

Climatology of the United States

No. 20

1971-2000

Station: WEST POINT 2 NW, VA

COOP ID: 449025

Climate Division: VA 1

NWS Call Sign:

Elevation: 20 Feet

Lat: 37° 34N

Lon: 76° 48W

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	48.3	28.2	38.3	77+	1999	23	47.8	1974	-7	1985	21	26.7	1977	830	0	.0	.0	12.8	2.7	21.4	.3
Feb	52.0	30.2	41.1	83	1997	27	49.1	1976	-1	1979	10	31.2	1978	669	0	.0	.0	15.2	1.4	18.2	@
Mar	61.1	37.0	49.1	90	1998	30	53.6	1977	10+	1960	11	44.4	1984	495	0	.0	@	25.9	.1	12.4	.0
Apr	71.5	45.0	58.3	96	1960	26	62.7	1994	24+	1965	1	54.2	1997	214	12	.0	.5	29.7	.0	2.7	.0
May	79.1	54.7	66.9	98+	1996	20	72.3	1991	30	1966	11	62.9	1992	50	108	.0	2.3	31.0	.0	.0	.0
Jun	86.1	63.3	74.7	103	1959	29	78.3	1981	38	1967	2	70.8	1979	2	293	.1	9.2	30.0	.0	.0	.0
Jul	89.8	67.8	78.8	102+	1998	22	81.7	1986	48	1979	6	75.6	2000	0	428	.6	15.5	31.0	.0	.0	.0
Aug	87.6	66.3	77.0	104	1983	20	80.9	1980	45+	1986	30	73.0	1992	0	370	.2	10.6	31.0	.0	.0	.0
Sep	81.9	60.1	71.0	105	1954	7	76.2	1980	36	1963	25	67.4	1994	14	193	.1	3.6	30.0	.0	.0	.0
Oct	71.5	48.2	59.9	96	1954	4	66.7	1984	19	1962	27	54.6	1988	200	40	.0	.2	30.9	.0	1.5	.0
Nov	61.7	39.6	50.7	85+	1993	15	58.6	1985	12	1970	25	43.7	1976	433	2	.0	.0	25.7	.0	9.6	.0
Dec	52.1	32.0	42.1	83	1998	6	49.9	1971	0	1958	16	30.9	1989	712	0	.0	.0	17.2	1.0	17.7	.0
Ann	70.2	47.7	59.0	105	Sep 1954	7	81.7	Jul 1986	-7	Jan 1985	21	26.7	Jan 1977	3619	1446	1.0	41.9	310.4	5.2	83.5	.3

+ 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

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1954-2001

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

064-A

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: WEST POINT 2 NW, VA

COOP ID: 449025

Climate Division: VA 1

NWS Call Sign:

Elevation: 20 Feet

Lat: 37°34N

Lon: 76°48W

Precipitation (inches)

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	4.01	4.04	3.08	1999	3	7.50	1978	.59	1981	11.2	7.3	2.9	1.1	1.39	1.77	2.32	2.79	3.23	3.69	4.19	4.77	5.52	6.67	7.73
Feb	3.16	3.20	2.22	1998	4	5.90	1998	.74	1978	10.0	6.1	2.5	.5	1.19	1.49	1.91	2.26	2.60	2.94	3.31	3.74	4.29	5.13	5.90
Mar	4.44	3.79	2.65	1989	31	8.50	1984	1.67	1981	11.1	7.6	3.2	1.1	1.65	2.06	2.66	3.16	3.63	4.12	4.64	5.25	6.03	7.23	8.32
Apr	3.20	3.10	3.07	1983	16	6.40	1983	.76	1985	10.0	5.8	2.3	.8	1.10	1.41	1.85	2.22	2.58	2.94	3.34	3.81	4.41	5.34	6.19
May	4.05	4.08	3.25	1957	19	7.16	1990	.72	1991	11.1	7.1	2.8	1.0	1.60	1.98	2.51	2.95	3.37	3.79	4.24	4.77	5.44	6.47	7.40
Jun	3.65	3.54	3.75	1963	3	6.96	1972	1.12	1980	10.0	6.4	2.7	.9	1.39	1.73	2.21	2.62	3.00	3.39	3.82	4.31	4.93	5.89	6.77
Jul	4.48	4.32	6.12	1960	30	9.16	1996	.91	1983	11.4	7.3	3.0	1.2	1.31	1.73	2.37	2.93	3.47	4.03	4.65	5.38	6.33	7.82	9.20
Aug	4.19	3.82	6.40	1955	12	9.06	1996	.59	1980	9.9	6.5	2.7	1.4	.84	1.22	1.84	2.40	2.97	3.58	4.27	5.10	6.20	7.95	9.62
Sep	4.63	3.28	10.75	1999	16	18.10	1999	.65	1978	8.6	5.6	2.7	1.4	.61	.98	1.64	2.29	2.96	3.71	4.58	5.65	7.10	9.47	11.76
Oct	3.57	3.31	4.10	1976	2	10.58	1976	.04	2000	7.6	4.8	2.4	1.1	.43	.71	1.21	1.71	2.23	2.82	3.51	4.36	5.51	7.41	9.25
Nov	3.17	2.86	2.60	1956	1	6.84	1979	.91	1981	9.7	5.8	2.1	.7	.96	1.26	1.71	2.10	2.47	2.86	3.29	3.79	4.44	5.46	6.40
Dec	3.21	3.65	2.88	1958	29	5.86	1998	.56	1980	10.3	6.5	2.3	.7	.88	1.19	1.65	2.05	2.45	2.87	3.32	3.87	4.57	5.68	6.71
Ann	45.76	45.74	10.75	Sep 1999	16	18.10	Sep 1999	.04	Oct 2000	120.9	76.8	31.6	11.9	33.23	35.68	38.80	41.16	43.26	45.27	47.36	49.65	52.43	56.45	59.93

+ 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: 1954-2001

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

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Station: WEST POINT 2 NW, VA

COOP ID: 449025

Climate Division: VA 1

NWS Call Sign:

Elevation: 20 Feet

Lat: 37°34N

Lon: 76°48W

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	3.4	.8	#	#	12.5	2000	25	18.5	2000	12+	2000	25	3	1996	1.7	1.1	.5	.2	@	2.6	1.1	.6	.1
Feb	2.2	.8	#	#	8.0	1996	16	12.7	1996	9	1979	19	2	1996	1.3	.7	.3	.1	.0	2.0	.9	.2	.0
Mar	1.3	.0	#	0	9.3	1980	2	12.5	1980	11	1980	2	1	1980	.6	.3	.1	.1	.0	.3	.1	.1	@
Apr	#	.0	0	0	#	1996	16	#+	1996	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
May	.0	.0	#	0	.0	0	0	.0	0	#	1981	1	#	1981	.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	.2	.0	#	0	2.5	1987	11	2.5	1987	2	1987	11	#+	1989	.1	.1	.0	.0	.0	.1	.0	.0	.0
Dec	.9	.0	#	#	4.2	1989	13	5.2	1982	5	1989	13	1	1989	.8	.4	.1	.0	.0	.5	@	.0	.0
Ann	8.0	1.6	N/A	N/A	12.5	Jan 2000	25	18.5	Jan 2000	12+	Jan 2000	25	3	Jan 1996	4.5	2.6	1.0	.4	@	5.5	2.1	.9	.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/normal/usnormals.html

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No. 20 1971-2000

Station: WEST POINT 2 NW, VA

COOP ID: 449025

Climate Division: VA 1

NWS Call Sign:

Elevation: 20 Feet

Lat: 37°34N

Lon: 76°48W

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	5/08	5/04	5/01	4/28	4/26	4/23	4/21	4/18	4/13
32	4/22	4/18	4/16	4/13	4/11	4/09	4/07	4/04	3/31
28	4/15	4/10	4/07	4/04	4/02	3/31	3/28	3/25	3/20
24	3/27	3/23	3/19	3/16	3/13	3/10	3/07	3/04	2/27
20	3/20	3/13	3/09	3/04	3/01	2/25	2/21	2/16	2/09
16	3/07	2/27	2/21	2/16	2/11	2/06	2/01	1/26	1/18
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	9/30	10/05	10/09	10/12	10/15	10/18	10/21	10/25	10/30
32	10/11	10/16	10/19	10/22	10/25	10/28	10/31	11/03	11/08
28	10/18	10/24	10/28	11/01	11/04	11/08	11/11	11/15	11/21
24	11/07	11/12	11/16	11/20	11/23	11/27	11/30	12/04	12/10
20	11/24	12/01	12/06	12/10	12/14	12/18	12/22	12/27	1/03
16	12/05	12/12	12/17	12/21	12/26	12/30	1/03	1/08	1/16
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	193	186	180	176	171	167	162	157	149
32	215	209	204	200	196	193	189	184	178
28	238	230	225	220	215	211	206	201	193
24	276	269	263	259	255	250	246	240	233
20	315	305	299	293	287	282	276	269	260
16	351	335	327	320	315	309	303	296	286

* 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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1971-2000**

Station: WEST POINT 2 NW, VA

COOP ID: 449025

Climate Division: VA 1 NWS Call Sign: Elevation: 20 Feet Lat: 37°34N Lon: 76°48W

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	830	669	495	214	50	2	0	0	14	200	433	712	3619
60	675	529	347	104	11	0	0	0	2	106	296	564	2634
57	591	452	264	58	3	0	0	0	0	66	222	477	2133
55	533	399	214	36	1	0	0	0	0	45	179	421	1828
50	395	276	114	7	0	0	0	0	0	14	94	293	1193
32	71	27	1	0	0	0	0	0	0	0	1	34	134

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	264	282	530	788	1081	1281	1451	1393	1169	863	560	345	10007
55	13	10	29	134	369	591	738	680	479	196	48	19	3306
57	9	6	17	96	309	531	676	618	419	154	31	13	2879
60	0	0	7	51	224	441	583	525	331	101	15	7	2285
65	0	0	0	12	108	293	428	370	193	40	2	0	1446
70	0	0	0	1	36	157	273	222	84	11	0	0	784

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	99	137	300	546	831	1035	1189	1134	915	607	325	158	99	236	536	1082	1913	2948	4137	5271	6186	6793	7118	7276
45	51	79	186	399	676	885	1034	979	765	453	212	87	51	130	316	715	1391	2276	3310	4289	5054	5507	5719	5806
50	21	35	106	264	521	735	879	824	615	306	121	45	21	56	162	426	947	1682	2561	3385	4000	4306	4427	4472
55	5	15	52	153	366	585	724	669	465	182	61	17	5	20	72	225	591	1176	1900	2569	3034	3216	3277	3294
60	0	0	24	82	231	436	569	514	322	93	25	3	0	0	24	106	337	773	1342	1856	2178	2271	2296	2299
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	62	89	197	348	537	705	817	782	612	384	202	93	62	151	348	696	1233	1938	2755	3537	4149	4533	4735	4828

(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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
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.

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| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
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References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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