

Climatology of the United States

No. 20

1971-2000

Station: ORANGEBURG 2, SC

COOP ID: 386527

Climate Division: SC 6

NWS Call Sign:

Elevation: 180 Feet Lat: 33°29N Lon: 80°52W

Temperature (°F)

Mean (1)				Extremes										Degree Days (1) Base Temp 65		Mean Number of 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	56.5	33.6	45.1	82	1985	1	56.8	1974	2	1985	21	33.7	1977	629	0	.0	.0	22.7	.4	14.0	.0
Feb	60.8	35.6	48.2	85+	1996	26	55.8	1990	9	1973	12	39.3	1978	476	6	.0	.0	22.7	.2	9.9	.0
Mar	68.7	42.6	55.7	89+	1995	23	64.2	1997	6	1980	3	48.5	1971	308	18	.0	.0	29.5	@	3.9	.0
Apr	76.5	49.2	62.9	96	1967	7	68.3	1999	27	1983	20	58.0	1983	115	51	.0	1.1	30.0	.0	.4	.0
May	83.4	58.5	71.0	101	1953	27	75.6	1998	35	1963	2	67.3	1971	20	204	@	5.7	31.0	.0	.0	.0
Jun	89.0	66.2	77.6	105	1954	28	82.4	1998	47	1988	5	72.9	1979	1	379	.9	15.0	30.0	.0	.0	.0
Jul	92.0	70.0	81.0	105+	1999	31	84.6	1993	54	1983	9	78.0	1979	0	496	2.0	22.6	31.0	.0	.0	.0
Aug	90.5	68.8	79.7	106+	1999	2	84.5	1999	53	1979	18	76.3	1981	0	453	1.0	19.4	31.0	.0	.0	.0
Sep	85.5	63.3	74.4	102	1954	7	77.6	1998	40	1967	30	70.4	1984	4	287	@	8.8	30.0	.0	.0	.0
Oct	76.5	50.9	63.7	99	1954	6	68.9+	1995	27	1976	29	57.8	1987	139	98	.0	.6	31.0	.0	.4	.0
Nov	68.1	42.3	55.2	91	1961	2	63.3	1985	18+	1970	25	47.3	1976	309	17	.0	.0	29.2	.0	5.4	.0
Dec	59.2	35.4	47.3	85	1998	6	54.9	1971	6	1962	13	39.8	2000	551	2	.0	.0	25.1	.1	12.5	.0
Ann	75.6	51.4	63.5	106+	Aug 1999	2	84.6	Jul 1993	2	Jan 1985	21	33.7	Jan 1977	2552	2011	3.9	73.2	343.2	.7	46.5	.0

+ Also occurred on an earlier date(s)

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

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

Issue Date: February 2004

(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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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

Station: ORANGEBURG 2, SC

COOP ID: 386527

Climate Division: SC 6

NWS Call Sign:

Elevation: 180 Feet Lat: 33°29N

Lon: 80°52W

Precipitation (inches)																								
	Precipitation Totals									Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
	Means/ Medians(1)		Extremes							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	4.76	4.55	2.95	1995	7	8.76	1991	.65	1981	11.6	7.9	3.5	1.3	1.60	2.05	2.71	3.27	3.81	4.36	4.96	5.67	6.57	7.97	9.27
Feb	3.62	3.46	2.84	1985	5	7.93	1998	1.09	2000	8.9	6.2	2.8	1.1	1.15	1.49	2.00	2.44	2.86	3.30	3.77	4.33	5.06	6.18	7.22
Mar	4.20	3.89	3.20	1980	13	9.58	1980	1.02	1982	9.6	6.3	3.0	1.3	1.24	1.63	2.23	2.75	3.26	3.78	4.36	5.04	5.92	7.30	8.59
Apr	2.70	2.84	3.06	1979	26	5.47	1979	.16	1976	7.4	5.0	1.7	.7	.36	.58	.97	1.34	1.74	2.17	2.68	3.30	4.14	5.52	6.85
May	3.62	2.57	3.61	1964	3	9.80	1976	.04	2000	8.7	5.9	2.6	1.0	.40	.67	1.17	1.67	2.22	2.82	3.53	4.42	5.62	7.62	9.56
Jun	4.87	4.36	3.66	1995	6	10.87	1994	.73	1984	10.1	7.5	3.5	1.4	1.46	1.92	2.61	3.21	3.79	4.39	5.06	5.84	6.85	8.43	9.89
Jul	5.11	4.64	4.60	1984	19	12.95	1984	1.57	1977	11.5	7.9	3.2	1.5	1.49	1.98	2.71	3.34	3.96	4.60	5.31	6.14	7.22	8.91	10.48
Aug	5.12	5.27	5.95	1964	29	13.56	1995	.96	1976	10.8	7.4	3.2	1.5	1.51	2.00	2.73	3.36	3.97	4.61	5.32	6.15	7.22	8.90	10.46
Sep	4.18	4.30	8.82	1948	7	11.99	1979	.00	1985	8.5	5.3	2.2	1.1	.43	.92	1.62	2.22	2.84	3.50	4.25	5.16	6.36	8.30	10.15
Oct	3.11	1.90	9.99	1990	10	17.36	1990	.00	2000	6.4	4.5	1.9	.8	.15	.42	.89	1.35	1.83	2.38	3.03	3.83	4.92	6.73	8.50
Nov	2.74	2.11	2.95	1957	17	10.18	1992	.57	1998	7.6	4.4	2.0	.8	.47	.71	1.11	1.48	1.87	2.29	2.76	3.34	4.12	5.37	6.57
Dec	3.34	2.59	2.03	1983	12	6.71	1997	.95	1984	9.5	6.2	2.5	.8	1.12	1.43	1.90	2.29	2.67	3.05	3.48	3.98	4.61	5.60	6.51
Ann	47.37	47.74	9.99	Oct 1990	10	17.36	Oct 1990	.00+	Oct 2000	110.6	74.5	32.1	13.3	33.98	36.58	39.90	42.42	44.66	46.82	49.05	51.51	54.49	58.82	62.55

+ Also occurred on an earlier date(s)

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

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

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Station: ORANGEBURG 2, SC

COOP ID: 386527

Climate Division: SC 6

NWS Call Sign:

Elevation: 180 Feet

Lat: 33°29N

Lon: 80°52W

Snow (inches)																							
Snow Totals															Mean Number of Days (1)								
Means/Medians (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	.1	.0	#	0	2.0	1977	31	2.0	1977	2	1977	31	#+	1983	.1	.1	.0	.0	.0	@	.0	.0	.0
Feb	.6	.0	#	0	5.0	1980	6	5.0	1980	5	1980	6	#+	1980	.2	.2	.1	.1	.0	.2	.1	@	.0
Mar	.1	.0	#	0	2.0	1980	3	2.0	1980	2	1980	3	#	1980	.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	2.0	1989	23	2.0	1989	1	1980	27	#	1980	.1	.1	.0	.0	.0	@	.0	.0	.0
Ann	.9	.0	N/A	N/A	5.0	Feb 1980	6	5.0	Feb 1980	5	Feb 1980	6	#+	Jan 1983	.5	.5	.1	.1	.0	.2	.1	@	.0

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

@ 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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NWS Call Sign:

Elevation: 180 Feet

Lat: 33°29N

Lon: 80°52W

Freeze Data									
Spring Freeze Dates (Month/Day)									
Temp (F)	Probability of later date in spring (thru Jul 31) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	4/21	4/16	4/12	4/09	4/06	4/03	3/30	3/26	3/21
32	4/12	4/05	3/31	3/27	3/22	3/18	3/14	3/09	3/02
28	3/27	3/19	3/13	3/08	3/04	2/27	2/22	2/16	2/08
24	3/09	2/28	2/21	2/16	2/11	2/05	1/31	1/24	1/15
20	2/24	2/15	2/08	2/02	1/27	1/20	1/12	12/28	0/00
16	2/15	2/05	1/28	1/20	1/10	0/00	0/00	0/00	0/00
Fall Freeze Dates (Month/Day)									
Temp (F)	Probability of earlier date in fall (beginning Aug 1) than indicated(*)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	10/09	10/15	10/20	10/24	10/27	10/31	11/04	11/08	11/14
32	10/23	10/29	11/03	11/07	11/11	11/14	11/18	11/23	11/30
28	11/04	11/12	11/17	11/21	11/25	11/30	12/04	12/09	12/16
24	11/18	11/30	12/09	12/16	12/23	12/30	1/07	1/16	1/28
20	12/09	12/18	12/26	1/01	1/07	1/14	1/23	2/07	0/00
16	1/01	1/11	1/19	1/28	2/08	0/00	0/00	0/00	0/00
Freeze Free Period									
Temp (F)	Probability of longer than indicated freeze free period (Days)								
	.10	.20	.30	.40	.50	.60	.70	.80	.90
36	229	221	214	209	204	199	194	187	178
32	263	252	245	238	233	227	220	213	203
28	294	284	277	272	266	261	255	248	238
24	>365	333	321	313	306	300	293	286	276
20	>365	>365	>365	>365	350	335	324	313	300
16	>365	>365	>365	>365	>365	>365	>365	354	336

* 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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Climate Division: SC 6 NWS Call Sign: Elevation: 180 Feet Lat: 33° 29N Lon: 80° 52W

Degree Days to Selected Base Temperatures (°F)													
Base	Heating Degree Days (1)												
Below	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
65	629	476	308	115	20	1	0	0	4	139	309	551	2552
60	487	346	189	44	3	0	0	0	1	70	192	408	1740
57	407	275	134	20	0	0	0	0	0	42	136	327	1341
55	358	232	103	11	0	0	0	0	0	28	104	277	1113
50	252	144	45	2	0	0	0	0	0	9	44	175	671
32	31	6	0	0	0	0	0	0	0	0	0	9	46

Base	Cooling Degree Days (1)												
Above	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
32	436	460	734	926	1207	1368	1519	1476	1273	982	697	484	11562
55	49	41	123	247	494	678	806	763	583	297	111	39	4231
57	37	28	93	197	432	618	744	701	523	249	83	26	3731
60	23	16	55	131	342	528	651	608	433	184	49	14	3034
65	0	6	18	51	204	379	496	453	287	98	17	2	2011
70	0	0	4	12	99	236	341	298	154	41	4	0	1189

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	229	296	517	710	974	1140	1282	1241	1044	750	479	276	229	525	1042	1752	2726	3866	5148	6389	7433	8183	8662	8938
45	134	189	370	560	819	990	1127	1086	894	595	338	166	134	323	693	1253	2072	3062	4189	5275	6169	6764	7102	7268
50	67	105	244	412	664	840	972	931	744	442	219	92	67	172	416	828	1492	2332	3304	4235	4979	5421	5640	5732
55	29	48	141	276	509	690	817	776	594	297	120	45	29	77	218	494	1003	1693	2510	3286	3880	4177	4297	4342
60	5	20	65	159	357	540	662	621	445	174	55	19	5	25	90	249	606	1146	1808	2429	2874	3048	3103	3122
Base	Growing Degree Units for Corn (Monthly)												Growing Degree Units for Corn (Accumulated Monthly)											
50/86	145	192	324	457	648	775	873	852	711	486	307	176	145	337	661	1118	1766	2541	3414	4266	4977	5463	5770	5946

(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/normal/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.
Complete documentation for the 1971-2000 Normals is available on the internet from:
www.ncdc.noaa.gov/oa/climate/normal/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 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.

- | | |
|---|---|
| <ol style="list-style-type: none">a. Temperature/ Precipitation Tables<ol style="list-style-type: none">1. 1971-2000 Monthly Normals2. Cooperative Summary of the Day3. National Weather Service station records4. 1971-2000 serially complete daily datab. Degree Day Table<ol style="list-style-type: none">1. Monthly and Annual Heating and Cooling Degree Days Normals to Selected Bases derived from 1971-2000 Monthly Normals2. Daily Normal Growing Degree Units to Selected Base Temperatures derived from 1971-2000 serially complete daily data | <ol style="list-style-type: none">c. Snow Tables<ol style="list-style-type: none">1. Snow Climatology2. Cooperative Summary of the Dayd. Freeze Data Table
1971-2000 serially complete daily data |
|---|---|

References

U.S. Climate Normals 1971-2000, www.ncdc.noaa.gov/normal.html
U.S. Climate Normals 1971-2000-Products Clim20, www.ncdc.noaa.gov/oa/climate/normal/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