Station: AMELIA 4 SW, VA

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: 440187

Climate Division: VA 2 NWS Call Sign: Elevation: 360 Feet Lat: 37°19N Lon: 78°04W

	Mea	n (1)						Extr	emes					U	Days (1) emp 65		Mean	Numb	er of I	Days (3)	
Month	Daily Max	Daily Min	Mean	Daily(2) Mean Daily(2)						Year	Day	Lowest Month(1) Mean	Year	Heating	Cooling	Max >= 100	Max >= 90	Max >= 50	Max <= 32	Min <= 32	Min <= 0
Jan	46.3	23.6	35.0	76	1975	30	44.7	1990	-10+	1985	22	21.9	1977	931	0	.0	.0	12.4	3.2	25.2	.5
Feb	49.8	25.8	37.8	81	2000	26	46.6	1990	-12	1979	10	23.5	1979	762	0	.0	.0	14.8	1.8	21.1	.1
Mar	59.1	33.4	46.3	90	1990	14	52.3	2000	10	1980	2	41.4	1981	582	0	.0	@	24.6	.3	14.2	.0
Apr	68.8	41.2	55.0	94+	1985	24	60.9	1985	17	1985	10	51.1	1975	305	4	.0	.5	28.9	.0	4.3	.0
May	76.7	51.3	64.0	96	1996	21	68.5	1991	30	1986	4	60.5	1992	100	68	.0	1.4	31.0	.0	.2	.0
Jun	84.5	60.1	72.3	100	1991	17	76.4	1981	39+	1992	22	66.7	1979	10	228	@	7.4	30.0	.0	.0	.0
Jul	88.5	64.6	76.6	102+	1999	6	80.5	1993	45	1988	1	72.7	1979	0	358	.6	13.7	31.0	.0	.0	.0
Aug	86.6	62.9	74.8	102	1987	4	78.0	1975	41	1986	29	71.6	1981	1	304	.2	10.2	31.0	.0	.0	.0
Sep	80.6	55.5	68.1	99+	1993	2	74.3	1998	32+	1989	29	64.9	1984	44	135	.1	3.5	30.0	.0	.1	.0
Oct	70.4	42.9	56.7	92+	1997	7	64.0	1984	23+	1988	15	50.2	1988	287	27	.0	.2	30.6	.0	4.1	.0
Nov	60.3	34.5	47.4	87	1974	4	54.6	1985	10	1991	27	39.6	1976	529	1	.0	.0	25.4	@	12.1	.0
Dec	50.4	27.2	38.8	82	1998	7	46.6	1984	-1+	1983	26	28.5	1989	813	0	.0	.0	16.8	1.3	22.0	.1
Ann	68.5	43.6	56.1	102+	Jul 1999	6	80.5	Jul 1993	-12	Feb 1979	10	21.9	Jan 1977	4364	1125	.9	36.9	306.5	6.6	103.3	.7

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 002-A

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

⁽¹⁾ From the 1971-2000 Monthly Normals

⁽²⁾ Derived from station's available digital record: 1970-2001

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

Climatography of the United States No. 20 1971-2000

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COOP ID: 440187

Station: AMELIA 4 SW, VA

Climate Division: VA 2

NWS Call Sign: Elevation: 360 Feet Lat: 37°19N Lon: 78°04W

										Pı	recipit	tation	(incl	nes)										
		ans/	P	recipi	itatio	on Total					ean N of D	ays (3	5)	Proba		M	nonthly/ onthly/Ar	annual j indic	precipitated an	babilit ation will nount vs Probal incomplet	ll be equ	els		an the
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	3.81	3.96	2.05	1984	11	8.32	1978	.77	1981	10.0	7.3	2.8	.7	1.17	1.54	2.08	2.54	2.99	3.45	3.96	4.56	5.34	6.54	7.66
Feb	3.22	3.04	3.12	1984	14	6.44	1984	.41	1978	8.9	6.3	2.3	.7	.84	1.15	1.61	2.02	2.43	2.85	3.32	3.88	4.61	5.76	6.83
Mar	4.27	3.35	3.17	1978	11	9.86	1975	1.49	1985	10.5	7.4	3.1	1.0	1.46	1.87	2.46	2.95	3.43	3.92	4.45	5.08	5.88	7.12	8.26
Apr	3.32	2.92	3.00	1987	16	7.43	1987	.19	1985	9.3	5.9	2.2	.9	.80	1.12	1.60	2.03	2.46	2.91	3.42	4.02	4.81	6.06	7.24
May	3.90	3.45	3.06	1984	30	7.95	1971	1.04	1997	10.6	7.0	2.8	1.0	1.64	2.00	2.50	2.90	3.29	3.68	4.09	4.57	5.18	6.11	6.94
Jun	3.23	2.94	4.46	1972	22	7.92	1972	.35	1990	9.8	6.0	2.2	.7	.83	1.14	1.61	2.02	2.43	2.86	3.34	3.91	4.65	5.82	6.91
Jul	4.33	4.36	3.46	1970	23	8.18	1996	.62	1998	10.3	6.9	2.8	1.0	1.15	1.56	2.18	2.73	3.28	3.84	4.47	5.22	6.19	7.72	9.16
Aug	4.01	4.02	3.20	1991	7	11.66	1978	.19	1976	9.1	6.0	2.6	1.3	.80	1.16	1.75	2.29	2.84	3.42	4.09	4.88	5.94	7.63	9.23
Sep	4.13	3.45	5.15	1996	6	11.42	1979	.81	1986	8.1	5.6	2.8	1.0	.92	1.30	1.91	2.45	3.00	3.58	4.23	5.01	6.04	7.67	9.21
Oct	4.18	2.90	10.52	1972	6	15.22	1972	.00	2000	7.7	5.1	2.5	1.3	.32	.77	1.44	2.06	2.69	3.39	4.19	5.16	6.48	8.62	10.67
Nov	3.69	3.28	7.25	1985	4	15.49	1985	1.06	1991	8.5	6.2	2.2	.9	.85	1.19	1.74	2.22	2.70	3.22	3.79	4.48	5.38	6.81	8.16
Dec	3.16	3.05	2.36	1998	13	6.91	1973	.32	1980	9.5	5.9	2.0	.9	.64	.93	1.39	1.82	2.25	2.71	3.23	3.85	4.68	6.00	7.25
Ann	45.25	44.33	10.52	Oct 1972	6	15.49	Nov 1985	.00	Oct 2000	112.3	75.6	30.3	11.4	32.80	35.23	38.33	40.68	42.76	44.77	46.84	49.13	51.90	55.91	59.36

⁺ 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: 1970-2001

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

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COOP ID: 440187

Station: AMELIA 4 SW, VA

Climate Division: VA 2 NWS Call Sign: Elevation: 360 Feet Lat: 37°19N Lon: 78°04W

			Depth Mean Median Snow Fall Day Snow Fall Day Snow Depth Snow Depth Depth Snow Depth Snow Depth Snow Depth Day Mean Snow Depth Snow Depth Snow Depth Day Mean Snow Depth Snow Depth Day Mean Snow Depth Day Da																				
						Sno	ow To	tals									Mea	n Nu	mber	of Day	yS (1)		
	Mean	s/Medi	ians (1)	1					Extre	mes (2)							ow Fa				Snow : = Thre	_	
Month	Snow Fall Mean	Snow Fall Median	Depth	Depth	Daily Snow	Year	Day	Monthly Snow	Year	Daily Snow	Year	Day	Monthly Mean Snow	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	4.0	2.0	#	#	10.0	1996	7	18.5	1996	13	1996	8	3	1996	1.6	1.3	.7	.3	@	2.9	1.4	.9	.3
Feb	3.7	1.0	1	#	11.0	1983	11	19.5	1983	15	1983	12	9	1982	1.4	1.3	.6	.2	@	2.3	1.4	.7	@
Mar	1.8	.0	#	0	10.9	1971	26	10.9	1971	9	1980	3	1	1980	.7	.5	.2	.1	@	.8	.3	.1	.0
Apr	.4	.0	0	0	10.0	1971	7	10.0	1971	0	0	0	0	0	.1	.1	@	@	@	.0	.0	.0	.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	#	.0	0	0	#	1972	20	#	1972	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.3	.0	#	0	4.0	1987	12	4.0	1987	1	1989	23	#+	1996	.2	.1	@	.0	.0	@	.0	.0	.0
Dec	1.2	.0	#	0	5.0	1989	13	11.3	1989	7	1989	13	2	1989	.9	.6	.2	@	.0	1.7	.7	.1	.0
Ann	11.4	3.0	N/A	N/A	11.0	Feb 1983	11	19.5	Feb 1983	15	Feb 1983	12	9	Feb 1982	4.9	3.9	1.7	.6	@	7.7	3.8	1.8	.3

⁺ 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: 440187

Station: AMELIA 4 SW, VA

Climate Division: VA 2 NWS Call Sign:

Lat: 37°19N Elevation: 360 Feet Lon: 78°04W

				Freez	e Data										
			Spri	ng Freeze D	ates (Month/	/Day)									
Tomm (E)	Probability of later date in spring (thru Jul 31) than indicated(*) 10 20 30 40 50 60 70 80 90 36 5/13 5/09 5/05 5/03 4/30 4/28 4/25 4/22 4/17 32 5/03 4/28 4/24 4/20 4/17 4/14 4/10 4/06 4/01 28 4/21 4/16 4/12 4/09 4/07 4/04 4/01 3/28 3/23 24 4/07 4/01 3/28 3/25 3/21 3/18 3/14 3/10 3/04 20 3/31 3/23 3/18 3/13 3/08 3/04 2/27 2/22 2/14 16 3/18 3/09 3/03 2/26 2/20 2/15 2/10 2/03 1/23 Temp (F)														
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	5/13	5/09	5/05	5/03	4/30	4/28	4/25	4/22	4/17						
32	5/03	4/28	4/24	4/20	4/17	4/14	4/10	4/06	4/01						
28	4/21	4/16	4/12	4/09	4/07	4/04	4/01	3/28	3/23						
24	4/07	4/01	3/28	3/25	3/21	3/18	3/14	3/10	3/04						
20	3/31	3/23	3/18	3/13	3/08	3/04	2/27	2/22	2/14						
16	3/18	3/09	3/03	2/26	2/20	2/15	2/10	2/03	1/23						
			Fal	l Freeze Da	tes (Month/D	Day)									
(T)		Pro	bability of ea	arlier date i	n fall (beginr	ning Aug 1) t	han indicate	ed(*)							
lemp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	9/26	10/01	10/04	10/07	10/10	10/13	10/16	10/20	10/25						
32	10/03	10/09	10/14	10/18	10/21	10/25	10/29	11/02	11/09						
28	10/13	10/19	10/23	10/27	10/30	11/03	11/07	11/11	11/17						
24	10/28	11/03	11/07	11/11	11/14	11/18	11/22	11/26	12/02						
20	11/12	11/19	11/23	11/27	12/01	12/04	12/08	12/12	12/19						
16	11/18	11/27	12/04	12/10	12/16	12/21	12/27	1/04	1/15						
			•	Freeze F	ree Period		•	•							
To (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days))							
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	182	175	170	166	162	158	154	149	142						
32	216	206	199	192	186	181	174	167	156						
28	230	222	216	211	206	201	196	190	182						
24	262	254	248	242	237	233	227	221	213						
20	296	286	278	272	266	260	254	247	237						
16	>365	317	307	299	293	287	280	273	263						

^{*} 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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Lon: 78°04W

Station: AMELIA 4 SW, VA

Climate Division: VA 2

COOP ID: 440187

Elevation: 360 Feet Lat: 37°19N

				Deg	ree Days to	o Selected	Base Tem	peratures ((°F)				
Base						Heatin	g Degree I	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	931	762	582	305	100	10	0	1	44	287	529	813	4364
60	776	622	428	175	35	1	0	0	12	176	386	658	3269
57	693	545	342	113	15	0	0	0	5	123	305	572	2713
55	634	492	286	80	7	0	0	0	2	94	255	513	2363
50	493	366	168	25	1	0	0	0	0	41	151	372	1617
32	133	70	5	0	0	0	0	0	0	0	3	57	268

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	225	232	446	690	991	1208	1381	1326	1081	763	465	267	9075
55	13	10	14	80	285	518	668	613	394	144	27	9	2775
57	9	7	8	53	230	458	606	551	336	111	17	6	2392
60	0	0	1	25	158	369	513	458	253	71	8	0	1856
65	0	0	0	4	68	228	358	304	135	27	1	0	1125
70	0	0	0	0	19	113	211	162	52	7	0	0	564

										Gro	wing	Degre	e Uni	ts (2)										
Base														Growing Degree Units (Accumulated Monthly)										
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	73	107	262	483	759	977	1148	1094	860	536	277	113	73	180	442	925	1684	2661	3809	4903	5763	6299	6576	6689
45	33 53 156 346 604 827 993 939 710 384 171												33	86	242	588	1192	2019	3012	3951	4661	5045	5216	5271
50	12 21 84 219 450 677 838 784 560 251 95												12	33	117	336	786	1463	2301	3085	3645	3896	3991	4015
55	1	7	38	121	303	527	683	629	412	140	44	10	1	8	46	167	470	997	1680	2309	2721	2861	2905	2915
60	0	0	15	59	176	381	528	474	276	63	11	2	0	0	15	74	250	631	1159	1633	1909	1972	1983	1985
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86)/86 58 83 180 315 483 655 780 743 564 348 188 8											87	58	141	321	636	1119	1774	2554	3297	3861	4209	4397	4484

(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