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: TOBYHANNA POCONO MTN A, PA **COOP ID: 368893**

Climate Division: PA 1 **NWS Call Sign:** **Elevation: 1,916 Feet** **Lat: 41˚08N** **Lon: 75˚22W**

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	12.3	21.4	64	1967	25	30.7	1998	-26	1988	11	11.3	1977	1353	0	.0	.0	1.9	17.1	29.5	4.2
Feb	33.0	12.8	22.9	65	1976	25	31.0	1998	-20+	1967	13	12.3	1979	1179	0	.0	.0	2.8	13.4	26.5	3.0
Mar	42.0	21.5	31.8	81	1998	31	38.3	2000	-14	1993	19	25.0	1984	1031	0	.0	.0	8.9	5.5	25.6	.7
Apr	53.9	32.1	43.0	88	1976	18	46.5	1981	8	1982	7	37.2	1975	660	0	.0	.0	20.6	.3	15.3	.0
May	65.2	42.1	53.7	89	1962	19	60.7	1991	22	1974	8	49.6	1973	358	5	.0	.1	30.2	.0	3.6	.0
Jun	73.0	50.9	62.0	90	1964	30	64.8	1994	29+	1972	11	58.9	1985	117	26	.0	.2	30.0	.0	.2	.0
Jul	77.5	55.8	66.7	94+	1966	3	71.5	1999	35	1986	4	63.5	1976	38	89	.0	1.2	31.0	.0	.0	.0
Aug	75.9	54.5	65.2	93	2001	10	68.6	1980	31	1986	30	61.6	1992	61	68	.0	.2	31.0	.0	@	.0
Sep	68.0	46.7	57.4	89+	1973	2	60.7	1999	22	1963	24	53.8	1975	232	2	.0	.1	29.9	.0	1.5	.0
Oct	57.7	36.1	46.9	81+	1963	7	53.1	1990	15	1969	24	42.3	1988	561	0	.0	.0	25.7	.0	11.4	.0
Nov	45.6	27.9	36.8	77	1982	2	42.0	1975	2	1976	30	30.1	1976	847	0	.0	.0	12.0	2.3	21.2	.0
Dec	35.0	18.4	26.7	66	1998	5	34.1	1998	-20	1989	24	13.4	1989	1188	0	.0	.0	2.9	12.8	28.2	2.1
Ann	54.8	34.3	44.5	94+	Jul 1966	3	71.5	Jul 1999	-26	Jan 1988	11	11.3	Jan 1977	7625	190	.0	1.8	226.9	51.4	163.0	10.0

\+ 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: 1961-2001

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

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: TOBYHANNA POCONO MTN A, PA **COOP ID: 368893**

Climate Division: PA 1 **NWS Call Sign:** **Elevation: 1,916 Feet** **Lat: 41˚08N** **Lon: 75˚22W**

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	4.01	3.08	3.09	1979	25	10.45	1979	.94	1981
Feb	3.29	2.95	2.74	1998	10	9.57	1981	1.07	1993
Mar	4.03	3.61	3.13	1977	23	7.68	1977	.75	1981
Apr	4.29	3.41	3.30	1983	16	11.65	1983	1.24	1985
May	4.69	4.69	2.92	1989	6	10.58	1989	.81	1993
Jun	4.53	4.66	3.07	1973	29	10.14	1972	.97	1988
Jul	4.08	3.87	4.59	1969	29	10.71	1988	1.13	1983
Aug	3.96	3.51	3.73	1986	20	7.28	1986	1.46	1995
Sep	4.98	4.40	5.58	1999	17	12.96	1999	.52	1984
Oct	3.76	3.38	3.34	1973	30	8.21	1976	1.13	1974
Nov	4.22	4.23	5.31	1972	9	11.20	1972	1.21	1981
Dec	3.60	2.99	3.56	1996	2	10.78	1973	.00	1989
Ann	49.44	49.06	5.58	Sep 1999	17	12.96	Sep 1999	.00	Dec 1989

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	13.0	7.2	2.5	1.1
Feb	10.4	6.4	2.2	1.0
Mar	11.5	7.1	2.3	.9
Apr	12.2	7.8	3.1	1.1
May	13.1	8.6	3.0	1.2
Jun	12.4	8.0	2.9	1.2
Jul	11.2	7.1	2.9	1.0
Aug	10.9	6.4	2.9	1.0
Sep	10.9	7.1	2.9	1.4
Oct	10.3	6.2	2.5	1.1
Nov	11.2	6.6	2.8	1.4
Dec	11.7	6.6	2.5	.8
Ann	138.8	85.1	32.5	13.2

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	.98	1.35	1.94	2.46	2.97	3.52	4.13	4.85	5.80	7.30	8.71
Feb	1.09	1.40	1.86	2.25	2.62	3.01	3.43	3.92	4.56	5.54	6.45
Mar	1.48	1.85	2.40	2.85	3.29	3.73	4.21	4.77	5.49	6.59	7.60
Apr	1.12	1.52	2.15	2.69	3.23	3.80	4.43	5.18	6.16	7.70	9.14
May	1.36	1.81	2.48	3.06	3.63	4.22	4.87	5.64	6.63	8.19	9.63
Jun	1.44	1.87	2.50	3.05	3.57	4.12	4.71	5.41	6.31	7.72	9.01
Jul	1.25	1.64	2.22	2.71	3.19	3.69	4.24	4.88	5.72	7.01	8.21
Aug	1.55	1.92	2.44	2.87	3.28	3.69	4.14	4.66	5.32	6.34	7.26
Sep	1.27	1.74	2.46	3.10	3.73	4.40	5.14	6.02	7.17	8.99	10.69
Oct	1.24	1.59	2.12	2.56	2.99	3.44	3.92	4.49	5.22	6.35	7.40
Nov	1.56	1.96	2.52	3.00	3.45	3.91	4.41	4.99	5.73	6.88	7.92
Dec	.59	1.07	1.69	2.18	2.67	3.18	3.75	4.42	5.30	6.68	7.97
Ann	37.53	39.89	42.89	45.14	47.12	49.03	50.99	53.14	55.74	59.47	62.68

\+ 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: 1961-2001
(3) Derived from 1971-2000 serially complete daily data

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

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

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: TOBYHANNA POCONO MTN A, PA **COOP ID: 368893**

Climate Division: PA 1 **NWS Call Sign:** **Elevation: 1,916 Feet** **Lat: 41°08N** **Lon: 75°22W**

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	17.2	18.4	5	4	20.5	1987	23	48.9	1987	30	1987	23	12	1978	9.1	4.9	1.5	.8	.1	21.4	15.7	10.6	4.2
Feb	14.7	11.7	6	4	30.0	1978	7	46.1	1978	45	1978	7	28	1978	6.6	3.7	1.2	.6	.2	19.4	13.9	11.2	5.5
Mar	11.9	10.6	3	1	12.7	1980	14	33.2	1984	30	1993	14	16	1993	5.7	3.1	1.4	.6	.1	10.1	6.0	3.8	.9
Apr	4.7	2.2	#	#	15.4	1983	20	26.5	1986	21	1986	24	2	1986	2.1	1.3	.4	.2	.1	2.0	.9	.6	.3
May	.4	.0	#	0	5.2	1977	10	8.2	1977	5	1977	10	#+	1978	.2	.1	.1	@	.0	.1	@	@	.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	#	1981	24	#	1981	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Oct	.4	.0	#	0	2.6	1972	19	3.9	1977	3	1972	19	#+	2000	.4	.2	.0	.0	.0	.3	@	.0	.0
Nov	4.4	1.5	#	#	16.5	1971	25	29.3	1971	22	1971	26	4	1971	2.7	1.2	.3	.2	.1	2.5	1.1	.7	.2
Dec	11.6	11.1	2	2	11.0	1992	11	29.2	1992	20	1992	13	6	1992	6.2	3.0	1.0	.6	@	12.8	6.9	3.8	1.0
Ann	65.3	55.5	N/A	N/A	30.0	Feb 1978	7	48.9	Jan 1987	45	Feb 1978	7	28	Feb 1978	33.0	17.5	5.9	3.0	.6	68.6	44.5	30.7	12.1

+ 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/normals/usnormals.html

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: TOBYHANNA POCONO MTN A, PA **COOP ID: 368893**

Climate Division: PA 1 **NWS Call Sign:** **Elevation: 1,916 Feet** **Lat: 41˚08N** **Lon: 75˚22W**

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	6/23	6/17	6/12	6/08	6/04	5/31	5/27	5/22	5/15
32	6/08	6/01	5/27	5/23	5/19	5/15	5/11	5/06	4/30
28	5/14	5/09	5/05	5/02	4/29	4/26	4/23	4/20	4/15
24	4/29	4/24	4/21	4/18	4/15	4/12	4/09	4/05	4/01
20	4/17	4/13	4/10	4/08	4/06	4/03	4/01	3/29	3/26
16	4/10	4/04	4/01	3/29	3/26	3/23	3/20	3/16	3/11

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	8/26	8/31	9/05	9/08	9/12	9/15	9/18	9/23	9/28
32	9/12	9/16	9/19	9/22	9/25	9/27	9/30	10/03	10/08
28	9/25	9/30	10/04	10/08	10/11	10/14	10/18	10/22	10/27
24	10/13	10/18	10/22	10/25	10/28	10/31	11/03	11/07	11/12
20	10/21	10/27	11/01	11/05	11/08	11/12	11/16	11/20	11/27
16	11/03	11/10	11/15	11/19	11/22	11/26	11/30	12/05	12/11

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	128	118	111	105	99	93	87	80	70
32	152	144	138	132	128	123	117	111	103
28	186	179	173	169	164	160	155	150	142
24	221	212	206	200	195	190	185	178	170
20	239	231	225	220	216	211	206	201	193
16	265	257	251	246	241	236	231	225	216

***** 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/normals/usnormals.html

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: TOBYHANNA POCONO MTN A, PA **COOP ID: 368893**

Climate Division: PA 1 **NWS Call Sign:** **Elevation: 1,916 Feet** **Lat: 41˚08N** **Lon: 75˚22W**

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	1353	1179	1031	660	358	117	38	61	232	561	847	1188	7625
60	1198	1039	876	510	223	38	5	11	107	411	697	1033	6148
57	1105	955	783	421	156	15	0	2	56	325	607	940	5365
55	1043	899	721	362	118	7	0	0	34	273	547	878	4882
50	888	759	566	225	49	1	0	0	7	160	400	723	3778
32	371	295	123	4	0	0	0	0	0	4	42	249	1088

Base — Cooling Degree Days (1)

Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	41	39	115	334	671	899	1074	1030	761	466	185	84	5699
55	0	0	0	2	76	216	361	317	105	22	0	0	1099
57	0	0	0	1	51	164	299	257	67	13	0	0	852
60	0	0	0	0	25	97	211	173	28	5	0	0	539
65	0	0	0	0	5	26	89	68	2	0	0	0	190
70	0	0	0	0	0	2	21	15	0	0	0	0	38

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	9	58	186	472	686	858	811	558	269	82	13	5	14	72	258	730	1416	2274	3085	3643	3912	3994	4007
45	1	0	26	100	324	536	703	656	410	152	37	4	1	1	27	127	451	987	1690	2346	2756	2908	2945	2949
50	0	0	10	50	195	387	548	501	277	75	14	0	0	0	10	60	255	642	1190	1691	1968	2043	2057	2057
55	0	0	3	20	99	248	393	347	159	30	4	0	0	0	3	23	122	370	763	1110	1269	1299	1303	1303
60	0	0	0	6	42	131	242	203	76	3	0	0	0	0	0	6	48	179	421	624	700	703	703	703
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	0	5	44	123	287	429	551	517	338	161	49	6	0	5	49	172	459	888	1439	1956	2294	2455	2504	2510

(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.
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