

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU  
 IN COOPERATION WITH State Development Board  
 CLIMATOGRAPHY OF THE UNITED STATES NO. 20 - 33  
**CLIMATOLOGICAL SUMMARY**

LATITUDE 33° 22' North  
 LONGITUDE 81° 19' West  
 ELEV. (GROUND) 324 MSL

STATION Blackville, South Carolina  
 County Barnwell

MEANS AND EXTREMES FOR PERIOD 1935 - 1964

Month	Temperature (°F)								** Mean degree days	Precipitation Totals (Inches)							Mean number of days					Month	
	Means				Extremes					Mean	Greatest daily	Year	Snow, Sleet				Precip. .10 inch or more	Temperatures					
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest	Year	Year					Year	Greatest daily	Year	90° and above		32° and below	32° and below	0° and below	Max.		Min.
(a)	25	25	25	25	25	25	25	25	30	30	30	30	30	30	30	30	30	25	25	25	25		
J	58.7	36.3	47.5	82	1950+	12	1959+	533	3.10	2.84	1964	0.1	2.5	1936	2.5	1936	6	0	*	12	0	J	
F	61.5	38.0	49.8	87	1945	10	1958+	432	3.77	2.80	1962	T	T	1958+	T	1958+	7	0	*	9	0	F	
M	68.2	44.2	56.2	92	1945	15	1943	316	4.68	3.42	1944	0.1	1.5	1960	1.5	1960	7	*	0	4	0	M	
A	76.7	51.9	64.3	94	1946+	28	1944	74	4.25	4.26	1961	0	0	0	0	0	6	1	0	*	0	A	
M	84.9	60.3	72.6	105	1941+	38	1963+	0	3.39	3.88	1964	0	0	0	0	0	6	8	0	0	0	M	
J	89.9	67.5	78.7	107	1939	52	1954	0	4.61	3.19	1961	0	0	0	0	0	8	16	0	0	0	J	
J	90.9	69.7	80.3	105	1952+	54	1954	0	5.22	3.57	1951	0	0	0	0	0	9	17	0	0	0	J	
A	90.5	69.1	79.8	104	1954+	53	1942	0	4.70	4.30	1964	0	0	0	0	0	8	18	0	0	0	A	
S	85.9	64.1	75.0	105	1939	41	1942	0	4.20	7.53	1959	0	0	0	0	0	6	10	0	0	0	S	
O	77.6	53.1	65.4	98	1954	26	1952	71	2.62	4.20	1941	0	0	0	0	0	4	1	0	*	0	O	
N	68.2	43.0	55.6	91	1961+	12	1950	291	2.52	2.15	1948	0	0	0	0	0	4	*	*	5	0	N	
D	58.6	35.7	47.2	84	1942	4	1962	552	2.87	4.00	1941	0.1	2.0	1943	2.0	1943	6	0	*	12	0	D	
Year	76.0	52.7	64.4	107	June 1939	4	Dec. 1962	2269	45.93	7.53	Sept. 1959	0.3	2.5	Jan. 1936	2.5	Jan. 1936	77	71	*	42	0	Year	

(a) Average length of record, years. + Also on earlier dates, months, or years.  
 † Trace, an amount too small to measure. \* Less than one half.  
 \*\* Base 65°F (H.C.S. Thom., Monthly Weather Review, January 1954.)

Climate of Blackville, South Carolina:

Blackville is located in northeastern Barnwell County. The surrounding country is mainly flat to gently rolling hills--a part of the upper coastal plains. Elevations in Barnwell County range from about 60 feet above sea level in the eastern sections, to nearly 600 feet in the northwestern section. Natural boundaries include the Savannah River on the southwest, Sandhills belt to the northwest, South Edisto River to the northeast and the coastal plains to the southeast. The Salkehatchie River drains the central section of the county. Temperatures taken at Blackville 3W are generally representative of Barnwell County. The prevailing climate is temperate (Cfa by Köppen; Johansson Continental Index - 39%) and is controlled largely by the characteristics of the air masses and pressure systems that move across the nation throughout the year. Maritime air dominates the summer months, when migrating storms are weakest while modified continental air dominates the winter months.

The fringe effects of tropical storms moving northward from the Caribbean and Gulf of Mexico, are most often felt during the late summer and fall months. Wind records are not available at Blackville, but they should be similar to the pattern at Augusta, Georgia. The prevailing Augusta wind is 6.4 mph from the southeast, with the fastest mile ever recorded being 48 mph. The relative humidity records should also be similar to Augusta, where the average 1:00 p.m. values vary from 57 per cent in the fall to 49 per cent in the spring.

The summer temperatures are warm, characteristic of the South. There are, on an average, 4 days with temperatures of 100 degrees or higher--1 day each in June, July, August, and September. The year 1954, an extremely hot year, produced 11 days on which the thermometer reached or exceeded the 100 degree mark. The longest period without recording a 100 degree reading is the period 1960 to 1963. Summer rainfall is 32 per cent of the annual total and falls mainly in the form of afternoon showers. The highest known temperature recorded at Blackville, 111 degrees occurred on September 4, 1922.

The fall season, being a transition between extremes, is generally considered the most pleasant time of the year. Temperature extremes are practically nonexistent, rainfall is at a minimum (20 per cent of the annual total) and sunshine at a relative maximum. September is the month with the highest frequency of hurricane occurrence for the western Atlantic and Gulf of Mexico, and these occasionally produce excessive precipitation in the Blackville area.

The winter season is relatively mild. Cold outbreaks do occur but these are of short duration. Days with maximum temperatures of 32 degrees or less have been observed only 5 times in the last 30 years. In addition to about one half of the winter days recording minimum

temperatures of 32° or less, 4 days can be expected to give readings of 20° or less and occasionally a reading of 15° or less will be observed. The coldest temperature recorded at Blackville, 3 below zero, occurred on February 14, 1899. Snow flurries are not uncommon in the Blackville area but measurable snowfalls have been reported only 7 times in the last 30 years. The greatest snowfall total for one month, 7 inches, occurred during February, 1914. Winter rainfall is 21 per cent of the annual total.

Spring is marked by rapid changes from windy and cold in March to generally warm and pleasant in May. This is the season when alerts for severe thundershowers and tornadoes are most frequently issued for South Carolina. Only 7 tornadoes have been observed in Barnwell County during the last 53 years, with the storm in June, 1952 being the most destructive. Spring months account for 27 per cent of the annual total rainfall.

During the last 30 years, the growing season has averaged 237 days. The average date of the first fall freeze being November 11, and the last freeze in the spring, March 20. The first fall freeze has occurred as early as October 24 and as late as December 11. The last freezing temperature in the spring has occurred as late as April 16 and as early as February 9.

Rainfall intensities and cloudiness are not recorded at Blackville. The data from Augusta, Georgia should be quite representative of the area and are as follows: Maximum rainfall intensities, Augusta, Georgia,

1 hour	2 hour	3 hour	24 hours
3.07	3.98	4.46	9.82
8/14/03	9/6/48	9/6/48	10/19/29

Mean cloudiness observed between sunrise and sunset for the year period, Augusta, Georgia:

	Clear (0-3 tenths)	Partly Cloudy (4-7 tenths)	Cloudy (8-10 tenths)
Days	110	101	154

Norton D. Strommen, Weather Bureau State Climatologist for S. C. Weather Bureau Airport Station - Columbia Metropolitan Airport West Columbia, S. C. 29169

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1935	1.02	1.98	2.12	2.31	2.41	3.38	11.98	5.78	5.26	0.55	3.73	2.44	42.96
1936	4.70	4.19	3.33	8.33	3.33	2.54	4.70	4.45	3.47	4.09	1.03	4.89	47.37
1937	3.16	4.09	2.21	5.57	1.18	6.74	8.51	5.35	4.32	1.53	2.63	2.37	49.66
1938	0.65	0.74	0.76	0.49	4.23	3.90	7.71	2.36	4.15	1.48	3.69	2.14	41.30
1939	1.16	8.42	3.04	2.00	4.33	2.39	3.32	6.18	2.32	0.17	0.41	2.59	36.33
1940	3.14	4.83	2.83	0.96	3.93	3.71	4.44	9.10	2.98	1.80	4.54	1.81	42.07
1941	1.19	1.86	4.65	1.80	0.20	11.35	4.27	4.81	2.34	4.90	0.56	8.74	46.87
1942	3.42	3.04	7.72	1.53	4.34	5.31	5.63	3.80	2.73	0.71	1.72	2.77	42.72
1943	3.70	1.10	6.40	2.75	3.97	4.82	2.54	3.62	2.36	3.06	1.59	1.06	44.56
1944	3.63	4.52	9.19	4.54	1.77	6.68	6.43	4.14	3.88	3.37	0.08	3.34	34.38
1945	1.64	2.44	1.81	2.15	1.77	0.87	6.43	5.26	3.13	5.87	1.90	1.90	35.54
1946	1.91	1.62	3.20	3.26	1.77	3.71	2.91	5.48	4.69	7.05	8.36	8.14	65.15
1947	4.01	0.68	6.57	4.17	3.30	5.20	4.28	10.60	10.45	7.05	9.15	5.77	74.66
1948	3.92	6.42	7.49	6.30	5.69	0.74	9.32	2.36	10.45	9.15	5.77	1.61	42.17
1949	1.91	4.84	1.22	2.86	5.39	4.90	3.21	10.85	2.27	3.31	1.32	3.69	41.83
1950	0.41	1.17	6.58	1.33	7.31	4.04	4.34	2.87	5.46	1.79	1.32	1.61	41.55
1951	1.13	1.89	6.54	2.29	1.06	4.58	9.54	2.73	5.32	1.83	2.02	3.46	42.99
1952	2.09	4.69	6.27	4.21	3.92	3.87	1.60	7.93	3.35	1.62	2.68	3.46	46.19
1953	3.71	5.60	4.14	2.80	4.40	5.07	3.64	2.43	7.09	0.45	1.17	8.06	48.56
1954	1.52	1.36	2.63	3.43	3.78	4.62	1.16	2.82	4.14	1.80	1.51	2.17	27.85
1955	5.30	2.60	2.22	4.91	4.13	3.94	9.18	3.35	4.14	2.09	3.08	0.51	45.40
1956	1.99	7.71	4.78	3.15	2.79	4.61	2.79	4.74	3.50	3.11	0.83	2.05	45.13
1957	1.36	1.35	4.70	2.28	6.07	5.93	2.41	2.54	5.29	2.82	7.00	3.38	53.02
1958	3.38	4.56	4.85	7.40	3.56	3.08	3.08	5.48	0.83	10.75	1.61	5.01	63.42
1959	2.87	6.02	7.37	3.33	3.22	2.82	3.53	4.34	3.61	10.15	1.21	2.37	43.38
1960	4.13	4.79	5.34	4.41	2.29	6.24	5.58	1.98	3.61	0.15	1.30	4.40	50.42
1961	3.69	5.57	3.26	12.99	3.05	6.36	2.57	5.61	1.47	0.15	3.25	2.63	49.16
1962	5.32	4.56	5.35	4.42	3.79	5.31	4.55	5.24	4.69	0.00	3.04	3.37	42.41
1963	6.56	3.33	1.97	2.84	3.34	6.83	5.49	0.95	4.86	6.54	1.08	5.29	75.10
1964	8.35	7.39	8.81	4.91	4.05	4.68	9.17	9.97	4.86	6.54	1.08	5.29	75.10

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1935	49.7	49.5	61.9	-	74.2	80.2	80.5	80.8	75.0	66.8	59.2	41.4	65.6
1936	45.2	47.0	60.2	63.6	74.2	79.5	83.1	81.6	77.8	69.2	55.1	50.8	65.6
1937	60.1	50.1	55.5	63.6	73.6	80.5	79.8	73.8	63.8	52.9	47.0	49.1	63.1
1938	47.7	56.0	63.6	65.2	75.9	77.0	82.0	82.2	76.3	65.1	53.8	49.1	66.1
1939	51.5	56.4	61.0	63.3	72.4	82.6	80.0	79.4	70.0	53.8	50.2	67.1	67.1
1940	38.8	48.6	55.2	63.8	71.2	80.8	81.8	81.2	74.4	66.5	56.8	51.6	64.1
1941	48.5	44.5	51.2	66.8	74.7	78.4	81.7	78.2	76.1	71.6	57.4	51.2	65.3
1942	47.0	43.6	56.8	65.7	72.1	78.8	81.7	78.2	73.1	66.2	57.9	49.5	64.5
1943	51.0	52.4	56.5	64.1	74.6	82.0	80.8	81.2	73.1	66.3	55.0	42.4	65.0
1944	46.4	54.2	56.2	63.2	73.2	79.8	77.8	77.4	72.4	66.0	58.0	42.4	64.1
1945	47.2	53.4	67.4	69.5	72.2	81.4	-	79.8	78.6	65.7	58.0	42.4	64.1
1946	47.6	50.8	61.2	64.8	72.2	78.6	77.1	77.1	72.4	64.1	50.9	47.7	63.0
1947	51.2	42.4	44.9	67.0	72.4	76.6	77.5	78.2	75.2	68.1	52.2	46.8	63.0
1948	40.5	48.4	58.4	67.0	72.8	79.7	80.4	78.2	72.2	60.6	50.7	50.7	65.5
1949	55.9	55.3	55.6	61.7	72.9	77.4	81.5	79.4	73.2	69.0	54.0	50.5	65.5
1950	58.1	53.7	53.5	61.9	74.0	79.7	78.6	78.6	72.8	66.9	51.3	42.2	64.3
1951	47.1	49.1	56.0	62.3	70.9	78.6	80.3	80.4	74.7	67.3	51.3	50.4	64.1
1952	53.6	-	55.7	62.0	72.2	81.9	82.2	79.5	73.0	59.8	54.9	45.0	-
1953	49.7	50.3	56.7	-	77.2	79.1	79.8	79.9	74.6	65.7	-	48.2	-
1954	49.4	52.0	57.1	67.6	67.4	78.4	81.3	80.5	78.1	66.8	52.4	45.4	64.9
1955	44.4	47.9	57.4	65.0	73.1	72.8	79.8	80.3	80.3	71.1	63.5	53.0	64.9
1956	43.5	53.3	54.2	61.6	72.7	77.4	80.8	80.5	75.1	63.4	53.0	56.2	64.1
1957	48.8	56.7	54.1	65.2	72.0	77.9	79.5	78.8	76.6	59.9	58.7	48.5	64.6
1958	39.8	41.0	51.1	63.4	71.2	78.1	81.1	80.2	75.1	62.1	54.4	42.2	62.1
1959	44.9	50.6	53.3	64.9	74.0	77.5	79.4	80.5	74.2	67.2	55.7	47.4	64.0
1960	46.2	46.0	44.9	63.1	69.8	77.6	80.4	79.7	76.2	62.4	58.7	48.1	62.6
1961	41.4	51.0	59.0	65.1	68.8	76.4	80.4	79.0	76.0	62.4	53.1	44.5	63.3
1962	44.8	52.6	52.2	60.8	76.1	77.3	81.3	79.8	74.2	64.4	55.5	40.1	63.2
1963	41.2	42.4	58.1	64.8	71.0	77.2	79.0	80.9	72.2	64.4	58.4	48.8	62.8
1964	44.4	43.7	54.8	64.2	71.9	79.0	77.8	77.1	73.5	60.2	58.4	48.8	62.8

Station History:

Records began in June, 1884--records not available prior to 1893 in Columbia, South Carolina. From November 1893 to May 1953, the station was located in town, within a quarter of a mile of the Post Office. May 8, 1953, it was moved to South Carolina Experimental Station, Highway 78, 3 miles west of Blackville. Location was over cultivated ground until 1928 and then over sod at the various observer's residences. No loss in continuity records expected due to the various moves.

OBSERVERS

- S. S. Turner 11/1893 to 12/1894
- J. D. C. Lange 1/1895 to 6/1907
- Miss M. E. Lange 7/1907 to 4/1913
- Mrs. D. D. Sanders 5/1913 to 2/1928
- Mrs. M. T. Sanders 3/1928 to 12/1928
- Mrs. M. S. Matthews 1/1929 to 11/1942
- T. O. Boland 11/1942 to 2/1945
- Mrs. O. S. Boland 3/1945 to 7/1945
- Calvin Rountree 8/1945 to 5/1946
- Mrs. H. R. Johnson 6/1946 to 7/1946
- James R. Kelly 8/1946 to 4/1953
- Dr. Robert Aycock 5/1953 to 1/1955
- Joseph C. Fetheridge 2/1955 to present

