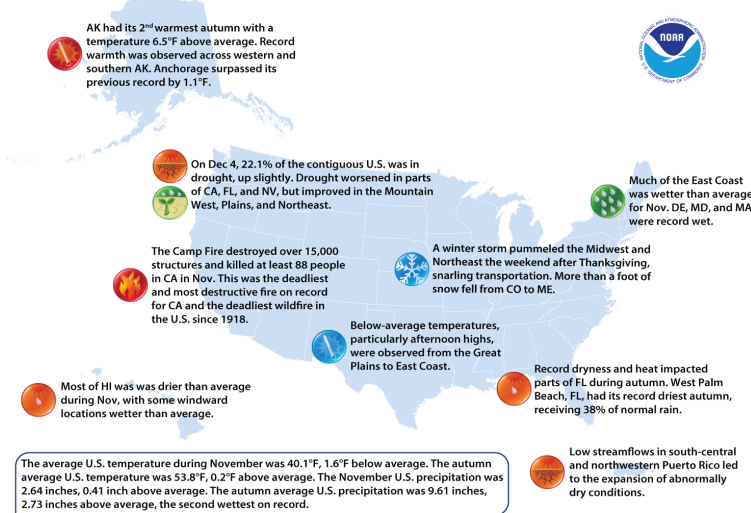


National – Significant Events for November and Autumn, 2018

U.S. Selected Significant Climate Anomalies and Events for November and Autumn 2018



The average U.S. temperature during November was 40.1°F, 1.6°F below average. The autumn average U.S. temperature was 53.8°F, 0.2°F above average. The November U.S. precipitation was 2.64 inches, 0.41 inch above average. The autumn average U.S. precipitation was 9.61 inches, 2.73 inches above average, the second wettest on record.

Highlights for the Region

Temperatures exhibited a west-to-east pattern, with cooler-than-normal temperatures in the west and warmer-than-normal temperatures in the east.

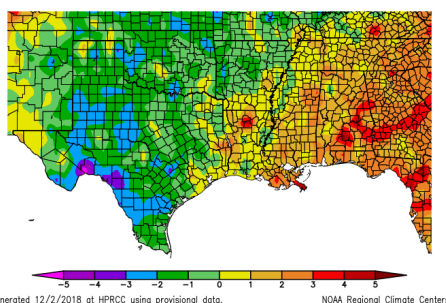
Most of the region received above-normal precipitation with the exception of northeastern Oklahoma, northwestern Arkansas, and far western Texas.

Due to the large area of above-normal precipitation, drought decreased substantially across the entire region.

Regional – Climate Overview for June to August 2018

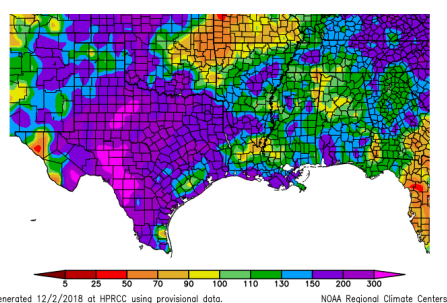
Temperature and Precipitation Anomalies

Departure from Normal (°F) 9/01/2018–11/30/2018



Overall, there was a west-to-east pattern with respect to temperature. The western part of the region experienced below-normal temperatures, while the eastern part of the region experienced above-normal temperatures. In general, the temperatures ranged between 3°F below normal to 3°F above normal.

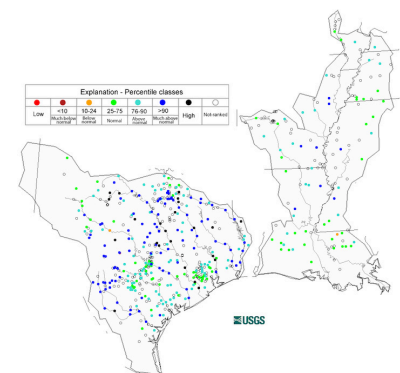
Percent of Normal (%) 9/01/2018–11/30/2018



Autumn precipitation varied spatially throughout the region, but tended to be above normal. Parts of central and southwestern Texas received 300 percent or more of normal precipitation. In contrast, areas of northwestern Oklahoma, northeastern Arkansas, and far western Texas received 70 percent or less of normal precipitation.

Streamflows

November average streamflow versus historical streamflow

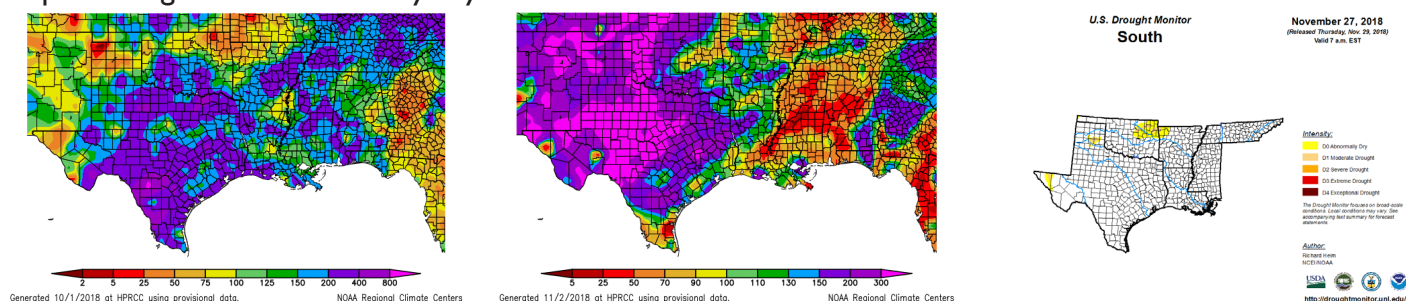


The above figure illustrates November average streamflows in the Texas Gulf and Lower Mississippi Basins as compared to historical streamflows. Streamflows in Arkansas, Louisiana, Tennessee, Mississippi, and coastal Texas are normal or above normal. Texas streamflows further inland are much above normal.

Regional Impacts — For September to November 2018

Extreme Precipitation and Drought

This autumn, the Southern Region was exposed to above-normal precipitation extremes, with every state experiencing precipitation events with totals at least 150 percent above normal. In September, areas in northern, northeastern, eastern, southern, and western Texas received precipitation 400–800 percent above normal, with a small part of southwestern Texas receiving precipitation 800 percent or more above normal. In October, central, eastern, southwestern, western, and northern Texas as well as western Oklahoma received precipitation 300 percent or more above normal. As a result, Texas experienced its wettest September and October on record; Tennessee experienced its 3rd wettest September on record; Louisiana and Mississippi experienced their 10th wettest September on record; Oklahoma experienced its 7th wettest October on record; and the region as a whole experienced its 3rd wettest September on record (1895–2018). In November, northeastern and southeastern Louisiana, southeastern Texas, and western Mississippi received precipitation 200–300 percent or more above normal. Alongside these extreme precipitation events, drought improved across the region. When August transitioned to September, almost 60 percent of the region was experiencing at least abnormally dry conditions. At the end of November, roughly 5 percent of the region was experiencing at least abnormally dry conditions.

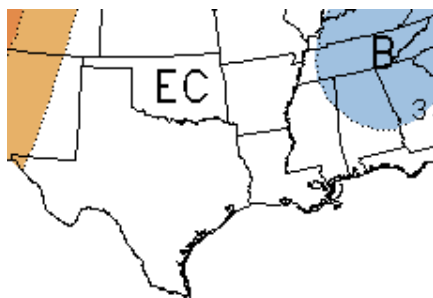


Above: Percent of normal precipitation in September (left), in October (middle), and November drought conditions (right).

CPC – Three-Month Outlook

Temperature

Outlook for January to March

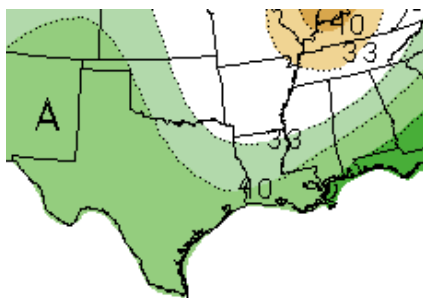


A = Above-normal temperatures EC = Equal chances
B = Below-normal rainfall N = Normal

According to the Climate Prediction Center, much of the region has equal chances of experiencing above-normal, below-normal, or normal temperatures. Far western Texas has a chance of experiencing above-normal temperatures while northeastern Mississippi and most of Tennessee has a chance of experiencing below-normal temperatures.

Precipitation is projected to be above normal for most of Texas and Louisiana as well as central and southern Mississippi and central and western Oklahoma, with chances increasing to the south and west. Northwestern and western Tennessee has a chance of receiving below-normal precipitation.

Precipitation



El Niño Outlook

NOAA's Climate Prediction Center is calling for a 90 percent chance of El Niño developing during the winter, with a 60 percent chance that El Niño conditions continue through spring. The winter precipitation outlook follows an El Niño pattern while temperature does not.

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)