

South Carolina 2005 Weather in Review

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General Summary: South Carolina temperatures averaged 64.35 F, or 0.2 F above normal while precipitation totaled 47.95 inches, or 0.01 inches below normal. Calendar year 2005 statewide average temperature ranked 70th warmest out of 111 years of records with statewide average precipitation ranking 59th wettest. (Based on preliminary data for December)

2005 Statewide Average Monthly Temperature

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005	47.2	47.8	51.7	60.0	67.0	75.8	81.2	80.3	76.8	64.8	55.3	43.7
1895-2004 Average	45.1	47.1	54.4	62.1	70.4	77.1	79.8	78.8	73.8	63.4	53.8	46.2
			= below normal				=above normal					

2005 Statewide Average Monthly Precipitation

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2005	2.10	4.04	5.03	2.91	3.90	6.48	6.17	4.95	0.77	4.92	3.08	3.60
1895-2004 Average	3.73	3.93	4.33	3.37	3.56	4.73	5.57	5.39	4.23	2.99	2.65	3.49
			= below normal				=above normal					

Significant Events:

2005 will long be remembered for the devastating hurricane season. The 2005 Atlantic hurricane season set several records with 26 named storms, an unprecedented 14 hurricanes, of which seven were major hurricanes. Three category 5 storms formed in the Atlantic Basin for the first time ever in a single season (Katrina, Rita, and Wilma). Four major hurricanes and three tropical storms made landfall in the U.S., with an eighth storm (Ophelia) brushing along the North Carolina coast. The costliest hurricane in U.S. history (Hurricane Katrina) led to more than 1,300 deaths, the deadliest hurricane in 77 years. South Carolina fortunately escaped the widespread devastation that occurred from Florida to Texas with only a glancing blow from Hurricane Ophelia and a quick punch from Tropical Storm Tammy. In addition to the impacts of these two tropical systems, South Carolina experienced the typical menagerie of weather from excessive heat to ice storms.

The table below gives a preliminary summary of the storm events reported in South Carolina during 2005.

2005 Preliminary Storm Event Summary

265	Thunderstorm	11	High Tides
194	Hail	7	Rip Currents
73	Flood / Heavy Rain	2	Tropical Storms
22	Lightning	2	Ice Storms
14	Tornadoes (1 funnel cloud)	2	Excessive Heat
12	Non-thunderstorm winds		

Synopsis: South Carolina entered the new year of 2005 on a mild note. Givhans reported 77 degrees on January 2. During the second week, spring-like warmth was observed in Charleston with a high temperature of 81 on January 8. Columbia's high temperature on January 13 of 70 degrees was twenty-six degrees above normal. A sharp cold front late on the same day produced 2.85 inches of rain in Bennettsville and an F2 tornado in Laurens County. Deep winter cold quickly followed with single digit lows across the Upstate and snow flurries over Florence County. Accumulating snows of nearly three inches fell on the states highest elevations on January 29. Locations from Abbeville to York received between 1/2 to 1 inches of sleet. In addition, freezing rain deposited a glaze of ice over the sleet during the afternoon and evening, creating extremely dangerous driving conditions, and numerous traffic accidents. Areas as far south as Bamberg reported 1/4 inch of ice on trees and other structures.

Above normal, daytime temperatures were observed early in February with Givhans, Allendale, Cades and Cheraw reporting 75 degrees on February 8. Jamestown warmed to 77 degrees on February 16. Strong storms produced one and one half inch hail causing damage in Hampton and Allendale Counties on February 20. The month ended with a coastal gale with high winds and battering surf along the beaches on February 27. Lake Marion received 2.18 inches of rain in a 24-hour period ending 7:00 a.m. Feb. 28.

Thunderstorms on March 4 passed through Pineville with 67 mph winds. The following day, Charleston Airport recorded a mild 75 degrees. High winds associated with a cold front reached 50 mph at both Florence and Charleston on March 8. Gusting surface winds between 25 and 50 mph continued into the weekend inhibiting the control of several wildfires. Sunday, March 13, was the warmest day of the new year. Orangeburg and Jamestown reported a high temp of 85 degrees. The early warm conditions helped to jump start early flowering and pollen counts. Afternoon thunderstorms during the week ending March 26 produced nearly 8 inches of rain at Beaufort.

Daily high temperatures in the mid 80's continued early in April. Thunderstorms on April 8 dropped 3.57 inches of rain in Cheraw. A strong cold front affected the state on April 12. Large hail fell in both Anderson and Charleston counties. During the third week of April, high temperatures approached 90 degrees. A second strong cold front arriving on the April 22 produced golf-ball sized hail and an F1 tornado in Pickens County.

On May 9, 90 degrees was observed in South Carolina for the first time in 2005. Convective storms on the May 10 produced hail, which covered the ground in York County. Johnston's high temperature on May 12 was 92 degrees. Thunderstorms associated with a passing cold front late in the day on May 19 caused wind 73 mph gusts at Lake Thurmond. Conway enjoyed a summer-like 92 degrees on May 23. An F1 tornado cause localized damage at Jamestown on May 29.

Heavy rains during the first week of June totaled 7.13 inches at Jamestown in Berkeley County. Tropical weather blossomed with mid-90 degree heat and daily afternoon thundershowers during the second week of June. Hot weather continued into week three with Orangeburg recording 99 degrees on June 15. More heavy rain on June 28 dropped 1.93 inches in one hour at Florence. This resulted in widespread urban flooding. Gray Court received 4.49 inches of rain overnight on the June 28.

Storms on July 3 became violent with baseball-sized hail in Anderson County and tornadoes in Due West and Newberry. Remnants of Tropical Depression Cindy brought heavy rains to the state on July 5th through the 7th. Berea, in Greenville County measured an event total of 5.20 inches of rain. Greer received 4.68 inches on July 7. Heavy flooding rains, remnants of Hurricane Dennis, fell over Charleston and Berkeley Counties on July 8. Hot, humid conditions fueled an intense thunderstorm over Columbia on July 18. The National Weather Service office at the Columbia International Airport measured 2.27 inches of rain in just one hour. Heat index values exceeded 110 degrees at several sites. The uncomfortable conditions peaked on July 27 with Myrtle Beach reporting a sweltering 123 degree heat index value. Cheraw was the states hottest location with 105 degrees. Flooding rains in downtown Columbia were the result of 4.83 inches falling on July 30, measured at the University of South Carolina.

Sandy Run measured 4.25 inches of rain for the 24 hours ending August 10th. While Upstate and Midlands locations had received generous rains for the year, coastal counties were now reporting rainfall deficits of between six and ten inches. Horry County lightning detection noted 200 ground strikes in 20 minutes during a thunderstorm August 16. Johnston recorded a 4-inch soil depth temperature of 90 degrees. A welcome cooler air mass dropped early morning temperatures to 57 degrees at Caesars's Head on August 26, an early hint at autumn.

Hurricane Ophelia packing 70 knot winds slowed to 3 knots 210 miles east-southeast of Charleston South Carolina during the afternoon of September 10 and proceeded on a slow clockwise two day offshore loop. Ophelia rolled out of this loop as a 55-knot tropical storm on September 12 and proceeded on a slow zigzag course towards the South Carolina coast for another 36 hours turning to a more northerly course away from South Carolina after 11 PM September 13th. This slow loop and erratic course towards the coast triggered



the South Carolina Emergency Management Division to activate the State Emergency Operation Center in accordance with the South Carolina Hurricane Plan September 10th through the 14th. Winds gusted to 61 mph in Horry County. North Myrtle Beach Airport measured 6.30 inches of rain. Sites away from the coast remained hot and dry. Darlington's afternoon high temperature on September 17 was 99 degrees. Drenching rains of 6.12 inches fell on James Island, September 28. Florence reported a record driest September of 0.01 inches. Columbia tied for the driest September with no measurable rain.

Tropical Storm Tammy was a short-lived tropical storm that developed just east of the central Florida coast early on October 5. This tropical cyclone moved north-northwestward parallel to the Florida east coast pumping moisture into South Carolina. Tammy moved inland across northeast Florida and into Georgia and Alabama before becoming absorbed by an extratropical low pressure system on October 6. Winds gusted to 59 mph at Edisto Beach. Storm driven tides destroyed beachfront property and caused widespread beach erosion. Georgetown measured a rainfall storm event total of 12.71 inches. Heavy rains Upstate dropped 14.50 inches on Spartanburg County in three days. On October 17 temperatures fell into the 30s signaling a return to autumn. Cedar Creek reported a frosty 27 degrees on October 31.



House on Edisto Beach collapses due to coastal flooding from TS Tammy (Photo by Delaine McJunkin)

Dry conditions prevailed through November. Indian Summer weather was noted during the first week with central counties reporting 80-degree temperatures. After nearly five weeks of no rain, showers began to fall Sunday, November 20 in response to a developing low pressure centered over the Gulf of Mexico. Heavy rains soaked the state on November 21 and 22. Fountain Inn received 5.15 inches of rain for the event. Caesars Head observed the season's first snowflakes on November 22.

On December 3, Hilton Head reported pockets of frost, an early occurrence for the southern coast. A coastal storm affected the beaches on December 8 with gale force winds gusting to 43 mph at Edisto Beach. The season's coldest morning was felt early on December 14. Caesars Head observed a low temperature of 16 degrees. A freezing rain event quickly followed into December 15 with a quarter of an inch to three quarters of an inch coating of ice on elevated surface across the Upstate. Electrical service was disrupted over several days. Passing rains fell on Christmas and above normal temperatures persisted through the end of the year.