

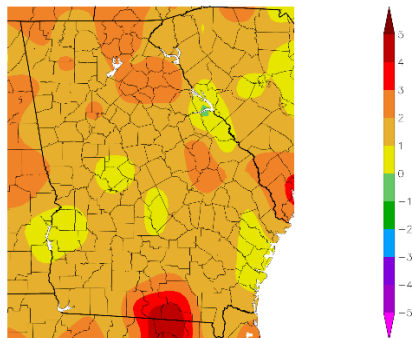
2024 Climate Summary – Georgia

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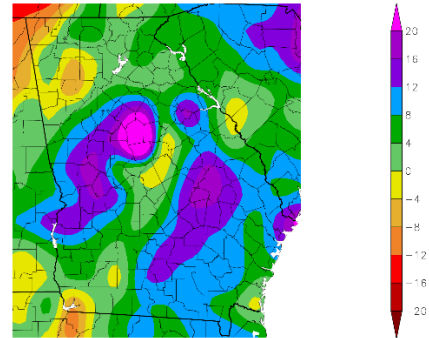
State of Georgia Climate Office

In 2024, Georgia experienced hurricanes, tornadoes, excessive heat, and rapid-onset droughts, as well as many days of normal weather. Overall, 2024 was the 2nd warmest year in Georgia on a record extending back to 1895. The vast majority of the state received above average precipitation, especially in the path of Hurricane Helene. The year began in El Nino conditions and transitioned to ENSO-neutral in May. ENSO-neutral conditions remained for the rest of the year.

Departure from Normal Temperature (F)
1/1/2024 – 12/31/2024



Departure from Normal Precipitation (in)
1/1/2024 – 12/31/2024



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NOAA Regional Climate Centers Generated 1/6/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

The first three months of the year were slightly warmer than average, except for January which was normal. January and March were both wetter than normal, starting the year out with plenty of rain. A severe weather outbreak on January 9th spawned five tornadoes. Additional severe weather in February and March brought flooding and more tornadoes, bringing the tornado count for the three-month period to 10 tornadoes on 3 separate days. Drought conditions covered just over half the state at the beginning of January, including large areas of Severe Drought (D2). These conditions steadily improved until the state was completely drought free in mid-to-late March.

April, May, and June were all warmer than average. The three-month period was the 4th warmest such period on record. Precipitation was variable over these three months. In April, Georgia experienced near normal precipitation, but in May the state received 6.44 inches of rain (+2.73 inches) and was the 8th wettest May on record. The state was mostly drought-free in April and May. In June, however, soil moisture conditions dried out quickly. The state received 2.29 inches of rain, falling 2.20 inches below normal and resulting in the 4th driest June on record. Combined with the warmth of the past few months, June's dryness resulted in a flash drought. By June 18th, 34.6% of the state was experiencing Abnormally Dry (D0) conditions or worse, and by June 25th, only one week later, 93.9% of the state was experiencing D0 conditions or worse. By the end of June, farmers and cattle operators reported loss of non-irrigated corn crops and being forced to use wintertime hay supplies to feed cattle. Pond and creek levels decreased, and grass

turned brown. June also brought some severe weather to southeastern Georgia when on the 9th and 10th, a stationary front led to thunderstorm development. These storms caused wind damage, downed trees, and significant hail reports.

July, August, and September were all warmer than normal, but August and September were both only slightly warmer than normal (+1.4F and +1.0F, respectively). July's heat was a bit more extreme, with an average temperature of 82F (+2.3F) making it the 11th warmest July on record. In contrast to June, July was wetter than normal, with the state receiving an average of 7.36 inches (+1.76 inches). August would have been a relatively dry month if not for Hurricane Debby, which crossed through southern Georgia and pushed the statewide average rainfall for the month to near normal. Macon recorded its driest August on record, while some areas of southeast Georgia received upwards of eight inches above normal rainfall. September was a very wet month. The state received an average of 8.45 inches of rain (+4.53 inches) making it the 4th wettest September on record. Most of this excess rainfall can be attributed to Hurricane Helene. At the beginning of July, most of the state experienced Abnormally Dry (D0) to Severe Drought (D2) conditions, but conditions were improving going into August. Conditions then started to worsen again as August was dry in Georgia except for along the path of Debby. Drought continued to worsen through September, with the northern half of the state experiencing D0 to Extreme Drought (D3).

Two hurricanes entered Georgia in 2024, Debby and Helene. Hurricane Debby made landfall as a Category 1 storm in the Big Bend region of northern Florida on August 5th. It weakened to a tropical storm as the center slowly lifted northeast allowing significant rainfall to accumulate and flooding to take place. Georgia ASOS stations in the path of Debby recorded wind gusts from 45-49 mph. Hurricane Helene made landfall near Perry, Florida on September 26th as a Category 4 storm. Helene entered Georgia on September 27th as a Category 2 hurricane. It moved through the middle of the state, tracking east of Atlanta, until it entered western North Carolina. The most extreme wind and rain occurred on the east side of the storm. Atlanta received its highest 48-hour rainfall total on record of 11.12 inches (POR 1878-present). Two days of heavy rainfall preceded the hurricane, which contributed to flash flooding in multiple Georgia cities. Wind damage and some tornadic wind damage was the worst in Savannah and Augusta, and power outages were widespread.

October through December was the 7th warmest such period on record, with November being especially warm – the 2nd warmest November on record with an average temperature +7.1F above normal. The rainfall rollercoaster continued with a very dry October. Atlanta only received trace amounts of rainfall, and the average statewide rainfall was only 0.16 inches, 2.57 inches less than normal, making this October the 2nd driest on record. Precipitation levels returned to near normal in November and December. Drought conditions spread slowly across the state through October after being wiped out by Hurricane Helene at the end of September. At least five locations throughout the state, including Atlanta at 41 days, set records for their longest dry streaks. Drought conditions worsened in November, with some areas experiencing Severe Drought (D2), but by the end of the month, D2 had vanished from the map and the areas of

Moderate Drought (D1) started to shrink. In December, drought conditions improved in North and Central Georgia, but D1 conditions expanded in Southwest Georgia.

Citations:

NOAA National Centers for Environmental Information, Climate at a Glance: Statewide Rankings, published January 2025, retrieved on January 10, 2025 from <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/rankings>

Southeast Regional Climate Center, Climate Perspectives Tool – Streaks and Thresholds Perspectives, published November 2024, retrieved on November 16, 2024 from <https://sercc.com/climate-perspectives/>