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: 113335

Station: GALVA, IL

Climate Division: IL 1 NWS Call Sign:

Elevation: 810 Feet Lat: 41°11N Lon: 90°02W

									ŗ	Гетр	eratui	re (°F)									
	Mea	n (1)						Extr	emes						Days (1) emp 65		Mean	Numb	er of I	Days (3)	
Month	Daily Max	Max Min Mean Daily(2) Ye			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	28.9	12.5	20.7	67	1909	24	33.1	1990	-23+	1985	20	7.6	1977	1374	0	.0	.0	1.2	19.1	29.8	7.8
Feb	34.7	18.4	26.6	70+	1954	15	37.3	1998	-28+	1905	14	13.3	1979	1077	0	.0	.0	3.3	12.6	25.4	4.2
Mar	47.4	28.7	38.1	86	1910	24	45.1	1973	-12	1962	1	30.9	1996	836	0	.0	.0	11.9	3.8	21.5	.2
Apr	60.7	39.1	49.9	93	1930	10	55.6	1977	9	1920	5	44.4	1982	457	4	.0	.1	23.8	.3	7.5	.0
May	72.1	50.6	61.4	105	1934	31	69.1	1977	24	1966	10	55.4	1997	190	78	.0	.4	30.4	.0	.3	.0
Jun	81.7	59.5	70.6	105	1934	2	76.3	1971	36	1913	8	65.2	1982	22	189	.1	3.8	30.0	.0	.0	.0
Jul	84.9	64.0	74.5	111	1936	14	79.1	1999	44	1947	22	70.8	1971	4	297	.2	7.4	31.0	.0	.0	.0
Aug	82.9	61.5	72.2	105	1936	18	78.5	1995	38	1915	30	67.8	1992	18	241	.3	4.9	31.0	.0	.0	.0
Sep	76.2	53.2	64.7	101+	1953	1	70.4	1978	25	1942	28	60.0	1993	92	84	.0	1.7	30.0	.0	.2	.0
Oct	64.0	41.5	52.8	94	1909	31	60.4	1971	9	1925	29	46.8	1987	388	8	.0	@	27.7	.0	4.8	.0
Nov	47.6	30.0	38.8	83	1950	1	45.4	1999	-7+	1977	26	30.4	1976	785	0	.0	.0	12.4	3.0	18.3	.2
Dec	34.1	18.0	26.1	69	1998	5	34.6	1982	-26	1924	28	12.8	1983	1207	0	.0	.0	2.6	13.2	28.4	4.0
Ann	59.6	39.8	49.7	111	Jul 1936	14	79.1	Jul 1999	-28+	Feb 1905	14	7.6	Jan 1977	6450	901	.6	18.3	235.3	52.0	136.2	16.4

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 031-A

- (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

[@] Denotes mean number of days greater than 0 but less than .05

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COOP ID: 113335

Station: GALVA, IL

Climate Division: IL 1

NWS Call Sign: Elevation: 810 Feet Lat: 41°11N Lon: 90°02W

										Pı	recipit	tation	(incl	nes)										
			P	recipi	itatio	n Total	s			М	ean N	lumbo Pays (3		Proba	ability th	nat the r		annual j		babilit ation wil		ıal to or	less tha	ın the
	Mea Medi					Extremes	3			D	aily Pre	cipitatio	n		Th		•		•	vs Probal	•		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	1.39	2.60	1938	24	4.00	1974	.09	1981	7.2	4.1	.8	.2	.31	.45	.67	.88	1.08	1.30	1.55	1.85	2.24	2.87	3.46
Feb	1.54	1.45	3.16	1997	21	4.98	1997	.02	1987	6.6	4.0	.9	.3	.25	.39	.61	.82	1.04	1.28	1.55	1.88	2.33	3.05	3.74
Mar	2.79	2.86	2.60	1954	25	5.41	1991	.70	1981	9.5	6.2	1.7	.6	.60	.86	1.27	1.64	2.01	2.40	2.85	3.38	4.09	5.21	6.28
Apr	3.93	4.32	3.03	1976	24	7.30	1973	.97	1971	10.8	6.9	2.7	1.0	1.18	1.55	2.11	2.59	3.06	3.55	4.08	4.71	5.52	6.79	7.97
May	3.94	3.78	3.02	1932	26	8.09	1973	.47	1992	11.3	7.7	2.7	1.0	1.22	1.59	2.15	2.63	3.09	3.57	4.10	4.72	5.52	6.77	7.93
Jun	4.39	4.17	4.25	1974	22	9.54	1974	1.54	1976	10.1	6.9	3.0	1.3	1.49	1.90	2.51	3.03	3.52	4.03	4.59	5.23	6.07	7.36	8.55
Jul	3.98	3.35	6.10	1982	7	12.50	1992	.39	1988	9.1	6.6	2.6	1.0	.76	1.12	1.70	2.24	2.79	3.38	4.05	4.85	5.92	7.64	9.27
Aug	4.32	3.46	9.15	1924	20	11.94	1987	.98	1974	9.2	6.2	2.7	1.6	.89	1.29	1.92	2.50	3.08	3.71	4.41	5.26	6.38	8.17	9.86
Sep	3.57	3.01	3.61	1989	1	10.12	1989	1.01	1990	8.5	5.9	2.4	1.0	.89	1.23	1.75	2.21	2.67	3.15	3.68	4.32	5.15	6.46	7.69
Oct	2.73	2.30	3.84	1954	10	7.18	1998	.58	1993	8.5	5.4	1.8	.7	.64	.89	1.29	1.65	2.00	2.38	2.80	3.31	3.97	5.02	6.01
Nov	2.91	2.68	3.06	1928	17	7.94	1985	.25	1999	8.6	5.8	2.0	.6	.47	.72	1.14	1.54	1.95	2.40	2.92	3.55	4.39	5.76	7.06
Dec	2.27	2.13	2.65	1982	3	5.17	1971	.09	1995	8.2	4.6	1.4	.5	.45	.65	.98	1.29	1.60	1.93	2.31	2.76	3.36	4.32	5.23
Ann	37.89	37.14	9.15	Aug 1924	20	12.50	Jul 1992	.02	Feb 1987	107.6	70.3	24.7	9.8	27.77	29.76	32.28	34.19	35.88	37.51	39.18	41.03	43.27	46.50	49.29

⁺ 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: 1901-2001

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

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COOP ID: 113335

Station: GALVA, IL

Climate Division: IL 1 NWS Call Sign: Elevation: 810 Feet Lat: 41°11N Lon: 90°02W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ians (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	9.3	9.0	3	2	13.0	1971	4	33.5	1979	30	1979	16	21	1979	4.6	3.2	.8	.4	.1	20.2	12.8	7.4	.3
Feb	6.2	5.5	3	2	8.0	1974	22	16.5	1989	26	1979	1	21	1979	3.5	2.2	.8	.2	.0	14.3	9.6	6.4	1.1
Mar	4.3	3.0	1	#	7.0	1972	14	15.5	1972	12	1979	2	5	1979	1.9	1.4	.6	.2	.0	5.3	2.4	1.0	.1
Apr	1.4	.0	#	0	9.0	1975	3	12.0	1982	9	1975	3	1	1982	.7	.4	.2	.1	.0	.6	.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	.2	.0	#	0	7.0	1997	27	7.0	1997	7	1997	27	#+	1997	.1	.1	@	@	.0	.1	@	@	.0
Nov	2.2	1.5	#	#	7.0	1975	27	9.0	1974	7	1975	27	1	1977	1.5	.9	.2	.1	.0	1.9	.4	.1	.0
Dec	6.0	4.8	1	1	10.0	2000	11	18.0	1978	11	1977	9	5	1983	3.4	2.2	.7	.2	@	11.4	5.7	3.0	.2
Ann	29.6	23.8	N/A	N/A	13.0	Jan 1971	4	33.5	Jan 1979	30	Jan 1979	16	21+	Feb 1979	15.7	10.4	3.3	1.2	.1	53.8	31.2	18.1	1.7

⁺ 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

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COOP ID: 113335

Station: GALVA, IL Climate Division: IL 1

NWS Call Sign:

Elevation: 810 Feet

Lat: 41°11N Lon: 90°02W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month	/Day)			
Tomp (F)		P	robability of	later date i	n spring (thi	ru Jul 31) tha	n indicated(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/16	5/12	5/08	5/06	5/03	4/30	4/27	4/24	4/19
32	5/05	4/30	4/27	4/25	4/22	4/20	4/17	4/14	4/09
28	4/21	4/17	4/15	4/12	4/10	4/08	4/05	4/02	3/29
24	4/15	4/12	4/09	4/07	4/04	4/02	3/31	3/28	3/24
20	4/08	4/03	3/30	3/26	3/23	3/20	3/17	3/13	3/07
16	3/29	3/23	3/19	3/16	3/12	3/09	3/06	3/02	2/24
'			Fal	l Freeze Da	tes (Month/I	Day)	•	•	•
To (E)		Pro	bability of ea	arlier date i	n fall (begini	ning Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	9/19	9/24	9/28	10/01	10/04	10/07	10/10	10/14	10/19
32	9/27	10/03	10/07	10/10	10/13	10/16	10/20	10/24	10/29
28	10/13	10/18	10/22	10/26	10/29	11/01	11/04	11/08	11/14
24	10/24	10/28	10/31	11/02	11/05	11/07	11/10	11/13	11/17
20	10/31	11/05	11/08	11/11	11/14	11/17	11/20	11/24	11/29
16	11/10	11/15	11/19	11/22	11/25	11/28	12/01	12/05	12/11
		l	•	Freeze F	ree Period	-1		l .	1
T (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	171	165	160	157	153	150	146	142	136
32	194	187	182	178	174	169	165	160	153
28	220	214	209	205	201	197	193	189	182
24	228	223	220	216	214	211	208	204	199
20	260	251	245	240	235	230	225	219	211
16	280	272	266	262	257	252	247	242	234

^{*} 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: 113335

Lon: 90°02W

Station: GALVA, IL

Climate Division: IL 1

Elevation: 810 Feet Lat: 41°11N

				Deg	ree Days to	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	1374	1077	836	457	190	22	4	18	92	388	785	1207	6450
60	1219	937	681	319	108	5	0	3	34	256	635	1052	5249
57	1126	853	590	245	71	2	0	0	16	188	547	959	4597
55	1064	797	534	200	51	1	0	0	8	149	489	897	4190
50	910	667	392	108	20	0	0	0	1	75	354	753	3280
32	418	261	69	1	0	0	0	0	0	0	52	300	1101

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	67	108	256	537	911	1157	1316	1246	982	644	258	116	7598
55	0	0	8	47	249	468	603	533	300	80	4	0	2292
57	0	0	2	31	206	409	541	471	247	57	2	0	1966
60	0	0	0	16	150	322	448	381	176	31	0	0	1524
65	0	0	0	4	78	189	297	241	84	8	0	0	901
70	0	0	0	0	32	86	159	130	29	1	0	0	437

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (M	(Ionthly)					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	4	20	100	315	660	925	1076	1008	745	404	109	15	4	24	124	439	1099	2024	3100	4108	4853	5257	5366	5381
45	0	6	53	204	506	775	921	853	595	271	53	7	0	6	59	263	769	1544	2465	3318	3913	4184	4237	4244
50	0 0 25 115 361 625 766 698 449 163 25											1	0	0	25	140	501	1126	1892	2590	3039	3202	3227	3228
55	0	0	8	56	234	475	611	543	307	86	7	0	0	0	8	64	298	773	1384	1927	2234	2320	2327	2327
60	0	0	3	27	132	329	457	388	193	38	2	0	0	0	3	30	162	491	948	1336	1529	1567	1569	1569
Base	Growing Degree Units for Corn (Monthly)														Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	0/86 0 14 66 190 405 613 735 680 472 237 61												0	14	80	270	675	1288	2023	2703	3175	3412	3473	3479

(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

NWS Call Sign:

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