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

COOP ID: 311881

Lon: 78°17W

Station: CLINTON 2 NE, NC

Climate Division: NC 6 NWS Call Sign:

Temperature (°F) Degree Days (1) Mean (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Daily Daily Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Month Mean Year Day Year Year Day Year Heating Max Min Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 52.3 31.7 42.0 78+ 1990 26 54.6 1974 -2 1985 21 32.2 1977 713 0 .0 .0 18.6 .9 17.6 .1 Jan 3 56.1 33.9 45.0 83 1997 28 52.5 1990 1996 5 35.6 1978 561 0 .0 .0 19.5 .5 14.1 0. Feb Mar 64.0 41.5 52.8 89+ 1985 31 57.8 1976 8 1980 4 47.5 1996 385 6 .0 .0 28.0 .1 6.5 0. 48.4 1977 26 57.2 1997 23 Apr 73.1 60.8 94 +1990 28 64.2 1985 10 150 .0. .7 29.7 .0 .9 .0. May 80.3 57.6 69.0 96+ 1996 20 73.3 1991 35+ 1989 8 64.9 1992 25 149 .0 3.0 31.0 .0 0. .0 79.3 42 12 71.2 10.5 86.6 65.4 76.0 100 +1998 28 1998 1972 1979 1 331 .1 30.0 .0 .0 .0 Jun Jul 89.9 69.9 79.9 102 1977 9 83.6 1993 52+ 1979 8 77.1 1975 462 .7 17.5 31.0 0. .0 0 .0 88.2 68.3 78.3 104 1983 22 81.7 1987 46 1976 31 75.3 1981 0 411 .4 14.0 31.0 .0 .0 .0 Aug 7 Sep 83.3 62.5 72.9 100 1983 12 76.7 1980 40 +1990 25 69.4 1984 244 @ 4.9 30.0 .0 .0 .0 74.0 49.3 24 29 55.9 Oct 61.7 96 1997 8 68.1 1984 1976 1988 165 61 .0 .3 31.0 .0 .9 .0 64.9 41.1 53.0 85+ 1979 11 63.2 1985 18 1976 9 45.5 1976 373 13 .0 .0 28.0 .0 7.0 .0 Nov Dec 55.5 34.0 44.8 81 1998 9 53.4 1971 5+ 1989 26 34.8 1989 629 1 .0 .0 22.1 .3 15.1 .0 Aug Jul Jan Jan

50.3

61.4

72.4

Ann

104

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

22

83.6

1993

-2

1985

21

32.2

1977

3009

1701

Issue Date: February 2004 022-A

1983

(1) From the 1971-2000 Monthly Normals

50.9

1.2

Elevation: 158 Feet Lat: 35°01N

(2) Derived from station's available digital record: 1971-2001

329.9

1.8

62.1

.1

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

⁺ Also occurred on an earlier date(s)

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

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										Pı	ecipi	tation	(incl	nes)										
	Mea	Precipitation Totals Means/ Medians() Extremes										ays (3	5)	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										
	Medi	ans(1)				Extremes	•			Daily Precipitation				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	4.33	4.05	3.01	1993	8	7.96	1999	1.49+	1986	12.3	7.9	3.2	.8	1.98	2.36	2.89	3.32	3.72	4.12	4.54	5.03	5.65	6.58	7.42
Feb	3.23	2.69	3.03	1998	17	7.02	1998	1.07	1978	10.1	6.1	2.2	.6	.98	1.29	1.74	2.14	2.52	2.92	3.36	3.87	4.53	5.57	6.53
Mar	4.50	4.59	3.75	1998	9	9.09	1983	1.62	1981	11.0	7.5	2.9	1.3	1.71	2.13	2.73	3.23	3.70	4.19	4.71	5.32	6.09	7.28	8.36
Apr	3.16	2.98	3.65	1973	1	8.09	1978	.19	1976	8.5	5.3	2.1	.7	.53	.81	1.27	1.70	2.14	2.63	3.18	3.85	4.75	6.20	7.59
May	3.68	3.54	2.25	1988	20	7.21	1979	1.37	1983	10.5	7.0	2.2	.8	1.47	1.81	2.29	2.69	3.06	3.45	3.86	4.34	4.94	5.87	6.71
Jun	4.49	4.52	4.00	1983	8	12.87	1995	1.58	1997	10.1	6.8	3.1	1.3	1.55	1.98	2.59	3.11	3.61	4.13	4.69	5.34	6.17	7.47	8.66
Jul	6.06	5.69	5.40	1997	25	17.47	1991	2.06	1977	12.5	8.6	4.3	2.0	2.03	2.61	3.45	4.16	4.84	5.55	6.32	7.22	8.37	10.16	11.81
Aug	5.40	4.59	4.73	1992	17	16.71	1981	.89	1980	11.0	7.4	3.4	1.7	1.12	1.61	2.40	3.12	3.85	4.63	5.51	6.56	7.96	10.18	12.29
Sep	5.00	3.74	10.05	1999	16	21.63	1999	.08	1990	8.6	6.4	2.8	1.4	.38	.70	1.35	2.04	2.80	3.68	4.74	6.07	7.92	11.03	14.10
Oct	3.21	2.90	4.45	1999	18	8.74	1990	.16	2000	7.2	4.7	2.1	.8	.45	.71	1.17	1.62	2.09	2.60	3.19	3.92	4.90	6.50	8.04
Nov	2.89	2.62	3.02	1977	6	6.49	1997	.26	1973	8.4	4.8	1.9	.9	.77	1.04	1.46	1.83	2.19	2.57	2.99	3.49	4.14	5.16	6.11
Dec	3.24	3.17	2.08	1982	12	6.83	1973	.80	1988	10.7	6.4	2.7	.6	.98	1.29	1.75	2.14	2.53	2.93	3.37	3.88	4.55	5.59	6.56
Ann	49.19	49.76	10.05	Sep 1999	16	21.63	Sep 1999	.08	Sep 1990	120.9	78.9	32.9	12.9	38.70	40.81	43.46	45.45	47.19	48.87	50.58	52.45	54.70	57.92	60.68

⁺ Also occurred on an earlier date(s)

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

[#] 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: 1971-2001

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

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COOP ID: 311881

Station: CLINTON 2 NE, NC

Climate Division: NC 6 NWS Call Sign: Elevation: 158 Feet Lat: 35°01N Lon: 78°17W

										Snov	w (inc	hes)													
						Sno	ow To	tals							Mean Number of Days (1)										
	Mean	s/Medi	ians (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	.9	.0	#	0	5.5	1988	8	10.5	2000	6	1988	9	1+	2000	.4	.3	.1	.1	.0	1.0	.6	.2	.0		
Feb	1.0	.0	#	0	8.0	1973	10	8.0	1973	8	1973	10	1	1973	.5	.2	.1	@	.0	.6	.3	.1	.0		
Mar	.9	.0	#	0	8.5	1980	3	9.9	1980	10	1980	3	1	1980	.3	.2	.1	.1	.0	.2	.1	.1	@		
Apr	#	.0	0	0	#	1989	11	#+	1989	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	#	1987	11	#	1987	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0		
Dec	.7	.0	#	0	10.0	1989	24	10.0	1989	10	1989	26	1	1989	.3	.2	.1	@	@	.3	.2	.1	.1		
Ann	3.5	.0	N/A	N/A	10.0	Dec 1989	24	10.5	Jan 2000	10+	Dec 1989	26	1+	Jan 2000	1.5	.9	.4	.2	@	2.1	1.2	.5	.1		

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

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

[@] 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

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Lat: 35°01N Elevation: 158 Feet Lon: 78°17W

				Freez	e Data									
			Spri	ng Freeze D	ates (Month	/Day)								
Temp (F)		P	robability of	later date i	n spring (thr	ru Jul 31) tha	n indicated	(*)						
Temp (I')	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	5/02	4/26	4/21	4/17	4/13	4/10	4/06	4/01	3/26					
32	4/17	4/11	4/07	4/03	3/31	3/28	3/24	3/20	3/15					
28	4/04	3/29	3/24	3/20	3/16	3/12	3/08	3/03	2/25					
24	3/18	3/11	3/06	3/02	2/26	2/22	2/17	2/12	2/05					
20	3/05	2/24	2/17	2/11	2/05	1/30	1/23	1/15	12/30					
16	2/19	2/10	2/03	1/29	1/23	1/16	1/08	0/00	0/00					
<u> </u>			Fal	l Freeze Da	tes (Month/I	Day)		II.						
T (E)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)													
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	10/07	10/12	10/15	10/18	10/21	10/23	10/26	10/30	11/03					
32	10/16	10/21	10/24	10/27	10/30	11/02	11/05	11/08	11/13					
28	10/26	11/02	11/08	11/12	11/16	11/20	11/24	11/29	12/06					
24	11/08	11/16	11/22	11/27	12/02	12/07	12/12	12/18	12/27					
20	11/30	12/08	12/13	12/18	12/23	12/28	1/02	1/09	1/22					
16	12/16	12/23	12/29	1/03	1/08	1/14	1/22	0/00	0/00					
1			•	Freeze F	ree Period	•	1	1	•					
Tomas (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)							
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90					
36	213	205	199	194	189	185	180	174	166					
32	237	228	222	217	212	207	202	196	187					
28	275	264	256	250	244	238	232	224	213					
24	306	297	290	284	279	274	268	261	252					
20	>365	>365	336	325	317	310	303	295	284					
16	>365	>365	>365	>365	355	343	334	325	313					

^{*} 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.

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	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree l	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	713	561	385	150	25	1	0	0	7	165	373	629	3009		
60	569	428	248	61	3	0	0	0	1	85	247	484	2126		
57	483	350	180	29	0	0	0	0	0	51	185	399	1677		
55	428	301	142	16	0	0	0	0	0	35	150	346	1418		
50	304	195	68	2	0	0	0	0	0	11	77	231	888		
32	41	12	0	0	0	0	0	0	0	0	0	19	72		

Base						Coolin	g Degree I	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	352	376	644	863	1147	1320	1485	1434	1227	919	631	414	10812
55	26	21	73	189	434	630	772	721	537	241	90	28	3762
57	18	14	49	142	372	570	710	659	477	196	66	19	3292
60	11	7	24	84	282	480	617	566	388	136	38	11	2644
65	0	0	6	23	149	331	462	411	244	61	13	1	1701
70	0	0	0	3	57	191	307	257	120	20	2	0	957

	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	167	219	416	632	901	1084	1240	1193	997	682	418	223	167	386	802	1434	2335	3419	4659	5852	6849	7531	7949	8172
45	93	134	287	484	746	934	1085	1038	847	528	291	130	93	227	514	998	1744	2678	3763	4801	5648	6176	6467	6597
50	46	66	177	341	591	784	930	883	697	379	181	66	46	112	289	630	1221	2005	2935	3818	4515	4894	5075	5141
55	20	31	96	218	437	634	775	728	547	245	102	32	20	51	147	365	802	1436	2211	2939	3486	3731	3833	3865
60	1	11	40	120	294	484	620	573	399	136	48	9	1	12	52	172	466	950	1570	2143	2542	2678	2726	2735
Base		•	•	Gro	wing Deg	gree Unit	s for Co	rn (Mont	thly)	•	•				Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)	•	
50/86	109	146	260	401	595	747	856	831	679	440	268	143	109	255	515	916	1511	2258	3114	3945	4624	5064	5332	5475

(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

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

- c. Snow Tables
 - 1. Snow Climatology
 - 2. Cooperative Summary of the Day
- d. Freeze Data Table

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

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