

Climatology of the United States

No. 20

1971-2000

Station: LAWRENCEVILLE 3 E, VA

COOP ID: 444768

Climate Division: VA 2

NWS Call Sign:

Elevation: 325 Feet Lat: 36°46N Lon: 77°47W

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	48.1	25.6	36.9	80	1952	2	46.1	1974	-10	1985	21	26.1	1977	873	0	.0	.0	14.5	2.0	22.4	.3
Feb	52.0	27.1	39.6	83	1977	26	47.6	1990	-6	1979	10	28.8	1979	714	0	.0	.0	17.8	.9	19.1	.1
Mar	60.4	34.9	47.7	89+	1990	13	52.0	2000	8	1980	2	42.0	1996	539	0	.0	.0	26.6	.1	13.2	.0
Apr	69.2	42.1	55.7	96	1990	28	60.3	1994	17	1985	10	51.0	1975	286	6	.0	.5	29.7	.0	4.5	.0
May	77.1	51.5	64.3	98	1991	31	69.0	1991	28+	1976	9	61.6	1988	83	62	.0	1.3	31.0	.0	.2	.0
Jun	84.2	60.2	72.2	103+	1959	30	76.4	1981	36	1976	6	68.3+	1979	8	223	.0	7.1	30.0	.0	.0	.0
Jul	88.3	64.6	76.5	107	1952	29	80.4	1986	46	1988	2	73.1	1975	0	355	.4	14.2	31.0	.0	.0	.0
Aug	86.7	63.2	75.0	103	1953	31	79.6	1980	40	1976	31	71.5	1981	1	309	.3	10.4	31.0	.0	.0	.0
Sep	80.8	56.5	68.7	106	1954	6	73.4	1980	34	1951	30	64.3	1988	35	143	@	3.1	30.0	.0	.0	.0
Oct	71.0	44.3	57.7	97	1954	5	64.4	1984	16	1962	27	50.9	1987	255	27	.0	.1	30.8	.0	3.5	.0
Nov	61.6	35.5	48.6	86+	1993	16	58.8	1985	9	1970	25	41.8	1976	496	2	.0	.0	26.5	.0	12.0	.0
Dec	52.0	28.8	40.4	81	1998	8	48.5	1971	-2	1958	16	30.0	1989	763	0	.0	.0	18.9	1.1	19.7	.0
Ann	69.3	44.5	56.9	107	Jul 1952	29	80.4	Jul 1986	-10	Jan 1985	21	26.1	Jan 1977	4053	1127	.7	36.7	317.8	4.1	94.6	.4

+ 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

Issue Date: February 2004

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1948-2001

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

032-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: LAWRENCEVILLE 3 E, VA

COOP ID: 444768

Climate Division: VA 2

NWS Call Sign:

Elevation: 325 Feet Lat: 36°46N

Lon: 77°47W

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	3.89	3.83	2.53	1985	3	7.29	1985	.80	1981	9.6	7.1	3.2	.9	1.46	1.82	2.34	2.78	3.19	3.61	4.07	4.59	5.27	6.30	7.25
Feb	3.26	3.06	5.08	1984	14	8.53	1984	.62	1978	8.5	6.1	2.4	.9	.89	1.19	1.66	2.08	2.48	2.90	3.37	3.93	4.65	5.79	6.85
Mar	4.41	4.08	2.70	1993	4	8.70	1994	.95	1985	10.0	7.5	2.9	1.2	1.52	1.94	2.55	3.06	3.55	4.05	4.60	5.24	6.07	7.34	8.51
Apr	3.28	3.08	3.35	1978	26	6.73	1987	.37	1976	8.7	6.2	2.2	.6	.70	1.00	1.48	1.92	2.35	2.82	3.35	3.98	4.82	6.15	7.41
May	3.88	3.82	3.40	1958	6	7.54	1971	1.01	1988	9.5	6.7	3.0	1.0	1.57	1.93	2.43	2.85	3.24	3.63	4.06	4.56	5.18	6.14	7.01
Jun	3.48	3.05	4.45	1972	21	8.26	1972	.77	1986	9.1	6.4	2.3	.7	1.21	1.54	2.02	2.42	2.80	3.20	3.63	4.13	4.78	5.77	6.69
Jul	4.59	3.55	4.57	1966	30	10.58	1975	1.07	1983	9.4	7.0	3.2	1.2	1.08	1.51	2.18	2.78	3.38	4.01	4.72	5.57	6.68	8.44	10.10
Aug	4.23	4.25	4.27	1977	24	9.13	1986	.51	1976	8.1	6.2	2.8	1.4	.88	1.27	1.89	2.45	3.02	3.63	4.31	5.14	6.23	7.97	9.61
Sep	4.63	3.10	6.75	1999	4	21.80	1999	.28	1990	7.3	5.5	2.8	1.5	.60	.98	1.64	2.28	2.96	3.71	4.59	5.66	7.12	9.50	11.81
Oct	3.68	3.23	8.11	1972	5	11.52	1972	.00	2000	6.9	4.9	2.4	1.2	.46	.92	1.55	2.07	2.60	3.16	3.79	4.54	5.53	7.12	8.62
Nov	3.47	3.14	5.35	1985	4	14.26	1985	1.01	1974	8.2	5.6	2.4	.9	.88	1.21	1.71	2.16	2.60	3.07	3.58	4.20	5.00	6.27	7.46
Dec	3.12	3.37	3.15	1956	15	7.01	1998	.43	2000	8.6	6.0	2.3	.7	.73	1.02	1.48	1.89	2.29	2.72	3.21	3.78	4.54	5.74	6.87
Ann	45.92	45.14	8.11	Oct 1972	5	21.80	Sep 1999	.00	Oct 2000	103.9	75.2	31.9	12.2	33.60	36.01	39.09	41.41	43.47	45.45	47.49	49.75	52.47	56.41	59.81

+ 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: 1948-2001

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

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

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: LAWRENCEVILLE 3 E, VA

COOP ID: 444768

Climate Division: VA 2

NWS Call Sign:

Elevation: 325 Feet

Lat: 36°46N

Lon: 77°47W

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	2.0	.0	#	0	8.0	1980	5	12.0	1980	8	1980	5	2	1982	.6	.6	.3	.2	.0	2.0	1.3	.5	.0
Feb	4.2	1.0	#	0	14.5	1989	18	19.3	1989	9	1979	19	3	1979	1.2	1.0	.5	.2	@	1.8	.9	.4	.0
Mar	1.6	.0	#	0	12.0	1980	2	14.0	1980	12	1980	2	1	1980	.4	.4	.2	.1	.1	.5	.3	.2	.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	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Nov	#	.0	0	0	#	1989	23	#+	1989	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	1.0	.0	#	0	5.0	1973	17	6.5	1982	4	1982	12	#+	2000	.5	.3	.2	@	.0	.3	.1	.0	.0
Ann	8.8	1.0	N/A	N/A	14.5	Feb 1989	18	19.3	Feb 1989	12	Mar 1980	2	3	Feb 1979	2.7	2.3	1.2	.5	.1	4.6	2.6	1.1	.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/normals/usnormals.html

Climatography of the United States

No. 20 1971-2000

Station: LAWRENCEVILLE 3 E, VA

COOP ID: 444768

Climate Division: VA 2

NWS Call Sign:

Elevation: 325 Feet

Lat: 36° 46N

Lon: 77° 47W

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	5/19	5/14	5/10	5/07	5/04	5/01	4/28	4/24	4/19
32	5/05	4/30	4/27	4/24	4/21	4/18	4/15	4/11	4/06
28	4/22	4/16	4/12	4/09	4/06	4/02	3/30	3/26	3/20
24	4/11	4/04	3/30	3/26	3/22	3/18	3/14	3/10	3/03
20	4/01	3/24	3/18	3/14	3/09	3/04	2/27	2/22	2/14
16	3/20	3/11	3/04	2/26	2/21	2/15	2/10	2/03	1/24
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	9/25	9/30	10/04	10/07	10/10	10/13	10/16	10/20	10/26
32	10/06	10/10	10/13	10/15	10/18	10/20	10/23	10/26	10/30
28	10/13	10/18	10/22	10/26	10/29	11/01	11/05	11/09	11/14
24	10/19	10/26	10/30	11/03	11/07	11/11	11/15	11/19	11/26
20	11/05	11/13	11/18	11/23	11/27	12/01	12/06	12/11	12/18
16	11/19	11/29	12/07	12/13	12/19	12/25	1/01	1/08	1/19
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	180	173	167	163	158	154	149	144	136
32	198	192	187	183	179	176	172	167	160
28	229	221	215	210	206	201	196	190	182
24	260	249	242	235	229	223	216	209	198
20	293	283	275	268	262	256	249	242	231
16	337	319	310	302	296	289	282	274	264

* 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:
www.ncdc.noaa.gov/oa/climate/normal/usnormals.html

**Climatology
of the United States**
No. 20
1971-2000

Station: LAWRENCEVILLE 3 E, VA

COOP ID: 444768

Climate Division: VA 2 NWS Call Sign: Elevation: 325 Feet Lat: 36° 46N Lon: 77° 47W

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	873	714	539	286	83	8	0	1	35	255	496	763	4053
60	718	574	387	160	24	0	0	0	8	148	356	610	2985
57	633	495	301	102	8	0	0	0	3	99	278	525	2444
55	574	441	248	71	4	0	0	0	1	73	232	467	2111
50	434	314	137	22	0	0	0	0	0	28	136	333	1404
32	91	39	2	0	0	0	0	0	0	0	3	45	180

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	240	250	486	710	1002	1205	1378	1331	1098	795	499	305	9299
55	11	8	19	91	293	515	665	618	410	155	38	14	2837
57	8	5	11	61	236	455	603	556	351	119	25	10	2440
60	0	0	3	30	158	365	510	463	266	75	13	2	1885
65	0	0	0	6	62	223	355	309	143	27	2	0	1127
70	0	0	0	0	15	108	210	169	57	7	0	0	566

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	97	145	303	515	785	992	1149	1101	883	574	316	145	97	242	545	1060	1845	2837	3986	5087	5970	6544	6860	7005
45	47	79	186	373	630	842	994	946	733	420	201	79	47	126	312	685	1315	2157	3151	4097	4830	5250	5451	5530
50	22	38	104	241	475	692	839	791	583	277	116	42	22	60	164	405	880	1572	2411	3202	3785	4062	4178	4220
55	3	17	49	139	326	542	684	636	434	162	56	16	3	20	69	208	534	1076	1760	2396	2830	2992	3048	3064
60	0	0	17	69	192	392	529	481	291	78	21	3	0	0	17	86	278	670	1199	1680	1971	2049	2070	2073
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	68	107	209	340	508	670	780	746	584	372	214	101	68	175	384	724	1232	1902	2682	3428	4012	4384	4598	4699

(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.

- | | |
|---|---|
| <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 |
|---|---|

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