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: 441606

Lon: 78°28W

Station: CHASE CITY, VA

Climate Division: VA 2

NWS Call Sign:

Temperature (°F)

Elevation: 510 Feet Lat: 36°48N

	Temperature (°F) Mean (1) Extremes Degree Days (1) Base Temp 65 Mean Number of Days (3) Month Daily Daily Mean Highest Vear Day Month(1) Vear Lowest Vear Day Month(1) Vear Heating Cooling >= >= >= <= <= <= <= <= <= <= <= <= <= <= <= <=																				
	Mea	n (1)						Extr	emes				•		Mean	Numb	er of I	Days (3)			
Month	Daily Max	Daily Min	Mean	Highest Daily(2)	Year	Day		Year	Lowest Daily(2)	Year	Day		Year	Heating	Cooling						
Jan	47.1	24.3	35.7	78+	1997	5	46.0	1974	-12	1985	21	25.3	1977	908	0	.0	.0	14.8	2.1	23.5	.2
Feb	51.2	25.9	38.6	80+	1989	16	47.6	1990	-1	1996	5	28.6	1978	740	0	.0	.0	17.2	1.1	20.7	.2
Mar	60.5	33.7	47.1	88	1968	21	53.3	1990	10+	1980	3	41.9	1980	556	0	.0	.0	26.3	.2	12.9	.0
Apr	70.9	41.8	56.4	95	1976	19	61.7	1991	15	1982	7	51.0	1997	272	12	.0	.7	29.4	.0	3.8	.0
May	78.3	52.1	65.2	105	1970	22	73.6	1991	31+	1972	28	59.5	1972	97	104	.0	2.1	31.0	.0	.1	.0
Jun	86.1	61.4	73.8	103	1959	30	77.8	1981	40	1972	11	69.0	1972	5	268	.1	9.4	30.0	.0	.0	.0
Jul	90.2	66.1	78.2	107	1954	14	82.2	1991	49	1988	2	73.9	2000	0	407	.8	17.9	31.0	.0	.0	.0
Aug	88.0	64.1	76.1	105	1983	23	79.9	1988	46+	1998	21	72.9	1981	0	342	.4	13.2	31.0	.0	.0	.0
Sep	81.4	57.3	69.4	106	1954	6	73.8	1980	35	2001	27	65.2	1984	28	158	@	5.0	30.0	.0	.0	.0
Oct	70.8	44.0	57.4	93	1954	5	64.1	1984	22	1962	27	52.0	1988	260	23	.0	.1	30.8	.0	2.5	.0
Nov	60.5	35.2	47.9	89	1974	3	54.9	1985	12	1970	25	40.6	1976	516	2	.0	.0	26.8	.0	10.8	.0
Dec	50.6	27.4	39.0	81+	1998	8	46.5	1991	0	1983	25	29.7	1989	806	0	.0	.0	18.8	1.2	21.3	@
Ann	69.6	44.4	57.1	107	Jul 1954	14	82.2	Jul 1991	-12	Jan 1985	21	25.3	Jan 1977	4188	1316	1.3	48.4	317.1	4.6	95.6	.4

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 016-A

- (1) From the 1971-2000 Monthly Normals
- (2) Derived from station's available digital record: 1949-2001
- (3) Derived from 1971-2000 serially complete daily data

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

Climate Division: VA 2

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COOP ID: 441606

Station: CHASE CITY, VA

NWS Call Sign: Elevation: 510 Feet Lat: 36°48N Lon: 78°28W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recip	itatio	on Total						ays (3	3)	Proba	ability th		nonthly/	annual j	precipita ated an		ll be equ		less tha	in the
	Medi	ians(1)				Extremes	•			1	aily Pre	стриацо	n		Th	ese value	s were de	termined	from the	incomplet	te gamma	distributi	on	
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	3.87	3.55	2.50	1999	3	10.72	1978	.28	1981	7.2	6.0	2.7	1.1	.77	1.12	1.68	2.21	2.73	3.30	3.94	4.71	5.72	7.36	8.91
Feb	3.29	2.80	3.00	1994	11	8.09	1994	.55	1978	6.7	5.7	2.0	.7	.87	1.18	1.66	2.08	2.49	2.92	3.40	3.97	4.71	5.87	6.96
Mar	4.14	3.52	3.50	1984	7	12.46	1984	.97	1985	8.1	7.1	3.4	1.0	1.13	1.52	2.12	2.64	3.15	3.69	4.28	4.98	5.90	7.33	8.67
Apr	3.70	3.24	4.10	1983	16	9.92	1983	.74	1986	7.6	6.3	2.7	1.0	.86	1.20	1.75	2.23	2.72	3.23	3.80	4.49	5.39	6.82	8.17
May	4.06	3.46	3.22	1968	27	10.53	1982	1.20	1975	8.2	6.9	3.3	1.0	1.31	1.69	2.26	2.74	3.21	3.70	4.23	4.85	5.65	6.89	8.04
Jun	3.68	3.29	4.30	1966	17	10.99	1995	.70	1986	6.9	6.0	2.9	1.1	.93	1.28	1.81	2.29	2.75	3.25	3.79	4.45	5.30	6.64	7.90
Jul	4.09	3.88	3.60	1987	3	9.19	1981	1.30	1976	7.7	7.0	2.9	1.1	1.53	1.91	2.46	2.92	3.35	3.79	4.28	4.84	5.55	6.65	7.65
Aug	3.71	3.50	3.50	1986	13	10.84	1986	.36	1980	6.1	5.3	2.6	1.2	.76	1.10	1.64	2.14	2.64	3.18	3.78	4.51	5.48	7.02	8.48
Sep	4.21	3.08	4.10	1999	16	15.14	1999	.16	1990	6.2	5.4	2.7	1.5	.45	.77	1.35	1.94	2.57	3.28	4.10	5.14	6.55	8.88	11.15
Oct	3.88	3.29	3.80	1972	5	11.55	1971	.00	2000	5.9	5.0	2.8	1.4	.61	1.13	1.79	2.32	2.86	3.41	4.03	4.76	5.72	7.24	8.66
Nov	3.38	3.10	4.04	1993	28	11.02	1985	.75	1981	7.4	5.6	2.5	.9	.91	1.23	1.72	2.15	2.57	3.01	3.50	4.08	4.84	6.02	7.13
Dec	3.25	3.39	3.50	1983	6	8.17	1983	.21	2000	6.7	5.6	2.3	.9	.56	.85	1.32	1.76	2.22	2.71	3.28	3.96	4.87	6.35	7.76
Ann	45.26	44.73	4.30	Jun 1966	17	15.14	Sep 1999	.00	Oct 2000	84.7	71.9	32.8	12.9	33.86	36.11	38.96	41.11	43.01	44.84	46.72	48.79	51.29	54.89	57.98

⁺ 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: 1949-2001

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

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COOP ID: 441606

Station: CHASE CITY, VA

Climate Division: VA 2 NWS Call Sign:

Elevation: 510 Feet Lat: 36°48N Lon: 78°28W

		Daily Monthly Daily																					
						Sn	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa					Depth esholo	
Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median	8	Year	Day	0	Year		Year	Day	_	Year	0.1	1.0	3.0	5.0	10.0	1	3	5	10
Jan	1.1	.0	#	0	4.0	1973	8	4.0+	1973	4	1973	8	#+	1998	.3	.3	.2	.0	.0	.1	.1	.0	.0
Feb	.9	.0	#	0	3.0	1978	2	4.5	1978	10	1989	18	9	1979	.5	.2	.1	.0	.0	.0	.0	.0	.0
Mar	1.9	.0	#	0	11.0	1971	27	11.0	1971	11	1971	27	#+	1999	.2	.2	.2	.1	.1	.1	.1	.1	.1
Apr	.0	.0	0	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.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	.0	0	0	.0	0	#	2000	8	#	2000	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.1	.0	#	0	1.0	1971	24	1.0	1971	#+	2000	20	#+	2000	.1	.1	.0	.0	.0	.0	.0	.0	.0
Dec	.2	.0	#	0	1.0	1981	25	1.0+	2000	1	2000	20	#+	2000	.2	.2	.0	.0	.0	.1	.0	.0	.0
Ann	4.2	.0	N/A	N/A	11.0	Mar 1971	27	11.0	Mar 1971	11	Mar 1971	27	9	Feb 1979	1.3	1.0	.5	.1	.1	.3	.2	.1	.1

⁺ 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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Climate Division: VA 2 NWS Call Sign:

Elevation: 510 Feet Lat: 36°48N Lon: 78°28W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month/	Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated((*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/17	5/11	5/06	5/03	4/29	4/25	4/22	4/17	4/11
32	5/01	4/26	4/22	4/18	4/15	4/12	4/09	4/05	3/30
28	4/17	4/12	4/08	4/05	4/02	3/30	3/26	3/23	3/17
24	4/05	3/30	3/26	3/22	3/19	3/15	3/11	3/07	3/01
20	3/24	3/17	3/12	3/08	3/04	3/01	2/24	2/20	2/13
16	3/20	3/10	3/03	2/25	2/19	2/14	2/07	1/31	1/19
			Fal	l Freeze Da	tes (Month/D	Oay)			
Temp (F)		Pro	bability of ea	arlier date i	n fall (beginn	ing Aug 1) t	han indicate	d(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/01	10/07	10/11	10/14	10/18	10/21	10/24	10/28	11/03
32	10/07	10/13	10/18	10/21	10/25	10/28	11/01	11/05	11/11
28	10/15	10/22	10/27	11/01	11/05	11/09	11/13	11/18	11/25
24	11/04	11/11	11/17	11/21	11/25	11/30	12/04	12/09	12/17
20	11/16	11/23	11/28	12/02	12/06	12/10	12/14	12/19	12/25
16	11/29	12/08	12/15	12/21	12/26	1/01	1/06	1/14	1/25
				Freeze F	ree Period				
Temp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days)		
remb (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	194	186	180	175	171	166	161	156	148
32	217	208	202	197	192	187	181	175	167
28	245	235	228	222	216	211	205	198	188
24	284	273	265	258	251	244	237	229	218
20	304	294	287	281	276	270	264	257	247
16	>365	331	320	312	305	299	292	284	273

^{*} 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.

Complete documentation available from:

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Climate Division: VA 2 NWS Call Sign: Elevation: 510 Feet Lat: 36°48N Lon: 78°28W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	908	740	556	272	97	5	0	0	28	260	516	806	4188
60	753	600	408	154	39	0	0	0	6	149	376	651	3136
57	667	517	324	100	19	0	0	0	2	99	297	565	2590
55	608	466	272	71	11	0	0	0	1	73	250	506	2258
50	466	337	163	23	2	0	0	0	0	28	150	368	1537
32	108	45	5	0	0	0	0	0	0	0	5	56	219

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	223	229	473	730	1030	1253	1430	1365	1120	786	480	273	9392
55	10	6	27	111	328	563	717	652	431	147	35	10	3037
57	7	1	17	80	274	503	655	590	372	111	23	7	2640
60	0	0	7	44	201	414	562	497	286	68	12	0	2091
65	0	0	0	12	104	268	407	342	158	23	2	0	1316
70	0	0	0	2	41	142	259	197	65	5	0	0	711

										Gro	wing	Degre	e Uni	ts (2)										
Base					Growin	g Degree	Units (N	(Ionthly)								Growi	ng Degre	ee Units (Accumu	lated Mo	onthly)			
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	0 10 10 10 10 10 10 10 10 10 10 10 10 10												84	210	500	1023	1812	2827	4016	5154	6058	6626	6931	7057
45	45 40 66 175 381 634 865 1034 983 754 414 189												40	106	281	662	1296	2161	3195	4178	4932	5346	5535	5596
50	14	27	94	250	482	715	879	828	604	272	106	29	14	41	135	385	867	1582	2461	3289	3893	4165	4271	4300
55	0	9	44	140	332	566	724	673	455	153	50	9	0	9	53	193	525	1091	1815	2488	2943	3096	3146	3155
60	0	1	15	69	199	416	569	518	315	71	16	0	0	1	16	85	284	700	1269	1787	2102	2173	2189	2189
Base	Base Growing Degree Units for Corn (Monthly)													•	Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)	•	
50/86	50/86 65 99 200 340 510 682 802 769 598 368 200 92												65	164	364	704	1214	1896	2698	3467	4065	4433	4633	4725

(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