Quarterly Climate Impacts and Outlook

Southern Region

June 2019

National — Significant Events for May and Spring, 2019



The average U.S. temperature during May was 59.5°F, 0.7°F below average, ranking in the bottom third of the 125-year record. The spring average U.S. temperature was 50.9°F, 0.1°F below average, ranking near the mean. The May U.S. precipitation was 4.41 inches, 1.50 inches above average, ranking second wettest month on record. The spring average U.S. precipitation was 9.85 inches, 1.91 inches above average, ranking it the 6th wettest spring on record.

Regional — Climate Overview for March 2019 to May 2019

Temperature and Precipitation Anomalies

Departure from Normal (°F) 3/01/2019–5/31/2019



Spring temperatures exhibited a west-to-east pattern across the region in general, with abovenormal temperatures in the east and normal to slightly belownormal temperatures in the western states. On the whole, the temperatures ranged between 3°F below normal to 3°F above normal. Percent of Normal (%) 3/01/2019–5/31/2019



Spring precipitation was primarily above normal across the Southern Region. Parts of Texas, Mississippi, and Tennessee received 70 percent or less of normal precipitation while parts of Oklahoma and Texas received 200 percent or more of normal precipitation.

Highlights for the Region

Temperatures exhibited a westto-east pattern, with cooler-thannormal temperatures in parts of the west and warmer-thannormal temperatures in parts of the east.

Precipitation was primarily above normal across the region, with parts of Texas, Mississippi, and Tennessee slightly drier than normal.

The main impact this spring was extreme precipitation, with parts of every state receiving precipitation 150 percent or more of normal.

Streamflows May average streamflow

versus historical streamflow



The above figure illustrates May average streamflows in the Texas Gulf and Lower Mississippi Basins as compared to historical streamflows. Streamflows in central, northern, and eastern Texas as well as most of Louisiana, Arkansas, and Mississippi are above normal or much above normal.



Regional Impacts — For March 2019 to May 2019

Extreme Precipitation and Drought

This spring, the Southern Region was exposed to above-normal precipitation extremes. Even though precipitation varied across the region for the period from March to May, every state experienced precipitation events with totals at least 150 percent of normal. March was below normal across almost the entire region, but areas in southern and western Texas received precipitation 150 to 200 percent of normal. In April, parts of Texas, Oklahoma, Arkansas, Louisiana, and Mississippi received precipitation 200 to 300 percent of normal, with isolated areas in Texas receiving precipitation 300 percent or more of normal. In May, parts of Arkansas, Mississippi, Louisiana, Texas, and Oklahoma received precipitation 200 to 300 percent of normal, with parts of Oklahoma receiving precipitation 300 percent or more of normal. As a result, Arkansas experienced its tenth-wettest May on record, Louisiana experienced both its eighth-driest March and its eighth-wettest April on record, Mississippi experienced its ninth-driest March on record, Oklahoma experienced its second-wettest May and fourth-wettest spring on record, and the region as a whole experienced its ninth-wettest April and fifth-wettest May on record (1895–2019). Due to March's dry conditions, drought expanded across the region, peaking at the beginning of April. However, the above-normal precipitation in April and May combined to eliminate almost all of the drought in the region.



Above: Percent of normal precipitation in March (left), April (middle), and May (right).

CPC — Three-Month Outlook

Temperature

Precipitation



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

According to the Climate Prediction Center, July through September temperatures are expected to be above normal across parts of Texas, Louisiana, Mississippi, and Tennessee and below normal across Oklahoma as well as parts of Texas and Arkansas. The greatest chances for abovenormal temperatures are located in far western and far southern Texas, southeastern Louisiana, and southern Mississippi. The greatest chances for below-normal temperatures are located in northern Oklahoma.

Precipitation is projected to be above normal in parts of Arkansas, Texas, and most of Oklahoma, with the greatest chances of above-normal precipitation in northern Oklahoma and northern Texas.

Hurricane Outlook

NOAA's Climate Prediction Center is calling for a near-normal hurricane season, with predictions for 9–15 named storms, 4–8 hurricanes, and 2–4 major hurricanes. El Niño, above-average sea surface temperatures, and enhanced West African Monsoon activity influenced this prediction.

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)

