

Climatography of the United States

No. 20

1971-2000

Station: LEXINGTON, VA

COOP ID: 444876

Climate Division: VA 5

NWS Call Sign:

Elevation: 1,125 Feet Lat: 37°48N

Lon: 79°25W

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	44.0	20.9	32.5	76	1952	2	42.4	1974	-12+	1987	27	20.9	1977	1010	0	.0	.0	10.4	3.3	24.9	.7
Feb	48.4	22.4	35.4	80	2000	26	42.9	1990	-15	1996	5	25.2	1978	830	0	.0	.0	13.8	1.7	21.2	.2
Mar	58.0	30.5	44.3	87	1963	30	49.4	1977	-4	1960	8	39.5	1996	644	0	.0	.0	24.4	.2	15.5	@
Apr	68.2	37.9	53.1	94	1960	23	57.7	1981	15+	1997	18	49.2	1997	360	1	.0	.6	29.0	.0	6.3	.0
May	76.2	48.7	62.5	95+	1996	20	68.1	1991	26	1963	2	58.0	1994	133	54	.0	.5	31.0	.0	.6	.0
Jun	83.2	57.5	70.4	100	1959	30	74.0	1981	36	1977	8	65.8	1972	14	174	.0	3.6	30.0	.0	.0	.0
Jul	87.1	62.3	74.7	102	1952	28	77.8	1993	44	1962	27	72.0	1984	0	301	@	9.0	31.0	.0	.0	.0
Aug	85.4	60.7	73.1	100	1983	20	76.3	1987	42+	1986	30	70.5	1992	2	252	@	5.9	31.0	.0	.0	.0
Sep	78.6	53.6	66.1	100	1954	6	70.7	1980	30+	1963	25	62.4	1984	56	89	.0	1.9	30.0	.0	@	.0
Oct	68.8	40.6	54.7	93+	1954	13	61.6	1984	18+	1965	30	49.0	1988	330	10	.0	.0	30.6	.0	4.9	.0
Nov	57.8	30.6	44.2	84	1982	2	52.2	1985	8	1970	25	36.6	1976	624	0	.0	.0	23.3	.1	14.6	.0
Dec	48.3	24.1	36.2	79+	1998	7	42.9	1971	-9	1989	23	25.6	1989	893	0	.0	.0	13.5	1.6	22.0	.2
Ann	67.0	40.8	53.9	102	Jul 1952	28	77.8	Jul 1993	-15	Feb 1996	5	20.9	Jan 1977	4896	881	.0	21.5	298.0	6.9	110.0	1.1

+ 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

033-A

Climatology 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: LEXINGTON, VA

COOP ID: 444876

Climate Division: VA 5

NWS Call Sign:

Elevation: 1,125 Feet Lat: 37°48N

Lon: 79°25W

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	3.02	2.51	2.11	1998	28	7.63	1998	.28	1981	8.6	6.2	2.1	.9	.65	.93	1.37	1.77	2.18	2.61	3.09	3.67	4.43	5.65	6.80
Feb	2.77	2.88	2.47	1984	14	5.58	1998	.52	1978	8.3	5.5	1.6	.8	.77	1.04	1.43	1.78	2.12	2.47	2.87	3.33	3.93	4.87	5.75
Mar	3.53	3.21	2.50	1967	7	7.16	1994	1.53+	1995	9.7	6.6	2.4	.9	1.30	1.63	2.11	2.50	2.88	3.27	3.69	4.18	4.80	5.76	6.64
Apr	3.17	2.52	3.80	1992	21	9.34	1987	1.13	1985	9.4	6.3	2.0	.7	.93	1.23	1.68	2.07	2.45	2.85	3.29	3.80	4.47	5.52	6.49
May	3.96	3.95	3.36	1973	28	6.83	1971	1.56	1997	11.4	7.6	2.8	1.0	1.83	2.18	2.66	3.05	3.41	3.77	4.15	4.59	5.15	5.99	6.74
Jun	4.08	2.80	5.18	1995	28	16.99	1995	.84	1999	10.1	6.5	2.5	1.0	.72	1.08	1.68	2.24	2.81	3.42	4.12	4.97	6.10	7.93	9.67
Jul	3.88	3.59	2.80	1959	24	8.61	1972	1.26	1998	10.4	6.7	2.4	.8	1.39	1.76	2.28	2.73	3.15	3.58	4.05	4.60	5.30	6.38	7.38
Aug	3.05	2.43	4.95	1969	20	9.87	1984	1.15	1997	9.3	5.6	2.1	.6	.94	1.23	1.66	2.03	2.39	2.76	3.17	3.65	4.27	5.24	6.13
Sep	3.48	2.91	4.15	1959	30	9.50	1999	.14	1985	8.7	5.7	2.0	1.1	.37	.62	1.10	1.59	2.11	2.70	3.39	4.25	5.42	7.36	9.26
Oct	3.08	2.27	5.33	1954	15	11.08	1990	.04	2000	7.2	4.4	2.2	.9	.32	.54	.97	1.39	1.86	2.38	2.99	3.76	4.80	6.54	8.23
Nov	3.03	2.70	3.49	1985	4	10.07	1985	.74	1981	8.2	5.4	2.2	.7	.71	.99	1.43	1.83	2.23	2.65	3.12	3.68	4.41	5.58	6.68
Dec	2.91	2.57	2.21	1958	29	6.87	1973	.46	1980	8.8	5.6	2.3	.7	.93	1.21	1.61	1.96	2.30	2.65	3.03	3.48	4.06	4.95	5.78
Ann	39.96	39.74	5.33	Oct 1954	15	16.99	Jun 1995	.04	Oct 2000	110.1	72.1	26.6	10.1	29.02	31.15	33.87	35.93	37.76	39.52	41.33	43.33	45.76	49.26	52.29

+ 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: LEXINGTON, VA

COOP ID: 444876

Climate Division: VA 5

NWS Call Sign:

Elevation: 1,125 Feet

Lat: 37°48N

Lon: 79°25W

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	4.3	1.7	1	#	12.7	1971	1	20.4	1978	16	1987	26	6	1978	2.0	1.3	.6	.3	.1	4.9	3.4	1.8	.8
Feb	4.3	3.4	1	#	8.6	1982	27	14.6	1979	13	1983	11	6	1978	1.9	1.3	.4	.1	.0	4.2	2.2	1.4	@
Mar	1.9	.3	#	0	8.0	1971	26	11.0	1980	6	1994	3	1	1994	1.1	.7	.2	.1	.0	.8	.3	.2	.0
Apr	.2	.0	#	0	3.6	1971	7	3.6	1971	1	1987	3	#	1987	.1	.1	@	.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	1.2	1979	10	1.2	1979	0	0	0	0	0	@	@	.0	.0	.0	.0	.0	.0	.0
Nov	.6	.0	#	0	6.5	1971	24	8.0	1971	6	1971	24	1	1971	.3	.2	@	@	.0	.2	.1	@	.0
Dec	1.6	.5	#	#	8.0	1973	17	11.9	1973	11	1973	17	3	1989	1.1	.6	.2	.1	.0	1.5	.9	.2	@
Ann	12.9	5.9	N/A	N/A	12.7	Jan 1971	1	20.4	Jan 1978	16	Jan 1987	26	6+	Feb 1978	6.5	4.2	1.4	.6	.1	11.6	6.9	3.6	.8

+ 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: LEXINGTON, VA

COOP ID: 444876

Climate Division: VA 5

NWS Call Sign:

Elevation: 1,125 Feet

Lat: 37° 48N

Lon: 79° 25W

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	5/22	5/17	5/14	5/11	5/09	5/06	5/03	4/30	4/25
32	5/12	5/07	5/04	5/01	4/28	4/26	4/23	4/19	4/15
28	4/23	4/19	4/16	4/13	4/11	4/09	4/06	4/03	3/30
24	4/16	4/11	4/07	4/04	4/01	3/30	3/27	3/23	3/18
20	4/03	3/28	3/23	3/19	3/15	3/12	3/08	3/03	2/25
16	3/21	3/14	3/09	3/05	3/01	2/25	2/21	2/16	2/09
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	9/23	9/27	9/30	10/02	10/04	10/07	10/09	10/12	10/15
32	10/02	10/06	10/09	10/12	10/15	10/17	10/20	10/23	10/27
28	10/13	10/18	10/22	10/25	10/28	10/31	11/03	11/07	11/12
24	10/23	10/28	11/01	11/04	11/07	11/11	11/14	11/18	11/23
20	11/07	11/12	11/16	11/19	11/22	11/25	11/28	12/02	12/07
16	11/14	11/22	11/27	12/02	12/06	12/10	12/15	12/20	12/28
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	167	161	156	152	148	144	140	136	129
32	188	182	177	173	169	165	161	156	149
28	217	211	207	203	199	196	192	187	181
24	240	233	228	223	219	215	211	206	199
20	275	267	261	256	251	246	241	235	227
16	305	296	290	284	279	274	268	262	253

* 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

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

Station: LEXINGTON, VA

COOP ID: 444876

Climate Division: VA 5 NWS Call Sign: Elevation: 1,125 Feet Lat: 37° 48N Lon: 79° 25W

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	1010	830	644	360	133	14	0	2	56	330	624	893	4896
60	855	690	489	220	55	2	0	0	15	203	475	738	3742
57	762	606	400	148	27	0	0	0	5	141	390	645	3124
55	700	550	343	108	15	0	0	0	2	107	336	584	2745
50	556	417	213	38	2	0	0	0	0	47	212	441	1926
32	147	73	8	0	0	0	0	0	0	0	9	79	316

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	160	167	388	631	944	1150	1324	1274	1023	703	375	210	8349
55	0	0	9	49	246	460	611	561	336	97	12	1	2382
57	0	0	4	29	196	400	549	499	279	69	6	0	2031
60	0	0	0	11	131	312	456	406	198	38	2	0	1554
65	0	0	0	1	54	174	301	252	89	10	0	0	881
70	0	0	0	0	14	71	156	116	25	1	0	0	383

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	55	88	236	464	736	935	1087	1051	818	498	221	88	55	143	379	843	1579	2514	3601	4652	5470	5968	6189	6277
45	23	41	136	324	581	785	932	896	668	350	126	41	23	64	200	524	1105	1890	2822	3718	4386	4736	4862	4903
50	3	16	66	198	427	635	777	741	518	214	58	16	3	19	85	283	710	1345	2122	2863	3381	3595	3653	3669
55	0	0	27	108	281	485	622	586	371	110	25	3	0	0	27	135	416	901	1523	2109	2480	2590	2615	2618
60	0	0	4	46	152	337	467	431	235	49	3	0	0	0	4	50	202	539	1006	1437	1672	1721	1724	1724
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	41	73	170	313	474	624	742	718	533	318	149	62	41	114	284	597	1071	1695	2437	3155	3688	4006	4155	4217

(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/normal/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