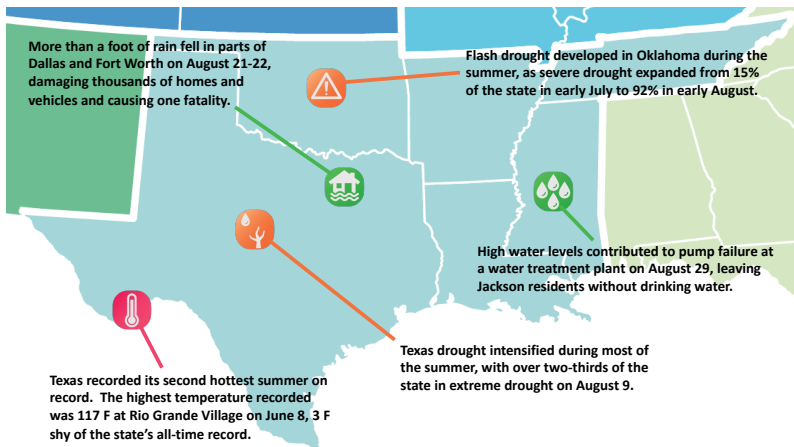


## Southern Region Significant Events — Summer 2022



Tornadoes were few and far between during summer 2022. Only a dozen tornadoes were reported, most with little to no damage. There were no reported injuries or fatalities. Strong straight-line winds were much more common, with five injuries across the region caused by trees falling on occupied cars or mobile homes.

### Overview

Summer started off dry and hot across most of the Southern Region and stayed that way until mid-August. June was tenth-warmest on record, and July was second-warmest on record. Texas's July was its hottest July on record, its second-hottest month on record, and the fifth-hottest month on record for any state.

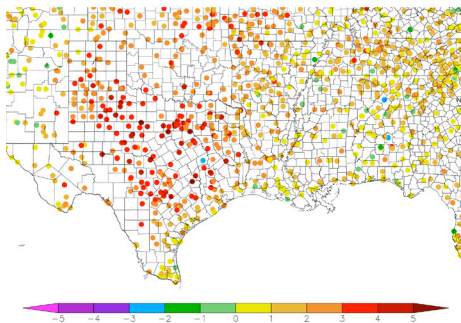
Accompanying and contributing to the high temperatures was a lack of rainfall. Texas had its second-driest start to the year ever through July, with rainfall just 58% of its 20th century average.

Weather conditions shifted in August, as a persistent ridge of high pressure gave way to deep tropical air from the southeast. The Southern Region ended up with its tenth wettest August on record, and Mississippi had its wettest August ever.

## Regional Climate Overview — Summer 2022

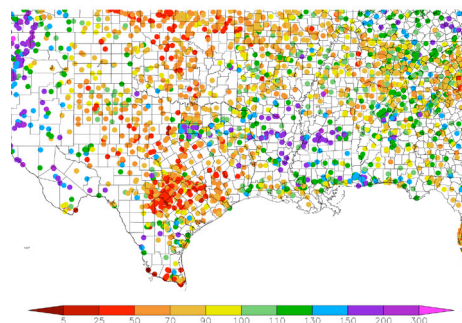
### Temperature and Precipitation

**Departure from Normal Temperature °F**  
6/1/2022 – 8/31/2022



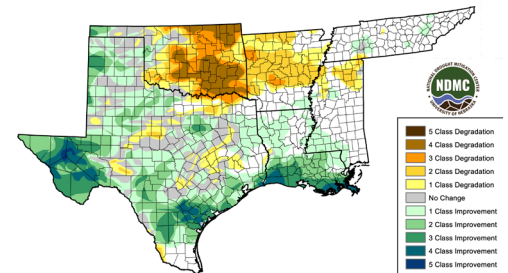
Temperatures were generally above normal across the entire Southern Region. Temperatures were particularly warm in Texas, with temperatures at most stations in north-central Texas averaging at least 3 F above normal. It was the hottest summer on record in San Antonio and tied for hottest in College Station, Texas. Near-normal temperatures were found along the Gulf Coast and along the Mississippi River valley.

**Percent of Normal Precipitation (%)**  
6/1/2022 – 8/31/2022



Above-normal rainfall was common in far West Texas and from southern Arkansas to southern Mississippi. Many places received close to twice their normal rainfall for the season. From northern Oklahoma to south-central Texas, rainfall was typically below normal, except for the vicinity of Dallas-Fort Worth, with many places receiving less than half their normal seasonal value. Near-normal conditions prevailed elsewhere.

**Drought Overall Change**  
6/7/2022 – 9/6/2022



Drought conditions generally improved across the Southern Region during summer 2022, although it was a rocky road. Worsening conditions were common through June and July, and the primary improvements were made due to rainfall in August. Oklahoma, Arkansas, and northern Mississippi missed out on the August improvements, while the greatest improvements were along the Gulf Coast and far West Texas.

## Southern Regional Impacts

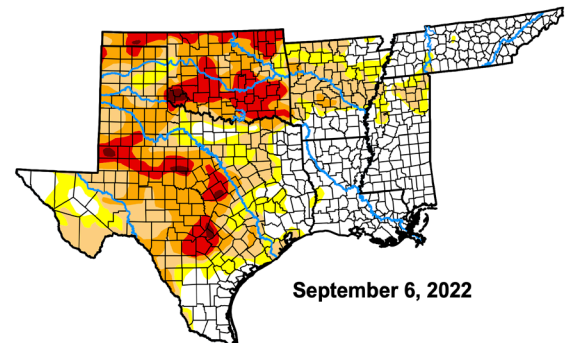
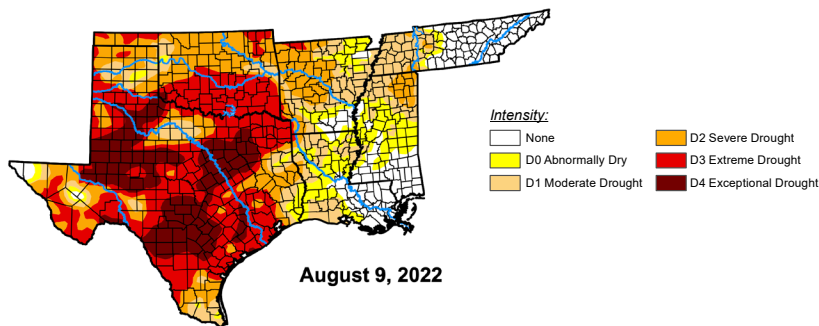
### Drought, Agriculture, and Water Supply

Drought conditions during the summer are always a problem for farmers and ranchers. In this instance, the lack of rainfall combined with the high heat to make impacts especially severe in Texas and Oklahoma during summer 2022. Drought peaked in early August before improving somewhat.

Yields were much lower than normal in Texas and Oklahoma for crops such as corn and sorghum. Expected yields for cotton are also down.

Ranchers in many areas of Texas and Oklahoma were forced to sell cattle due to the high costs of hay and supplemental feed and, in some instances, lack of water. Cattle auctions lasted through the night and into the following morning. The August rains ended the crisis in most parts of Texas, coming just in time to allow for some warm-season forage growth and possibly set the stage for improved soil conditions during fall and winter.

Water restrictions were widespread as well. Reservoir storage along the Rio Grande reached all-time low values before improving in August due to rains in Texas and Northern Mexico.

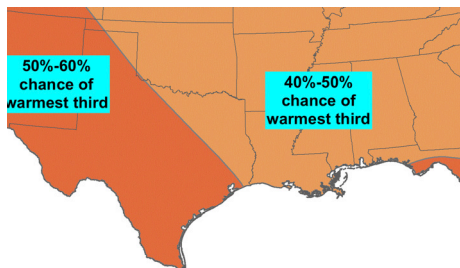


US Drought Monitor depiction of the Southern Region. The US Drought Monitor is produced by the National Drought Mitigation Center, the USDA, and NOAA.

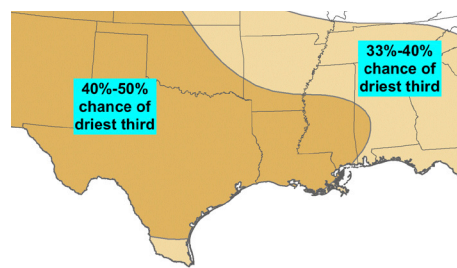
## Seasonal Outlook

### Temperature

#### Outlook for October-December 2022



### Precipitation



Shown are chances that Oct-Dec 2022 will have conditions roughly similar to the ten warmest and driest years of 1991-2020.

The seasonal outlook from NOAA's Climate Prediction Center is largely based upon typical expected conditions during a La Niña, forecasts from models of the coupled atmosphere-ocean system, and the long-term warming trend. All signs point toward a warmer than normal end to the year, especially in Texas. Likewise, drier than normal conditions are likely throughout the region, particularly in Texas, Oklahoma, Louisiana, and southern Mississippi.

These seasonal outlooks represent a tilting of the odds. A particularly warm October-December is considerably more likely than normal, while a particularly cool October-December is only about half as likely as normal. These are also broad-brush predictions; the precipitation at any particular location is considerably more random.

## ENSO Outlook

La Niña conditions are expected to persist at least into winter, making this the third consecutive La Niña winter. By spring, neutral conditions are likely to return. An early end to La Niña would improve the chances of a wetter late winter and spring.

## Southern Partners

NOAA/NWS Climate Prediction Center  
([cpc.ncep.noaa.gov](http://cpc.ncep.noaa.gov))

NOAA National Centers for Coastal Ocean Science  
([coastalscience.noaa.gov](http://coastalscience.noaa.gov))

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

NOAA/NESDIS National Centers for Environmental Information  
([ncei.noaa.gov](http://ncei.noaa.gov))

NOAA/NWS Southern Region  
([weather.gov/srh](http://weather.gov/srh))

Southern Climate Impacts Planning Program  
([southernclimate.org](http://southernclimate.org))

Southern Regional Climate Center  
([srcc.tamu.edu](http://srcc.tamu.edu))