# September 2019 Climate Summary - Georgia <br> Nyasha Dunkley, Deputy State Climatologist State of Georgia Climate Office 

The month of September in Georgia was one for the records, with numerous temperature records broken and lack of rainfall across the state. The prevailing atmospheric conditions included a strong area of high pressure over the Southeast U.S., which provided continually hot and dry conditions for the region. The average temperature for the state ranked $5^{\text {th }}$ warmest on record at $79.1^{\circ}$, which was $4.6^{\circ}$ above the mean. Statewide precipitation rankings were the driest to date at $0.93^{\prime \prime}$, falling $-2.99^{\prime \prime}$ below average.

Numerous temperature records were broken between the four primary climate sites across the state (see tables below). According to the National Weather Service at Peachtree City, Atlanta experienced 23 days that were $90^{\circ}$ or higher, tying a previous record set in 1925. Macon experienced even more days that were $90^{\circ}$ or higher with 23 days, breaking the previous record set in 2018. The average temperature for Columbus was $83.3^{\circ}(+6.7)$, while setting daily high maximum temperature records of $100^{\circ}$ on $9 / 26$ and $99^{\circ}$ on 9/27 (passing the previous records of $99^{\circ}$ and $97^{\circ}$, respectively). Athens' average temperature was also well above normal at $79.3^{\circ}(+6.0)$, setting highest

Departure from Normal Temperature (F) 9/1/2019 - 9/30/2019
 maximum temperature records of $97^{\circ}, 95^{\circ}$, and $97^{\circ}$ on the $27^{\text {th }}, 29^{\text {th }}$ and $30^{\text {th }}$ of the month, respectively.

Departure from Normal Precipitation (in) 9/1/2019-9/30/2019


Precipitation totals were scarce across the state. Macon tied the record for driest September, receiving only 0.02 inches of rainfall for the month. Atlanta, Columbus, and Athens all recorded below normal precipitation for September, at $0.76^{\prime \prime}\left(-3.71^{\prime \prime}\right)$, $1.29 "(-1.77 ")$, and $1.40^{\prime \prime}(-2.54 ")$, respectively. Coastal regions of the state received just a bit more rainfall, though still well below normal, with Savannah receiving 1.27" (-3.31") and St. Simons Island at 2.76" (-3.00").

The Atlantic Basin Hurricane season remained active during September, with seven named storms forming during the month, three of them becoming hurricanes, and two reaching
major hurricane status according to the National Hurricane Center. While Hurricane Dorian did not heavily impact the state, increased subsidence from the storm system allowed for poorer air quality to affect the Atlanta area. The hot and dry conditions during the month also impacted air quality, with Atlanta recording 13 ozone exceedances for the month.

The U.S. Drought Monitor showed a rapid deterioration in drought conditions across the state. The current flash drought the state is in is primarily agricultural and due to the intense daytime heating, lack of rainfall, and sudden increase in evapotranspiration experienced during the month of September. The NOAA National Weather Service's Climate Prediction Center defines a flash drought as an event during which an area experiences degradation by two or more drought categories in a four-week period, based on the U.S. Drought Monitor.


ENSO-neutral conditions continued in September with near-average sea surface temperatures across most of the central and eastern equatorial Pacific Ocean. ENSO-neutral conditions are expected to continue through the Fall 2019 months and into Spring 2020. The seasonal outlook from the Climate Prediction Center for October, November, and December favors above normal temperatures for the state and equal chances of above, near or below normal precipitation for much of the state.


## Atlanta Temperature Records:

| Highest Maximum <br> Temperature $\left({ }^{\circ} \mathbf{F}\right)$ | Date | Previous Record ( ${ }^{\circ} \mathbf{F}$ ) | Year |
| :---: | :---: | :---: | :---: |
| 98 | $9 / 10$ | 97 | 1925 |
| 96 | $9 / 11$ | 96 | 2010 |
| 99 | $9 / 12$ | 94 | 1900 |
| 98 | $9 / 13$ | 95 | 1991 |
| 98 | $9 / 17$ | 97 | 1927 |
| 93 | $9 / 25$ | 93 | 2010 |
| 95 | $9 / 26$ | 90 | 1986 |
| 97 | $9 / 27$ | 93 | 1954 |
| 93 | $9 / 29$ | 92 | 1941 |
| 96 | $9 / 30$ | 91 | 1941 |


| Highest Minimum <br> Temperature $\left({ }^{\circ} \mathbf{F}\right)$ | Date | Previous Record $\left({ }^{\circ} \mathbf{F}\right)$ | Year |
| :---: | :---: | :---: | :---: |
| 73 | $9 / 24$ | 73 | 1980 |
| 73 | $9 / 26$ | 72 | 2018 |
| 76 | $9 / 27$ | 73 | 1911 |
| 73 | $9 / 29$ | 72 | 1904 |
| 74 | $9 / 30$ | 74 | 1904 |

## Macon Temperature Records:

| Highest Maximum <br> Temperature $\left({ }^{\circ} \mathbf{F}\right)$ | Date | Previous Record ( ${ }^{\circ} \mathbf{F}$ ) | Year |
| :---: | :---: | :---: | :---: |
| 98 | $9 / 12$ | 97 | 1962 |
| 97 | $9 / 13$ | 96 | 1991 |
| 103 | $9 / 17$ | 98 | 2018 |
| 98 | $9 / 24$ | 96 | 1993 |
| 99 | $9 / 25$ | 96 | 1993 |
| 102 | $9 / 26$ | 96 | 2018 |
| 102 | $9 / 27$ | 94 | 1986 |
| 98 | $9 / 28$ | 96 | 1986 |
| 97 | $9 / 29$ | 95 | 1941 |
| 100 | $9 / 30$ | 95 | 1954 |

