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: 383106

Lon: 79°44W

Station: FLORENCE RGNL AP, SC

Climate Division: SC 4 NWS Call Sign: FLO

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 54.8 35.2 45.0 85 1975 31 59.8 1974 0 1985 21 34.3 1977 634 0 .0 .0 21.7 .5 13.0 @ Jan 38.5 59.1 37.6 48.4 85+ 1997 27 56.8 1976 11 1996 5 1978 473 6 .0 .0 22.0 .2 9.3 0. Feb Mar 67.2 44.4 55.8 92 +1974 10 62.7 1976 11 1980 3 49.1 1971 302 17 .0 .1 29.6 @ 3.4 0. 97 27 20 58.8 1983 Apr 75.2 51.0 63.1 1981 28 68.9 1981 1983 115 58 .0 1.5 29.9 .0 .4 .0 May 82.0 59.9 71.0 102 +1953 31 76.0 1975 36 1989 8 67.7 1971 20 203 .0 5.2 31.0 .0 0. .0 1954 27 82.8 47 2 71.9 13.5 87.6 67.6 77.6 108 1981 1966 1979 0 379 .6 30.0 .0 .0 .0 Jun Jul 90.7 71.6 81.2 104+ 1990 10 85.8 1993 57+ 1988 2 77.7 1984 501 1.9 20.8 31.0 .0 .0 0 .0 89.1 70.4 79.8 106 +1980 1 84.1 1975 54 1979 17 76.5 1981 0 457 .8 16.3 31.0 .0 .0 .0 Aug 5 Sep 84.3 65.0 74.7 101 1954 6 79.6 1973 41 +1967 30 70.2 1984 294 .1 7.6 30.0 .0 .0 .0 75.2 69.2+ 27 27 57.6 1987 123 Oct 52.9 64.1 102 1954 6 1984 1962 93 .0 .4 31.0 .0 .2 .0 44.2 55.4 89+ 1993 16 63.7 1985 16 1950 26 48.5 1976 307 19 .0 .0 29.0 .0 4.3 0. Nov 66.6 Dec 57.6 37.4 47.5 86 1991 3 55.5 1971 8+ 1983 26 38.8 1989 544 2 .0 .0 24.3 .2 10.4 .0 Jun Jul Jan Jan 74.1 53.1 63.6 108 1954 27 85.8 1993 0 1985 21 34.3 1977 2523 2029 3.4 65.4 340.5 .9 41.0 @ Ann

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

Issue Date: February 2004 025-A

Elevation: 146 Feet Lat: 34°12N

⁺ Also occurred on an earlier date(s)

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

⁽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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Station: FLORENCE RGNL AP, SC

Climate Division: SC 4 NWS Call Sign: FLO Elevation: 146 Feet Lat: 34°12N Lon: 79°44W

										Pı	recipi	tation	(incl	nes)										
	Me	ans/	P	recipi	itatio	on 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	3			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	4.09	4.01	2.10	1999	23	7.78	1995	.71	1981	10.9	7.5	3.0	1.0	1.53	1.91	2.46	2.92	3.35	3.79	4.28	4.84	5.55	6.64	7.65
Feb	3.02	2.45	2.86	1962	22	6.86	1998	.97	2000	8.3	6.0	2.1	.7	.88	1.17	1.60	1.97	2.34	2.72	3.14	3.63	4.27	5.28	6.21
Mar	4.00	3.46	4.20	1971	3	10.96	1971	.77	1985	9.1	6.6	2.5	1.1	1.16	1.54	2.12	2.61	3.09	3.59	4.15	4.80	5.65	6.97	8.20
Apr	2.79	2.59	3.84	1949	22	6.15	1989	.33	1986	7.7	5.1	2.1	.6	.50	.75	1.16	1.54	1.93	2.34	2.82	3.40	4.17	5.40	6.58
May	3.31	3.18	3.59	1966	26	7.12	1972	.46	1987	9.2	6.4	2.5	.7	1.15	1.47	1.92	2.30	2.67	3.05	3.46	3.94	4.55	5.50	6.37
Jun	4.27	4.12	4.92	1958	22	8.17	1976	.58	1990	9.7	6.8	3.1	1.0	1.32	1.73	2.33	2.85	3.35	3.87	4.44	5.11	5.98	7.33	8.57
Jul	5.28	5.05	4.65	1951	1	10.16	1997	1.48	1987	11.0	7.7	4.0	1.4	1.93	2.42	3.14	3.73	4.30	4.89	5.52	6.26	7.20	8.64	9.97
Aug	5.33	5.32	5.54	1973	3	14.36	1992	1.50	1976	10.6	7.3	3.5	1.7	1.51	2.02	2.78	3.45	4.10	4.78	5.53	6.42	7.57	9.37	11.05
Sep	3.67	3.39	4.95	1964	30	8.78	1979	.02	1981	8.8	6.0	2.3	.9	.41	.68	1.19	1.70	2.25	2.86	3.58	4.48	5.69	7.70	9.66
Oct	2.94	2.29	6.08	1954	15	10.83	1990	.00	2000	6.0	4.1	1.8	.9	.08	.29	.68	1.10	1.57	2.11	2.76	3.58	4.73	6.66	8.58
Nov	2.59	2.27	2.63	1978	29	8.21	1985	.46	1973	7.0	4.7	1.7	.5	.52	.75	1.13	1.48	1.83	2.21	2.64	3.15	3.83	4.91	5.94
Dec	3.47	3.22	4.09	1994	22	9.57	1994	.77	1988	9.1	6.0	2.6	.8	.76	1.08	1.59	2.05	2.51	3.00	3.55	4.21	5.08	6.47	7.77
Ann	44.76	43.85	6.08	Oct 1954	15	14.36	Aug 1992	.00	Oct 2000	107.4	74.2	31.2	11.3	33.79	35.96	38.71	40.78	42.61	44.37	46.17	48.16	50.55	54.00	56.96

⁺ 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

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

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COOP ID: 383106

Station: FLORENCE RGNL AP, SC

Climate Division: SC 4 NWS Call Sign: FLO Elevation: 146 Feet Lat: 34°12N Lon: 79°44W

										Snov	w (incl	hes)											
						Sno	ow To	tals									Mea	n Nu	mber	of Day	ys (1)		
	Mean	s/Medi	ans (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	.6	.0	#	0	9.9	1988	7	9.9	1988	9	1988	7	1+	1988	.2	.2	@	@	.0	.7	.4	.1	.0
Feb	1.4	.0	#	0	13.0	1973	10	17.0	1973	17+	1973	12	2	1973	.3	.2	.2	.1	.1	.4	.3	.3	.1
Mar	.4	.0	#	0	6.7	1980	2	6.7	1980	6+	1980	3	#	1980	.1	.1	@	@	.0	.1	.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	#	1996	.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	#	1976	14	#	1976	0	0	0	0	0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Dec	.1	.0	#	0	3.0	1989	23	3.0	1989	5	1989	24	#	1993	.1	.1	@	.0	.0	.2	.1	@	.0
Ann	2.5	.0	N/A	N/A	13.0	Feb 1973	10	17.0	Feb 1973	17+	Feb 1973	12	2	Feb 1973	.7	.6	.2	.1	.1	1.4	.9	.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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				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((*)							
Temp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	4/23	4/16	4/11	4/07	4/03	3/30	3/26	3/21	3/14						
32	4/10	4/03	3/29	3/24	3/20	3/16	3/11	3/06	2/27						
28	3/27	3/19	3/13	3/09	3/04	2/28	2/23	2/17	2/09						
24	3/11	3/02	2/24	2/18	2/13	2/08	2/03	1/27	1/18						
20	2/28	2/18	2/11	2/05	1/30	1/24	1/17	1/05	0/00						
16	2/14	2/03	1/25	1/16	1/03	0/00	0/00	0/00	0/00						
_		-	Fal	l Freeze Da	tes (Month/D	ay)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)														
remp (r)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	10/13	10/18	10/22	10/25	10/28	11/01	11/04	11/08	11/13						
32	10/28	11/02	11/06	11/09	11/11	11/14	11/17	11/21	11/25						
28	11/10	11/16	11/20	11/23	11/26	11/30	12/03	12/07	12/13						
24	11/22	12/01	12/07	12/12	12/17	12/22	12/27	1/03	1/11						
20	12/02	12/13	12/22	12/29	1/05	1/12	1/21	2/03	0/00						
16	12/28	1/10	1/20	1/31	2/15	0/00	0/00	0/00	0/00						
1		-		Freeze F	ree Period			•	•						
Tomp (E)			Probability	of longer th	an indicated	freeze free p	eriod (Days)								
Temp (F)	.10	.20	.30	.40	.50	.60	.70	.80	.90						
36	235	226	219	213	208	202	196	190	180						
32	258	250	245	240	236	231	227	221	214						
28	291	283	277	271	267	262	256	250	242						
24	340	324	316	309	303	297	291	284	275						
20	>365	>365	>365	347	334	324	316	307	295						
16	>365	>365	>365	>365	>365	>365	>365	>365	332						

^{*} 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:

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				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	634	473	302	115	20	0	0	0	5	123	307	544	2523
60	494	344	183	45	3	0	0	0	1	57	191	401	1719
57	417	273	127	21	1	0	0	0	0	31	136	320	1326
55	368	231	96	12	0	0	0	0	0	20	105	270	1102
50	265	145	40	2	0	0	0	0	0	5	46	169	672
32	39	7	0	0	0	0	0	0	0	0	0	8	54

Base						Coolin	g Degree l	Days (1)					
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	441	464	738	932	1206	1368	1524	1480	1280	993	702	489	11617
55	58	44	121	254	493	678	811	767	590	300	117	38	4271
57	44	30	90	204	432	618	749	705	530	250	88	26	3766
60	29	17	52	138	341	528	656	612	440	182	53	14	3062
65	0	6	17	58	203	379	501	457	294	93	19	2	2029
70	0	0	3	15	98	236	346	302	164	36	5	0	1205

	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	227	293	513	715	981	1148	1294	1247	1054	765	487	286	227	520	1033	1748	2729	3877	5171	6418	7472	8237	8724	9010
45	133	186	367	566	826	998	1139	1092	904	611	349	179	133	319	686	1252	2078	3076	4215	5307	6211	6822	7171	7350
50	70	107	242	420	671	848	984	937	754	458	228	99	70	177	419	839	1510	2358	3342	4279	5033	5491	5719	5818
55	32	55	140	280	517	698	829	782	604	310	131	48	32	87	227	507	1024	1722	2551	3333	3937	4247	4378	4426
60	14	22	67	163	364	548	674	627	455	187	63	20	14	36	103	266	630	1178	1852	2479	2934	3121	3184	3204
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	136	184	316	454	655	791	893	869	726	490	304	172	136	320	636	1090	1745	2536	3429	4298	5024	5514	5818	5990

(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