



LATITUDE 35° 40' N  
 LONGITUDE 80° 20' W  
 ELEV. (GROUND) 764 Ft.

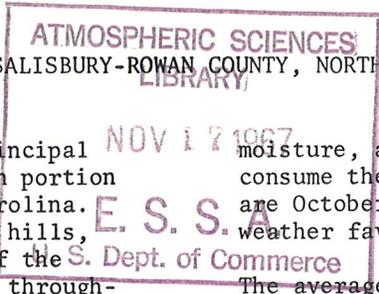
U.S. DEPARTMENT OF COMMERCE  
 ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
 WEATHER BUREAU

IN COOPERATION WITH SALISBURY-ROWAN COUNTY CHAMBER OF COMMERCE  
 CLIMATOGRAPHY OF THE UNITED STATES NO. 20 - 31

STATION SALISBURY, N. C.

CLIMATOLOGICAL SUMMARY

*M 82.2/73*  
*U587cl*  
*N. C. - Salisbury*



CLIMATE OF SALISBURY-ROWAN COUNTY, NORTH CAROLINA

SALISBURY is the county seat and principal city of Rowan County, in the western portion of the Piedmont section of North Carolina. The city is built on gently rolling hills, typical of the topography of most of the County. Elevations above sea level throughout Rowan County range mostly between 600 and 800 feet, and within the city of Salisbury mostly between 700 and 800 feet. About 35 miles to the northwest of Salisbury the Brushy Mountains form a northeast-southwest barrier with peaks rising to 2500 feet; another 20 miles beyond, the Blue Ridge is similarly aligned, and a thousand to fifteen hundred feet higher.

These two mountain barriers, separated by the Yadkin River valley, tend to hold back the flow of cold air from winter outbreaks which move southward over the Plains States from central Canada. The weaker outbreaks are thus often prevented from reaching the Salisbury area, and the stronger are modified in passing over the mountains. While the temperature drops below freezing on more than half the days in winter, a temperature as low as zero happens less than once in ten years on an average, and there are only one or two days in a typical winter when the mercury fails to rise above freezing in the afternoon.

The average length of freeze-free growing season at Salisbury is 207 days. The average date of last occurrence in spring of a temperature as low as 32 degrees is April 7; of 28 degrees, March 27; of 20 degrees, February 26. The average date of the first occurrence in autumn of 32 degrees is October 30; of 28 degrees, November 8; of 20 degrees, November 30.

Summer days are warm in Salisbury, but nights cool rapidly, so that early morning temperatures average below 68 degrees at the hottest time of the year. Daytime heat is less persistent than in lower lying areas of the southern and eastern states; 90 degree weather occurs only about three fourths as often as in eastern North Carolina. While 100 degree temperatures have been recorded in five different months of the year, such temperatures are rare; several years may pass without the occurrence of any 100 degree weather.

Precipitation is usually plentiful and well distributed throughout the year at Salisbury. The heaviest occurs, on the average, during the months of July and August, at the time of year when plant growth requires the most

moisture, and when man, animal and industry consume the most water. The driest months are October and November, the time when fair weather favors the harvesting of farm crops.

The average annual snowfall at Salisbury is less than six inches, only a little more than that of most areas of eastern North Carolina; individual snows are generally small, and the greatest fall of record is only a little over half that of some stations in the northeastern section of the State. No single month averages as much as three inches of snow and sleet.

Most winter precipitation comes as a result of moving low pressure storms, while summer rainfall is mainly the result of thundershowers. Occasionally thunderstorms may produce strong winds and hail, but neither is likely to affect more than a few square miles, and the likelihood of a given point in Rowan County being struck by hail is very small. Autumn rainfall is in some years increased by the movement of a tropical disturbance through the eastern part of North Carolina or the offshore waters, but the passage of such a storm near enough to Salisbury to cause damaging winds is almost unknown.

Prevailing winds in Salisbury blow out of the north or northeast in the fall, and from the southwest at other seasons. The average surface wind speed is about 8 miles per hour. Northwesterly winds bringing cold air in winter are diminished by the two mountain ranges lying to the northwest of Salisbury.

The sun shines about sixty percent of the daylight hours in the Rowan County area, ranging from about half of the time in December and January to more than two-thirds of the time in May and June. The early autumn months are also most often quite sunny. Relative humidity averages about 70 percent around the year, with the highest humidities occurring in the late summer and the lowest in the spring.

Salisbury weather records are among the oldest and most complete in North Carolina, being almost unbroken in both precipitation and temperature since 1887. Most of the observations for this long period were made by C. M. Smith at his home at 814 Lincoln Road. Since his death in 1956, C. W. Cranford, 731 South Church Street, has been Observer.

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