

Climatography of the United States

No. 20

1971-2000

Station: EFFINGHAM, IL

COOP ID: 112687

Climate Division: IL 7

NWS Call Sign: EFF

Elevation: 625 Feet

Lat: 39°07N

Lon: 88°37W

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	34.8	17.8	26.3	72	1950	25	38.3	1990	-29	1915	24	9.7	1977	1200	0	.0	.0	3.9	13.2	27.2	3.6
Feb	40.5	21.6	31.1	78	1972	29	39.9	1998	-19	1982	11	16.8	1978	950	0	.0	.0	7.3	7.7	22.2	2.4
Mar	51.7	31.8	41.8	89	1929	24	49.1	1973	-11	1978	5	32.6	1978	721	0	.0	.0	17.3	1.9	16.6	.2
Apr	63.5	41.9	52.7	91+	1930	11	57.9	1981	21+	1994	7	47.7	1983	374	5	.0	.0	26.6	.0	4.6	.0
May	73.8	52.0	62.9	98	1934	31	70.4	1991	28+	1944	7	57.2	1981	156	92	.0	.7	30.8	.0	.3	.0
Jun	83.2	61.5	72.4	106	1954	26	77.3	1971	35	1917	16	67.0	1982	13	233	.1	6.2	30.0	.0	.0	.0
Jul	86.9	65.7	76.3	111+	1954	14	79.2	1986	45+	1947	23	73.0	1975	0	350	.3	11.1	31.0	.0	.0	.0
Aug	85.0	63.3	74.2	110	1918	4	80.4	1995	39	1915	31	69.8	1992	12	296	.3	8.0	31.0	.0	.0	.0
Sep	78.1	54.8	66.5	105+	1954	5	71.3	1998	24	1928	26	60.9+	1975	73	117	.0	2.7	30.0	.0	.0	.0
Oct	66.6	43.2	54.9	95+	1922	4	63.5	1971	15	1952	29	47.5	1976	333	21	.0	@	29.5	.0	4.6	.0
Nov	52.2	33.7	43.0	83	1933	1	49.5	1999	-6	1950	25	34.2	1976	661	0	.0	.0	16.8	1.0	14.4	.0
Dec	39.9	23.1	31.5	74	1948	15	40.3	1982	-17	1924	28	19.1	1983	1040	0	.0	.0	6.6	7.2	24.5	1.8
Ann	63.0	42.5	52.8	111+	Jul 1954	14	80.4	Aug 1995	-29	Jan 1915	24	9.7	Jan 1977	5533	1114	.7	28.7	260.8	31.0	114.4	8.0

+ 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: 1901-2001

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

026-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: EFFINGHAM, IL

COOP ID: 112687

Climate Division: IL 7

NWS Call Sign: EFF

Elevation: 625 Feet

Lat: 39°07N

Lon: 88°37W

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	2.38	1.84	3.82	1950	3	6.41	1999	.05	1986	9.7	5.4	1.4	.4	.29	.48	.82	1.15	1.50	1.89	2.34	2.90	3.66	4.91	6.12
Feb	2.51	2.44	2.75	1999	7	5.95	1990	.66	1972	8.3	4.8	1.6	.6	.59	.83	1.19	1.52	1.85	2.19	2.58	3.04	3.64	4.59	5.49
Mar	3.61	3.75	3.30	1922	14	7.68	1973	1.01	1972	10.9	7.2	2.5	.7	1.18	1.52	2.02	2.45	2.87	3.29	3.76	4.31	5.02	6.11	7.13
Apr	4.09	3.72	2.75	1929	8	9.57	1994	.90	1976	11.9	7.9	2.5	.8	1.25	1.64	2.22	2.72	3.20	3.70	4.25	4.90	5.74	7.04	8.25
May	4.46	4.24	4.41	1946	1	9.61	1995	.93	1972	10.8	8.0	3.4	1.1	1.46	1.88	2.51	3.03	3.54	4.07	4.65	5.32	6.19	7.53	8.78
Jun	4.26	4.30	5.02	1970	16	9.03	2000	.34	1992	9.9	7.1	2.7	1.0	.77	1.15	1.78	2.36	2.95	3.59	4.32	5.20	6.37	8.26	10.05
Jul	4.51	3.82	5.25	2000	5	11.66	2000	.73	1983	9.3	6.5	3.0	1.4	1.09	1.51	2.17	2.76	3.34	3.95	4.64	5.46	6.53	8.23	9.82
Aug	2.92	2.80	5.66	1973	13	6.66	1973	.44	1983	7.7	5.0	2.0	.8	.61	.88	1.31	1.70	2.09	2.51	2.98	3.55	4.30	5.50	6.64
Sep	3.04	2.47	5.22	1955	29	8.63	1984	.19	1985	7.1	4.8	2.2	.9	.42	.66	1.10	1.52	1.96	2.45	3.02	3.71	4.65	6.18	7.66
Oct	2.95	2.61	3.99	1949	11	7.76	1983	.94	1985	8.1	5.1	1.9	.8	.94	1.22	1.64	1.99	2.33	2.68	3.07	3.52	4.11	5.02	5.86
Nov	4.05	3.78	3.17+	1993	14	10.36	1985	.39	1976	10.3	6.8	2.8	1.1	.86	1.24	1.83	2.37	2.91	3.49	4.14	4.93	5.96	7.61	9.16
Dec	3.27	2.41	3.27	1990	30	8.89	1990	.30	1976	10.0	5.8	2.1	.9	.64	.93	1.41	1.85	2.30	2.78	3.32	3.98	4.84	6.24	7.56
Ann	42.05	40.97	5.66	Aug 1973	13	11.66	Jul 2000	.05	Jan 1986	114.0	74.4	28.1	10.5	30.54	32.78	35.65	37.82	39.74	41.59	43.50	45.61	48.16	51.86	55.04

+ 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: 1901-2001

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

Complete documentation available from:
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

Station: EFFINGHAM, IL

COOP ID: 112687

Climate Division: IL 7

NWS Call Sign: EFF

Elevation: 625 Feet

Lat: 39°07N

Lon: 88°37W

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	5.7	3.6	2	1	10.2	1987	10	23.7	1979	15	1979	31	8	1977	4.2	2.6	.8	.2	.1	9.4	5.6	3.2	.9
Feb	5.0	4.0	2	1	9.0	1993	26	21.5	1993	16	1982	9	11	1982	2.8	1.7	.6	.2	.0	7.7	5.3	3.7	1.9
Mar	3.3	1.6	#	#	9.0	1990	24	17.2	1978	14	1978	10	7	1978	1.3	.9	.4	.2	.0	1.5	.6	.3	.0
Apr	.2	.0	#	0	3.0	1973	10	3.0	1973	3	1973	10	#+	2000	.2	.1	@	.0	.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	.0	.0	#	0	.4	1993	31	.4	1993	#	1993	31	#	1993	@	.0	.0	.0	.0	.0	.0	.0	.0
Nov	1.3	.0	#	0	10.0	1980	27	13.5	1980	10	1980	27	1	1980	.6	.5	.1	.1	@	.7	.3	.3	@
Dec	3.7	2.0	1	#	14.5	1973	20	25.5	1973	16	1973	23	4	1973	2.3	1.5	.4	.2	@	5.0	2.8	1.0	.2
Ann	19.2	11.2	N/A	N/A	14.5	Dec 1973	20	25.5	Dec 1973	16+	Feb 1982	9	11	Feb 1982	11.4	7.3	2.3	.9	.1	24.3	14.6	8.5	3.0

+ 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

Climatography of the United States

No. 20 1971-2000

Station: EFFINGHAM, IL

COOP ID: 112687

Climate Division: IL 7

NWS Call Sign: EFF

Elevation: 625 Feet

Lat: 39°07N

Lon: 88°37W

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	5/14	5/09	5/05	5/02	4/29	4/26	4/23	4/19	4/14
32	5/03	4/27	4/23	4/19	4/16	4/12	4/09	4/04	3/30
28	4/16	4/12	4/09	4/07	4/04	4/02	3/30	3/27	3/23
24	4/10	4/05	4/01	3/29	3/26	3/23	3/19	3/15	3/10
20	3/25	3/21	3/18	3/16	3/14	3/12	3/10	3/07	3/04
16	3/18	3/11	3/07	3/02	2/27	2/23	2/19	2/14	2/07
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	9/28	10/01	10/03	10/06	10/08	10/11	10/14	10/18
32	10/03	10/07	10/11	10/14	10/17	10/19	10/22	10/26	10/31
28	10/12	10/18	10/22	10/26	10/29	11/01	11/05	11/09	11/14
24	10/26	11/02	11/06	11/10	11/13	11/17	11/21	11/25	12/01
20	11/02	11/08	11/13	11/17	11/21	11/24	11/28	12/03	12/09
16	11/15	11/21	11/26	11/30	12/04	12/07	12/11	12/16	12/22
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	180	173	168	163	159	155	151	146	138
32	206	198	192	188	183	179	174	169	161
28	227	220	215	211	207	203	199	194	187
24	253	246	241	236	232	228	223	218	211
20	271	264	259	255	251	247	242	237	230
16	305	296	290	284	279	274	269	262	253

* 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

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

Station: EFFINGHAM, IL

COOP ID: 112687

Climate Division: IL 7 NWS Call Sign: EFF Elevation: 625 Feet Lat: 39°07N Lon: 88°37W

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	1200	950	721	374	156	13	0	12	73	333	661	1040	5533
60	1045	810	569	242	82	3	0	2	26	214	513	885	4391
57	952	729	484	174	50	1	0	0	12	156	430	793	3781
55	891	678	427	135	34	0	0	0	6	123	375	738	3407
50	749	548	297	61	11	0	0	0	1	60	252	593	2572
32	300	185	39	0	0	0	0	0	0	0	22	194	740

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	123	160	341	621	958	1210	1373	1307	1034	711	351	177	8366
55	1	8	15	66	279	520	660	594	350	121	15	8	2637
57	0	3	10	45	233	461	598	532	296	92	9	2	2281
60	0	0	3	23	172	373	505	441	220	57	3	0	1797
65	0	0	0	5	92	233	350	296	117	21	0	0	1114
70	0	0	0	1	39	117	201	172	49	6	0	0	585

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	26	52	180	405	728	979	1142	1069	809	481	187	47	26	78	258	663	1391	2370	3512	4581	5390	5871	6058	6105
45	8	25	100	274	575	829	987	914	660	338	106	21	8	33	133	407	982	1811	2798	3712	4372	4710	4816	4837
50	2	9	55	168	422	679	832	759	512	216	56	7	2	11	66	234	656	1335	2167	2926	3438	3654	3710	3717
55	0	1	26	92	281	529	677	604	367	123	24	1	0	1	27	119	400	929	1606	2210	2577	2700	2724	2725
60	0	0	8	42	163	383	522	450	241	59	6	0	0	0	8	50	213	596	1118	1568	1809	1868	1874	1874
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	13	37	109	238	450	658	789	732	528	300	109	28	13	50	159	397	847	1505	2294	3026	3554	3854	3963	3991

(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