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: 387722

Lon: 81°31W

Station: SANTUCK, SC

Climate Division: SC 2 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 53.3 32.9 43.1 81 1949 11 55.0 1974 -4 1985 21 32.8 1977 678 0 .0 .0 19.4 .5 15.8 @ Jan 58.4 35.3 46.9 82+ 1996 27 54.1 1990 5 1958 17 39.1 1978 508 0 .0 .0 21.2 .2 12.9 0. Feb Mar 66.7 42.2 54.5 90 1945 17 59.5 1997 7 1980 3 49.3 1971 338 11 .0 .0 29.4 @ 6.6 0. 25+58.2 1983 Apr 75.0 49.4 62.2 93+ 2001 10 66.8 1981 1943 4 121 36 .0. .3 29.9 .0 1.0 0. May 81.4 57.8 69.6 100 1941 23 73.6 2000 32+ 1989 8 65.8 1997 26 169 .0 2.5 31.0 .0 @ .0 1954 27 80.5 42 72.8+ 11.0 Jun 87.5 65.4 76.5 106 +1981 1930 1979 1 344 .2 30.0 .0 .0 .0 Jul 90.5 80.1 108 1952 29 84.7 1993 48 1933 5 76.9 1971 467 1.4 19.1 31.0 0. 69.6 0 .0 .0 22 1992 88.3 68.6 78.5 105 +1968 23 82.1 1987 48 1930 75.5 0 415 .5 13.4 31.0 .0 .0 .0 Aug 7 Sep 82.0 62.7 72.4 103 1939 9 76.3 1980 36 1967 30 69.9 1994 228 .0 3.9 30.0 .0 .0 .0 72.5 24 55.8 1987 54 Oct 50.7 61.6 100 1954 6 68.8 1984 1965 30 160 .0 .2 30.9 .0 .7 .0 63.8 42.1 53.0 88 2 61.0 1985 12+ 1950 26 46.9 1976 367 5 .0 .0 28.3 .0 6.8 .0 Nov 1961 Dec 55.5 35.1 45.3 85 1931 12 53.3 1971 -1 1935 31 36.8 2000 610 0 .0 .0 21.5 .2 14.1 .0 Jul Jul Jan Jan 72.9 51.0 62.0 108 1952 29 84.7 1993 -4 1985 21 32.8 1977 2816 1729 2.1 50.4 333.6 .9 57.9 @ Ann

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

Issue Date: February 2004 051-A

(1) From the 1971-2000 Monthly Normals

Elevation: 520 Feet Lat: 34°38N

- (2) Derived from station's available digital record: 1930-2001
- (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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Climate Division: SC 2 NWS Call Sign: Elevation: 520 Feet Lat: 34°38N Lon: 81°31W

										Pı	recipi	tation	(incl	nes)										
	Mea	ans/	P	recipi	itatio	n Total						ays (3)	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	8			D	aily Pre	cipitatio	n	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	4.59	4.75	4.00	1962	6	7.82	1975	.47	1981	11.1	7.4	3.5	1.4	1.57	2.01	2.64	3.18	3.69	4.22	4.79	5.47	6.33	7.66	8.89
Feb	4.01	4.28	2.75	1948	10	9.22	1979	.73	1978	9.5	6.8	2.7	1.2	1.07	1.45	2.03	2.54	3.04	3.56	4.15	4.84	5.74	7.15	8.47
Mar	4.85	4.74	3.21	1953	23	10.33	1980	.83	1985	10.8	7.8	3.5	1.4	1.46	1.92	2.61	3.20	3.78	4.38	5.04	5.82	6.82	8.39	9.85
Apr	3.09	2.95	3.24	1937	24	9.91	1998	.31	1976	8.8	5.6	2.1	.6	.65	.94	1.39	1.80	2.22	2.66	3.16	3.76	4.54	5.80	6.99
May	3.22	2.96	4.50	1966	28	7.08	1975	.23	2000	9.8	5.8	2.2	.8	.70	1.00	1.47	1.90	2.32	2.78	3.30	3.91	4.72	6.02	7.24
Jun	3.95	3.69	2.84	1961	21	9.49	1995	.59	1990	10.3	6.4	2.9	1.3	1.19	1.56	2.13	2.61	3.08	3.57	4.10	4.74	5.55	6.83	8.01
Jul	3.95	3.25	4.30	1959	21	9.19	1975	1.05	1987	11.2	6.8	2.3	1.0	1.08	1.45	2.02	2.52	3.01	3.52	4.08	4.75	5.62	6.99	8.27
Aug	3.87	3.43	6.14	1967	23	10.34	1995	.84	1997	9.2	5.7	2.3	1.1	.92	1.28	1.85	2.35	2.85	3.38	3.97	4.68	5.61	7.08	8.46
Sep	4.23	3.72	4.67	1936	30	9.26	1998	.14	1985	8.7	5.8	2.8	1.4	.58	.92	1.53	2.12	2.73	3.41	4.20	5.16	6.47	8.60	10.66
Oct	3.55	3.19	5.02	1934	10	11.96	1990	.00	2000	6.5	4.4	2.4	1.2	.20	.54	1.09	1.61	2.17	2.78	3.49	4.38	5.58	7.55	9.47
Nov	3.42	3.29	4.26	1957	18	8.36	1985	.83	1973	9.0	5.8	2.7	.9	1.22	1.54	2.00	2.40	2.77	3.15	3.57	4.06	4.68	5.64	6.52
Dec	3.47	3.43	3.15	1931	4	8.48	1983	.73	1988	10.1	6.9	2.5	.5	1.02	1.35	1.85	2.28	2.69	3.13	3.60	4.17	4.90	6.04	7.10
Ann	46.20	46.74	6.14	Aug 1967	23	11.96	Oct 1990	.00	Oct 2000	115.0	75.2	31.9	12.8	35.46	37.60	40.31	42.34	44.12	45.84	47.60	49.53	51.86	55.21	58.07

⁺ 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: 1930-2001

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

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Station: SANTUCK, SC

Climate Division: SC 2 NWS Call Sign:

Elevation: 520 Feet Lat: 34°38N

COOP ID: 387722 Lon: 81°31W

										Snov	w (inc	hes)												
						Sno	ow To	tals							Mean Number of Days (1)									
	Mean	s/Medi	ans (1)	1	Extremes (2)												Snow Fall >= Thresholds						n ds	
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	1.4	.0	#	0	9.0	2000	24	12.9	2000	10	2000	24	1+	2000	.9	.4	.1	.1	.0	1.2	.5	.2	@	
Feb	1.3	.0	#	0	5.5	1973	10	8.3	1979	5	1979	18	1	1979	.7	.4	.1	.1	.0	.6	.2	.1	.0	
Mar	.7	.0	#	0	7.2	1983	24	8.0	1983	7	1983	24	#+	1993	.3	.2	.1	@	.0	.2	.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	.8	2000	19	.8	2000	0	0	0	0	0	@	.0	.0	.0	.0	.0	.0	.0	.0	
Dec	.5	.0	#	0	7.8	1971	3	7.8	1971	8	1971	3	1	1971	.4	.1	.1	@	.0	.1	.1	@	.0	
Ann	3.9	.0	N/A	N/A	9.0	Jan 2000	24	12.9	Jan 2000	10	Jan 2000	24	1+	Jan 2000	2.3	1.1	.4	.2	.0	2.1	.9	.4	@	

⁺ 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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Elevation: 520 Feet Lat: 34°38N

				Freez	ze 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 (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	4/28	4/23	4/20	4/18	4/16	4/13	4/11	4/08	4/03						
32	4/22	4/16	4/12	4/08	4/04	4/01	3/28	3/24	3/17						
28	4/06	3/31	3/26	3/23	3/19	3/16	3/12	3/08	3/02						
24	3/19	3/13	3/08	3/05	3/01	2/26	2/22	2/18	2/12						
20	3/10	3/01	2/23	2/17	2/12	2/07	2/01	1/26	1/17						
16	3/01	2/20	2/13	2/07	2/02	1/27	1/20	1/09	0/00						
_			Fal	ll Freeze Da	tes (Month/D	Day)									
Tomp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	10/06	10/11	10/14	10/17	10/20	10/22	10/25	10/28	11/02						
32	10/18	10/23	10/28	10/31	11/03	11/06	11/10	11/14	11/20						
28	10/30	11/05	11/09	11/12	11/15	11/19	11/22	11/26	12/02						
24	11/11	11/18	11/23	11/27	12/01	12/05	12/09	12/15	12/21						
20	11/28	12/04	12/09	12/13	12/16	12/20	12/24	12/29	1/04						
16	12/09	12/20	12/27	1/03	1/09	1/16	1/24	2/06	0/00						
_				Freeze F	ree Period										
Temp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days))							
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	203	198	193	190	186	183	179	175	169						
32	236	228	222	217	212	207	202	196	188						
28	264	256	250	245	241	236	231	225	217						
24	295	288	283	278	274	270	265	260	253						
20	338	327	319	313	307	301	294	287	276						
16	>365	>365	>365	350	337	328	321	312	301						

^{*} 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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Station: SANTUCK, SC

Climate Division: SC 2

Elevation: 520 Feet Lat: 34°38N

	Degree Days to Selected Base Temperatures (°F)														
Base						Heatin	g Degree I	Days (1)							
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann		
65	678	508	338	121	26	1	0	0	7	160	367	610	2816		
60	534	374	209	44	4	0	0	0	1	78	235	464	1943		
57	449	296	148	19	1	0	0	0	0	45	169	379	1506		
55	395	247	114	10	0	0	0	0	0	29	131	326	1252		
50	274	146	49	1	0	0	0	0	0	8	60	211	749		
32	31	3	0	0	0	0	0	0	0	0	0	14	48		

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	375	419	696	906	1166	1333	1490	1438	1211	917	629	427	11007
55	27	19	97	225	453	643	777	725	521	233	70	26	3816
57	19	12	69	175	391	583	715	663	461	187	47	17	3339
60	11	6	37	110	302	493	622	570	372	127	24	9	2683
65	0	0	11	36	169	344	467	415	228	54	5	0	1729
70	0	0	1	7	74	203	312	262	105	16	0	0	980

	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	168	240	449	656	912	1097	1246	1194	972	667	393	208	168	408	857	1513	2425	3522	4768	5962	6934	7601	7994	8202
45	91	141	310	508	757	947	1091	1039	822	513	260	120	91	232	542	1050	1807	2754	3845	4884	5706	6219	6479	6599
50	43	75	189	360	603	797	936	884	672	366	154	64	43	118	307	667	1270	2067	3003	3887	4559	4925	5079	5143
55	17	33	101	232	449	647	781	729	523	228	80	28	17	50	151	383	832	1479	2260	2989	3512	3740	3820	3848
60	60 0 8 43 126 298 497 626 574 376 123 34 2									2	0	8	51	177	475	972	1598	2172	2548	2671	2705	2707		
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	100	155	282	420	607	747	853	825	659	420	239	122	100	255	537	957	1564	2311	3164	3989	4648	5068	5307	5429

(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

NWS Call Sign:

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