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: ENKA, NC **COOP ID: 312837**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 2,050 Feet** **Lat: 35˚32N** **Lon: 82˚39W**

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	.0	.0	.0	75	1957	29	.0	0	-8	1963	24	.0	0	0	0	.0	.0	9.2	3.2	25.0	.5
Feb	.0	.0	.0	78	1957	9	.0	0	-2	1958	17	.0	0	0	0	.0	.0	14.4	2.0	20.9	.1
Mar	.0	.0	.0	83	1954	25	.0	0	3+	1960	6	.0	0	0	0	.0	.0	25.5	.3	16.3	.1
Apr	.0	.0	.0	91	1957	23	.0	0	21+	1972	9	.0	0	0	0	.0	@	29.5	.0	1.8	.0
May	.0	.0	.0	93	1953	22	.0	0	30+	1973	18	.0	0	0	0	.0	.1	30.9	.0	.7	.0
Jun	.0	.0	.0	98+	1952	28	.0	0	40+	1972	11	.0	0	0	0	.0	1.6	30.0	.0	.0	.0
Jul	.0	.0	.0	99+	1952	29	.0	0	47	1963	11	.0	0	0	0	.0	1.9	31.0	.0	.0	.0
Aug	.0	.0	.0	99+	1975	13	.0	0	44	1968	29	.0	0	0	0	@	2.7	31.0	.0	.0	.0
Sep	.0	.0	.0	94	1953	1	.0	0	31	1967	30	.0	0	0	0	.0	.1	30.0	.0	.1	.0
Oct	.0	.0	.0	86+	1953	1	.0	0	18	1952	30	.0	0	0	0	.0	.0	30.8	.0	6.3	.0
Nov	.0	.0	.0	84	1958	17	.0	0	3	1950	26	.0	0	0	0	.0	.0	23.9	.1	14.7	.0
Dec	.0	.0	.0	77	1951	31	.0	0	-5	1962	13	.0	0	0	0	.0	.0	13.2	1.4	22.9	.1
Ann	.0	.0	.0	99+	Aug 1975	13	-99.9	0	-8	Jan 1963	24	99.9	0	0	0	@	6.4	299.4	7.0	108.7	.8

\+ 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: 1948-2001

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

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: ENKA, NC

COOP ID: 312837

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 2,050 Feet** **Lat: 35˚32N** **Lon: 82˚39W**

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	3.22	3.17	3.30	1995	15	9.01	1998	.47	1981
Feb	3.55	3.55	3.44	1983	2	6.91	1982	.65	1988
Mar	4.35	3.88	3.21	1979	4	9.21	1975	.74	1985
Apr	3.29	3.11	4.38	1957	5	7.55	1979	.68	1986
May	3.93	3.23	4.02	1976	29	10.52	1976	1.01	1988
Jun	3.12	2.72	3.47	1972	21	8.86	1989	.77	1990
Jul	3.18	2.72	2.38	1970	22	6.70	1988	.68	1974
Aug	3.54	3.23	4.58	1990	25	8.98	1990	.36	1998
Sep	3.54	2.61	5.04	1977	7	9.70	1977	.00	1984
Oct	2.43	2.23	2.93	1977	26	6.34	1995	.00	1991
Nov	3.05	2.90	3.56	1977	6	8.14	1979	.81	1981
Dec	2.63	2.31	2.55	1983	12	7.28	1983	.25	1999
Ann	39.83	40.55	5.04	Sep 1977	7	10.52	May 1976	.00+	Oct 1991

Mean Number of Days (3)

Daily Precipitation

Month	>= 0.01	>= 0.10	>= 0.50	>= 1.00
Jan	8.7	5.9	2.3	1.0
Feb	7.6	5.7	2.2	.9
Mar	9.6	7.0	2.5	1.1
Apr	8.7	6.0	2.3	.8
May	9.9	6.9	2.7	.8
Jun	9.4	7.1	1.9	.7
Jul	10.2	7.1	2.2	.7
Aug	9.3	6.4	2.3	.6
Sep	6.9	5.5	1.9	.9
Oct	6.3	4.6	1.8	.8
Nov	7.7	5.1	2.0	.7
Dec	8.7	5.6	2.0	.7
Ann	103.0	72.9	26.1	9.7

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	.88	1.18	1.65	2.05	2.45	2.87	3.34	3.88	4.60	5.72	6.77
Feb	1.07	1.41	1.91	2.35	2.77	3.21	3.69	4.26	4.99	6.13	7.20
Mar	1.22	1.63	2.25	2.80	3.33	3.89	4.51	5.23	6.18	7.67	9.05
Apr	.90	1.21	1.68	2.10	2.51	2.93	3.40	3.96	4.69	5.83	6.90
May	1.28	1.65	2.20	2.67	3.12	3.59	4.10	4.69	5.46	6.66	7.76
Jun	.80	1.10	1.55	1.95	2.34	2.76	3.22	3.77	4.49	5.62	6.67
Jul	1.03	1.33	1.78	2.16	2.52	2.90	3.32	3.80	4.42	5.39	6.29
Aug	.51	.80	1.31	1.80	2.31	2.88	3.53	4.33	5.40	7.15	8.84
Sep	.36	.78	1.37	1.88	2.41	2.97	3.60	4.37	5.38	7.02	8.58
Oct	.10	.31	.67	1.02	1.41	1.84	2.35	2.99	3.87	5.32	6.75
Nov	1.17	1.45	1.85	2.19	2.51	2.84	3.19	3.60	4.12	4.92	5.65
Dec	.50	.73	1.12	1.48	1.84	2.23	2.67	3.21	3.92	5.06	6.14
Ann	26.60	29.10	32.34	34.82	37.04	39.19	41.43	43.92	46.96	51.39	55.25

\+ 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

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: ENKA, NC **COOP ID: 312837**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 2,050 Feet** **Lat: 35°32N** **Lon: 82°39W**

Snow (inches)

Snow Totals

Means/Medians (1)

Month	Snow Fall Mean	Snow Fall Median	Snow Depth Mean	Snow Depth Median
Jan	.4	.0	0	0
Feb	#	.0	0	0
Mar	.3	.0	#	0
Apr	.0	.0	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
Dec	.9	.0	0	0
Ann	1.6	.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	4.5	1973	8	4.5	1973	0	0	0	0	0
Feb	#	1971	4	#	1971	0	0	0	0	0
Mar	4.0	1971	26	5.0	1971	4	1971	26	#	1971
Apr	.0	0	0	.0	0	0	0	0	0	0
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	#	1971	10	#	1971	0	0	0	0	0
Dec	13.0	1971	4	16.0	1971	16	1971	4	1	1971
Ann	13.0	Dec 1971	4	16.0	Dec 1971	16	Dec 1971	4	1	Dec 1971

Mean Number of Days (1)

Snow Fall >= Thresholds

Month	0.1	1.0	3.0	5.0	10.0
Jan	.1	.1	.1	.0	.0
Feb	.0	.0	.0	.0	.0
Mar	.1	.1	@	.0	.0
Apr	.0	.0	.0	.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	.2	.1	@	@
Ann	.4	.4	.2	@	@

Snow Depth >= Thresholds

Month	1	3	5	10
Jan	.0	.0	.0	.0
Feb	.0	.0	.0	.0
Mar	.1	.1	.0	.0
Apr	.0	.0	.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	.1	.1	@	@
Ann	.2	.2	@	@

+ 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: ENKA, NC **COOP ID: 312837**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 2,050 Feet** **Lat: 35˚32N** **Lon: 82˚39W**

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	5/26	5/18	5/12	5/07	5/02	4/27	4/22	4/16	4/08
32	5/14	5/05	4/28	4/23	4/18	4/12	4/07	3/31	3/22
28	4/16	4/11	4/07	4/03	3/31	3/28	3/25	3/21	3/15
24	3/31	3/27	3/24	3/22	3/19	3/17	3/15	3/12	3/08
20	3/23	3/17	3/13	3/09	3/05	3/02	2/26	2/21	2/15
16	3/18	3/09	3/03	2/25	2/20	2/15	2/09	2/02	1/22

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	9/22	9/26	9/29	10/02	10/04	10/06	10/09	10/11	10/16
32	9/29	10/03	10/06	10/09	10/11	10/14	10/16	10/19	10/24
28	10/08	10/13	10/17	10/20	10/23	10/26	10/29	11/02	11/07
24	10/23	10/29	11/02	11/06	11/10	11/13	11/17	11/22	11/28
20	10/27	11/07	11/15	11/22	11/29	12/05	12/12	12/20	12/31
16	11/15	11/26	12/04	12/10	12/17	12/23	12/30	1/08	1/21

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	171	165	159	154	149	144	138	129
32	204	194	187	182	176	171	165	158	148
28	220	215	211	208	205	202	199	196	191
24	257	249	244	239	235	230	225	220	212
20	289	280	274	269	264	260	255	249	241
16	>365	325	313	305	297	290	282	273	261

***** 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: ENKA, NC **COOP ID: 312837**

Climate Division: NC 3 **NWS Call Sign:** **Elevation: 2,050 Feet** **Lat: 35˚32N** **Lon: 82˚39W**

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	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0

Cooling Degree Days (1)

Base Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0

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	46	78	212	472	688	889	1036	997	762	476	212	77	46	124	336	808	1496	2385	3421	4418	5180	5656	5868	5945
45	19	35	110	322	533	739	881	842	612	329	113	35	19	54	164	486	1019	1758	2639	3481	4093	4422	4535	4570
50	0	13	45	183	378	589	726	687	462	198	47	10	0	13	58	241	619	1208	1934	2621	3083	3281	3328	3338
55	0	0	12	71	240	439	571	532	317	97	17	1	0	0	12	83	323	762	1333	1865	2182	2279	2296	2297
60	0	0	1	16	120	292	416	377	183	36	0	0	0	0	1	17	137	429	845	1222	1405	1441	1441	1441
Base	**Growing Degree Units for Corn (Monthly)**												**Growing Degree Units for Corn (Accumulated Monthly)**											
50/86	32	59	156	289	443	593	720	678	488	317	138	50	32	91	247	536	979	1572	2292	2970	3458	3775	3913	3963

(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