Quarterly Climate Impacts and Outlook

Southern Region

Highlights for the Region

It was a warmer than normal winter

warmer than normal temperatures in December, January, and February,

February on record.

Mountain wildfires.

(December–February) for the southern region, with all six states reporting

with many states having their warmest

Precipitation was abundant in southern

Texas, and western Oklahoma. In

The March 2016–February 2017 temperatures were the warmest on record for the southern region as a whole,

Tennessee, much needed rain fell to

help put out some of the Great Smoky

with Louisiana and Oklahoma reported

top five warmest March-February.

their warmest March-February on record,

and the other states reported one of their

March 2017

National – Significant Events for February and Winter 2016–2017



The average U.S. temperature during February was 41.2°F, 7.3°F above average, and the second warmest on record. The winter U.S. temperature was 35.9°F, 3.7°F above average, and the sixth highest on record. February U.S. precipitation was 2.21 inches, 0.08 inches above average. The winter precipitation total was 8.22 inches, 1.43 inches above average, and eighth wettest on record.

Material provided in this map was compiled from NOAA's State of the Climate Reports. For more information please visit: www.ncdc.noaa.gov/sotc

Regional – Climate Overview for December 2016–February 2017

Temperature and Precipitation Anomalies

Departure from Normal Temperature (°F) December 1, 2016–February 28, 2017



Overall, temperatures averaged between 2°F to 8°F above normal for most of the period spanning from December 2016 to February 2017. Temperature anomalies in Louisiana, Mississippi, and southern Texas were slightly higher with the majority of stations averaging between 6°F to 10°F above normal. Both Louisiana and Texas had their warmest winter on record (1895–2017), with Louisiana reporting an average winter temperature of 57.7°F. Arkansas and Tennessee had their second warmest winter on record.

Percent of Normal Precipitation (%) December 1, 2016–February 28, 2017



Winter precipitation was variable throughout the southern region. Western Texas and Oklahoma reported 150–300% above normal precipitation, whereas areas in Arkansas reported 25–50% below normal precipitation. Northern Mississippi and northern Louisiana had below normal precipitation for the winter months. In contrast, the southern parts of those states were near normal precipitation. Some much needed rain fell in Tennessee in December and January to help put out some of the Great Smoky Mountain wildfires.

Streamflows

February average streamflow compared to historical streamflow.



The above figure illustrates the February average streamflow in the Texas Gulf and lower Mississippi basins as compared to historical streamflow. Streamflows in Texas are exhibiting near normal flow, except for in the eastern counties where a cluster of stations are below normal. There are areas in central Louisiana and Mississippi that are below normal to much below normal. Many locations in Arkansas and Tennessee are reporting near normal conditions.

Regional – Impacts for January–March 2017

Warm Winter 2016-17

The southern region had its warmest winter on record in 2016–17. The temperature change throughout the region in December was variable, with the northern part of the region reporting near normal or slightly below normal temperatures. The southern part of the region reported, on average, 2°F–4°F above average for the month of December. In January most of the region reported above normal temperatures, with portions of Louisiana, Mississippi, and Tennessee having 6°F–10°F above normal temperatures. The panhandles of Texas and Oklahoma exhibited near normal temperatures. In February, there were no areas in the southern region that were below or near normal. The whole region averaged 2°F above normal, with portions of each state reporting 9°F–12°F above normal. Louisiana did not have any areas where there were below or near normal temperatures for any winter month. In the entirety of winter 2016–17, Louisiana and Texas reported their warmest winter, Arkansas and Tennessee reported their second warmest winter, Mississippi reported its third warmest winter, and Oklahoma reported its fifth warmest winter. Farmers are concerned about the crops throughout the region, with growing degree days and growing cycles being effected by the warm temperatures. For some farmers in southern Texas, the unseasonable warmth has them anxious to start farming their spring crops earlier than usual according to the *Southwest FarmPress* in February 2017. Some farmers already have their tractors out in hopes to get an early start on the planting year, which is many farmers' optimal outcome.



Above: The departure from normal temperatures for December (left), January (middle), and February (right). Records date back to 1895.



According to the Climate Prediction Center, Spring (April, May, June) temperatures for the southern region are expected to be above normal in all six states.

For most of the southern region, the Climate Prediction Center is giving equal chances of above or below normal Spring (April, May, June) precipitation, except for along the Gulf coast, where there is a slight chance of above normal rainfall.

Mar 2016–Feb 2017 Temperatures

As of February 28, 2017, the southern region as a whole had its warmest March 2016–February 2017 on record (recorded since 1895). Louisiana and Oklahoma saw their highest average temperatures ever for March 2016–February 2017. The other states had their second or third warmest March–February on record.

Gulf Region Partners

Earth Scan Lab at Louisiana State University www.esl.lsu.edu

NOAA/NWS Climate Prediction Center www.cpc.noaa.gov

NOAA/NOS Gulf of Mexico Coastal Services Center www.csc.noaa.gov

NOAA Gulf of Mexico Collaboration Team www.regions.noaa.gov

NOAA/NESDIS National Centers for Environmental Information

www.ncei.noaa.gov

NOAA/NWS Southern Region www.srh.noaa.gov

Southern Climate Impacts Planning Program www.southernclimate.org

Southern Regional Climate Center www.srcc.lsu.edu