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: HENDERSON 2 NNW, NC **COOP ID: 313969**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 480 Feet** **Lat: 36˚21N** **Lon: 78˚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	48.4	24.4	36.4	81	1949	25	47.0	1974	-8	1940	28	26.0	1977	886	0	.0	.0	14.2	2.6	24.3	.4
Feb	52.3	26.6	39.5	85	1977	27	47.1	1990	-6	1936	1	29.9	1979	715	0	.0	.0	16.3	1.5	21.2	.1
Mar	60.9	34.1	47.5	92	1945	17	52.6	1976	4	1937	1	42.6	1981	542	0	.0	@	25.6	.3	14.3	.0
Apr	70.8	42.1	56.5	96	1946	22	60.5	1985	18	1985	10	52.3	1987	263	7	.0	.6	29.3	.0	5.0	.0
May	77.8	52.1	65.0	104	1941	29	69.3	1991	28+	1977	10	60.3	1992	81	80	.0	1.5	31.0	.0	.3	.0
Jun	85.0	61.6	73.3	102+	1959	30	76.3	1989	38+	1977	9	69.3	1979	5	254	.0	7.9	30.0	.0	.0	.0
Jul	88.8	66.4	77.6	105+	1952	29	80.8	1993	44	1975	2	74.4	2000	0	391	.3	14.7	31.0	.0	.0	.0
Aug	87.2	64.4	75.8	105	1983	23	79.8	1980	41	1981	18	72.1	1992	1	335	.5	10.5	31.0	.0	.0	.0
Sep	81.2	57.3	69.3	105	1954	6	74.5	1980	35+	1983	25	66.2	1994	26	153	.1	3.2	30.0	.0	.0	.0
Oct	71.2	42.9	57.1	99	1941	6	64.1	1984	20+	1990	30	50.1	1987	272	26	.0	.1	30.7	.0	4.3	.0
Nov	61.8	34.6	48.2	86	1950	1	57.6	1985	11	1970	25	41.6	1976	505	1	.0	.0	25.8	.0	14.0	.0
Dec	52.2	27.2	39.7	81+	1998	9	47.0	1971	0	1935	23	30.4	1989	784	0	.0	.0	17.4	1.0	21.9	.0
Ann	69.8	44.5	57.2	105+	Aug 1983	23	80.8	Jul 1993	-8	Jan 1940	28	26.0	Jan 1977	4080	1247	.9	38.5	312.3	5.4	105.3	.5

\+ 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: HENDERSON 2 NNW, NC

COOP ID: 313969

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 480 Feet** **Lat: 36˚21N** **Lon: 78˚25W**

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	3.85	3.74	2.60	1999	3	7.32	1998	.72	1981
Feb	3.09	2.96	1.98	1957	26	5.84	1983	.71	1978
Mar	4.05	3.96	3.06	1934	10	8.68	1975	.69	1985
Apr	3.05	2.81	3.50	1934	9	6.00	1987	.56	1985
May	3.90	3.84	3.56	1958	6	7.74	1971	.68	1987
Jun	3.64	3.36	4.75	1941	30	9.83	1995	.39	1986
Jul	4.10	3.95	6.43	1959	10	13.53	1975	.99	1974
Aug	4.49	3.92	5.91	1979	3	10.03	1974	.98	1983
Sep	4.32	3.43	5.00	1999	16	17.07	1999	.48	1986
Oct	3.47	3.07	3.56	1954	15	9.70	1971	.00	2000
Nov	3.15	2.63	7.50	1934	29	9.97	1985	.87	1981
Dec	3.02	3.02	2.28	1958	28	6.37	1973	.63	1985
Ann	44.13	44.68	7.50	Nov 1934	29	17.07	Sep 1999	.00	Oct 2000

Mean Number of Days (3)

Month	Daily Precipitation >= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	9.3	7.3	3.2	.9
Feb	7.9	6.0	2.3	.8
Mar	9.2	7.0	2.9	1.0
Apr	8.2	5.9	2.2	.8
May	8.4	6.7	3.0	1.1
Jun	8.6	6.6	2.6	1.0
Jul	8.5	6.8	3.2	1.1
Aug	8.7	6.7	2.8	1.1
Sep	7.2	5.8	3.1	1.3
Oct	6.4	4.7	2.5	1.2
Nov	7.1	5.4	2.1	.8
Dec	8.8	6.3	2.1	.7
Ann	98.3	75.2	32.0	11.8

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	1.33	1.69	2.22	2.67	3.10	3.54	4.02	4.58	5.30	6.41	7.43
Feb	.94	1.24	1.67	2.05	2.41	2.79	3.21	3.70	4.33	5.32	6.23
Mar	1.32	1.70	2.27	2.75	3.22	3.70	4.22	4.84	5.63	6.87	8.01
Apr	.59	.87	1.32	1.73	2.15	2.60	3.11	3.72	4.53	5.84	7.08
May	1.39	1.76	2.29	2.74	3.16	3.60	4.07	4.62	5.33	6.42	7.42
Jun	.76	1.09	1.63	2.11	2.60	3.13	3.72	4.43	5.37	6.86	8.28
Jul	1.12	1.51	2.10	2.62	3.12	3.66	4.25	4.95	5.86	7.29	8.62
Aug	1.18	1.60	2.25	2.83	3.39	3.98	4.64	5.43	6.44	8.05	9.55
Sep	.56	.91	1.52	2.13	2.76	3.46	4.28	5.28	6.64	8.87	11.02
Oct	.44	.88	1.47	1.96	2.46	2.98	3.57	4.27	5.20	6.68	8.08
Nov	1.01	1.31	1.75	2.13	2.50	2.87	3.29	3.77	4.39	5.36	6.25
Dec	.84	1.12	1.56	1.94	2.31	2.70	3.13	3.64	4.30	5.34	6.31
Ann	32.63	34.89	37.77	39.95	41.87	43.73	45.63	47.73	50.27	53.94	57.10

\+ 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: HENDERSON 2 NNW, NC **COOP ID: 313969**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 480 Feet** **Lat: 36°21N** **Lon: 78°25W**

Snow (inches)

Snow Totals

Means/Medians (1)

Extremes (2)

Mean Number of Days (1)

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	1.3	.0	#	0	5.5	1982	15	10.9	1982	1+	1981	30	#+	1981	.3	.3	.2	.1	.0	.1	.0	.0	.0
Feb	2.8	.4	#	0	15.0	1989	18	18.4	1979	11	1979	19	1	1979	.8	.4	.3	.3	.2	.2	.1	.1	.1
Mar	#	.0	#	0	#	1983	25	#	1983	3	1971	27	#	1971	.0	.0	.0	.0	.0	.0	.0	.0	.0
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	0	.0	0	0	.0	0	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.2	.0	#	0	1.9	1980	28	1.9	1980	2	1980	28	#	1980	.1	.1	.0	.0	.0	.1	.0	.0	.0
Ann	4.3	.4	N/A	N/A	15.0	Feb 1989	18	18.4	Feb 1979	11	Feb 1979	19	1	Feb 1979	1.2	.8	.5	.4	.2	.4	.1	.1	.1

+ Also occurred on an earlier date(s) #Denotes trace amounts

(1) Derived from Snow Climatology and 1971-2000 daily data

@ Denotes mean number of days greater than 0 but less than .05

(2) Derived from 1971-2000 daily data

-9/-9.9 represents missing values

Annual statistics for Mean/Median snow depths are not appropriate

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: HENDERSON 2 NNW, NC **COOP ID: 313969**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 480 Feet** **Lat: 36˚21N** **Lon: 78˚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	5/14	5/10	5/07	5/05	5/02	4/30	4/27	4/24	4/20
32	5/09	5/03	4/28	4/25	4/21	4/18	4/14	4/10	4/04
28	4/26	4/20	4/15	4/11	4/07	4/04	3/31	3/26	3/20
24	4/08	4/01	3/27	3/23	3/19	3/15	3/11	3/06	2/28
20	4/04	3/26	3/20	3/14	3/09	3/04	2/27	2/20	2/11
16	3/17	3/07	2/28	2/22	2/17	2/11	2/05	1/29	1/20

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	10/03	10/05	10/07	10/08	10/10	10/12	10/14	10/17
32	10/06	10/11	10/14	10/17	10/20	10/23	10/26	10/30	11/03
28	10/13	10/19	10/23	10/26	10/29	11/01	11/05	11/09	11/14
24	10/28	11/02	11/06	11/10	11/13	11/16	11/19	11/23	11/28
20	11/07	11/14	11/19	11/23	11/28	12/02	12/06	12/11	12/19
16	11/24	12/03	12/10	12/16	12/22	12/27	1/02	1/09	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	173	168	165	161	158	156	152	149	143
32	205	197	191	186	181	176	171	165	157
28	230	221	215	209	204	199	194	187	178
24	265	255	249	243	238	232	227	220	211
20	292	282	275	269	263	257	251	243	233
16	343	329	319	312	305	298	291	282	270

***** 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: HENDERSON 2 NNW, NC **COOP ID: 313969**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 480 Feet** **Lat: 36˚21N** **Lon: 78˚25W**

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	886	715	542	263	81	5	0	1	26	272	505	784	4080
60	731	575	390	141	25	0	0	0	5	162	364	629	3022
57	644	491	305	86	9	0	0	0	2	112	285	539	2473
55	585	441	251	57	4	0	0	0	1	84	236	483	2142
50	443	313	140	15	0	0	0	0	0	35	137	343	1426
32	92	36	2	0	0	0	0	0	0	0	2	42	174

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	228	245	483	734	1022	1239	1414	1357	1118	777	488	281	9386
55	9	6	19	101	313	549	701	644	428	149	32	9	2960
57	6	1	11	69	256	489	639	582	369	114	21	3	2560
60	0	0	3	35	179	399	546	489	283	71	10	0	2015
65	0	0	0	7	80	254	391	335	153	26	1	0	1247
70	0	0	0	0	25	128	237	192	59	6	0	0	647

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	85	122	286	510	785	1000	1169	1114	883	543	281	121	85	207	493	1003	1788	2788	3957	5071	5954	6497	6778	6899
45	36	65	175	368	630	850	1014	959	733	392	179	64	36	101	276	644	1274	2124	3138	4097	4830	5222	5401	5465
50	16	28	96	239	476	700	859	804	583	254	99	28	16	44	140	379	855	1555	2414	3218	3801	4055	4154	4182
55	1	9	50	140	325	550	704	649	434	143	47	9	1	10	60	200	525	1075	1779	2428	2862	3005	3052	3061
60	0	0	19	67	201	401	549	494	295	69	15	0	0	0	19	86	287	688	1237	1731	2026	2095	2110	2110
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	70	101	202	338	509	675	799	757	587	357	201	96	70	171	373	711	1220	1895	2694	3451	4038	4395	4596	4692

(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