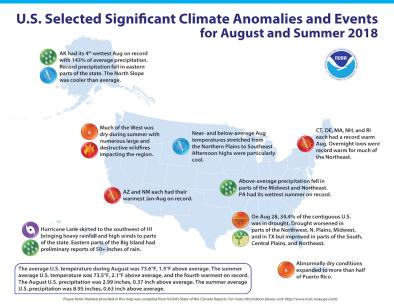
## National – Significant Events for August and Summer, 2018



The average U.S. temperature during August was 73.6°F, 1.5°F above average.

The summer average U.S. temperature was 73.5°F, 2.1°F above average, and the fourth warmest on record. The August U.S. precipitation was 2.99 inches, 0.37 inch above average. The summer average U.S. precipitation was 8.95 inches, 0.63 drought increased across the region. inch above average.

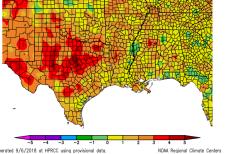
### **Highlights for the Region**

Temperatures varied spatially throughout the Southern Region. Most of the region experienced above normal temperatures, with an area near the Mississippi, Louisiana, and Arkansas borders experiencing below normal temperatures. Summer precipitation also varied spatially throughout the Southern Region. Parts of Texas, Arkansas, and Louisiana received 50 percent or less of normal precipitation while parts of northwestern Oklahoma and southern Texas received 200–400 percent above normal precipitation. The main climate impacts for summer in the Southern Region were extreme precipitation and drought. Every state experienced percent or more above normal, while

# **Regional** – Climate Overview for June to August 2018

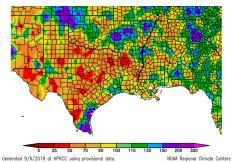
### **Temperature and Precipitation Anomalies**

Departure from Normal (F) 6/01/2018–8/31/2018



Overall, average temperatures throughout the Southern Region were between 2°F below to 5°F above normal for the period spanning from June to August 2018. There were areas of 4–5°F above normal temperatures in western and central Texas. There were areas in northeastern Louisiana, western Mississippi, and southeastern Arkansas that were 1–2°F below normal.

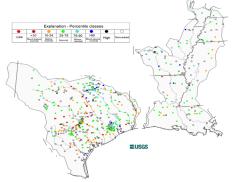
Percent of Normal (%) 6/01/2018–8/31/2018



Summer precipitation varied spatially throughout the Southern Region for the period from June to August 2018. Areas in central, western, and southern Texas, southwestern Arkansas, and northwestern Louisiana received 50 percent or less of normal precipitation. In contrast, areas of northwestern Oklahoma and southern Texas received 200–300 percent of normal precipitation.

#### **Streamflows**

August average streamflow versus historical streamflow



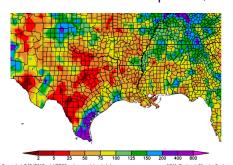
The above figure illustrates August average streamflows in the Texas Gulf and Lower Mississippi Basins as compared to historical streamflows. Streamflows in southern Louisiana and Arkansas are near normal. Parts of central and southern Texas and northern Mississippi are experiencing below normal streamflow. In contrast, northeastern Texas is experiencing above normal streamflow.

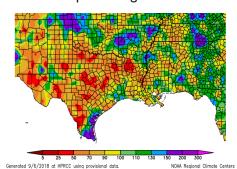


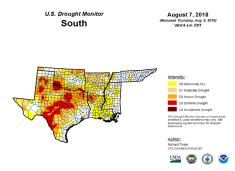
# **Regional Impacts** — For June to August 2018

#### **Extreme Precipitation and Drought**

This summer, the Southern Region was exposed to precipitation extremes, both in terms of above and below normal precipitation. Even though precipitation varied across the Southern Region for the period from June to August, every state experienced precipitation events with totals at least 150 percent above normal. In June, areas in northern, western, southeastern, and southern Texas as well as areas in central and southeastern Tennessee experienced precipitation 200 to 400 percent above normal. Far southern Texas experienced precipitation 400 to 800 percent above normal, and Tennessee experienced the 21st wettest June on record (1895-2018). In July, eastern and part of western Texas as well as far northwestern Oklahoma experienced precipitation 200 percent above normal. In August, northeastern Texas, western, northeastern, and southeastern Arkansas, northwestern Tennessee, and eastern, northeastern and northwestern Oklahoma experienced precipitation 300 percent or more above normal. Arkansas experienced the 8th wettest August on record, and every state except for Louisiana recorded a wetter than normal August, with the region as a whole experiencing the 27th wettest August on record (1895-2018). Despite these extreme precipitation events, drought worsened across parts of the region. Compared to the end of May, the total area not experiencing drought conditions decreased to less than 50 percent, while the areas experiencing moderate and severe drought increased.







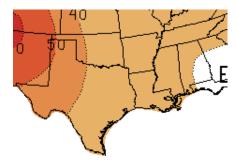
Above: Percent of normal precipitation in June (left), in August (middle), and August drought conditions (right).

### CPC -Three-Month Outlook

### **Temperature**

# **Precipitation**

#### **Outlook for October to December**





A = Above normal temperatures EC = Equal chances B = Below normal rainfall N = Normal

According to the Climate Prediction Center, October through December temperatures for the Southern Region are expected to be above normal. Chances are highest in far western and northwestern Texas and decrease from west to east across the region.

There is an equal chance of above or below normal precipitation from October through December across Tennessee, northern Mississippi, central and northern Arkansas, and northeastern Oklahoma. Much of Texas and southern Louisiana have the highest chance of experiencing above normal precipitation, with chances decreasing from south to north.

#### El Niño Outlook

NOAA's Climate Prediction Center is calling for a 60 percent chance of El Niño developing during the fall. Should El Niño develop, the Southern region could experience cooler than normal temperatures as well as higher than normal precipitation, especially during the winter.

# **Gulf Regional Partners**

Earth Scan Laboratory at Louisiana State University (esl.lsu.edu)

NOAA/NWS Climate Prediction Center (cpc.noaa.gov)

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

NOAA Gulf of Mexico Collaboration Team (regions.noaa.gov)

NOAA/NESDIS National Centers for Environmental Information (ncei.noaa.gov)

NOAA/NWS Southern Region (srh.noaa.gov)

Southern Climate Impacts Planning Program (southernclimate.org)

Southern Regional Climate Center (srcc.lsu.edu)

