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: 380165

Station: ANDERSON, SC

Climate Division: SC 2

NWS Call Sign:

Elevation: 800 Feet Lat: 34°32N Lon: 82°40W

									ŗ	Гетр	eratui	re (°F)									
	Mea	n (1)						Extr	emes					Degree Base To	•		Mean	Numb	er of I	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	52.5	27.7	40.1	81	1949	11	50.2	1974	-5	1985	21	29.4	1977	773	0	.0	.0	21.5	.4	18.1	@
Feb	57.6	30.6	44.1	80+	1996	28	50.6	1990	4	1958	17	35.8	1978	586	0	.0	.0	22.9	.2	14.1	.0
Mar	65.2	37.2	51.2	88	1995	23	56.3	1974	5	1980	3	45.1	1971	430	2	.0	.0	29.7	@	7.9	.0
Apr	73.4	45.4	59.4	94	1986	27	65.2	1981	24	1987	2	54.4	1983	192	23	.0	.3	30.0	.0	1.5	.0
May	80.4	54.9	67.7	100	1989	31	71.4	1982	33	1994	6	63.6	1997	51	134	@	2.1	30.9	.0	.0	.0
Jun	87.3	62.5	74.9	106	1978	28	79.7	1981	42+	1985	15	69.8	1972	3	299	.2	12.8	30.0	.0	.0	.0
Jul	90.5	66.6	78.6	108	1952	29	83.2	1993	53	1982	2	75.0	1979	0	421	2.0	20.4	31.0	.0	.0	.0
Aug	88.9	65.9	77.4	106	1954	17	82.4	1999	52+	1992	29	74.1	1992	0	385	1.0	16.5	31.0	.0	.0	.0
Sep	83.3	59.5	71.4	102+	1954	6	75.7	1998	34	1967	30	68.1	1975	9	201	@	5.9	30.0	.0	.0	.0
Oct	73.6	46.7	60.2	98	1954	5	67.5	1984	25	1962	27	54.5	1976	190	40	.0	.3	31.0	.0	.9	.0
Nov	64.1	37.9	51.0	88	1961	2	58.6	1985	11+	1950	26	44.7	1976	423	3	.0	.0	28.9	.0	7.6	.0
Dec	54.8	29.9	42.4	80+	1998	7	49.2	1998	2	1962	13	33.7	2000	703	0	.0	.0	23.8	.1	16.5	.0
Ann	72.6	47.1	59.9	108	Jul 1952	29	83.2	Jul 1993	-5	Jan 1985	21	29.4	Jan 1977	3360	1508	3.2	58.3	340.7	.7	66.6	@

⁺ Also occurred on an earlier date(s)

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

Issue Date: February 2004 002-A

- (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

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

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										Pı	ecipi	tation	(incl	nes)										
	Me	ans/	P	recipi	tatio	on Total					of D	Numbo)	Proba	ability th		nonthly/	indic	precipita ated am	ntion wi			less tha	ın the
	Medi	ans(1)				Extremes	,			"	any 110	cipitatio	11		Th	ese value	s were det	termined	from the i	incomplet	e gamma	distributi	ion	
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	5.23	4.97	4.70	1969	20	12.26	1982	.30	1986	10.3	7.9	3.9	1.8	1.17	1.66	2.42	3.11	3.80	4.54	5.36	6.35	7.64	9.70	11.65
Feb	4.27	4.70	3.00	1982	3	7.50	1975	.98	1978	8.1	6.4	3.3	1.4	1.40	1.80	2.40	2.91	3.39	3.90	4.45	5.09	5.92	7.20	8.39
Mar	5.41	4.90	4.05	1964	26	12.14	1980	1.14	1985	9.2	7.6	3.8	1.6	1.56	2.08	2.85	3.52	4.18	4.86	5.62	6.51	7.66	9.46	11.14
Apr	3.55	3.41	4.60	1998	17	11.15	1998	.31	1986	7.3	6.1	2.7	.9	.62	.94	1.46	1.94	2.44	2.97	3.58	4.33	5.31	6.91	8.43
May	4.02	3.55	4.05	1996	25	8.82	1972	.10	2000	7.9	6.4	2.5	1.2	.77	1.14	1.73	2.27	2.82	3.41	4.09	4.90	5.98	7.71	9.35
Jun	3.42	3.24	5.15	1965	12	9.00	1994	.03	1993	7.6	6.3	2.8	.9	.52	.81	1.30	1.78	2.27	2.80	3.42	4.17	5.19	6.83	8.41
Jul	4.30	3.90	6.16	1964	19	9.65	1985	.82	1980	8.9	7.0	3.2	1.2	1.31	1.72	2.33	2.85	3.36	3.89	4.47	5.15	6.04	7.41	8.69
Aug	3.82	3.39	5.00	1991	12	9.92	1991	.31	1981	8.0	6.6	2.7	1.1	.64	.97	1.53	2.05	2.59	3.18	3.85	4.67	5.76	7.52	9.21
Sep	4.20	3.84	6.40	1956	26	11.82	1977	.00	1985	7.1	5.6	2.8	1.6	.40	.88	1.57	2.18	2.81	3.49	4.25	5.19	6.43	8.43	10.35
Oct	3.85	3.63	4.90	1990	22	11.58	1990	.00	2000	5.8	4.8	2.5	1.3	.34	.77	1.40	1.96	2.54	3.17	3.88	4.75	5.91	7.80	9.60
Nov	4.36	4.36	4.13	1957	18	8.37	1992	1.64	1991	8.6	6.8	3.3	1.4	1.72	2.12	2.69	3.17	3.61	4.07	4.56	5.13	5.86	6.97	7.98
Dec	4.57	4.10	4.34	1972	15	11.00	1983	.94	1980	9.5	7.3	3.1	1.2	1.37	1.80	2.45	3.01	3.56	4.12	4.74	5.48	6.42	7.90	9.28
Ann	51.00	51.97	6.40	Sep 1956	26	12.26	Jan 1982	.00+	Oct 2000	98.3	78.8	36.6	15.6	37.13	39.84	43.29	45.91	48.22	50.45	52.75	55.29	58.36	62.81	66.64

⁺ 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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Climate Division: SC 2 NWS Call Sign: Elevation: 800 Feet Lat: 34°32N Lon: 82°40W

										Snov	w (inc	hes)											
						Sno	ow To	tals									Mea	ın Nu	mber	of Da	ys (1)		
	Mean	s/Medi	ians (1))					Extre	mes (2)							ow Fa					Depth esholo	
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	.6	.0	#	0	4.0	1977	24	4.0	1977	7	1987	23	1	1987	.2	.2	.1	.0	.0	.2	.1	.0	.0
Feb	.6	.0	#	0	4.0	1980	6	7.0	1980	5	1979	18	1	1979	.3	.2	.2	.0	.0	.1	@	.0	.0
Mar	.1	.0	#	0	1.2	1983	24	1.2	1983	4	1980	2	#+	1983	.1	.1	.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	.1	.0	0	0	1.0	2000	19	1.0+	2000	0	0	0	0	0	.1	.1	.0	.0	.0	.0	.0	.0	.0
Ann	1.4	.0	N/A	N/A	4.0+	Feb 1980	6	7.0	Feb 1980	7	Jan 1987	23	1+	Jan 1987	.7	.6	.3	.0	.0	.3	.1	.0	.0

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

- (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

[@] 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

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Elevation: 800 Feet Lat: 34°32N Lon: 82°40W

				Freez	e Data				
			Spri	ng Freeze D	ates (Month	/Day)			
Temp (F)		P	robability of	later date i	n spring (thr	u Jul 31) tha	n indicated	(*)	
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	5/04	4/28	4/25	4/22	4/19	4/16	4/13	4/09	4/04
32	4/21	4/15	4/11	4/08	4/05	4/01	3/29	3/25	3/19
28	4/07	4/01	3/28	3/24	3/21	3/18	3/14	3/10	3/04
24	3/22	3/16	3/11	3/08	3/04	3/01	2/25	2/21	2/15
20	3/11	3/04	2/27	2/22	2/18	2/14	2/09	2/04	1/28
16	3/01	2/21	2/15	2/09	2/04	1/29	1/22	1/12	0/00
			Fal	l Freeze Da	tes (Month/L	Day)			
Town (F)		Pro	bability of ea	arlier date ii	n fall (beginr	ning Aug 1) t	han indicate	ed(*)	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/05	10/10	10/13	10/16	10/19	10/22	10/25	10/29	11/02
32	10/16	10/21	10/24	10/28	10/31	11/03	11/06	11/10	11/15
28	11/01	11/06	11/10	11/13	11/17	11/20	11/23	11/27	12/03
24	11/16	11/22	11/26	11/29	12/03	12/06	12/09	12/14	12/19
20	11/27	12/04	12/09	12/14	12/18	12/22	12/27	1/01	1/08
16	12/06	12/18	12/27	1/04	1/12	1/20	1/29	2/13	0/00
•				Freeze F	ree Period		•	1	
Tomp (F)			Probability	of longer th	an indicated	freeze free p	eriod (Days))	
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	201	195	190	186	183	179	175	170	164
32	226	220	216	212	208	205	201	197	190
28	264	256	250	245	240	235	230	224	216
24	296	288	282	277	273	268	263	257	250
20	331	321	314	308	302	296	290	283	273
16	>365	>365	>365	>365	336	325	317	308	297

^{*} 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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Climate Division: SC 2 Elevation: 800 Feet Lat: 34°32N Lon: 82°40W

				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	773	586	430	192	51	3	0	0	9	190	423	703	3360
60	624	447	287	94	13	0	0	0	1	98	285	550	2399
57	536	369	210	53	5	0	0	0	0	60	212	464	1909
55	479	317	166	33	2	0	0	0	0	40	169	407	1613
50	345	201	81	7	0	0	0	0	0	12	86	276	1008
32	51	9	0	0	0	0	0	0	0	0	0	25	85

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	300	347	595	821	1106	1286	1444	1408	1182	873	570	345	10277
55	16	11	48	164	395	596	731	695	492	200	49	14	3411
57	11	7	30	124	335	536	669	633	432	157	32	9	2975
60	6	0	14	75	251	446	576	540	343	102	15	1	2369
65	0	0	2	23	134	299	421	385	201	40	3	0	1508
70	0	0	0	4	54	168	272	235	85	10	0	0	828

										Gro	wing]	Degre	e Uni	ts (2)										
Base					Growing	g Degree	Units (M	(Ionthly)					Growing Degree Units (Accumulated Monthly)											
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec													Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
40	152	224	425	634	899	1085	1231	1196	978	682	388	194	152	376	801	1435	2334	3419	4650	5846	6824	7506	7894	8088
45													76	204	487	972	1717	2652	3728	4769	5597	6124	6379	6486
50												46	30	88	257	598	1188	1973	2894	3780	4458	4834	4980	5026
55	8	17	83	211	437	635	766	731	528	237	70	15	8	25	108	319	756	1391	2157	2888	3416	3653	3723	3738
60	1	0	30	110	285	485	611	576	378	124	28	1	1	1	31	141	426	911	1522	2098	2476	2600	2628	2629
Base	Growing Degree Units for Corn (Monthly)													Gr	owing D	egree Un	its for C	orn (Acc	umulate	d Month	ly)			
50/86	50/86 107 161 285 416 599 733 828 814 660 442 251 130												107	268	553	969	1568	2301	3129	3943	4603	5045	5296	5426

(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