U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: POUGHKEEPSIE, NY **COOP ID: 306820**

Climate Division: NY 5 **NWS Call Sign: POU** **Elevation: 170 Feet** **Lat: 41˚38N** **Lon: 73˚55W**

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	34.2	14.7	24.5	68	1950	26	34.1	1990	-30	1961	21	14.9	1981	1257	0	.0	.0	2.4	13.1	28.9	3.7
Feb	37.5	16.1	26.8	73	1997	28	35.1	1997	-23	1967	8	15.8	1979	1070	0	.0	.0	3.8	8.9	25.6	2.2
Mar	47.2	25.5	36.4	86	1998	31	42.2	1973	-13	1967	19	30.0	1984	889	0	.0	.0	12.2	2.1	23.1	.1
Apr	59.0	35.8	47.4	94	1976	18	51.3	1991	13	1954	3	43.2	1972	528	0	.0	.2	24.4	.1	11.4	.0
May	70.4	46.3	58.4	96+	1969	29	63.6	1991	27+	1963	24	55.0	1984	220	15	.0	.5	30.8	.0	1.0	.0
Jun	78.4	55.3	66.9	99	1964	30	70.4	1973	35	1984	1	62.6	1985	42	97	.0	2.4	30.0	.0	.0	.0
Jul	83.6	60.2	71.9	103+	1995	16	75.9	1994	43+	1986	4	66.2	2000	6	219	.2	5.9	31.0	.0	.0	.0
Aug	81.7	59.3	70.5	100+	1955	5	74.6	1973	38+	1986	30	66.7	2000	13	183	.0	3.5	31.0	.0	.0	.0
Sep	73.8	50.1	62.0	101	1953	2	66.1	1971	26	1963	24	58.1	1984	124	33	.0	.8	30.0	.0	.2	.0
Oct	62.1	38.1	50.1	88	1963	7	56.6	1971	18+	1988	31	45.2	1988	463	3	.0	.0	28.8	.0	8.6	.0
Nov	50.6	30.1	40.4	82	1950	1	46.3	1975	3	1989	24	35.2	1976	741	0	.0	.0	15.2	.5	18.2	.0
Dec	39.1	20.9	30.0	72+	1998	8	36.6	1998	-23	1950	27	15.7	1989	1085	0	.0	.0	4.2	7.1	27.2	.8
Ann	59.8	37.7	48.8	103+	Jul 1995	16	75.9	Jul 1994	-30	Jan 1961	21	14.9	Jan 1981	6438	550	.2	13.3	243.8	31.8	144.2	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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

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

Issue Date: February 2004

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Climate Division: NY 5 **NWS Call Sign: POU** **Elevation: 170 Feet** **Lat: 41˚38N** **Lon: 73˚55W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	3.19	2.88	2.02	1979	21	8.30	1979	.64	1980
Feb	2.53	2.53	1.83	1982	3	5.42	1981	.32	1987
Mar	3.59	3.27	2.22	1977	22	7.39	1983	.15	1981
Apr	3.79	3.67	3.75	1987	4	8.51	1983	1.32	1978
May	4.73	4.29	3.71	1984	29	11.81	1989	1.36	1993
Jun	3.73	3.31	2.84	1973	29	8.39	1982	.30	1988
Jul	4.72	3.92	4.72	1975	14	13.63	1975	1.28	1983
Aug	3.83	3.67	4.02	1971	28	10.92	1971	.64	1981
Sep	3.69	3.50	4.59	1999	17	7.19	1975	.46	1986
Oct	3.56	3.54	4.48	1955	15	9.98	1995	1.23	1978
Nov	3.53	3.40	2.88	1988	20	8.11	1972	.67	1976
Dec	3.23	3.01	2.74	1983	13	8.65	1973	.57	1980
Ann	44.12	42.64	4.72	Jul 1975	14	13.63	Jul 1975	.15	Mar 1981

Mean Number of Days (3)

Month	Daily Precipitation >= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	10.8	6.6	2.3	.5
Feb	9.2	6.0	1.8	.3
Mar	10.7	6.8	2.5	.8
Apr	10.6	6.5	2.5	.9
May	11.7	7.8	2.9	1.2
Jun	10.0	7.0	2.5	.8
Jul	9.5	6.6	2.9	1.2
Aug	9.3	6.0	2.2	1.1
Sep	9.2	5.8	2.4	.9
Oct	8.4	5.8	2.5	.9
Nov	10.0	6.3	2.6	.8
Dec	10.8	6.9	2.2	.6
Ann	120.2	78.1	29.3	10.0

Precipitation Probabilities (1)

Probability that the monthly/annual precipitation will be equal to or less than the indicated amount

Monthly/Annual Precipitation vs Probability Levels
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	.77	1.07	1.54	1.95	2.36	2.80	3.28	3.86	4.61	5.81	6.93
Feb	.92	1.16	1.50	1.79	2.06	2.34	2.65	3.00	3.45	4.15	4.79
Mar	1.12	1.46	1.97	2.40	2.82	3.26	3.73	4.29	5.01	6.14	7.17
Apr	1.38	1.73	2.25	2.68	3.09	3.51	3.97	4.50	5.18	6.22	7.18
May	1.51	1.96	2.63	3.19	3.74	4.30	4.92	5.65	6.58	8.04	9.38
Jun	.83	1.18	1.72	2.22	2.71	3.23	3.82	4.52	5.45	6.92	8.31
Jul	1.19	1.64	2.33	2.93	3.53	4.17	4.87	5.71	6.80	8.53	10.15
Aug	1.05	1.42	1.97	2.45	2.92	3.42	3.97	4.61	5.46	6.78	8.01
Sep	.89	1.24	1.78	2.26	2.73	3.23	3.79	4.46	5.34	6.72	8.03
Oct	1.06	1.40	1.90	2.34	2.76	3.21	3.70	4.27	5.01	6.17	7.25
Nov	1.02	1.35	1.86	2.30	2.72	3.17	3.66	4.24	4.99	6.17	7.26
Dec	.79	1.09	1.56	1.98	2.40	2.84	3.33	3.91	4.68	5.89	7.03
Ann	33.28	35.42	38.15	40.19	42.00	43.74	45.52	47.49	49.85	53.26	56.19

\+ 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: 1948-2001
(3) Derived from 1971-2000 serially complete daily data

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Snow (inches)

Snow Totals

Means/Medians (1)

Extremes (2)

Mean Number of Days (1)

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	10.4	8.4	3	1	12.0	1971	1	33.8	1996	29	1996	9	15	1996	4.2	3.3	1.5	.6	.1	16.8	10.8	6.5	2.3
Feb	7.6	6.4	2	2	13.0	1972	19	18.0	1983	23	1994	12	13	1994	3.4	2.3	1.0	.5	@	12.9	9.0	5.3	1.8
Mar	5.5	4.4	1	1	9.2	1996	8	25.5	1984	15+	1996	9	8	1994	2.5	1.9	.6	.4	.0	4.7	2.4	1.4	.8
Apr	1.8	.0	#	0	11.0	1971	7	12.0	1971	10	1982	7	1+	1983	.4	.4	.2	.2	@	.7	.3	.2	@
May	.0	.0	#	0	.0	0	0	.0	0	0	0	0	#	1996	.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	#	1987	4	#+	1987	#+	1987	4	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	2.2	.0	#	0	9.0	1987	11	10.0	1987	10	1987	12	1+	1997	.9	.7	.3	.1	.0	1.1	.7	.3	@
Dec	6.0	5.5	1	1	16.0	2000	31	21.2	1995	16+	2000	31	7	1995	3.1	2.4	.7	.2	@	7.3	4.0	2.4	.8
Ann	33.5	24.7	N/A	N/A	16.0	Dec 2000	31	33.8	Jan 1996	29	Jan 1996	9	15	Jan 1996	14.5	11.0	4.3	2.0	.1	43.5	27.2	16.1	5.7

+ 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

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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	5/28	5/23	5/20	5/17	5/14	5/11	5/09	5/05	5/01
32	5/14	5/10	5/07	5/05	5/03	4/30	4/28	4/25	4/21
28	4/27	4/23	4/21	4/18	4/16	4/14	4/12	4/10	4/06
24	4/19	4/14	4/11	4/08	4/06	4/03	4/01	3/28	3/24
20	4/04	3/31	3/29	3/27	3/25	3/23	3/21	3/18	3/15
16	3/28	3/24	3/22	3/20	3/18	3/16	3/13	3/11	3/07

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	9/15	9/18	9/21	9/23	9/25	9/27	9/29	10/02	10/06
32	9/24	9/29	10/03	10/06	10/09	10/12	10/15	10/19	10/24
28	10/05	10/10	10/14	10/17	10/20	10/23	10/26	10/30	11/04
24	10/12	10/19	10/23	10/27	10/31	11/04	11/08	11/13	11/19
20	10/27	11/02	11/06	11/10	11/13	11/17	11/21	11/25	12/01
16	11/13	11/19	11/23	11/26	11/30	12/03	12/06	12/10	12/16

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	150	144	140	137	133	130	126	122	116
32	182	174	168	163	159	154	149	143	135
28	202	196	192	189	186	182	179	175	169
24	229	222	216	212	208	203	199	194	186
20	253	246	241	237	233	229	225	220	213
16	277	270	265	260	256	252	248	243	236

***** 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

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Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	1257	1070	889	528	220	42	6	13	124	463	741	1085	6438
60	1102	930	734	380	108	8	0	1	47	320	591	930	5151
57	1009	846	641	293	61	2	0	0	22	243	501	837	4455
55	947	790	579	239	39	1	0	0	12	197	442	775	4021
50	792	650	426	124	8	0	0	0	2	105	300	623	3030
32	305	213	54	0	0	0	0	0	0	0	16	181	769

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	71	67	188	462	818	1045	1236	1193	899	562	265	119	6925
55	0	0	0	10	144	355	523	480	221	47	1	0	1781
57	0	0	0	5	104	297	461	418	171	30	0	0	1486
60	0	0	0	1	58	213	368	325	106	14	0	0	1085
65	0	0	0	0	15	97	219	183	33	3	0	0	550
70	0	0	0	0	2	28	97	77	4	0	0	0	208

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	9	17	76	257	592	820	1004	961	678	346	119	22	9	26	102	359	951	1771	2775	3736	4414	4760	4879	4901
45	1	3	35	146	437	670	849	806	528	215	58	6	1	4	39	185	622	1292	2141	2947	3475	3690	3748	3754
50	0	0	12	74	288	520	694	651	381	113	21	1	0	0	12	86	374	894	1588	2239	2620	2733	2754	2755
55	0	0	4	31	163	373	539	496	247	51	8	0	0	0	4	35	198	571	1110	1606	1853	1904	1912	1912
60	0	0	0	8	81	236	384	343	137	14	2	0	0	0	0	8	89	325	709	1052	1189	1203	1205	1205
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	5	12	56	165	358	526	677	641	426	214	71	9	5	17	73	238	596	1122	1799	2440	2866	3080	3151	3160

(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:
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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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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