U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

In Cooperation with Orangeburg Chamber of Commerce and State Development Board

CLIMATOLOGICAL SUMMARY

MEANS AND EXTREMES FOR PERIOD 1925-1954

LATITUDE 33° 29'
LONGITUDE 80° 52'
ELEV. (GROUND) 244

CLIMATOGRAPHY OF THE U. S.
STATION Orangeburg, S. C.
STATION NO. 38 6527 1

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	Mean degree days**	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet, Hail: Mean	Maximum monthly	Year	Greatest daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures Max. 90° and above	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	30	30	30	30		30		30	30	30		30	30		30		30	30	30	30	30	
Jan.	60.5	38.0	49.3	83	1929+	10	1928	499	2.91	2.41	1925	0.3	6.6	1936	5.3	1936	7	0	*	9	0	Jan.
Feb.	62.5	38.7	50.6	83	1930+	11	1943	412	3.53	2.20	1939	T	T	1926+	T	1926+	7	0	*	8	0	Feb.
Mch.	68.8	44.5	56.7	93	1929+	19	1943	298	3.58	2.86	1944	T	0.1	1926	0.1	1926	7	*	0	3	0	Mch.
Apr.	77.2	51.7	64.5	95	1925+	30	1944+	57	3.24	3.30	1948	0	0				6	1	0	*	0	Apr.
May	84.9	59.6	72.3	101	1938+	40	1939+	0	3.45	3.15	1928	T	T	1950	T	1950	6	8	0	0	0	May
June	90.6	67.9	79.3	105	1943+	47	1930	0	4.47	2.65	1939	0	0				8	18	0	0	0	June
July	91.9	70.3	81.1	107	1952	56	1951	0	4.53	2.82	1927	0	0				10	22	0	0	0	July
Aug.	91.0	69.3	80.2	106	1925+	53	1945	0	5.39	4.90	1949	0	0				9	20	0	0	0	Aug.
Sept.	86.8	64.8	75.8	106	1925	42	1943	0	4.23	7.80	1948	0	0				6	12	0	0	0	Sept.
Oct.	78.1	53.1	65.6	99	1954	27	1952	68	2.31	4.09	1944	0	0				4	1	0	*	0	Oct.
Nov.	67.0	42.6	54.8	89	1946	14	1950	315	2.23	2.15	1934	T	T	1950	T	1950	5	0	*	6	0	Nov.
Dec.	59.1	36.7	47.9	83	1948	12	1943	533	3.35	5.10	1941	0.3	5.0	1943	5.0	1943	7	0	*	11	0	Dec.
Year	76.5	53.1	64.8	107	July 1952	10	Jan. 1928	2,182	43.22	7.80	Sept. 1948	0.6	6.6	Jan. 1936	5.3	Jan. 1936	82	82	* (10)	37	0	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

\+ Also on later dates, months or years.

* Less than one half.

** Base 65° computed from average monthly temperature rather than the actual degree-day averages.

The City of Orangeburg, located near the geographical center of Orangeburg County, lies some 25 miles to the Southwest of what may be considered a natural geographic midpoint of South Carolina, the junction of the Wateree and Congaree Rivers. The immediate area is drained by the North Fork of the Edisto River which flows Southward at the Western edge of the City into the main stream of the Edisto River. Orangeburg is in the upper coastal plain, the ground is undulating to rolling with elevations ranging from 200 to 275 feet above mean sea level.

The prevailing climate is relatively temperate (Cfa classification after Kopper). This section is mostly under continental influence and weather changes are shaped by the characteristics of the air masses and pressure systems which march across the continent throughout the year but occasionally, in the summer and fall months by the passage of tropical storms from the Carribbean Sea, the Atlantic Ocean or the Gulf of Mexico. While Orangeburg records do not include humidity, this should closely follow values recorded at Columbia and Augusta. Average one p. m. relative humidities at these points show an annual variation from about 59% in January to 48% in April and May, rising to a secondary maximum of 56% in July and August, falling to a secondary minimum of 50% in October. Although wind measurements are not available for Orangeburg, the values recorded at Columbia and Augusta should serve as a guide. The prevailing wind at Columbia is Northeast with an average speed of 7.7 miles per hour, while at Augusta it is Southeast with an average speed of 5.4 miles per hour. The highest one minute velocity ever recorded at Columbia was 60 miles per hour during March, while at Augusta the highest was 48 miles per hour in July.

The summer season is warm, characteristic of the South. The average number of days per year with 100 degrees or more is 5 with 2 occurrences in June, 2 in July and 1 in August. Summer is the rainiest season during which 33 per cent of the annual rainfall is accumulated. Since July and August comprise a substantial portion of the hurricane season, the rainfall averages are affected by the few downpours which had developed as a result of the proximity of hurricanes, notably in 1936, 1940 and 1949 when rains ranging from 3.44 to 4.90 inches fell in 24 hour periods. The summer precipitation, outside of tropical storms is generally of a shower or thundershower nature.

The fall season, being a transition between extremes, partakes of summer weather early in September then passes through the "Indian Summer" period to the prewinter cold spells which begin to be felt late in November. On the whole, this is the most pleasant time of the year, especially the "Indian Summer" from late September to early November when rainfall is at a minimum, sunshine at a relative maximum and temperature extremes practically non-existent. The jarring note of the fall is the relative frequency of hurricane scares. Since September is the month of generally greatest hurricane frequency in the Atlantic Ocean and the Gulf of Mexico frequent warnings are issued along the coast lines. So far as is known no hurricane conditions which would include damaging winds of major proportions have ever been reported. Heavy to excessive rains with gusty gale force winds resulting from nearby tropical storms in the last thirty years occurred in September 1928, 1945 and 1949. The fall rainfall is 20 percent of the annual total.

The winter months, December through February are mild with the total rainfall of about 23 percent of the annual total. The winter rainfall is generally of a more uniform type although a few thunderstorms do occur during this season. There is a good chance of a snow flurry about once a year with the best probability of its occurrence in January, but significant amounts of snow have been measured only five times in the past 30 years. An average winter would experience two to five cold waves and freezes during which minimum temperatures would fall below the middle twenties, two days would have temperatures less than twenty degrees and one day might have a minimum less than 15 degrees.

The most spectacular time of the year, weatherwise, is spring with its tumultuous changes from windy and cold in March to warm, fertile and pleasant in May. This is the period when tornado and severe local storm warnings and alerts are most often issued for South Carolina. Orangeburg County has had about 4 tornadoes of note reported in the last thirty five years, but none of serious proportions has been reported from the city. The spring rainfall represents about 24 per cent of the total annual rain.

Orangeburg has an average growing season of 241 days between the last average date in spring to the first average date in fall with temperatures 32 degrees or lower. The growing season, therefore, lasts from about March 18th to November 14th. A freezing temperature was reported as late in spring as April 21st in 1953 and as early in fall as October 25th in 1917.

It may be of interest that an automatic rainfall gage which has been located since 1940 near St. Matthews about 8 miles Northeast of Orangeburg shows the following maximum rainfall intensities:

	1 hour	2 hour	3 hour
Amounts	1.87 inches	27.0 inches	2.80 inches
Date	9/17/45	6/22/41	6/22/41
	6 hour	**12 hour**	**24 hour**
Amounts	3.47 inches	4.72 inches	7.20 inches
Date	9/17/45	9/17/45	9/16-17/45

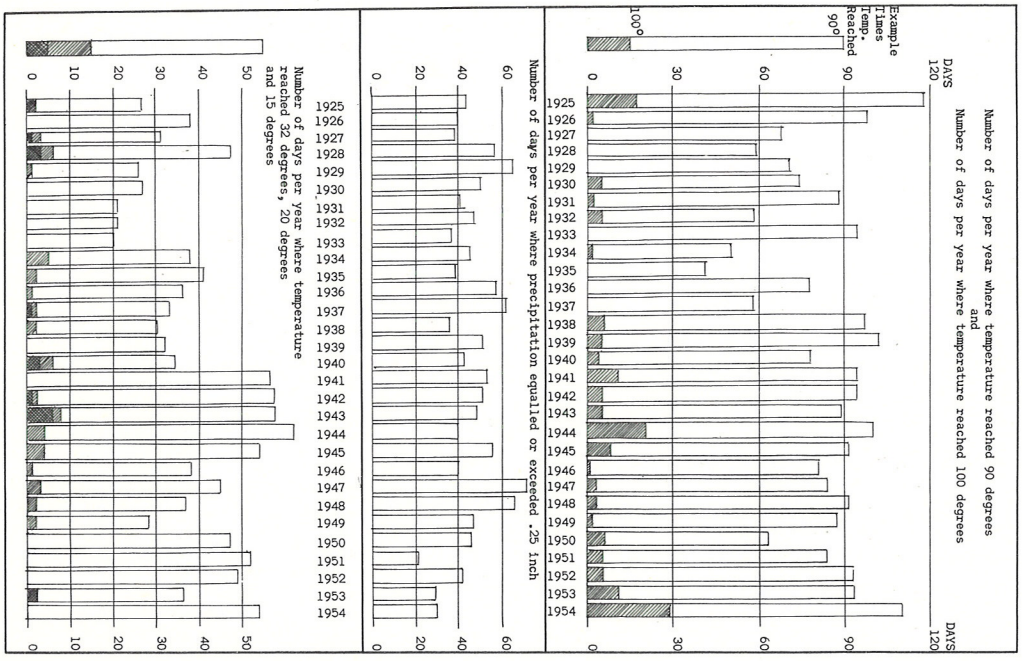
Nathan Kronberg
State Climatologist
Weather Bureau Airport Station
Columbia, S. C.

STATION HISTORY

Temperature and precipitation data have been recorded from the vicinity of Orangeburg, S. C. since Sept. 1916. The first observations were taken by the U. S. Fisheries Station located at Lat. 33° 28' Long. 80° 30'W or 2 miles SSE of the Post Office. Instruments were set up in open space in slightly rolling country at an elevation of 264 feet. This station recorded observations until July 1942 with Mrs. Myrtle O. Carnes as observer from Feb. 1938 to July 1942. From July 1942 to May 1953, the data were recorded by Mrs. Louise B. Horne at her residence about 1.7 miles southeast of the Orangeburg Post Office. Instruments were over sod in a good exposure, the coordinates being approximately the same as at the first site. In Jan. 1947 a river station was established. This station was located 1/2 mile northwest of the Post Office on top of a concrete reservoir and under the supervision of the Orangeburg Water and Power Company. Mr. L. H. Rickenbacker was observer. This continued as a river station until May 6, 1953 when the climalogical equipment was moved here from Mrs. Horne's residence, thus making one station for the Orangeburg area. From May 6, 1953 to the present all data have been received from this station, Mr. Rickenbacker continuing as observer.

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1925	10.94	2.35	1.16	1.72	1.68	4.34	3.27	0.68	1.77	4.80	3.54	3.16	39.41
1926	5.79	4.21	4.00	2.43	1.29	3.94	4.76	1.57	1.06	0.65	2.34	1.23	33.27
1927	0.64	4.09	2.48	0.53	2.48	6.10	7.61	2.80	0.38	3.07	0.77	5.11	36.06
1928	1.07	6.00	2.69	6.40	5.57	9.59	6.24	5.59	16.99	1.92	0.10	2.38	64.54
1929	4.42	6.18	4.00	2.54	6.49	2.94	2.47	6.73	5.15	2.76	1.75	4.84	50.30
1930	5.78	0.80	5.80	3.08	1.54	5.80	5.36	3.05	5.97	3.01	2.91	3.68	46.78
1931	2.59	1.56	2.14	3.31	4.00	3.45	3.72	1.86	2.12	0.72	0.54	5.12	31.13
1932	2.98	5.89	1.86	0.61	1.96	8.40	0.33	3.94	3.95	3.67	2.68	3.11	39.38
1933	2.27	4.72	1.23	1.63	1.52	2.87	3.35	6.35	3.79	0.57	1.68	0.20	30.18
1934	1.55	4.08	2.81	2.33	6.16	3.30	3.66	6.33	4.10	1.73	3.74	1.46	41.25
1935	0.62	1.76	1.24	5.69	1.57	2.89	7.62	7.10	6.14	1.21	1.84	2.82	40.50
1936	4.34	3.31	2.45	5.85	1.33	3.35	4.92	9.66	3.58	4.44	0.82	4.03	48.08
1937	4.31	3.95	2.34	6.60	1.19	6.69	6.97	9.44	2.67	1.17	1.75	2.21	49.29
1938	0.58	0.47	1.00	7.41	4.12	3.78	4.78	2.18	1.80	1.63	4.02	2.08	33.85
1939	1.11	9.64	2.90	3.44	3.63	4.97	3.91	8.22	3.77	0.92	0.44	2.19	45.14
1940	2.51	5.08	2.57	2.27	2.79	3.88	4.26	7.94	1.16	0.79	3.14	1.11	37.50
1941	1.60	1.95	4.49	2.23	1.24	12.84	4.72	9.90	2.24	2.34	0.96	8.58	53.09
1942	2.61	3.17	7.56	1.12	3.47	4.25	6.02	2.69	2.99	1.88	2.65	3.55	41.96
1943	4.79	1.72	6.06	3.91	5.05	5.06	4.35	6.99	2.84	0.12	2.33	4.49	47.71
1944	3.92	4.86	7.27	3.81	2.00	1.45	2.53	2.51	1.98	4.26	1.90	0.95	37.44
1945	1.68	3.03	2.95	2.20	4.77	2.05	5.17	7.00	12.60	2.57	1.71	6.40	52.13
1946	2.81	2.52	3.70	2.37	2.88	5.35	2.99	5.79	0.92	3.69	2.12	0.63	35.77
1947	3.77	0.31	5.29	5.58	4.04	2.74	6.15	6.13	3.97	3.76	6.16	6.38	54.28
1948	3.54	5.03	6.36	4.42	5.81	3.39	4.29	2.07	12.58	6.87	7.78	4.87	67.01
1949	1.34	4.76	0.91	3.07	4.71	3.75	5.62	12.01	2.79	1.78	1.48	1.29	41.80
1950	1.33	1.00	3.55	1.25	4.56	2.12	5.01	2.28	5.40	3.44	1.34	3.78	35.06
1951	0.85	1.76	6.12	2.12	0.48	4.66	5.89	3.09	2.57	1.41	2.30	3.16	34.41
1952	1.76	5.19	7.11	3.36	4.66	7.01	2.84	8.71	4.77	1.26	1.88	2.68	51.23
1953	4.31	5.01	3.08	1.09	4.51	1.67	5.93	6.97	5.96	0.30	1.24	7.18	47.83
1954	1.44	1.64	2.24	4.85	3.56	1.65	1.31	2.25	1.07	2.56	0.96	1.97	25.50
Average	2.91	3.53	3.58	3.24	3.45	4.47	4.53	5.39	4.23	2.31	2.23	3.35	43.22

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1925	47.2	54.8	59.4	67.4	69.6	81.3	82.6	80.9	83.0	68.7	52.8	46.4	66.2
1926	47.1	51.6	50.8	62.4	71.8	78.4	81.4	82.2	78.0	67.2	53.3	52.6	64.7
1927	48.3	59.7	57.2	66.2	73.0	77.2	79.3	77.4	76.8	66.8	59.5	48.0	65.8
1928	47.0	47.8	55.6	60.6	67.0	76.4	79.3	79.4	72.8	68.1	54.8	49.6	63.2
1929	51.2	49.4	61.8	67.0	72.0	76.4	79.3	80.2	74.7	64.8	58.4	48.1	65.3
1930	49.8	54.4	54.4	66.5	74.0	76.5	82.9	78.3	79.2	62.4	53.4	44.9	64.7
1931	46.5	50.8	52.4	63.4	70.7	78.8	83.1	80.1	79.2	67.8	59.8	56.8	65.8
1932	58.0	56.6	55.9	65.0	71.4	78.8	83.8	80.2	74.4	65.8	54.3	53.8	66.5
1933	54.8	52.6	58.4	63.6	77.2	79.0	79.6	80.8	79.2	66.7	53.9	56.3	66.8
1934	50.8	45.2	56.0	65.4	69.8	80.0	83.1	80.5	76.1	65.2	57.6	47.5	64.8
1935	49.0	50.2	62.7	64.5	71.5	77.9	79.1	78.8	73.3	64.2	57.4	39.0	64.0
1936	43.6	46.2	58.2	63.5	74.2	78.8	82.0	80.4	76.6	68.0	52.2	49.2	64.4
1937	58.2	48.9	54.0	62.6	71.8	79.0	79.6	79.4	72.9	62.3	50.9	45.1	63.7
1938	46.2	53.6	62.2	65.0	74.3	77.6	79.8	83.2	76.6	62.8	57.9	46.2	65.4
1939	49.8	55.4	60.2	64.2	72.0	81.6	81.6	79.6	77.1	66.8	51.1	48.1	65.6
1940	37.4	48.4	54.6	62.9	69.8	79.1	80.2	70.2	73.4	63.4	54.4	50.0	62.7
1941	45.3	42.6	49.1	65.7	72.8	78.8	82.0	81.6	76.6	70.4	54.8	49.2	64.1
1942	45.8	42.4	55.8	63.9	72.4	79.0	82.6	79.7	76.1	65.2	57.0	48.2	64.0
1943	50.4	50.2	55.0	62.4	75.8	83.5	81.4	79.6	70.2	61.1	51.3	45.0	63.8
1944	45.9	52.3	55.1	61.7	73.5	81.5	80.0	79.4	76.2	63.5	51.6	41.4	63.5
1945	45.0	51.2	63.8	67.8	69.4	80.7	80.9	78.4	77.0	63.2	56.8	42.1	64.7
1946	48.1	51.0	61.8	64.6	71.4	77.8	80.4	78.6	74.3	65.8	60.6	51.2	65.5
1947	52.4	42.7	48.6	67.5	73.4	77.8	78.4	80.4	76.4	69.0	52.6	47.2	63.9
1948	42.4	48.8	59.4	67.6	73.5	80.2	82.4	79.5	73.8	60.9	61.4	51.2	65.1
1949	56.4	55.9	56.3	63.5	73.4	79.1	82.3	80.8	73.8	69.6	53.6	49.7	66.2
1950	57.8	53.5	53.0	61.5	74.1	79.9	79.1	79.4	73.7	67.4	51.6	42.2	64.4
1951	48.0	48.8	56.7	63.0	70.6	80.0	81.0	81.4	75.9	68.5	51.6	50.9	64.7
1952	54.1	50.0	56.4	63.2	73.5	82.7	82.3	81.7	73.6	60.4	54.7	45.5	64.8
1953	50.7	51.4	57.4	63.2	76.7	80.3	81.5	80.5	75.0	65.7	53.8	48.0	63.3
1954	49.4	52.8	56.4	67.8	68.0	79.7	84.2	84.1	78.9	65.8	51.3	43.7	65.2
Average	49.3	50.6	56.7	64.5	72.3	79.3	81.1	80.2	75.8	65.6	54.8	47.9	64.8