

# Climatography of the United States No. 20

National Climatic Data Center  
Federal Building  
151 Patton Avenue  
Asheville, North Carolina 28801  
www.ncdc.noaa.gov

Station: SALTVILLE 1 N, VA

1971-2000

COOP ID: 447506

Climate Division: VA 6

NWS Call Sign:

Elevation: 1,733 Feet Lat: 36° 53N

Lon: 81° 46W

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	42.9	21.1	32.0	79	1952	1	42.4	1974	-10+	1963	25	19.7	1977	1023	0	.0	.0	6.7	9.5	26.6	1.1
Feb	47.3	22.8	35.1	77	1927	17	42.2	1990	-19+	1996	6	25.0	1978	839	0	.0	.0	9.1	6.8	23.9	.2
Mar	56.5	30.5	43.5	86+	1929	25	48.0+	1976	-4	1993	15	37.6	1971	666	0	.0	.0	23.2	.5	20.1	.1
Apr	66.1	38.4	52.3	90+	1957	29	56.7	1981	20	1950	8	48.0	1997	384	1	.0	.0	27.7	@	10.0	.0
May	74.6	48.2	61.4	92+	1970	22	66.2	1991	30+	1996	1	55.4	1997	157	46	.0	.0	30.8	.0	2.5	.0
Jun	81.4	56.8	69.1	99	1952	29	72.1	1981	37	1966	2	65.3	1972	18	140	.0	.7	29.9	.0	.2	.0
Jul	84.6	61.6	73.1	100+	1952	29	76.1	1993	42	1961	10	70.2	1996	0	251	.0	2.4	31.0	.0	.0	.0
Aug	83.6	59.9	71.8	97+	1965	18	75.3	1995	45	1999	31	68.9	1992	3	212	.0	1.5	31.0	.0	.0	.0
Sep	77.9	52.8	65.4	100	1954	7	69.2	1998	33+	1999	24	62.4	1976	65	75	.0	.5	30.0	.0	.6	.0
Oct	68.0	39.0	53.5	93+	1953	2	61.2	1984	17	1962	27	47.2	1988	366	9	.0	.0	30.0	.0	9.0	.0
Nov	56.8	30.9	43.9	81+	1961	6	52.7	1985	2	1929	30	36.2	1976	636	0	.0	.0	24.9	.1	20.2	.0
Dec	46.2	24.2	35.2	79	2001	6	42.1	1984	-6+	1962	14	24.6	1989	925	0	.0	.0	9.8	5.6	25.6	.4
Ann	65.5	40.5	53.0	100+	Sep 1954	7	76.1	Jul 1993	-19+	Feb 1996	6	19.7	Jan 1977	5082	734	.0	5.1	284.1	22.5	138.7	1.8

+ 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/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html)

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1927-2001

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

050-A

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COOP ID: 447506

Climate Division: VA 6

NWS Call Sign:

Elevation: 1,733 Feet Lat: 36°53N

Lon: 81°46W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels 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	3.79	3.49	2.50	1996	27	8.78	1996	.66	1981	14.3	8.1	2.4	.6	1.33	1.69	2.20	2.64	3.06	3.49	3.95	4.50	5.20	6.27	7.26
Feb	3.61	3.72	1.93	1994	11	7.30	1994	.75	1978	11.5	7.0	2.2	.6	1.46	1.79	2.26	2.65	3.01	3.38	3.78	4.24	4.82	5.72	6.53
Mar	4.33	4.02	3.11	1963	12	8.37	1975	1.55	1985	12.9	8.7	2.4	.7	1.89	2.28	2.82	3.27	3.68	4.09	4.54	5.05	5.70	6.68	7.57
Apr	3.85	3.45	2.86	1998	17	7.63	1998	1.15	1995	12.2	7.3	2.1	.5	1.46	1.82	2.34	2.76	3.17	3.58	4.03	4.55	5.21	6.22	7.15
May	4.52	4.90	2.25	1971	7	7.44	1990	1.92	1977	14.9	9.8	3.0	.7	2.28	2.66	3.17	3.58	3.96	4.34	4.74	5.20	5.77	6.63	7.40
Jun	3.44	3.17	2.37	1951	30	6.58	1998	1.26	1993	8.3	5.8	1.0	.2	1.57	1.87	2.29	2.63	2.95	3.27	3.61	4.00	4.50	5.24	5.92
Jul	4.71	4.48	3.87	1966	30	8.28	1992	1.75	1995	7.0	5.2	1.6	.4	2.32	2.72	3.26	3.70	4.10	4.51	4.94	5.42	6.03	6.95	7.78
Aug	4.15	4.34	2.82	1998	10	6.22	1978	1.09	1995	10.7	6.6	2.1	.7	1.95	2.31	2.81	3.21	3.58	3.95	4.35	4.80	5.37	6.23	7.00
Sep	3.16	2.96	2.48	1966	14	7.13	1979	.63	1984	4.2	2.7	.9	.3	.99	1.29	1.74	2.12	2.49	2.87	3.29	3.79	4.42	5.41	6.33
Oct	2.51	2.25	2.06	1964	17	5.65	1990	.41	1991	3.7	2.0	.8	.1	.77	1.01	1.36	1.67	1.97	2.27	2.61	3.01	3.52	4.33	5.07
Nov	3.04	3.11	2.04	1999	26	5.73	1985	1.09	1976	6.5	4.3	.7	.2	1.24	1.52	1.91	2.24	2.54	2.85	3.18	3.57	4.05	4.80	5.47
Dec	3.86	3.68	2.49	1993	5	7.75	1991	1.27	1971	12.6	7.5	2.1	.6	1.38	1.74	2.27	2.71	3.13	3.56	4.03	4.58	5.28	6.36	7.35
Ann	44.97	44.38	3.87	Jul 1966	30	8.78	Jan 1996	.41	Oct 1991	118.8	75.0	21.3	5.6	34.82	36.85	39.42	41.34	43.03	44.65	46.31	48.14	50.33	53.48	56.18

+ 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: 1927-2001

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

Complete documentation available from:  
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Station: SALTVILLE 1 N, VA

COOP ID: 447506

Climate Division: VA 6

NWS Call Sign:

Elevation: 1,733 Feet

Lat: 36°53N

Lon: 81°46W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (1)					Extremes (2)										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	1.6	.0	1	#	6.0	1996	12	6.0	1971	18	1996	8	4	1996	1.4	1.1	.2	.2	.0	-9.9	-9.9	-9.9	-9.9
Feb	2.2	.0	#	#	8.0	1996	2	9.3	1972	8	1996	2	2	1996	1.5	1.2	.4	.2	.0	1.2	.2	.0	.0
Mar	3.7	1.3	#	#	8.3	1993	13	14.3	1993	8	1993	13	#+	1999	1.2	1.1	.4	.2	.0	1.0	.3	.2	.0
Apr	.3	.0	#	0	2.3	1992	4	2.3	1992	2	1992	4	#+	1997	.2	.2	.0	.0	.0	.1	.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	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	.5	.0	#	0	3.0	1971	24	5.5	1971	3	1971	25	#+	1997	.2	.2	.1	.0	.0	.2	.2	.0	.0
Dec	2.7	.1	#	#	8.0	1995	7	10.5	1995	8	1995	7	1+	2000	1.0	.8	.2	.1	.0	.6	.0	.0	.0
Ann	11.0	1.4	N/A	N/A	8.3	Mar 1993	13	14.3	Mar 1993	18	Jan 1996	8	4	Jan 1996	5.5	4.6	1.3	.7	.0	-9.9	-9.9	-9.9	-9.9

+ 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:

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**NWS Call Sign:**

**Elevation: 1,733 Feet**

**Lat: 36° 53N**

**Lon: 81° 46W**

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	6/10	6/02	5/27	5/22	5/17	5/12	5/07	5/01	4/23
32	5/25	5/19	5/14	5/10	5/06	5/02	4/28	4/23	4/16
28	5/19	5/09	5/03	4/27	4/22	4/17	4/11	4/05	3/27
24	4/30	4/22	4/17	4/12	4/08	4/04	3/30	3/25	3/18
20	4/16	4/08	4/01	3/27	3/22	3/17	3/11	3/05	2/24
16	4/02	3/24	3/18	3/12	3/07	3/01	2/24	2/17	2/08
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	9/13	9/18	9/23	9/26	9/29	10/03	10/06	10/10	10/16
32	9/24	9/29	10/03	10/06	10/09	10/12	10/16	10/19	10/25
28	10/02	10/07	10/10	10/13	10/15	10/18	10/21	10/24	10/29
24	10/07	10/14	10/19	10/23	10/27	10/31	11/04	11/09	11/16
20	10/22	10/28	11/02	11/06	11/10	11/14	11/18	11/22	11/29
16	10/31	11/09	11/15	11/21	11/26	12/01	12/06	12/13	12/22
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	168	157	148	141	135	128	121	113	101
32	188	177	169	162	156	149	143	135	124
28	211	199	190	183	176	169	161	152	140
24	235	223	215	208	201	194	187	179	167
20	266	255	246	239	232	225	218	210	198
16	304	290	280	272	263	255	247	236	222

\* 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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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	1023	839	666	384	157	18	0	3	65	366	636	925	5082
60	868	699	511	241	71	3	0	0	19	235	487	770	3904
57	775	615	422	166	38	0	0	0	7	170	401	677	3271
55	713	559	364	123	23	0	0	0	4	133	346	615	2880
50	572	426	232	46	5	0	0	0	0	64	220	472	2037
32	166	76	11	0	0	0	0	0	0	0	9	95	357

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	166	161	368	607	912	1112	1274	1232	1001	666	363	193	8055
55	0	0	8	40	222	422	561	519	314	87	10	0	2183
57	0	0	4	23	176	362	499	457	258	62	5	0	1846
60	0	0	0	8	116	275	406	364	180	34	1	0	1384
65	0	0	0	1	46	140	251	212	75	9	0	0	734
70	0	0	0	0	12	46	109	87	18	1	0	0	273

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	37	51	173	366	610	754	1004	948	756	401	133	49	37	88	261	627	1237	1991	2995	3943	4699	5100	5233	5282
45	15	19	91	240	458	604	849	793	606	265	61	21	15	34	125	365	823	1427	2276	3069	3675	3940	4001	4022
50	2	4	36	134	310	456	694	638	456	147	23	2	2	6	42	176	486	942	1636	2274	2730	2877	2900	2902
55	0	0	9	64	181	317	539	483	309	65	3	0	0	0	9	73	254	571	1110	1593	1902	1967	1970	1970
60	0	0	0	20	84	196	384	328	176	17	0	0	0	0	0	20	104	300	684	1012	1188	1205	1205	1205
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	26	46	148	266	398	473	681	636	492	280	121	39	26	72	220	486	884	1357	2038	2674	3166	3446	3567	3606

(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.  
Complete documentation for the 1971-2000 Normals is available on the internet from:  
[www.ncdc.noaa.gov/oa/climate/normal/usnormals.html](http://www.ncdc.noaa.gov/oa/climate/normal/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 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.

- |   |   |
|---|---|
| <ol style="list-style-type: none"><li>a. Temperature/ Precipitation Tables<ol style="list-style-type: none"><li>1. 1971-2000 Monthly Normals</li><li>2. Cooperative Summary of the Day</li><li>3. National Weather Service station records</li><li>4. 1971-2000 serially complete daily data</li></ol></li><li>b. Degree Day Table<ol style="list-style-type: none"><li>1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals</li><li>2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data</li></ol></li></ol> | <ol style="list-style-type: none"><li>c. Snow Tables<ol style="list-style-type: none"><li>1. Snow Climatology</li><li>2. Cooperative Summary of the Day</li></ol></li><li>d. Freeze Data Table<br/>1971-2000 serially complete daily data</li></ol> |
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## References

U.S. Climate Normals 1971-2000, [www.ncdc.noaa.gov/normal.html](http://www.ncdc.noaa.gov/normal.html)  
U.S. Climate Normals 1971-2000-Products Clim20, [www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html](http://www.ncdc.noaa.gov/oa/climate/normal/usnormalsprods.html)  
Snow Climatology Project Description, [www.ncdc.noaa.gov/oa/climate/monitoring/snowclim/mainpage.html](http://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](http://www1.ncdc.noaa.gov/pub/data/special/serialcomplete_jam_0900.pdf)