.93	3.51	4.05	4.62	5.23	5.94	6.86	8.26	9.56			
Jun	4.14	3.93	3.70	1960	23	8.74	1998	.57	1988	9.6	7.3	3.0	1.1	1.41	1.80	2.38	2.86	3.32	3.80	4.32	4.93	5.71	6.92	8.03			
Jul	4.41	4.01	4.00	1971	19	9.18	1992	1.65	1999	9.3	7.3	3.4	1.1	1.79	2.19	2.77	3.24	3.68	4.13	4.62	5.18	5.89	6.98	7.97			
Aug	4.37	4.24	3.39	1995	6	8.05	1995	.56	1987	8.4	6.7	3.0	1.3	1.44	1.85	2.46	2.98	3.48	4.00	4.56	5.22	6.07	7.38	8.60			
Sep	3.02	2.76	3.20	1952	2	6.98	1996	.49	1998	7.7	5.7	2.3	.7	.66	.94	1.39	1.79	2.19	2.61	3.09	3.66	4.42	5.62	6.76			
Oct	3.26	2.63	5.50	1983	21	12.34	1983	.95	1987	7.9	5.8	2.1	.8	.88	1.18	1.65	2.07	2.47	2.90	3.37	3.93	4.66	5.80	6.87			
Nov	4.06	3.81	3.15	1993	15	9.22	1985	1.34	1971	10.0	7.4	2.9	1.2	1.53	1.91	2.46	2.91	3.34	3.77	4.25	4.80	5.50	6.58	7.56			
Dec	3.41	3.22	2.61	2001	17	7.15	1990	.64	1976	10.3	6.5	2.5	.7	1.15	1.47	1.94	2.34	2.73	3.12	3.55	4.06	4.70	5.71	6.63			
Ann	46.15	46.81	5.78	Apr 1998	16	12.34	Oct 1983	.32	Jan 1981	116.7	84.3	32.8	11.4	32.94	35.50	38.78	41.26	43.47	45.60	47.80	50.24	53.19	57.46	61.16			

<sup>+</sup> Also occurred on an earlier date(s)

Complete documentation available from:

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

<sup>#</sup> Denotes amounts of a trace

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>\*\*</sup> Statistics not computed because less than six years out of thirty had measurable precipitation

<sup>(1)</sup> From the 1971-2000 Monthly Normals

<sup>(2)</sup> Derived from station's available digital record: 1948-2001

<sup>(3)</sup> Derived from 1971-2000 serially complete daily data

## 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: 127935** 

**Station: SEYMOUR 2 N, IN** 

Climate Division: IN 8 NWS Call Sign: Elevation: 570 Feet Lat: 38°59N Lon: 85°54W

										Snov	v (incl	hes)															
						Sno	ow To	tals							Mean Number of Days (1)												
	Mean	s/Medi	ians (1)	1					Extre	mes (2)							ow Fa	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	3.8	2.9	1	#	8.4	1996	3	12.0	1996	21	1996	8	9	1977	2.4	1.0	.4	.1	.0	1.5	.2	.1	.0				
Feb	.8	.4	1	#	9.6	1998	6	9.6	1998	12	1977	2	9	1978	1.0	.5	.2	.2	.0	.6	.1	.0	.0				
Mar	2.7	1.0	#	#	9.0	1996	21	16.0	1996	10	1980	3	3	1978	1.1	.7	.3	.2	.0	.5	.2	.1	.0				
Apr	.1	.0	#	0	1.5	1973	10	1.5	1973	2	1973	10	#+	1996	.1	@	.0	.0	.0	.1	.0	.0	.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	.2	.0	#	0	2.7	1993	30	5.2	1993	1	1993	30	#	1993	.1	.1	.0	.0	.0	@	.0	.0	.0				
Nov	.7	.0	#	0	5.0	1975	27	5.7	1971	3	1977	28	#+	1997	.5	.2	.1	@	.0	.3	@	.0	.0				
Dec	2.2	.9	#	#	8.0	1990	28	9.2	1990	7	1990	28	3	1989	1.3	.7	.2	.1	.0	1.4	.4	.1	.0				
Ann	10.5	5.2	N/A	N/A	9.6	Feb 1998	6	16.0	Mar 1996	21	Jan 1996	8	9+	Feb 1978	6.5	3.2	1.2	.6	.0	4.4	.9	.3	.0				

<sup>+</sup> Also occurred on an earlier date(s) #Denotes trace amounts

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

<sup>@</sup> Denotes mean number of days greater than 0 but less than .05

<sup>-9/-9.9</sup> represents missing values Annual statistics for Mean/Median snow depths are not appropriate

<sup>(1)</sup> Derived from Snow Climatology and 1971-2000 daily data

<sup>(2)</sup> Derived from 1971-2000 daily data

# 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: 127935** 

Lon: 85°54W

Lat: 38°59N

**Station: SEYMOUR 2 N, IN** 

Climate Division: IN 8 NWS Call Sign:

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(\*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 5/14 5/09 5/06 5/03 5/01 4/28 4/26 4/22 4/18 32 4/23 4/17 5/03 4/29 4/25 4/20 4/15 4/12 4/07 28 4/22 4/18 4/14 4/12 4/10 4/07 4/05 4/01 3/28 4/02 3/09 24 4/12 4/06 3/29 3/26 3/23 3/19 3/15 20 3/31 3/25 3/21 3/17 3/14 3/10 3/07 3/02 2/24 3/03 2/22 16 3/20 3/13 3/07 2/26 2/17 2/11 2/04 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(\*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 9/28 36 9/23 9/26 9/30 10/02 10/04 10/06 10/08 10/12 32 9/28 10/03 10/06 10/09 10/12 10/15 10/18 10/21 10/26 28 10/09 10/15 10/19 10/22 10/26 10/29 11/02 11/06 11/12 24 10/20 10/26 10/30 11/02 11/06 11/09 11/13 11/17 11/23 20 10/31 11/07 11/13 11/17 11/22 11/26 12/01 12/06 12/14 11/09 11/23 11/28 12/03 12/13 12/19 12/27 16 11/17 12/08 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 164 160 157 154 151 147 143 138 36 169 32 193 186 182 178 174 171 167 162 156 28 219 212 207 203 199 185 178 195 190

229

258

284

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

235

264

290

Derived from 1971-2000 serially complete daily data

250

280

305

241

271

296

24

20

16

Complete documentation available from:

214

241

268

Elevation: 570 Feet

207

234

262

198

224

253

224

252

279

219

247

274

<sup>\*</sup> Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

# 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: SEYMOUR 2 N, IN** 

COOP ID: 127935

Climate Division: IN 8 NWS Call Sign: Elevation: 570 Feet Lat: 38°59N Lon: 85°54W

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree 1	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1149	916	716	388	167	22	0	14	85	364	653	998	5472		
60	994	776	561	251	88	5	0	2	32	242	504	843	4298		
57	901	694	476	179	54	2	0	0	15	180	417	756	3674		
55	839	642	419	137	37	1	0	0	9	145	363	698	3290		
50	695	512	288	59	12	0	0	0	2	75	235	554	2432		
32	253	155	33	0	0	0	0	0	0	0	13	170	624		

Base	Cooling Degree Days (1)														
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
32	127	163	341	605	941	1168	1316	1254	1003	678	350	195	8141		
55	0	6	14	52	265	479	603	541	321	109	10	10	2410		
57	0	2	9	34	220	420	541	479	268	83	4	6	2066		
60	0	0	1	16	162	334	448	388	195	51	1	0	1596		
65	0	0	0	3	85	200	293	246	97	19	0	0	943		
70	0	0	0	0	36	96	151	130	36	6	0	0	455		

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 Ja												Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
40	28	58	172	386	702	935	1078	1013	772	444	181	57	28	86	258	644	1346	2281	3359	4372	5144	5588	5769	5826					
45	9	25	99	261	548	785	923	858	622	304	106	24	9	34	133	394	942	1727	2650	3508	4130	4434	4540	4564					
50	1	8	54	160	398	635	768	703	472	188	55	9	1	9	63	223	621	1256	2024	2727	3199	3387	3442	3451					
55	0	0	27	82	263	486	613	548	329	102	23	2	0	0	27	109	372	858	1471	2019	2348	2450	2473	2475					
60	0	0	6	37	153	339	458	393	205	50	6	0	0	0	6	43	196	535	993	1386	1591	1641	1647	1647					
Base		Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)	•						
50/86	19	42	117	247	441	626	740	686	500	294	113	34	19	61	178	425	866	1492	2232	2918	3418	3712	3825	3859					

(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

- 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