

Climatology of the United States

No. 20

1971-2000

Station: CORNING, IA

COOP ID: 131833

Climate Division: IA 7

NWS Call Sign:

Elevation: 1,215 Feet Lat: 40° 59N

Lon: 94° 45W

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	30.6	10.7	20.7	68	1981	25	32.0	1989	-32+	1912	12	7.9	1979	1376	0	.0	.0	2.0	16.0	30.4	8.7
Feb	36.4	15.8	26.1	79+	1930	20	36.5	1987	-32	1905	13	11.6	1979	1089	0	.0	.0	5.5	11.5	26.6	5.1
Mar	48.5	26.5	37.5	88	1986	30	43.2	2000	-22	1948	11	28.6	1975	852	0	.0	.0	14.4	3.5	23.1	.7
Apr	61.1	37.7	49.4	93	1910	28	55.4	1981	3	1975	3	44.1	1983	470	3	.0	.2	24.5	.4	9.6	.0
May	71.9	48.9	60.4	103	1934	30	66.8	1977	21	1908	2	54.7	1997	201	57	.0	.2	30.8	.0	.9	.0
Jun	81.6	58.8	70.2	106	1936	26	74.9	1988	34	1915	9	64.5	1982	25	182	.2	3.7	30.0	.0	.0	.0
Jul	86.1	63.5	74.8	115	1936	25	80.4	1974	42+	1971	30	70.2	1992	5	310	.6	9.1	31.0	.0	.0	.0
Aug	84.3	61.3	72.8	112	1936	18	80.8	1983	34	1915	30	66.3	1992	24	265	.5	7.0	31.0	.0	.0	.0
Sep	76.7	51.8	64.3	104	1939	7	71.0	1998	20+	1984	29	57.9	1993	109	87	.0	2.4	29.8	.0	.8	.0
Oct	64.8	39.9	52.4	93+	1953	2	58.1	1971	-3	1925	30	46.5	1976	396	4	.0	.1	28.0	@	8.0	.0
Nov	47.7	27.4	37.6	82	1968	2	46.0	1999	-14	1964	30	29.0	1991	823	0	.0	.0	13.9	3.7	22.3	.5
Dec	34.4	16.0	25.2	70	1946	8	31.1	1987	-32	1924	28	9.5	1983	1234	0	.0	.0	3.8	12.6	29.6	4.8
Ann	60.3	38.2	49.3	115	Jul 1936	25	80.8	Aug 1983	-32+	Dec 1924	28	7.9	Jan 1979	6604	908	1.3	22.7	244.7	47.7	151.3	19.8

+ 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: 1896-2001

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

032-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: CORNING, IA

COOP ID: 131833

Climate Division: IA 7

NWS Call Sign:

Elevation: 1,215 Feet Lat: 40°59N

Lon: 94°45W

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	.91	.73	2.60	1975	19	4.05	1975	.00+	1986	4.9	2.5	.4	.1	.00	.08	.24	.38	.54	.70	.90	1.13	1.46	2.00	2.52
Feb	1.02	.77	2.13	1911	17	3.74	1973	.22	1996	5.4	3.0	.4	.1	.15	.24	.39	.53	.67	.83	1.02	1.24	1.54	2.03	2.50
Mar	2.35	2.19	2.32	1982	19	7.64	1973	.08+	1994	7.1	5.4	1.6	.4	.20	.36	.67	1.00	1.36	1.76	2.25	2.86	3.70	5.10	6.48
Apr	3.47	2.70	4.25	1974	21	8.06	1986	1.00	1989	9.3	6.5	2.2	.9	.83	1.15	1.66	2.11	2.56	3.04	3.57	4.20	5.04	6.36	7.60
May	4.55	4.52	4.11	1950	9	10.02	1996	1.50	1988	10.7	8.3	3.5	.9	1.29	1.72	2.38	2.95	3.50	4.08	4.72	5.48	6.46	7.99	9.43
Jun	4.50	4.50	5.05	1941	2	10.08	1984	.97	1988	9.8	7.4	3.3	1.3	1.37	1.80	2.44	2.99	3.52	4.07	4.68	5.40	6.32	7.76	9.10
Jul	4.52	3.92	4.33	1900	16	14.14	1993	.49	1974	8.4	6.3	3.1	1.6	.72	1.11	1.76	2.39	3.03	3.73	4.53	5.52	6.83	8.96	11.00
Aug	4.18	3.16	8.02	1903	27	14.67	1977	.58	1984	8.8	5.8	2.4	1.0	.68	1.04	1.65	2.23	2.82	3.47	4.21	5.11	6.31	8.27	10.14
Sep	4.40	3.51	5.00	1914	1	12.82	1972	.86	1990	7.6	5.9	2.6	1.3	.78	1.17	1.81	2.41	3.03	3.69	4.45	5.37	6.59	8.57	10.45
Oct	2.63	2.18	4.63	1914	8	6.29	1977	.24	1999	6.9	4.5	1.8	.6	.48	.71	1.10	1.45	1.82	2.21	2.66	3.21	3.93	5.10	6.21
Nov	2.20	1.89	2.25	1919	9	5.23	1983	.00	1976	6.2	4.3	1.5	.6	.15	.37	.72	1.05	1.39	1.76	2.19	2.72	3.43	4.59	5.72
Dec	1.20	1.05	1.75	1982	28	2.98	1982	.12+	1979	5.2	3.4	.6	.2	.19	.30	.47	.63	.81	.99	1.20	1.46	1.81	2.37	2.91
Ann	35.93	33.83	8.02	Aug 1903	27	14.67	Aug 1977	.00+	Jan 1986	90.3	63.3	23.4	9.0	22.12	24.65	27.96	30.54	32.86	35.13	37.51	40.17	43.43	48.24	52.46

+ 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: 1896-2001

(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: CORNING, IA

COOP ID: 131833

Climate Division: IA 7

NWS Call Sign:

Elevation: 1,215 Feet

Lat: 40° 59N

Lon: 94° 45W

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	4.3	2	1	13.0	1996	27	15.0	1973	16	1996	28	8	1979	2.7	2.0	.7	.2	.1	5.4	1.9	.8	.4
Feb	6.0	4.0	1	1	10.0	1999	23	14.5+	1999	15	1996	5	5	1978	2.6	1.8	.8	.3	@	7.3	5.2	2.5	.8
Mar	3.2	3.0	#	#	15.0	1998	9	15.0	1998	16	1998	13	5	1998	1.5	1.1	.4	.1	@	1.3	.6	.3	.0
Apr	1.3	.0	#	0	4.5	1979	2	10.0	1997	5+	1997	11	5	1979	.4	.4	.3	.0	.0	.3	.2	@	.0
May	.0	.0	0	0	.5	1994	1	.5	1994	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	5.0	1997	26	5.0	1997	5	1997	27	#+	1997	@	@	@	@	.0	.1	.1	.1	.0
Nov	2.1	.5	#	0	7.0	1992	26	8.0	1972	5	1987	29	#+	2000	1.0	.6	.2	.1	.0	.5	.1	@	.0
Dec	3.3	2.0	1	#	8.0	1972	12	9.5	1972	19	2000	27	15	2000	2.8	2.0	.8	.2	.0	2.5	.9	.6	.1
Ann	21.8	13.8	N/A	N/A	15.0	Mar 1998	9	15.0+	Mar 1998	19	Dec 2000	27	15	Dec 2000	11.0	7.9	3.2	.9	.1	17.4	9.0	4.3	1.3

+ 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: CORNING, IA

COOP ID: 131833

Climate Division: IA 7

NWS Call Sign:

Elevation: 1,215 Feet

Lat: 40° 59N

Lon: 94° 45W

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	5/22	5/16	5/13	5/09	5/06	5/03	4/29	4/26	4/20
32	5/10	5/05	5/02	4/30	4/27	4/25	4/22	4/19	4/15
28	4/29	4/24	4/21	4/18	4/15	4/13	4/10	4/06	4/02
24	4/24	4/19	4/15	4/12	4/09	4/06	4/03	3/30	3/25
20	4/13	4/07	4/03	3/31	3/28	3/25	3/22	3/18	3/13
16	4/04	3/29	3/24	3/21	3/17	3/14	3/10	3/06	2/28
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	9/13	9/18	9/21	9/24	9/26	9/29	10/02	10/05	10/10
32	9/18	9/24	9/28	10/02	10/05	10/08	10/12	10/16	10/22
28	9/26	10/01	10/06	10/09	10/12	10/15	10/19	10/23	10/29
24	10/06	10/13	10/18	10/22	10/26	10/30	11/03	11/08	11/15
20	10/16	10/23	10/28	11/01	11/05	11/09	11/13	11/18	11/24
16	10/23	10/30	11/05	11/10	11/14	11/19	11/23	11/29	12/07
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	166	158	152	147	143	138	133	127	119
32	180	173	168	164	160	156	152	147	140
28	200	193	188	183	179	175	171	165	158
24	225	216	210	204	199	194	189	183	174
20	245	237	231	226	221	216	211	205	197
16	270	260	253	247	241	235	229	222	212

* 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: CORNING, IA

COOP ID: 131833

Climate Division: IA 7

NWS Call Sign:

Elevation: 1,215 Feet Lat: 40° 59N Lon: 94° 45W

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	1376	1089	852	470	201	25	5	24	109	396	823	1234	6604
60	1221	949	697	330	112	5	0	6	45	258	673	1079	5375
57	1128	869	608	254	72	2	0	2	22	187	586	986	4716
55	1066	817	551	208	51	1	0	0	13	146	530	924	4307
50	914	686	410	113	18	0	0	0	2	69	394	778	3384
32	425	292	82	1	0	0	0	0	0	0	77	317	1194

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	72	127	253	523	880	1147	1328	1265	968	631	244	106	7544
55	0	8	9	40	218	457	615	552	290	63	7	0	2259
57	0	4	4	26	177	399	553	491	239	43	3	0	1939
60	0	0	0	12	123	312	460	403	172	21	0	0	1503
65	0	0	0	3	57	182	310	265	87	4	0	0	908
70	0	0	0	0	20	83	175	155	34	0	0	0	467

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	2	22	110	314	632	902	1072	1009	720	388	93	8	2	24	134	448	1080	1982	3054	4063	4783	5171	5264	5272
45	0	5	56	203	477	752	917	854	571	256	45	4	0	5	61	264	741	1493	2410	3264	3835	4091	4136	4140
50	0	1	25	114	336	602	762	699	426	157	17	0	0	1	26	140	476	1078	1840	2539	2965	3122	3139	3139
55	0	0	5	59	205	453	607	544	295	77	4	0	0	0	5	64	269	722	1329	1873	2168	2245	2249	2249
60	0	0	2	26	105	310	452	391	178	32	0	0	0	0	2	28	133	443	895	1286	1464	1496	1496	1496
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	2	24	85	204	390	594	721	670	460	256	70	10	2	26	111	315	705	1299	2020	2690	3150	3406	3476	3486

(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