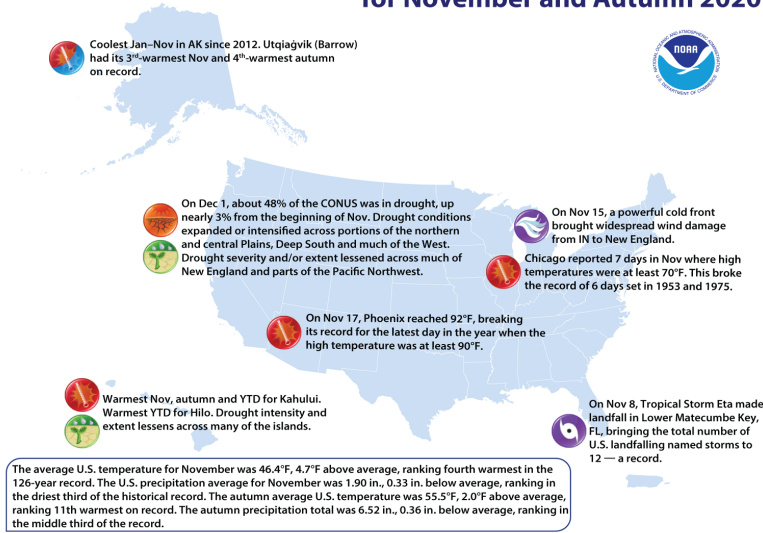




National — Significant Events for November and Autumn, 2020

U.S. Selected Significant Climate Anomalies and Events for November and Autumn 2020



The average U.S. temperature for November was 46.4°F, 4.7°F above average, ranking fourth warmest in the 126-year record. The U.S. precipitation average for November was 1.90 in., 0.33 in. below average, ranking in the driest third of the historical record. The autumn average U.S. temperature was 55.5°F, 2.0°F above average, ranking eleventh warmest on record. The autumn precipitation total was 6.52 in., 0.36 in. below average, ranking in the middle third on record.

Highlights for the Region

Temperatures were below normal across much of the region in September and October, but November temperatures were above normal across the entire region.

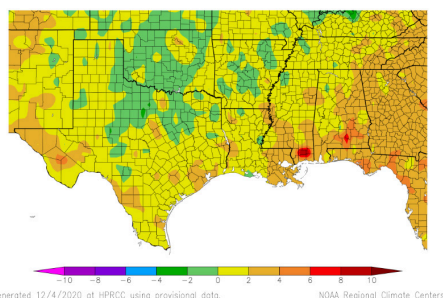
Precipitation was slightly above normal in September, but widespread areas received below-normal precipitation in October and November.

The main impacts this autumn were associated with three hurricanes and one tropical storm making landfall along the Gulf coast.

Regional — Climate Overview for September 2020 to November 2020

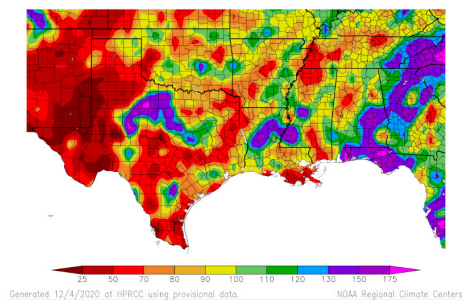
Temperature and Precipitation Anomalies

Departure from Normal (°F) 9/01/2020–11/30/2020



Autumn temperatures ranged between 2° F below normal to 2° F above normal across a broad portion of the region. However, parts of eastern Tennessee, southern and southeastern Mississippi, southeastern and northeastern Louisiana, and parts of western, southern, and southeastern Texas experienced temperatures 2°–4° above normal.

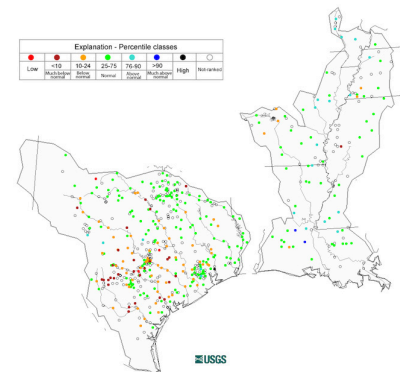
Percent of Normal (%) 9/01/2020–11/30/2020



Autumn precipitation varied spatially across the Southern Region. Parts of western and southern Texas received precipitation 25 percent or less of normal while parts of eastern Tennessee, southwestern Mississippi, central Louisiana, and north-central Texas received precipitation 130 percent or more of normal.

Streamflows

November Average Streamflow vs. Historical Streamflow



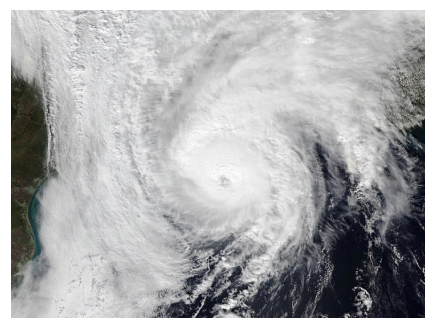
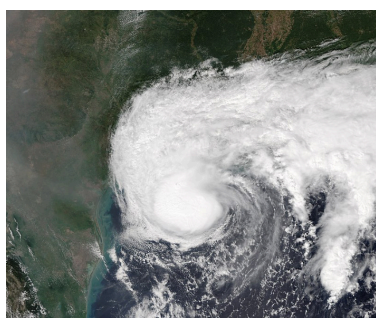
The above figure illustrates November average streamflows in the Texas Gulf and Lower Mississippi basins as compared to historical streamflows. Streamflows in the Lower Mississippi basin were normal to above normal. Streamflows in the Texas Gulf basin were normal to below normal across much of the basin and much below normal inland.



Regional Impacts — for September 2020 to November 2020

Tropical Cyclones

The Southern Region followed up the summer's round of tropical activity with another round during autumn, with two hurricanes and one tropical storm making direct landfall in the region as well as another system impacting the region even though direct landfall occurred outside of the region. Hurricane Sally, which made landfall in coastal Alabama on September 16, brought rain to parts of Mississippi, Louisiana, and Tennessee, with flooding occurring in Louisiana and Mississippi. Tropical Storm Beta made landfall in Texas on September 21, but the storm's remnants impacted parts of Arkansas, Louisiana, Mississippi, and Tennessee, bringing heavy rain, flooding, and gusty winds. Hurricane Delta made landfall in southwestern Louisiana on October 9, less than 15 miles from where Hurricane Laura made landfall less than two months prior. Impacts were felt across parts of Texas, Louisiana, Mississippi, and Arkansas as Delta accounted for an estimated \$4 billion in damage. It was also responsible for storm surge in excess of 9 feet above mean sea level (MSL) in southern Louisiana in addition to rainfall amounts greater than 17 inches across parts of southwestern Louisiana. Finally, Hurricane Zeta made landfall in southeastern Louisiana on October 28, bringing with it wind gusts in excess of 100 mph as well as storm surge in excess of 8 feet above mean higher high water (MHHW) levels in coastal Mississippi.



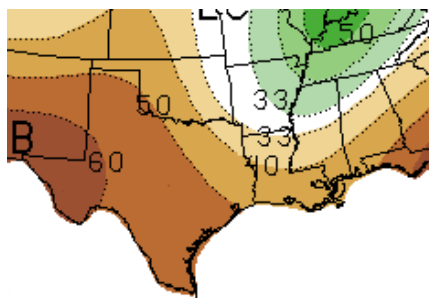
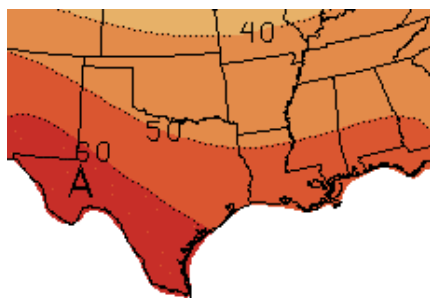
Above: Satellite images of Tropical Storm Beta (left), Hurricane Delta (middle), and Hurricane Zeta (right). (Credit: NASA)

CPC — Three-Month Outlook

Temperature

Precipitation

Outlook for January to March



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

According to the Climate Prediction Center, January through March temperatures have chances to be above normal across the entire region, with the highest chance across southern and western Texas.

Precipitation has chances to be above normal across parts of Mississippi, Arkansas, and most of Tennessee, and chances to be below normal across central and southern Mississippi as well as most of Louisiana, Oklahoma, and Texas.

2020 Atlantic Hurricane Season

The 2020 Atlantic Hurricane Season concluded on November 30 with 30 named storms, 13 hurricanes, and 6 major hurricanes. This was the fifth consecutive season with above-average activity, and the 30 named storms set the record for most active season on record, surpassing the 2005 season.

Gulf Regional Partners

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

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

NOAA National Centers for Coastal Ocean Science
(coastalscience.noaa.gov)

NOAA Gulf of Mexico Collaboration Team
(regions.noaa.gov/gulf-mexico)

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

NOAA/NWS Southern Region (weather.gov/srh)
Southern Climate Impacts Planning Program
(southernclimate.org)

Southern Regional Climate Center (srcc.lsu.edu)