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: 386209

Lon: 81°38W

Station: NEWBERRY, SC

Climate Division: SC 5

Mean (1)

Daily

Min

30.4

31.7

38.4

46.2

56.2

64.2

68.5

67.1

60.7

48.2

39.1

32.2

Mean

42.2

45.3

52.6

60.6

69.3

76.4

80.3

78.6

72.5

61.5

52.4

44.5

61.4

Daily

Max

53.9

58.8

66.7

74.9

82.3

88.6

92.0

90.0

84.3

74.8

65.6

56.8

74.1

Month

Jan

Feb Mar

Apr

May

Jun

Jul

Aug Sep

Oct

Nov

Dec

Ann

NWS Call Sign:

Temperature (°F) Degree Days (1) Mean Number of Days (3) **Extremes** Base Temp 65 Max Max Max Max Min Min Highest Lowest Highest Lowest Month(1) Month(1) Cooling >= >= >= <= <= <= Year Day Year Year Day Year Heating Daily(2) Daily(2) Mean Mean 100 90 50 32 32 0 81 +1975 31 54.8 1974 -1 1985 21 32.6 1977 709 0 .0 .0 22.1 .3 16.2 @ 37.9 82+ 1996 28 52.4 1990 7+ 1958 18 1978 553 0 .0 .0 22.9 .3 13.1 .0 89+ 1985 30 57.9 1974 -1 1980 3 45.8 1996 393 7 .0 .0 29.9 @ 6.9 @ 1983 32 94 +1986 28 65.6 1981 18 2000 5 56.5 164 .0. .7 29.9 .0 1.4 0. 99 1962 17 72.9 1998 32 1963 2 63.8 1997 35 166 .0 5.0 31.0 .0 .0 .0 1954 27 45+ 71.7 15.5 103 +80.6 1981 1984 1972 1 344 .7 30.0 .0 .0 .0 107 1993 3 84.7 1993 55+ 1988 76.2 1975 472 3.2 23.0 31.0 0. 0 .0 .0 108 1983 21 82.1 1999 51+1989 19 76.2 1976 0 420 1.4 18.4 31.0 .0 .0 .0 101 +1954 6 76.4 1980 36 1967 30 70.3 1976 6 232 .1 8.3 30.0 .0 .0 .0 5 21 +56.5+ 1987 100 1954 68.0 1984 1952 30 160 51 .0 .3 31.0 .0 .8 .0 89 1 60.7 1985 14 1955 30 45.7 1976 386 .0 .0 29.2 .0 7.5 .0 1961 6

48.6

80 +

108

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

7

21

52.1

84.7

1971

Jul

1993

1

-1+

1983

Jan

1985

26

21

34.8

32.6

2000

Jan

1977

636

3043

0

1730

Issue Date: February 2004 042-A

1998

Aug

1983

(1) From the 1971-2000 Monthly Normals

.0

5.4

Elevation: 476 Feet Lat: 34°17N

(2) Derived from station's available digital record: 1948-2001

23.8

341.8

.1

.7

14.8

60.7

.0

.0

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

.0

71.2

⁺ Also occurred on an earlier date(s)

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

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COOP ID: 386209

Station: NEWBERRY, SC

Climate Division: SC 5

NWS Call Sign: Elevation: 476 Feet Lat: 34°17N Lon: 81°38W

										Pı	recipit	tation	(incl	nes)										
		Precipitation Totals									ean N	Numbo Pays (3		Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Medi					Extreme	8			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	5.08	5.15	8.00	2000	25	14.22	2000	.61	1981	11.6	7.9	3.7	1.5	1.77	2.25	2.95	3.54	4.10	4.67	5.30	6.04	6.97	8.42	9.76
Feb	4.16	4.15	3.25	1979	18	7.87	1979	.95	1977	8.9	6.6	2.6	1.3	1.31	1.71	2.29	2.79	3.28	3.78	4.33	4.97	5.80	7.10	8.29
Mar	4.86	4.63	3.11	1964	15	12.77	1980	.81	1985	10.2	7.0	3.4	1.5	1.47	1.93	2.62	3.22	3.79	4.39	5.05	5.83	6.83	8.40	9.85
Apr	3.14	2.89	3.66	1956	11	7.63	1979	.35	1976	8.2	5.7	2.1	.8	.56	.84	1.30	1.72	2.16	2.63	3.17	3.83	4.69	6.09	7.43
May	3.44	3.03	4.17	1957	11	6.80	1984	1.10	1987	8.9	6.0	2.5	.8	1.05	1.38	1.87	2.28	2.69	3.11	3.57	4.12	4.82	5.91	6.93
Jun	4.44	3.83	3.83	1994	4	10.86	1994	1.18	1977	9.4	6.3	2.7	1.3	1.17	1.59	2.23	2.80	3.35	3.94	4.59	5.35	6.35	7.93	9.40
Jul	4.05	3.26	5.21	1959	9	8.33	1991	.55	1992	10.5	6.5	2.6	1.1	.94	1.31	1.91	2.44	2.97	3.53	4.16	4.92	5.90	7.47	8.95
Aug	4.88	4.48	10.42	1986	18	17.04	1986	.41	1997	9.6	6.1	2.9	1.4	1.08	1.53	2.24	2.89	3.54	4.23	5.00	5.93	7.14	9.09	10.92
Sep	4.57	4.51	6.24	1998	4	9.75	1980	.51	1985	7.9	5.3	2.8	1.7	1.08	1.51	2.18	2.77	3.37	4.00	4.70	5.54	6.64	8.38	10.02
Oct	3.68	3.28	6.01	1985	2	10.48	1985	.04	2000	6.5	4.2	2.4	1.2	.33	.58	1.07	1.58	2.14	2.78	3.53	4.48	5.78	7.96	10.10
Nov	3.43	2.90	3.56	1985	1	11.38	1985	.56	1973	8.4	5.5	2.6	1.0	.96	1.29	1.78	2.21	2.63	3.07	3.56	4.13	4.88	6.05	7.14
Dec	3.60	3.21	2.81	1994	22	9.24	1981	.39	1988	9.9	6.4	2.4	.9	.91	1.25	1.77	2.24	2.69	3.18	3.72	4.36	5.19	6.51	7.75
Ann	49.33	50.75	10.42	Aug 1986	18	17.04	Aug 1986	.04	Oct 2000	110.0	73.5	32.7	14.5	38.49	40.66	43.41	45.46	47.27	49.00	50.77	52.71	55.05	58.40	61.26

⁺ 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: 1948-2001

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

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COOP ID: 386209

Station: NEWBERRY, SC

Climate Division: SC 5 NWS Call Sign:

Elevation: 476 Feet Lat: 34°17N Lon: 81°38W

										Snov	w (incl	hes)												
						Sno	ow To	tals							Mean Number of Days (1)									
	Mean	s/Medi	ians (1))		Extremes (2)												Snow Fall >= 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	.5	.0	#	0	8.0	2000	25	8.0	2000	8	2000	25	1	2000	.2	.2	.1	.0	.0	.3	.1	@	.0	
Feb	.8	.0	#	0	5.5	1973	10	5.5	1973	6	1973	10	#+	1999	.4	.2	.1	.1	.0	.3	.1	.1	.0	
Mar	.6	.0	#	0	5.0	1971	25	5.0	1971	5	1971	25	#+	1983	.1	.1	.1	.1	.0	.1	.1	@	.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	2.0	1971	3	2.0+	1993	2	1971	3	#+	2000	.1	.1	.0	.0	.0	.1	.0	.0	.0	
Ann	2.1	.0	N/A	N/A	8.0	Jan 2000	25	8.0	Jan 2000	8	Jan 2000	25	1	Jan 2000	.8	.6	.3	.2	.0	.8	.3	.1	.0	

⁺ 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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COOP ID: 386209

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Climate Division: SC 5 NWS Call Sign:

Elevation: 476 Feet

Lat: 34°17N Lon: 81°38W

				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	5/04	4/28	4/24	4/20	4/17	4/14	4/10	4/06	3/31						
32	4/20	4/15	4/11	4/07	4/04	4/01	3/29	3/25	3/20						
28	4/08	4/02	3/28	3/24	3/21	3/17	3/13	3/09	3/03						
24	3/22	3/15	3/11	3/07	3/03	2/28	2/24	2/19	2/13						
20	3/15	3/06	2/28	2/22	2/17	2/12	2/07	2/01	1/23						
16	2/24	2/15	2/08	2/01	1/26	1/20	1/12	1/01	0/00						
-			Fal	ll Freeze Da	tes (Month/I	Oay)		•	•						
Tomas (E)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	10/08	10/13	10/16	10/19	10/21	10/24	10/27	10/30	11/03						
32	10/15	10/21	10/25	10/29	11/02	11/05	11/09	11/13	11/19						
28	10/30	11/04	11/08	11/11	11/15	11/18	11/21	11/25	11/30						
24	11/14	11/21	11/26	12/01	12/05	12/09	12/13	12/18	12/25						
20	11/24	12/05	12/12	12/19	12/25	12/31	1/07	1/15	1/26						
16	12/08	12/20	12/28	1/04	1/11	1/19	1/28	2/11	0/00						
<u></u>				Freeze F	ree Period	1		1	1						
T (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)								
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	206	200	195	191	187	183	179	174	167						
32	231	224	219	215	211	206	202	197	190						
28	263	254	248	243	238	233	228	222	213						
24	300	292	286	280	276	271	265	259	251						
20	353	333	322	314	306	299	291	282	269						
16	>365	>365	>365	>365	339	330	323	317	309						

^{*} 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.

Complete documentation available from:

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Climate Division: SC 5 NWS Call Sign: Elevation: 476 Feet Lat: 34°17N Lon: 81°38W

				Deg	ree Days t	o Selected	Base Tem	peratures	(°F)				
Base						Heatin	g Degree l	Days (1)					
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	709	553	393	164	35	1	0	0	6	160	386	636	3043
60	564	414	257	75	8	0	0	0	1	77	254	488	2138
57	477	337	188	41	2	0	0	0	0	45	186	402	1678
55	422	286	149	25	1	0	0	0	0	29	147	347	1406
50	297	174	72	5	0	0	0	0	0	8	72	226	854
32	37	5	0	0	0	0	0	0	0	0	0	15	57

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	351	376	637	857	1154	1332	1495	1443	1216	914	610	402	10787
55	23	13	73	192	442	642	782	730	526	230	67	20	3740
57	16	8	50	148	381	582	720	668	466	184	46	13	3282
60	10	1	26	93	294	492	627	575	376	123	23	7	2647
65	0	0	7	32	166	344	472	420	232	51	6	0	1730
70	0	0	0	6	75	205	318	266	108	14	0	0	992

	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	186	260	468	668	935	1121	1272	1225	1011	712	424	233	186	446	914	1582	2517	3638	4910	6135	7146	7858	8282	8515
45	106	154	326	520	780	971	1117	1070	861	558	288	130	106	260	586	1106	1886	2857	3974	5044	5905	6463	6751	6881
50	48	80	203	373	625	821	962	915	711	405	176	67	48	128	331	704	1329	2150	3112	4027	4738	5143	5319	5386
55	20	33	106	244	470	671	807	760	561	262	91	31	20	53	159	403	873	1544	2351	3111	3672	3934	4025	4056
60	1	8	48	132	320	521	652	605	412	146	40	7	1	9	57	189	509	1030	1682	2287	2699	2845	2885	2892
Base		•		Gro	wing De	gree Unit	s for Co	rn (Mont	hly)						Gr	owing D	egree Ur	its for C	orn (Acc	umulate	d Month	ly)		
50/86	123	176	315	440	625	757	854	830	682	465	278	154	123	299	614	1054	1679	2436	3290	4120	4802	5267	5545	5699

(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

- 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