U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BELHAVEN 5 SW, NC **COOP ID: 310674**

Climate Division: NC 7 **NWS Call Sign:** **Elevation: 8 Feet** **Lat: 35˚30N** **Lon: 76˚41W**

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	53.1	33.7	43.4	80	1943	18	54.2	1974	-10	1985	22	33.2	1977	670	0	.0	.0	18.8	1.2	15.9	.1
Feb	56.8	36.3	46.6	82	1989	4	54.0	1990	4	1996	5	37.0	1978	518	0	.0	.0	18.8	.7	13.0	.0
Mar	64.1	41.9	53.0	92	1945	17	58.1	1997	10	1943	4	48.5	1981	377	5	.0	.0	27.7	.1	5.5	.0
Apr	73.4	50.0	61.7	94	1985	23	66.0	1977	26+	1944	6	58.2	1987	134	36	.0	.5	29.7	.0	.4	.0
May	79.6	58.3	69.0	105	1941	29	73.4	1991	40+	1992	1	63.5	1992	24	147	.0	1.9	31.0	.0	.0	.0
Jun	85.9	66.3	76.1	102	1936	30	80.7	1981	43	1933	3	72.7	1992	1	335	@	6.9	30.0	.0	.0	.0
Jul	89.2	70.5	79.9	102	1940	22	82.3	1986	52	1933	4	76.9	2000	0	461	.1	13.6	31.0	.0	.0	.0
Aug	87.3	68.8	78.1	101	1988	19	81.1	1978	46	1941	14	75.6	1981	0	405	.1	9.6	31.0	.0	.0	.0
Sep	82.8	63.2	73.0	101	1939	10	75.9	1980	44+	1981	24	70.1	1984	4	245	.0	2.4	30.0	.0	.0	.0
Oct	73.4	51.0	62.2	95+	1941	6	67.8	1971	26	1942	28	56.1	1988	158	70	.0	.2	30.9	.0	.2	.0
Nov	65.2	43.9	54.6	85	1974	4	64.0	1985	19	1970	25	47.2	1976	326	13	.0	.0	28.1	.0	4.1	.0
Dec	55.8	35.9	45.9	81	1991	4	53.3	1971	8	1983	25	34.8	1989	595	1	.0	.0	22.0	.3	12.3	.0
Ann	72.2	51.7	62.0	105	May 1941	29	82.3	Jul 1986	-10	Jan 1985	22	33.2	Jan 1977	2807	1718	.2	35.1	329.0	2.3	51.4	.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/normals/usnormals.html

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1933-2001

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

Issue Date: February 2004

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BELHAVEN 5 SW, NC **COOP ID: 310674**

Climate Division: NC 7 **NWS Call Sign:** **Elevation: 8 Feet** **Lat: 35˚30N** **Lon: 76˚41W**

Precipitation (inches)

Precipitation Totals

Month	Means/ Medians(1) Mean	Means/ Medians(1) Median	Extremes Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year
Jan	4.25	3.88	2.80	1979	3	7.37	1979	1.66	1981
Feb	3.07	3.00	2.52	1960	1	6.26	1983	.70	1991
Mar	4.15	4.01	3.37	1966	1	7.69	1983	1.60	1985
Apr	3.17	2.75	2.50	1944	12	6.84	1973	.25	1981
May	4.50	3.85	5.33	1966	26	10.32	1984	.91	1987
Jun	4.75	4.33	12.41	1962	30	12.69	1995	1.50	1994
Jul	5.52	5.14	7.76	1950	9	12.07	1984	1.99	1974
Aug	5.81	4.85	6.00	1995	28	12.60	1986	1.04	1979
Sep	5.09	4.19	6.80	1938	20	14.11	1999	1.09	1991
Oct	3.43	2.99	7.73	1971	1	17.17	1971	.17	1984
Nov	2.92	2.85	4.35	1969	2	7.96	1985	.72	1973
Dec	3.18	3.22	3.57	1973	9	7.80	1973	.53	1988
Ann	49.84	49.00	12.41	Jun 1962	30	17.17	Oct 1971	.17	Oct 1984

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	12.5	9.1	3.2	.7
Feb	9.2	6.4	2.4	.6
Mar	10.6	7.0	3.2	1.2
Apr	8.1	5.9	2.1	.9
May	10.4	7.2	3.3	1.2
Jun	9.7	7.1	3.3	1.4
Jul	11.1	8.3	4.0	1.6
Aug	11.4	8.4	3.7	1.6
Sep	8.9	6.4	3.4	1.6
Oct	7.4	4.9	2.1	1.0
Nov	8.1	5.3	2.2	.6
Dec	10.1	6.4	2.5	.8
Ann	117.5	82.4	35.4	13.2

Precipitation Probabilities (1)

Probability that the monthly/annual precipitation will be equal to or less than the indicated amount

Monthly/Annual Precipitation vs Probability Levels
These values were determined from the incomplete gamma distribution

Month	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	1.93	2.30	2.82	3.24	3.64	4.03	4.45	4.94	5.55	6.47	7.30
Feb	1.00	1.29	1.72	2.08	2.44	2.80	3.20	3.67	4.27	5.20	6.06
Mar	1.78	2.15	2.68	3.11	3.51	3.92	4.35	4.86	5.49	6.46	7.33
Apr	.62	.91	1.37	1.80	2.23	2.70	3.22	3.86	4.70	6.05	7.33
May	1.13	1.55	2.21	2.79	3.36	3.97	4.64	5.44	6.49	8.14	9.69
Jun	2.03	2.46	3.06	3.55	4.01	4.47	4.97	5.55	6.28	7.38	8.38
Jul	2.26	2.76	3.48	4.06	4.62	5.18	5.78	6.48	7.36	8.71	9.94
Aug	1.49	2.04	2.89	3.63	4.37	5.14	6.00	7.02	8.35	10.46	12.42
Sep	1.11	1.57	2.32	3.00	3.67	4.39	5.20	6.18	7.46	9.50	11.43
Oct	.38	.64	1.11	1.59	2.11	2.68	3.35	4.19	5.33	7.22	9.06
Nov	1.03	1.31	1.71	2.04	2.36	2.69	3.05	3.46	3.99	4.81	5.57
Dec	.93	1.23	1.69	2.08	2.46	2.86	3.30	3.82	4.49	5.54	6.51
Ann	38.97	41.15	43.90	45.95	47.76	49.50	51.27	53.22	55.55	58.91	61.77

\+ 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: 1933-2001
(3) Derived from 1971-2000 serially complete daily data

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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Services

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: BELHAVEN 5 SW, NC **COOP ID: 310674**

Climate Division: NC 7 **NWS Call Sign:** **Elevation: 8 Feet** **Lat: 35˚30N** **Lon: 76˚41W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	1.0	.0	#	0
Feb	2.0	.0	#	0
Mar	1.2	.0	#	0
Apr	.2	.0	#	0
May	.0	.0	0	0
Jun	.0	.0	0	0
Jul	.0	.0	0	0
Aug	.0	.0	0	0
Sep	.0	.0	0	0
Oct	.0	.0	0	0
Nov	.0	.0	0	0
Dec	.3	.0	#	0
Ann	4.7	.0	N/A	N/A

Extremes (2)

Month	Highest Daily Snow Fall	Year	Day	Highest Monthly Snow Fall	Year	Highest Daily Snow Depth	Year	Day	Highest Monthly Mean Snow Depth	Year
Jan	5.7	1980	31	6.5	1973	5	1973	9	1	1973
Feb	7.4	1973	11	13.0	1979	12	1973	11	1	1980
Mar	16.4	1980	3	19.0	1980	16	1980	3	2	1980
Apr	4.4	1989	11	4.4	1989	4	1989	11	#	1989
May	.0	0	0	.0	0	0	0	0	0	0
Jun	.0	0	0	.0	0	0	0	0	0	0
Jul	.0	0	0	.0	0	0	0	0	0	0
Aug	.0	0	0	.0	0	0	0	0	0	0
Sep	.0	0	0	.0	0	0	0	0	0	0
Oct	.0	0	0	.0	0	0	0	0	0	0
Nov	.0	0	0	.0	0	0	0	0	0	0
Dec	5.6	1989	24	6.3	2000	5+	2000	3	1	1989
Ann	16.4	Mar 1980	3	19.0	Mar 1980	16	Mar 1980	3	2	Mar 1980

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.4	.3	.1	@	.0
Feb	.6	.4	.4	.2	.0
Mar	.2	.2	.1	.1	@
Apr	@	@	@	.0	.0
May	.0	.0	.0	.0	.0
Jun	.0	.0	.0	.0	.0
Jul	.0	.0	.0	.0	.0
Aug	.0	.0	.0	.0	.0
Sep	.0	.0	.0	.0	.0
Oct	.0	.0	.0	.0	.0
Nov	.0	.0	.0	.0	.0
Dec	.2	.1	.1	.1	.0
Ann	1.4	1.0	.7	.4	@

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.4	.1	@	.0
Feb	.6	.4	.2	@
Mar	.3	.2	.2	.1
Apr	@	@	.0	.0
May	.0	.0	.0	.0
Jun	.0	.0	.0	.0
Jul	.0	.0	.0	.0
Aug	.0	.0	.0	.0
Sep	.0	.0	.0	.0
Oct	.0	.0	.0	.0
Nov	.0	.0	.0	.0
Dec	.2	.1	.1	.0
Ann	1.5	.8	.5	.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

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BELHAVEN 5 SW, NC **COOP ID: 310674**

Climate Division: NC 7 **NWS Call Sign:** **Elevation: 8 Feet** **Lat: 35˚30N** **Lon: 76˚41W**

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	4/20	4/16	4/13	4/10	4/08	4/05	4/02	3/30	3/26
32	4/10	4/05	4/01	3/29	3/26	3/23	3/20	3/17	3/12
28	3/28	3/23	3/19	3/15	3/12	3/09	3/05	3/01	2/24
24	3/12	3/04	2/26	2/22	2/17	2/13	2/08	2/02	1/26
20	2/28	2/21	2/15	2/11	2/06	2/02	1/28	1/22	1/13
16	2/13	2/04	1/28	1/22	1/15	1/06	0/00	0/00	0/00

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	10/16	10/22	10/26	10/30	11/02	11/05	11/09	11/13	11/19
32	10/26	11/01	11/05	11/08	11/11	11/14	11/18	11/22	11/27
28	11/10	11/16	11/20	11/24	11/27	12/01	12/05	12/09	12/15
24	12/01	12/08	12/12	12/16	12/20	12/23	12/27	1/01	1/07
20	12/11	12/20	12/27	1/01	1/06	1/11	1/17	1/24	2/04
16	12/22	12/31	1/07	1/14	1/21	1/30	0/00	0/00	0/00

Freeze Free Period

Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	230	223	217	212	208	203	198	193	185
32	250	243	238	233	229	225	221	216	208
28	281	274	269	264	260	255	251	246	238
24	330	321	315	310	305	300	295	288	280
20	>365	>365	350	341	334	327	320	313	303
16	>365	>365	>365	>365	>365	>365	357	342	328

***** 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/normals/usnormals.html

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data,
and Information Service

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: BELHAVEN 5 SW, NC **COOP ID: 310674**

Climate Division: NC 7 **NWS Call Sign:** **Elevation: 8 Feet** **Lat: 35˚30N** **Lon: 76˚41W**

Degree Days to Selected Base Temperatures (˚F)

Heating Degree Days (1)

Base Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	670	518	377	134	24	1	0	0	4	158	326	595	2807
60	528	386	241	54	3	0	0	0	0	81	205	452	1950
57	444	309	172	26	0	0	0	0	0	49	146	369	1515
55	390	262	134	14	0	0	0	0	0	33	113	318	1264
50	272	162	61	2	0	0	0	0	0	11	50	209	767
32	32	6	0	0	0	0	0	0	0	0	0	15	53

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	384	413	651	892	1146	1324	1484	1428	1230	935	677	444	11008
55	30	24	72	216	433	634	771	715	540	255	101	34	3825
57	22	16	48	168	371	574	709	653	480	209	74	23	3347
60	13	8	23	106	281	484	616	560	391	148	42	13	2685
65	0	0	5	36	147	335	461	405	245	70	13	1	1718
70	0	0	0	7	55	194	306	250	114	24	2	0	952

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	169	209	393	623	890	1085	1243	1196	1004	703	438	231	169	378	771	1394	2284	3369	4612	5808	6812	7515	7953	8184
45	88	122	262	473	735	935	1088	1041	854	549	300	131	88	210	472	945	1680	2615	3703	4744	5598	6147	6447	6578
50	38	62	152	333	580	785	933	886	704	397	191	65	38	100	252	585	1165	1950	2883	3769	4473	4870	5061	5126
55	11	25	78	212	425	635	778	731	554	256	103	30	11	36	114	326	751	1386	2164	2895	3449	3705	3808	3838
60	0	5	36	112	286	485	623	576	404	141	48	7	0	5	41	153	439	924	1547	2123	2527	2668	2716	2723
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	97	125	229	379	582	756	883	844	693	439	256	131	97	222	451	830	1412	2168	3051	3895	4588	5027	5283	5414

(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.
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

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

c. Snow Tables
   1. Snow Climatology
   2. Cooperative Summary of the Day

d. Freeze Data Table
   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