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: 368469

Lon: 78°01W

Station: STEVENSON DAM, PA

Climate Division: PA 7

NWS Call Sign:

Tomporature (°F)

Elevation: 932 Feet Lat: 41°24N

									,	l'emp	eratui	re (*F)									
	Mean (1)							Extr	emes				Days (1) emp 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	33.0	14.9	24.0	67	1998	8	34.1	1998	-22	1994	20	11.4	1977	1273	0	.0	.0	1.6	13.9	29.5	3.9
Feb	36.8	14.8	25.8	69	1997	28	35.7	1998	-18+	1979	11	13.1	1979	1097	0	.0	.0	3.7	9.7	26.3	3.4
Mar	46.4	23.0	34.7	83	1986	31	41.7	2000	-9+	1993	15	27.5	1984	939	0	.0	.0	11.4	3.2	25.3	.7
Apr	58.7	32.2	45.5	90+	1976	19	49.5	1985	13+	1982	7	38.5	1995	587	0	.0	.1	22.8	.2	15.4	.0
May	70.6	43.1	56.9	93+	1987	30	64.1	1991	25+	1970	7	50.2	1995	282	28	.0	.4	30.4	.0	3.3	.0
Jun	78.3	52.6	65.5	95+	1988	26	69.2	1976	33	1977	8	61.1	1972	66	80	.0	1.3	30.0	.0	@	.0
Jul	82.6	57.9	70.3	101	1988	17	73.7	1999	39	1988	1	66.1	1995	11	173	@	3.5	31.0	.0	.0	.0
Aug	81.2	57.2	69.2	99	1999	1	73.4	1995	39+	1982	29	65.3	1992	21	151	.0	2.1	31.0	.0	.0	.0
Sep	73.5	49.6	61.6	95	1999	3	66.8	1998	31+	1974	24	58.0	1994	135	31	.0	.4	30.0	.0	.1	.0
Oct	62.1	38.0	50.1	87	1986	1	56.8	1971	18+	1969	24	45.2	1976	467	4	.0	.0	27.6	.0	8.5	.0
Nov	48.8	29.8	39.3	79	1982	3	44.5	1999	4	1976	30	33.2	1976	771	0	.0	.0	13.5	1.0	18.8	.0
Dec	37.5	21.2	29.4	71	1998	7	35.9	1984	-13	1989	24	16.8	1989	1105	0	.0	.0	3.1	8.4	27.4	1.3
Ann	59.1	36.2	47.7	101	Jul 1988	17	73.7	Jul 1999	-22	Jan 1994	20	11.4	Jan 1977	6754	467	@	7.8	236.1	36.4	154.6	9.3

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 054-A

- (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

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

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COOP ID: 368469

Station: STEVENSON DAM, PA

Climate Division: PA 7 NWS Call Sign: Elevation: 932 Feet Lat: 41°24N Lon: 78°01W

										Pı	ecipi	tation	(incl	nes)												
	Mea	ans/	P	recipi	itatio	on Total					ean N of D	ays (3)	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												
	Medi	ans(1)				Extremes	,			"	any 110	приано	11	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	2.57	2.31	1.61	1986	20	5.68	1999	.49	1981	12.4	7.0	1.7	.4	.63	.87	1.25	1.58	1.91	2.26	2.65	3.11	3.72	4.68	5.59		
Feb	2.45	2.37	1.50	1984	15	5.19	1981	.34	1987	10.8	5.9	1.5	.3	.78	1.01	1.36	1.65	1.93	2.23	2.55	2.93	3.41	4.17	4.87		
Mar	3.32	3.13	1.98	1999	4	7.08	1974	.92	1981	11.7	7.6	2.1	.6	1.27	1.58	2.02	2.39	2.74	3.09	3.47	3.92	4.48	5.35	6.14		
Apr	3.36	3.12	2.12	1998	10	7.68	1993	1.12	1971	12.9	8.2	1.9	.5	1.12	1.44	1.91	2.30	2.68	3.07	3.50	4.00	4.64	5.64	6.56		
May	3.75	3.77	1.81	1988	19	7.05	1989	1.06	1999	13.0	8.9	2.7	.4	1.44	1.79	2.29	2.70	3.09	3.49	3.92	4.42	5.06	6.04	6.93		
Jun	4.85	4.31	3.82	1972	23	11.52	1972	1.10	1988	12.6	9.2	3.3	1.2	1.65	2.11	2.78	3.35	3.89	4.45	5.06	5.78	6.69	8.11	9.41		
Jul	4.22	3.98	2.50	1992	31	13.45	1992	1.00	1983	12.1	8.3	2.8	.9	1.46	1.86	2.44	2.93	3.40	3.88	4.41	5.02	5.80	7.02	8.14		
Aug	3.93	3.84	3.20	1994	18	10.33	1994	.89	1995	10.5	6.9	2.7	1.0	1.03	1.41	1.98	2.48	2.97	3.49	4.06	4.74	5.63	7.03	8.33		
Sep	4.05	3.42	3.18	1975	26	10.08	1996	.84	1984	11.6	8.0	2.7	.9	1.31	1.69	2.26	2.74	3.21	3.69	4.22	4.84	5.63	6.87	8.02		
Oct	3.22	2.82	3.67	1995	21	8.21	1995	1.02	1994	12.2	6.8	1.9	.6	.98	1.29	1.74	2.14	2.52	2.91	3.35	3.86	4.52	5.55	6.51		
Nov	3.65	3.75	3.50	1993	28	8.33	1985	.67	1976	12.8	6.9	2.7	.8	1.10	1.45	1.97	2.41	2.85	3.30	3.79	4.38	5.13	6.31	7.40		
Dec	2.95	2.39	1.68	1992	11	7.08	1990	.86	1989	12.9	6.7	1.8	.4	.99	1.27	1.68	2.03	2.36	2.70	3.07	3.51	4.07	4.94	5.74		
Ann	42.32	41.28	3.82	Jun 1972	23	13.45	Jul 1992	.34	Feb 1987	145.5	90.4	27.8	8.0	31.99	34.04	36.63	38.58	40.30	41.96	43.65	45.52	47.77	51.02	53.80		

⁺ 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: 1969-2001

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

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COOP ID: 368469

Lon: 78°01W

Station: STEVENSON DAM, PA

Climate Division: PA 7 NWS Call Sign: Elevation: 932 Feet

										Snov	v (incl	hes)															
						Sno	ow To	tals							Mean Number of Days (1)												
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa		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	10.9	8.8	4	3	10.0	1978	21	31.0	1978	23	1978	22	10+	1994	5.4	3.6	1.2	.4	@	19.6	12.7	8.9	3.3				
Feb	9.8	8.3	5	4	10.0	1972	19	26.4	1972	24	1979	20	14	1978	4.5	3.4	1.1	.4	.1	15.1	12.0	9.0	3.8				
Mar	6.9	3.1	2	1	19.1	1994	3	22.0	1993	30	1994	4	15	1993	2.8	2.1	.9	.3	.1	7.8	5.5	3.6	1.9				
Apr	1.1	.0	#	#	6.0	1974	9	10.0	1982	6	1974	9	1	1982	.6	.4	.1	@	.0	.6	.2	.2	.0				
May	#	.0	#	0	#	1989	8	#+	1989	#+	1989	8	#+	1989	.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	.7	1972	19	.7	1972	#+	1997	28	#+	1997	@	.0	.0	.0	.0	.0	.0	.0	.0				
Nov	1.9	.3	#	#	8.0	1971	25	9.0	1995	8	1995	15	2	1995	.8	.7	.1	.1	.0	1.9	.6	.3	.0				
Dec	8.1	6.4	2	1	15.0	1978	25	26.2	1977	15	1978	25	8	1995	2.9	2.2	.7	.3	@	9.3	4.6	2.0	.8				
Ann	38.7	26.9	N/A	N/A	19.1	Mar 1994	3	31.0	Jan 1978	30	Mar 1994	4	15	Mar 1993	17.0	12.4	4.1	1.5	.2	54.3	35.6	24.0	9.8				

⁺ Also occurred on an earlier date(s) #Denotes trace amounts

- (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

Lat: 41°24N

[@] 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

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Station: STEVENSON DAM, PA

Climate Division: PA 7 NWS Call Sign:

Freeze Data Spring Freeze Dates (Month/Day) Probability of later date in spring (thru Jul 31) than indicated(*) Temp (F) .10 .20 .30 .40 .60 .70 .80 .90 36 6/07 6/01 5/28 5/25 5/21 5/18 5/15 5/10 5/05 32 5/21 5/17 5/15 5/12 5/10 5/08 5/06 5/04 4/30 28 5/12 5/08 5/04 5/01 4/29 4/26 4/23 4/20 4/15 4/23 3/30 24 4/19 4/16 4/14 4/11 4/09 4/06 4/03 20 4/15 4/10 4/07 4/04 4/01 3/29 3/27 3/23 3/18 3/30 3/24 3/22 16 4/03 3/27 3/20 3/17 3/14 3/10 Fall Freeze Dates (Month/Day) Probability of earlier date in fall (beginning Aug 1) than indicated(*) Temp (F) .20 .30 .40 .50 .70 .10 .60 .80 .90 9/26 36 9/19 9/23 9/29 10/01 10/03 10/06 10/09 10/13 32 10/01 10/05 10/08 10/10 10/12 10/14 10/17 10/20 10/24 28 10/11 10/15 10/18 10/21 10/24 10/26 10/29 11/01 11/05 24 10/21 10/26 10/30 11/02 11/05 11/09 11/12 11/16 11/21 20 10/31 11/06 11/11 11/15 11/19 11/23 11/27 12/02 12/09 11/25 11/29 12/02 12/05 12/13 16 11/15 11/21 12/09 12/19 Freeze Free Period **Probability of longer than indicated freeze free period (Days)** Temp (F) .10 .20 .30 .40 .50 .60 .70 .80 .90 152 145 140 136 132 128 124 112 36 119 32 169 164 160 157 154 151 148 145 140 28 198 191 186 181 177 173 157 169 164 24 229 222 216 212 208 203 199 194 186

236

259

0/00 Indicates that the probability of occurrence of threshold temperature is less than the indicated probability.

242

263

Derived from 1971-2000 serially complete daily data

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Complete documentation available from:

221

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^{*} Probability of observing a temperature as cold, or colder, later in the spring or earlier in the fall than the indicated date.

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	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	1273	1097	939	587	282	66	11	21	135	467	771	1105	6754		
60	1118	957	784	439	172	19	0	2	53	324	621	950	5439		
57	1025	873	691	353	120	7	0	0	26	248	531	857	4731		
55	963	817	629	299	91	4	0	0	15	203	472	795	4288		
50	808	677	479	179	39	0	0	0	3	111	330	644	3270		
32	314	246	88	3	0	0	0	0	0	1	25	197	874		

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	64	73	172	406	769	1003	1185	1153	887	561	244	116	6633
55	0	0	0	13	146	317	472	440	212	50	1	0	1651
57	0	0	0	7	113	261	410	378	163	33	0	0	1365
60	0	0	0	3	73	182	317	287	100	16	0	0	978
65	0	0	0	0	28	80	173	151	31	4	0	0	467
70	0	0	0	0	8	21	68	59	4	0	0	0	160

										Gro	wing	Degre	e Uni	ts (2)															
Base		Growing Degree Units (Monthly)														Growing Degree Units (Accumulated Monthly)													
	JanFebMarAprMayJunJulAugSepOctNovDec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
40	5	11	68	225	541	768	932	908	659	332	104	17	5	16	84	309	850	1618	2550	3458	4117	4449	4553	4570					
45	1	0	31	128	388	618	777	753	509	206	50	5	1	1	32	160	548	1166	1943	2696	3205	3411	3461	3466					
50	0	0	11	67	253	469	622	598	361	108	17	2	0	0	11	78	331	800	1422	2020	2381	2489	2506	2508					
55	0	0	4	31	145	325	468	443	231	47	5	0	0	0	4	35	180	505	973	1416	1647	1694	1699	1699					
60	0	0	0	8	70	197	316	292	124	13	0	0	0	0	0	8	78	275	591	883	1007	1020	1020	1020					
Base		•	•	Gro	wing Deg	gree Unit	s for Co	rn (Mont	thly)	•	•		Growing Degree Units for Corn (Accumulated Monthly)																
50/86	0	11	59	165	345	494	618	598	406	209	63	7	0	11	70	235	580	1074	1692	2290	2696	2905	2968	2975					

(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