

# Climatography of the United States No. 20

National Climatic Data Center  
Federal Building  
151 Patton Avenue  
Asheville, North Carolina 28801  
www.ncdc.noaa.gov

Station: GENEVA RESEARCH FARM, NY

1971-2000

COOP ID: 303184

Climate Division: NY10

NWS Call Sign:

Elevation: 718 Feet Lat: 42° 53N Lon: 77° 02W

## 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	30.4	15.3	22.9	67	1975	12	32.5	1990	-15	1976	18	13.2	1994	1308	0	.0	.0	1.5	17.4	29.2	3.3
Feb	32.1	16.4	24.3	69	1984	25	32.4	1984	-16	1979	18	13.2	1979	1141	0	.0	.0	2.3	14.9	26.0	2.4
Mar	41.1	24.9	33.0	84	1986	31	40.1	1973	-7	1993	19	25.2	1984	991	0	.0	.0	7.0	7.7	24.1	.3
Apr	53.6	35.7	44.7	89	1990	29	49.0	1991	10	1972	8	38.1	1975	610	0	.0	.0	17.9	.7	11.2	.0
May	66.6	46.8	56.7	92	1996	20	63.0	1998	27+	1978	1	50.9	1997	279	22	.0	.1	29.5	.0	.6	.0
Jun	75.4	55.9	65.7	95	1999	28	68.6	1999	36+	1983	9	61.4	1985	59	78	.0	.8	30.0	.0	.0	.0
Jul	80.0	60.7	70.4	97+	1988	17	73.4	1999	45	1969	8	65.6	1992	8	174	.0	2.1	31.0	.0	.0	.0
Aug	78.1	59.0	68.6	97	2001	10	71.8	1973	40	1982	29	65.2	1992	21	132	.0	1.0	31.0	.0	.0	.0
Sep	70.3	51.5	60.9	92+	1993	1	64.7	1971	30	1991	30	58.1	1975	138	16	.0	.2	29.9	.0	.1	.0
Oct	58.6	40.8	49.7	83+	1990	7	56.3	1971	21	1969	23	45.4	1976	475	1	.0	.0	24.8	.0	4.4	.0
Nov	46.5	32.2	39.4	77	1982	3	45.7	1975	6	1976	30	34.2	1996	770	0	.0	.0	10.8	2.3	16.4	.0
Dec	35.7	21.8	28.8	70	1998	7	35.2+	1998	-12+	1988	12	15.5	1989	1124	0	.0	.0	3.0	11.3	27.1	.8
Ann	55.7	38.4	47.1	97+	Aug 2001	10	73.4	Jul 1999	-16	Feb 1979	18	13.2+	Jan 1994	6924	423	.0	4.2	218.7	54.3	139.1	6.8

+ 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](http://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: 1969-2001

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

035-A

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## No. 20 1971-2000

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**Station: GENEVA RESEARCH FARM, NY**

**COOP ID: 303184**

**Climate Division: NY10**

**NWS Call Sign:**

**Elevation: 718 Feet Lat: 42°53N**

**Lon: 77°02W**

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	1.78	1.59	2.05	1998	8	4.86	1978	.34	1980	14.4	4.8	.8	.2	.37	.54	.80	1.04	1.28	1.53	1.82	2.17	2.63	3.36	4.05
Feb	1.61	1.48	1.15+	1990	16	3.78	1990	.33	1999	11.4	4.5	.8	.1	.44	.59	.83	1.03	1.23	1.44	1.67	1.94	2.30	2.85	3.37
Mar	2.24	2.07	1.80	1993	14	3.94	1980	.58	1981	12.5	6.0	1.3	.2	.86	1.07	1.36	1.61	1.85	2.09	2.35	2.65	3.03	3.62	4.16
Apr	2.86	2.82	1.99	1969	19	5.28	1993	1.01	1982	13.5	7.0	1.8	.3	1.14	1.40	1.78	2.08	2.38	2.67	2.99	3.36	3.84	4.56	5.21
May	3.03	2.64	1.92	1974	17	6.53	1989	.98	1987	13.1	7.5	1.8	.3	1.04	1.33	1.75	2.10	2.43	2.78	3.16	3.60	4.17	5.04	5.84
Jun	3.75	3.65	2.76	2001	17	10.63	1972	.96	1995	11.9	8.2	2.8	.6	1.18	1.54	2.06	2.52	2.95	3.41	3.90	4.48	5.24	6.41	7.49
Jul	3.12	2.63	1.69	1986	19	10.35	1992	.50	1983	11.5	7.2	2.0	.6	.81	1.10	1.56	1.95	2.35	2.76	3.22	3.77	4.48	5.60	6.65
Aug	3.22	2.85	2.67	2000	1	6.71	1984	.74	1982	11.5	6.8	2.0	.7	1.16	1.47	1.90	2.27	2.62	2.97	3.36	3.81	4.39	5.28	6.10
Sep	3.58	3.08	3.92	1975	26	7.33	1977	2.04	1983	13.3	7.3	2.4	.6	1.76	2.06	2.48	2.81	3.12	3.43	3.76	4.13	4.60	5.30	5.93
Oct	3.04	2.58	2.53	1980	26	7.39	1995	.86	1994	14.0	6.7	1.6	.5	.95	1.24	1.67	2.03	2.39	2.76	3.17	3.64	4.26	5.22	6.11
Nov	2.95	2.56	1.77	1996	9	6.84	1985	.63	1976	13.4	7.1	1.9	.4	.98	1.26	1.67	2.01	2.35	2.70	3.07	3.52	4.09	4.97	5.78
Dec	2.25	2.16	1.52	1979	25	4.03	1977	.66	2000	13.5	6.0	1.1	.2	.76	.97	1.28	1.55	1.80	2.06	2.34	2.68	3.10	3.76	4.37
Ann	33.43	33.34	3.92	Sep 1975	26	10.63	Jun 1972	.33	Feb 1999	154.0	79.1	20.3	4.7	24.90	26.58	28.72	30.33	31.75	33.12	34.53	36.08	37.95	40.65	42.98

+ 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: 1969-2001

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

Complete documentation available from:  
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Station: GENEVA RESEARCH FARM, NY

COOP ID: 303184

Climate Division: NY10

NWS Call Sign:

Elevation: 718 Feet

Lat: 42°53N

Lon: 77°02W

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	14.1	12.1	4	3	15.0	1978	21	53.7	1978	40	1978	22	18	1994	11.0	4.1	1.2	.4	.1	19.2	13.2	7.3	2.2
Feb	12.8	13.0	4	3	14.0	1972	20	32.1	1971	26	1978	8	17	2000	9.1	4.1	1.3	.5	.1	20.6	13.6	8.0	3.0
Mar	12.2	9.9	3	1	36.0	1993	14	53.0	1993	54	1993	16	25	1993	5.7	3.0	1.2	.8	.1	11.1	7.3	5.9	3.0
Apr	3.1	1.2	#	#	9.0	1975	4	17.9	1975	17	1975	7	4	1975	1.9	1.0	.4	.2	.0	2.1	1.1	.5	.2
May	.2	.0	#	0	3.3	1977	9	3.3	1977	3	1977	9	#+	1989	.1	.1	@	.0	.0	.1	@	.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	1.4	1988	22	1.4	1988	1+	1988	22	#+	1988	.2	.1	.0	.0	.0	.1	.0	.0	.0
Nov	4.3	3.6	1	#	8.0	1995	15	13.0	1996	11	1997	16	3	1997	2.9	1.6	.5	.2	.0	4.0	1.8	1.0	.2
Dec	11.9	10.2	2	2	14.0	1978	25	26.1	1977	15+	1992	13	5	1995	8.1	3.7	1.2	.4	.1	13.8	6.4	3.5	1.2
Ann	58.7	50.0	N/A	N/A	36.0	Mar 1993	14	53.7	Jan 1978	54	Mar 1993	16	25	Mar 1993	39.0	17.7	5.8	2.5	.4	71.0	43.4	26.2	9.8

+ 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:

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**NWS Call Sign:**

**Elevation: 718 Feet**

**Lat: 42° 53N**

**Lon: 77° 02W**

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	5/26	5/21	5/18	5/15	5/12	5/09	5/07	5/03	4/29
32	5/10	5/06	5/03	4/30	4/28	4/26	4/23	4/20	4/16
28	4/27	4/23	4/20	4/17	4/15	4/13	4/10	4/07	4/03
24	4/16	4/12	4/09	4/07	4/05	4/02	3/31	3/28	3/24
20	4/08	4/04	4/01	3/30	3/28	3/25	3/23	3/20	3/17
16	4/03	3/30	3/27	3/24	3/22	3/20	3/17	3/14	3/10
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	9/20	9/25	9/28	10/01	10/03	10/06	10/09	10/12	10/16
32	10/01	10/06	10/09	10/12	10/15	10/18	10/21	10/24	10/29
28	10/17	10/22	10/25	10/28	10/31	11/02	11/05	11/09	11/13
24	11/03	11/07	11/10	11/12	11/15	11/17	11/20	11/23	11/27
20	11/11	11/16	11/19	11/22	11/25	11/28	12/01	12/04	12/09
16	11/22	11/26	11/29	12/02	12/05	12/07	12/10	12/13	12/18
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	162	156	151	147	143	140	136	131	125
32	189	182	177	173	169	165	161	156	150
28	220	212	207	202	198	194	189	184	176
24	241	235	231	227	224	220	216	212	206
20	261	254	250	246	242	238	234	229	222
16	276	269	265	261	257	253	249	245	238

\* 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:  
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**Elevation: 718 Feet Lat: 42°53N Lon: 77°02W**

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	1308	1141	991	610	279	59	8	21	138	475	770	1124	6924
60	1153	1001	836	461	166	15	0	2	48	328	620	969	5599
57	1060	917	743	375	113	5	0	0	21	248	530	876	4888
55	998	861	681	319	84	2	0	0	11	201	471	814	4442
50	843	721	532	196	34	0	0	0	1	105	329	661	3422
32	332	269	124	5	0	0	0	0	0	0	26	206	962

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	47	52	156	385	765	1009	1188	1134	868	549	246	106	6505
55	0	0	0	9	136	322	475	421	189	37	1	0	1590
57	0	0	0	5	103	264	413	359	139	22	0	0	1305
60	0	0	0	2	64	184	320	267	75	9	0	0	921
65	0	0	0	0	22	78	174	132	16	1	0	0	423
70	0	0	0	0	5	19	66	45	1	0	0	0	136

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	5	12	60	202	529	777	950	895	636	320	105	17	5	17	77	279	808	1585	2535	3430	4066	4386	4491	4508
45	0	1	31	118	379	627	795	740	487	197	49	5	0	1	32	150	529	1156	1951	2691	3178	3375	3424	3429
50	0	0	15	62	248	477	640	585	343	107	20	1	0	0	15	77	325	802	1442	2027	2370	2477	2497	2498
55	0	0	4	32	145	331	485	430	213	48	5	0	0	0	4	36	181	512	997	1427	1640	1688	1693	1693
60	0	0	3	13	69	206	331	282	114	12	1	0	0	0	3	16	85	291	622	904	1018	1030	1031	1031
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	0	5	38	112	297	482	632	587	370	165	49	6	0	5	43	155	452	934	1566	2153	2523	2688	2737	2743

(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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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](http://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"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
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## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)