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: 128698

Station: TELL CITY, IN

Climate Division: IN 8

NWS Call Sign:

Elevation: 400 Feet Lat: 37°57N Lon: 86°46W

									ŗ	Гетр	eratui	re (°F)									
	Mea	n (1)						Extr	emes					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	39.0	24.0	31.5	74	1952	1	42.6	1990	-17	1985	21	15.4	1977	1038	0	.0	.0	7.0	8.6	24.0	1.2
Feb	44.5	26.9	35.7	77	1962	14	44.6	1990	-8+	1951	2	22.4	1978	820	0	.0	.0	10.8	4.9	19.8	.3
Mar	54.9	35.4	45.2	84	1986	31	51.9	1973	-1	1980	3	38.1	1978	617	0	.0	.0	21.2	.8	13.3	@
Apr	65.8	44.2	55.0	89+	1989	26	60.1	1981	20	1971	8	49.3	1983	310	10	.0	.0	27.8	.0	3.4	.0
May	75.3	54.0	64.7	95	1953	27	71.2	1991	30+	1963	1	60.1	1981	121	110	.0	.7	30.9	.0	@	.0
Jun	83.7	63.3	73.5	102+	1952	30	76.8	1984	42+	1956	2	68.8	1974	7	262	.0	6.3	30.0	.0	.0	.0
Jul	87.5	67.9	77.7	105	1952	29	81.5	1993	47	1959	2	74.3	1979	0	394	.2	13.0	31.0	.0	.0	.0
Aug	86.3	66.1	76.2	104	1951	31	81.8	1983	46	1986	30	72.3	1976	2	349	.1	10.3	31.0	.0	.0	.0
Sep	80.0	58.9	69.5	106	1954	7	74.8	1998	36+	1974	24	63.7	1974	40	174	@	3.9	30.0	.0	.0	.0
Oct	68.7	46.7	57.7	96	1953	1	64.9	1971	21+	1952	29	51.2	1976	259	33	.0	.1	30.4	.0	2.2	.0
Nov	55.8	38.2	47.0	86	1950	1	53.2	1999	0	1950	26	38.6	1976	541	1	.0	.0	20.7	.3	10.0	.0
Dec	43.9	28.6	36.3	77	1982	3	44.7	1982	-14+	1989	22	24.7	1989	890	0	.0	.0	10.5	4.7	20.0	.4
Ann	65.5	46.2	55.8	106	Sep 1954	7	81.8	Aug 1983	-17	Jan 1985	21	15.4	Jan 1977	4645	1333	.3	34.3	281.3	19.3	92.7	1.9

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 059-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

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: TELL CITY, IN COOP ID: 128698

Climate Division: IN 8 NWS Call Sign: Elevation: 400 Feet Lat: 37°57N Lon: 86°46W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recipi	tatio	on Total					of D	Numbo)	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	•			"	any 11c	cipitatio	11		Th	ese value	s were det	ermined	from the i	incomplet	te gamma	distribut	ion	
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	3.38	2.94	3.51	1999	23	7.32	1996	.48	1981	9.3	6.1	2.1	.9	.88	1.20	1.69	2.12	2.55	2.99	3.49	4.07	4.84	6.05	7.18
Feb	3.18	2.94	3.09	1989	13	8.87	1989	.51	1978	8.5	5.8	1.9	.8	.87	1.17	1.63	2.03	2.42	2.84	3.29	3.83	4.53	5.63	6.65
Mar	4.46	3.84	4.75	1997	2	13.16	1997	2.23	1990	10.9	8.0	2.8	1.0	1.86	2.26	2.83	3.30	3.74	4.19	4.67	5.23	5.93	7.00	7.97
Apr	4.49	3.98	6.05	1970	28	10.04	1979	1.05	1986	10.7	7.2	2.9	1.2	1.52	1.94	2.56	3.09	3.59	4.11	4.68	5.34	6.20	7.51	8.73
May	5.22	4.37	3.75	1961	8	13.27	1995	1.63	1987	11.4	8.3	3.8	1.3	1.75	2.25	2.97	3.59	4.18	4.78	5.45	6.23	7.22	8.77	10.19
Jun	4.34	4.45	4.37	2001	21	8.98	1998	1.09	1984	9.6	7.6	2.9	1.0	1.32	1.73	2.35	2.88	3.39	3.93	4.52	5.21	6.10	7.49	8.79
Jul	4.50	4.18	3.20	1981	15	12.45	1979	.81	1994	8.9	6.7	3.3	1.4	1.20	1.63	2.28	2.85	3.41	4.00	4.65	5.42	6.43	8.01	9.49
Aug	3.81	3.12	6.24	1950	1	11.50	1974	.34	1987	7.7	5.5	2.6	1.1	.55	.86	1.41	1.94	2.49	3.10	3.80	4.66	5.81	7.70	9.52
Sep	3.39	3.37	3.60	1965	12	8.44	1996	.26	1999	7.6	5.3	2.1	1.0	.50	.78	1.27	1.74	2.23	2.77	3.39	4.14	5.16	6.82	8.41
Oct	2.98	2.71	2.72	1999	10	7.15	1983	.30	2000	7.5	5.2	2.0	.7	.79	1.08	1.51	1.89	2.26	2.65	3.08	3.60	4.27	5.32	6.31
Nov	4.05	3.33	3.62	1957	14	9.50	1973	1.05	1976	9.6	6.9	3.0	1.1	1.25	1.64	2.21	2.70	3.18	3.67	4.22	4.85	5.67	6.96	8.14
Dec	4.02	3.42	2.31	1957	7	9.17	1990	.61	1976	10.4	7.1	2.9	1.2	1.19	1.57	2.14	2.64	3.12	3.62	4.17	4.82	5.66	6.97	8.19
Ann	47.82	47.47	6.24	Aug 1950	1	13.27	May 1995	.26	Sep 1999	112.1	79.7	32.3	12.7	35.31	37.77	40.90	43.26	45.34	47.35	49.42	51.70	54.46	58.44	61.87

⁺ 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

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: 128698

Station: TELL CITY, IN

Climate Division: IN 8 NWS Call Sign:

Elevation: 400 Feet Lat: 37°57N Lon: 86°46W

										Snov	w (incl	hes)											
						Sn	ow To	tals									Mea	n Nu	mber	of Day	yS (1)		
	Mean	s/Medi	ans (1)	1					Extre	mes (2)							ow Fa					Depth esholo	
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	4.9	.0	1	#	12.0	1978	17	26.8	1978	16	1978	20	7	1978	1.8	1.4	.6	.2	.1	3.0	1.4	1.0	.6
Feb	2.2	.0	1	#	6.8	1993	16	11.0	1979	10	1998	6	3	1978	1.3	.9	.2	@	.0	3.2	2.0	.7	.0
Mar	.7	.0	#	0	4.0	1978	3	4.5	1978	5	1980	2	#+	1998	.3	.2	.1	.0	.0	.4	.2	.0	.0
Apr	.1	.0	#	0	2.5	1973	10	2.5	1973	3	1973	10	#+	1982	.1	.1	.0	.0	.0	.1	@	.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	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.4	.0	#	0	2.5	1977	27	4.5	1971	3	1977	27	#+	1992	.2	.2	.0	.0	.0	.1	@	.0	.0
Dec	1.1	.0	#	0	6.0	1984	6	6.0	1984	6	1984	7	1	1984	.6	.3	.2	.1	.0	.4	.2	.1	.0
Ann	9.4	.0	N/A	N/A	12.0	Jan 1978	17	26.8	Jan 1978	16	Jan 1978	20	7	Jan 1978	4.3	3.1	1.1	.3	.1	7.2	3.8	1.8	.6

⁺ 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

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: 128698

Station: TELL CITY, IN

Climate Division: IN 8

NWS Call Sign:

Elevation: 400 Feet

Lat: 37°57N

Lon:	86	46 W	

				Freez	ze 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	5/04	4/29	4/25	4/22	4/20	4/17	4/14	4/10	4/05
32	4/23	4/18	4/15	4/12	4/10	4/07	4/05	4/01	3/28
28	4/15	4/09	4/05	4/02	3/30	3/26	3/23	3/19	3/13
24	4/01	3/26	3/22	3/18	3/14	3/11	3/07	3/03	2/24
20	3/21	3/13	3/08	3/04	2/28	2/24	2/19	2/14	2/07
16	3/13	3/04	2/26	2/20	2/15	2/11	2/05	1/30	1/21
		•	Fal	l Freeze Da	tes (Month/D	ay)			
Tomp (E)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/03	10/07	10/10	10/13	10/16	10/18	10/21	10/24	10/28
32	10/08	10/14	10/18	10/21	10/24	10/28	10/31	11/04	11/09
28	10/25	10/30	11/03	11/06	11/09	11/12	11/15	11/19	11/25
24	10/31	11/07	11/12	11/17	11/21	11/24	11/29	12/04	12/11
20	11/13	11/20	11/25	11/30	12/04	12/08	12/12	12/17	12/24
16	11/30	12/07	12/12	12/16	12/20	12/24	12/28	1/02	1/08
				Freeze F	ree Period	•	•	1	•
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	197	191	186	182	178	175	171	166	160
32	215	209	204	200	197	193	189	185	178
28	246	238	233	228	224	219	215	209	202
24	275	267	261	255	250	245	240	234	225
20	305	296	289	283	278	273	267	260	251
16	339	328	320	313	307	300	293	285	274

^{*} 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

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: 128698

Station: TELL CITY, IN

Climate Division: IN 8 NWS Call Sign: Elevation: 400 Feet Lat: 37°57N Lon: 86°46W

				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	1038	820	617	310	121	7	0	2	40	259	541	890	4645
60	883	680	470	187	57	1	0	0	11	153	399	735	3576
57	799	602	385	127	32	0	0	0	4	104	318	652	3023
55	740	550	332	94	20	0	0	0	2	77	268	593	2676
50	596	422	216	36	6	0	0	0	0	31	163	454	1924
32	203	103	17	0	0	0	0	0	0	0	7	111	441

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	188	207	423	690	1012	1245	1417	1370	1124	797	456	244	9173
55	12	10	25	94	319	555	704	657	437	161	28	13	3015
57	9	7	16	67	268	495	642	595	379	125	18	9	2630
60	0	0	9	37	200	406	549	502	295	81	8	0	2087
65	0	0	0	10	110	262	394	349	174	33	1	0	1333
70	0	0	0	2	48	136	243	207	84	9	0	0	729

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (N	(Ionthly)								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	47	89	236	470	777	1018	1178	1132	892	558	262	88	47	136	372	842	1619	2637	3815	4947	5839	6397	6659	6747
45	21	46	140	335	622	868	1023	977	742	408	162	44	21	67	207	542	1164	2032	3055	4032	4774	5182	5344	5388
50	5	16	81	213	467	718	868	822	592	272	93	20	5	21	102	315	782	1500	2368	3190	3782	4054	4147	4167
55	0	2	37	126	321	568	713	667	445	164	45	3	0	2	39	165	486	1054	1767	2434	2879	3043	3088	3091
60	0	0	11	61	195	419	558	512	305	87	14	0	0	0	11	72	267	686	1244	1756	2061	2148	2162	2162
Base	se Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)		
50/86	28	55	144	286	495	698	820	785	593	343	142	47	28	83	227	513	1008	1706	2526	3311	3904	4247	4389	4436

(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