### 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: GENESEO, IL 1971-2000 COOP ID: 113384

Climate Division: IL 1 NWS Call Sign: Elevation: 639 Feet Lat: 41°27N Lon: 90°09W

									r	Tempe	eratur	re (°F)									
	Mea	<b>n</b> (1)						Extr	emes					Degree Base To	Days (1) emp 65		Mean	Numb	er of I	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	28.7	13.4	21.1	66	1989	31	33.1	1990	-23+	1985	20	8.1	1977	1363	0	.0	.0	1.2	18.1	29.6	6.7
Feb	34.4	19.3	26.9	71	2000	25	37.5	1998	-24	1996	3	14.4	1979	1068	0	.0	.0	3.2	12.0	24.9	3.3
Mar	47.2	29.5	38.4	87	1986	29	45.5	1973	-13	1962	1	31.0	1984	826	0	.0	.0	11.8	3.4	21.0	.1
Apr	61.1	40.2	50.7	92	1986	25	56.9	1977	12	1982	7	44.8	1975	436	5	.0	.1	24.8	.2	6.1	.0
May	73.1	51.6	62.4	95+	1991	28	69.9	1977	26	1966	10	56.5	1997	167	84	.0	1.2	30.7	.0	.2	.0
Jun	82.4	61.3	71.9	101	1971	19	78.0	1971	39+	1972	11	67.5	1982	14	218	.2	5.2	30.0	.0	.0	.0
Jul	85.7	65.7	75.7	103+	1983	22	79.7	1983	47+	1972	5	70.6	1992	1	334	.3	8.7	31.0	.0	.0	.0
Aug	83.2	63.5	73.4	103	1988	17	79.1	1995	40	1986	28	67.7	1992	13	271	.3	5.6	31.0	.0	.0	.0
Sep	75.7	54.9	65.3	99	1971	8	70.2	1971	31+	1995	23	60.1	1993	80	88	.0	1.9	29.9	.0	.2	.0
Oct	63.3	43.2	53.3	92	1997	3	61.1	1971	19	1988	30	47.4	1988	372	9	.0	.1	27.9	.0	3.9	.0
Nov	46.9	31.1	39.0	79	2000	1	45.9	1999	-7+	1977	26	31.1	1976	780	0	.0	.0	12.3	3.0	18.0	.2
Dec	33.4	19.2	26.3	70	1998	4	35.5	1982	-20	1983	24	13.5	1983	1201	0	.0	.0	2.3	12.5	28.0	3.5
Ann	59.6	41.1	50.4	103+	Aug 1988	17	79.7	Jul 1983	-24	Feb 1996	3	8.1	Jan 1977	6321	1009	.8	22.8	236.1	49.2	131.9	13.8

<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 032-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

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**COOP ID: 113384** 

Station: GENESEO, IL

Climate Division: IL 1 NWS Call Sign: Elevation: 639 Feet Lat: 41°27N Lon: 90°09W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total					ean N of D	ays (3	5)	Proba	ability th		nonthly/	annual j	precipita ated an	babilit ation wi nount vs Proba	ll be equ		less tha	in the
	Medi	ans(1)				Extremes	•			ь п	any Pre	стриацо	n		Th	ese value	s were det	termined	from the	incomplet	e gamma	distributi	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	1.52	1.41	3.05	1960	12	3.72	1974	.31	1986	8.5	4.1	.6	.2	.35	.50	.72	.92	1.12	1.33	1.56	1.84	2.21	2.80	3.35
Feb	1.58	1.32	1.86	1985	21	3.97	1997	.51	1991	7.0	3.7	.9	.2	.43	.58	.81	1.01	1.21	1.41	1.64	1.90	2.25	2.80	3.31
Mar	2.69	2.34	2.03	1998	17	5.79	1998	.63	1981	10.0	5.6	1.7	.7	.57	.82	1.21	1.57	1.93	2.31	2.74	3.26	3.95	5.04	6.07
Apr	3.74	3.29	3.01	1973	21	7.31	1973	1.54	1977	10.5	6.7	2.4	1.0	1.44	1.79	2.29	2.70	3.09	3.49	3.92	4.42	5.06	6.03	6.92
May	4.21	3.88	3.93	1974	16	12.19	1974	.55	1992	11.2	7.3	2.5	1.2	.95	1.34	1.95	2.51	3.06	3.65	4.31	5.10	6.14	7.80	9.36
Jun	4.20	3.90	4.03	1990	29	11.58	1990	.60	1991	10.1	6.8	2.7	1.2	.80	1.18	1.80	2.36	2.94	3.56	4.27	5.12	6.24	8.06	9.78
Jul	3.90	3.42	4.88	1969	17	12.85	1992	.35	1991	9.6	6.4	2.6	1.0	.86	1.22	1.80	2.31	2.83	3.38	4.00	4.74	5.71	7.26	8.72
Aug	4.32	3.46	4.85	1951	29	13.69	1987	.52	1976	9.3	6.4	2.6	1.3	.63	1.00	1.62	2.22	2.84	3.52	4.31	5.28	6.58	8.69	10.72
Sep	3.29	2.91	4.52	1961	13	7.09	1989	.05	1979	7.9	5.2	2.4	.8	.55	.83	1.31	1.76	2.22	2.73	3.31	4.01	4.95	6.47	7.92
Oct	3.01	2.52	4.75	1998	17	9.36	1998	.70	1975	8.7	5.3	1.9	.6	.64	.92	1.36	1.76	2.16	2.59	3.07	3.65	4.41	5.63	6.78
Nov	2.82	2.75	2.47	1977	1	6.70	1985	.61	1976	9.9	5.9	1.8	.5	.66	.93	1.34	1.71	2.07	2.46	2.90	3.42	4.10	5.18	6.20
Dec	2.15	1.99	2.56	1982	2	4.69	1987	.25	1976	8.5	4.8	1.3	.4	.47	.67	.98	1.27	1.56	1.86	2.20	2.61	3.15	4.01	4.83
Ann	37.43	37.66	4.88	Jul 1969	17	13.69	Aug 1987	.05	Sep 1979	111.2	68.2	23.4	9.1	27.69	29.60	32.04	33.88	35.50	37.07	38.68	40.45	42.59	45.69	48.35

<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

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Station: GENESEO, IL

Climate Division: IL 1 NWS Call Sign:

Elevation: 639 Feet Lat: 41°27N

Lon: 90°09W

**COOP ID: 113384** 

										Snov	w (inc	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	<b>ys</b> (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	Day	Highest Monthly Mean Snow Depth	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10			
Jan	6.4	7.3	4	3	16.0	1971	3	17.3	1995	29	1979	18	20	1979	5.0	2.6	.8	.3	.1	15.3	11.5	7.3	2.8
Feb	4.9	3.4	3	2	10.0	2000	18	17.0	1994	19	1979	18	16	1979	3.2	1.8	.6	.3	@	13.1	9.2	5.7	1.4
Mar	3.3	1.5	1	#	8.0	1972	29	18.0	1972	10	1994	2	3	1979	2.0	1.2	.3	.1	.0	4.0	2.3	.9	.1
Apr	1.4	.0	#	0	8.5	1975	2	9.7	1982	9	1975	2	1	1982	.3	.2	.2	.1	.0	.5	.3	.2	.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	.1	.0	0	0	1.3	1972	18	1.3	1972	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
Nov	2.3	1.0	#	#	8.5	1975	26	11.3	1974	9	1975	26	1	1995	1.6	.7	.1	.1	.0	1.5	.6	.2	.0
Dec	7.8	4.5	2	1	14.5	1987	15	24.8	2000	21	2000	31	11	2000	3.8	2.3	.8	.3	.1	7.4	5.1	3.5	1.0
Ann	26.2	17.7	N/A	N/A	16.0	Jan 1971	3	24.8	Dec 2000	29	Jan 1979	18	20	Jan 1979	16.0	8.9	2.8	1.2	.2	41.8	29.0	17.8	5.3

<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

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**COOP ID: 113384** 

**Station: GENESEO, IL** 

**Climate Division: IL 1** 

**NWS Call Sign:** 

Elevation: 639 Feet

Lat: 41°27N Lon: 90°09W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	Day)			
Temp (F)		P	robability of	later date in	n spring (thr	u Jul 31) tha	n indicated(	*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/20	5/14	5/10	5/07	5/04	5/01	4/28	4/24	4/18
32	5/04	4/28	4/25	4/21	4/18	4/15	4/12	4/08	4/03
28	4/22	4/18	4/14	4/12	4/09	4/07	4/04	4/01	3/28
24	4/14	4/09	4/06	4/03	4/01	3/29	3/27	3/23	3/19
20	4/05	3/30	3/26	3/22	3/18	3/15	3/11	3/06	2/28
16	3/27	3/20	3/16	3/12	3/09	3/05	3/01	2/25	2/18
			Fal	l Freeze Dat	tes (Month/D	ay)			
To (E)		Pro	bability of ea	ırlier date iı	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/22	9/26	9/29	10/02	10/04	10/06	10/09	10/11	10/15
32	9/28	10/03	10/07	10/10	10/13	10/17	10/20	10/24	10/29
28	10/12	10/18	10/22	10/25	10/28	11/01	11/04	11/08	11/13
24	10/22	10/27	10/31	11/03	11/06	11/09	11/12	11/16	11/21
20	10/31	11/06	11/10	11/14	11/17	11/20	11/24	11/28	12/03
16	11/09	11/15	11/19	11/23	11/26	11/30	12/04	12/08	12/14
		•		Freeze F	ree Period			•	
Town (F)			<b>Probability</b>	of longer th	an indicated	freeze free p	eriod (Days)	1	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	171	165	160	156	152	148	144	140	133
32	201	193	187	182	177	173	168	162	154
28	222	215	210	205	201	197	192	187	180
24	237	231	226	222	218	215	211	206	199
20	271	261	254	248	243	237	232	225	215
16	290	280	274	268	262	257	251	244	234

<sup>\*</sup> 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.

Complete documentation available from:

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**COOP ID: 113384** 

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Climate Division: IL 1 NWS Call Sign: Elevation: 639 Feet Lat: 41°27N Lon: 90°09W

				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	1363	1068	826	436	167	14	1	13	80	372	780	1201	6321
60	1208	928	671	300	90	2	0	2	27	242	630	1046	5146
57	1115	844	579	228	56	1	0	0	11	176	542	953	4505
55	1053	788	520	185	40	0	0	0	6	138	485	891	4106
50	899	658	379	97	14	0	0	0	1	68	351	747	3214
32	407	254	61	1	0	0	0	0	0	0	53	297	1073

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	67	111	258	559	940	1195	1356	1281	998	660	263	119	7807
55	0	0	5	54	266	505	643	568	313	85	5	0	2444
57	0	0	1	37	221	445	581	506	259	61	2	0	2113
60	0	0	0	19	161	357	488	415	185	34	0	0	1659
65	0	0	0	5	84	218	334	271	88	9	0	0	1009
70	0	0	0	1	34	106	193	151	31	1	0	0	517

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (N	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov D												Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	5	23	107	338	692	955	1105	1030	754	413	110	13	5	28	135	473	1165	2120	3225	4255	5009	5422	5532	5545
45	0 9 59 219 539 805 950 875 606 281 58											4	0	9	68	287	826	1631	2581	3456	4062	4343	4401	4405
50	0	1	30	126	388	655	795	720	457	173	23	2	0	1	31	157	545	1200	1995	2715	3172	3345	3368	3370
55	0	0	10	63	255	505	640	565	314	91	7	0	0	0	10	73	328	833	1473	2038	2352	2443	2450	2450
60	0	0	4	28	147	358	485	410	192	43	1	0	0	0	4	32	179	537	1022	1432	1624	1667	1668	1668
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	<b>6</b> 0 15 69 199 424 633 758 697 471 241 59											5	0	15	84	283	707	1340	2098	2795	3266	3507	3566	3571

(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