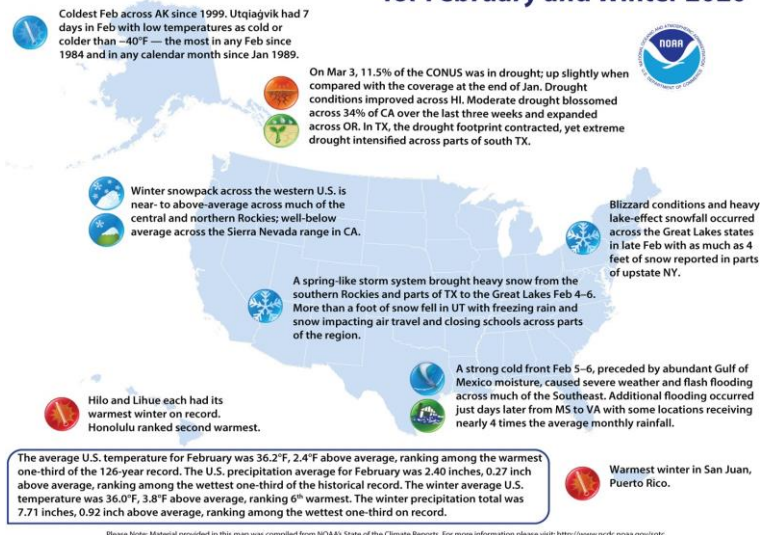




National — Significant Events for February and Winter, 2020

U.S. Selected Significant Climate Anomalies and Events for February and Winter 2020



The average U.S. temperature for February was 36.2°F , 2.4°F below average, ranking among the warmest one-third of the 126-year record. The U.S. precipitation average for February was 2.40", 0.27" above average, ranking among the wettest one-third of the historical record. The winter average U.S. temperature was 36.0°F , 3.8°F above average, ranking sixth warmest. The winter precipitation total was 7.71", 0.92" above average, ranking among the wettest one-third on record.

Highlights for the Region

Temperatures were primarily above normal. Every state experienced above-normal temperatures, but the west experienced smaller departures from normal due to a cooler February.

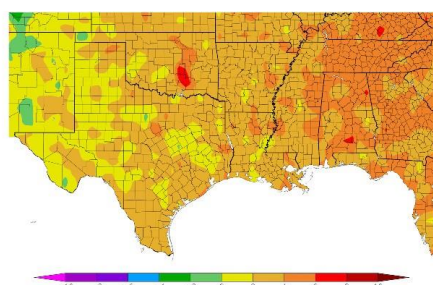
Precipitation varied spatially, with wetter-than-normal conditions in the north and east and drier-than-normal conditions in parts of the west and south.

The main impact this winter was extreme temperatures, as every state experienced temperatures at least 2° – 4°F above normal.

Regional — Climate Overview for December 2019 to February 2020

Temperature and Precipitation Anomalies

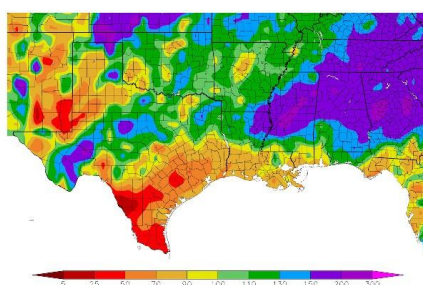
Departure from Normal ($^{\circ}\text{F}$)
12/01/2019–2/29/2020



Generated 3/2/2020 at 11P3CC using provisional data. NOAA Regional Climate Centers

Winter temperatures were above normal for much of the region. A west-to-east gradient was evident, with most of Tennessee and parts of Mississippi, Louisiana, and Arkansas experiencing temperatures 4° – 6°F above normal while western Texas experienced temperatures 0° – 2°F above normal.

Percent of Normal (%)
12/01/2019–2/29/2020

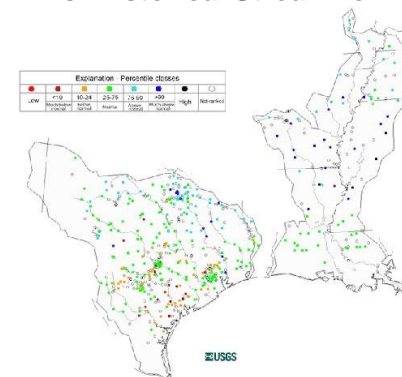


Generated 3/2/2020 at 11P3CC using provisional data. NOAA Regional Climate Centers

Winter precipitation varied spatially across the Southern Region. Along the Gulf Coast, precipitation ranged between 25 percent or less of normal to 90 percent or less of normal. Inland, parts of Oklahoma, Texas, and Mississippi received 200 percent or more of normal precipitation, while most of Tennessee received 150 percent or more of normal.

Streamflows

February Average Streamflow vs. Historical Streamflow



The above figure illustrates February average streamflows in the Texas Gulf and Lower Mississippi Basins as compared to historical streamflows. Streamflows in the Lower Mississippi Basin were primarily normal to above normal. Streamflows in the Texas Gulf basin were above normal in the north and below normal in the south.

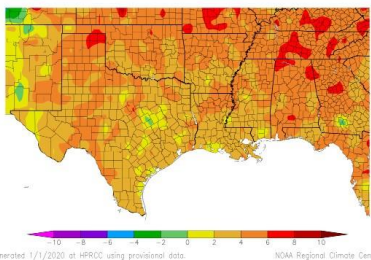


Regional Impacts — for December 2019 to February 2020

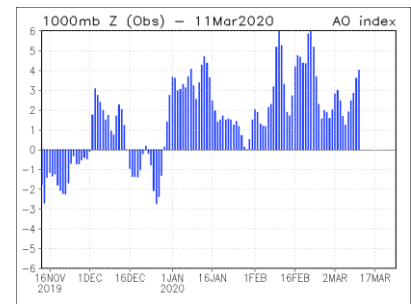
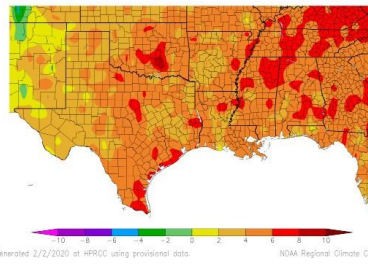
Extreme Temperatures

The Southern Region experienced extreme temperatures this winter; in every month least one state experienced temperatures at least 2°– 4°F degrees above normal. In December, parts of western and northern Texas, northern Louisiana, northern Arkansas, northern Mississippi, and most of Oklahoma and Tennessee experienced temperatures 4°– 6°F degrees F above normal, and both Oklahoma and Tennessee experienced their 10th warmest December on record. In January, parts of southern and eastern Texas, central Oklahoma, northeastern Louisiana, eastern Arkansas, northern Mississippi, and central and eastern Tennessee experienced temperatures 6°– 8°F above normal, and Texas experienced its 10th warmest January on record. In February, the warm temperatures relented slightly, as parts of Louisiana, Arkansas, Oklahoma, and Texas experienced below-normal temperatures. Collectively for the winter, the region experienced its 10th warmest winter on record and Tennessee experienced its sixth warmest winter on record. The warmer-than-normal temperatures can be attributed in part to a record-setting Arctic Oscillation (AO). During the first half of December as well as all of January and February, the AO was strongly positive, with daily values approaching and even exceeding six standard deviations above the mean. A positive AO phase is indicative of stronger winds surrounding the Arctic, which reduces cold air outbreaks and keeps temperatures warmer.

Departure from Normal Temperature (F)
12/1/2019 – 12/31/2019



Departure from Normal Temperature (F)
1/1/2020 – 1/31/2020



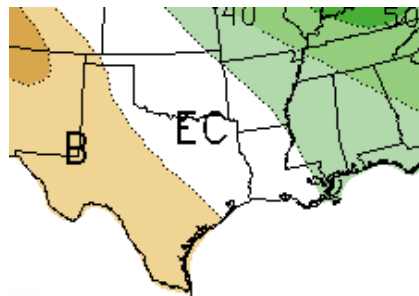
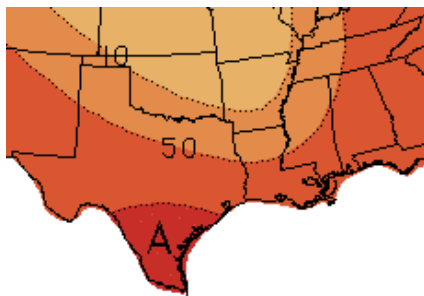
Above: Temperature departure from normal maps for December (left) and January (middle) as well as Arctic Oscillation index (right). (Credit: CPC)

CPC — Three-Month Outlook

Temperature

Precipitation

Outlook for April to June



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

According to the Climate Prediction Center, April through June temperatures are expected to be above normal across the entire region. Chances increase from north to south, and the greatest chances for above-normal temperatures are located across southern Texas.

Precipitation has an elevated chance to be above normal across the eastern and central parts of the region and an elevated chance to be below-normal across the western part of the region.

2020 ENSO Forecast

As of mid-March, the atmospheric and oceanic systems continued to reflect ENSO-neutral conditions. The Climate Prediction Center's forecast predicts a 65% chance ENSO-neutral conditions continue through spring and a 55% chance ENSO-neutral conditions continue through summer.

Gulf Regional Partners

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

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

Southern Climate Impacts Planning Program (southernclimate.org)

Southern Regional Climate Center (srcc.lsu.edu)