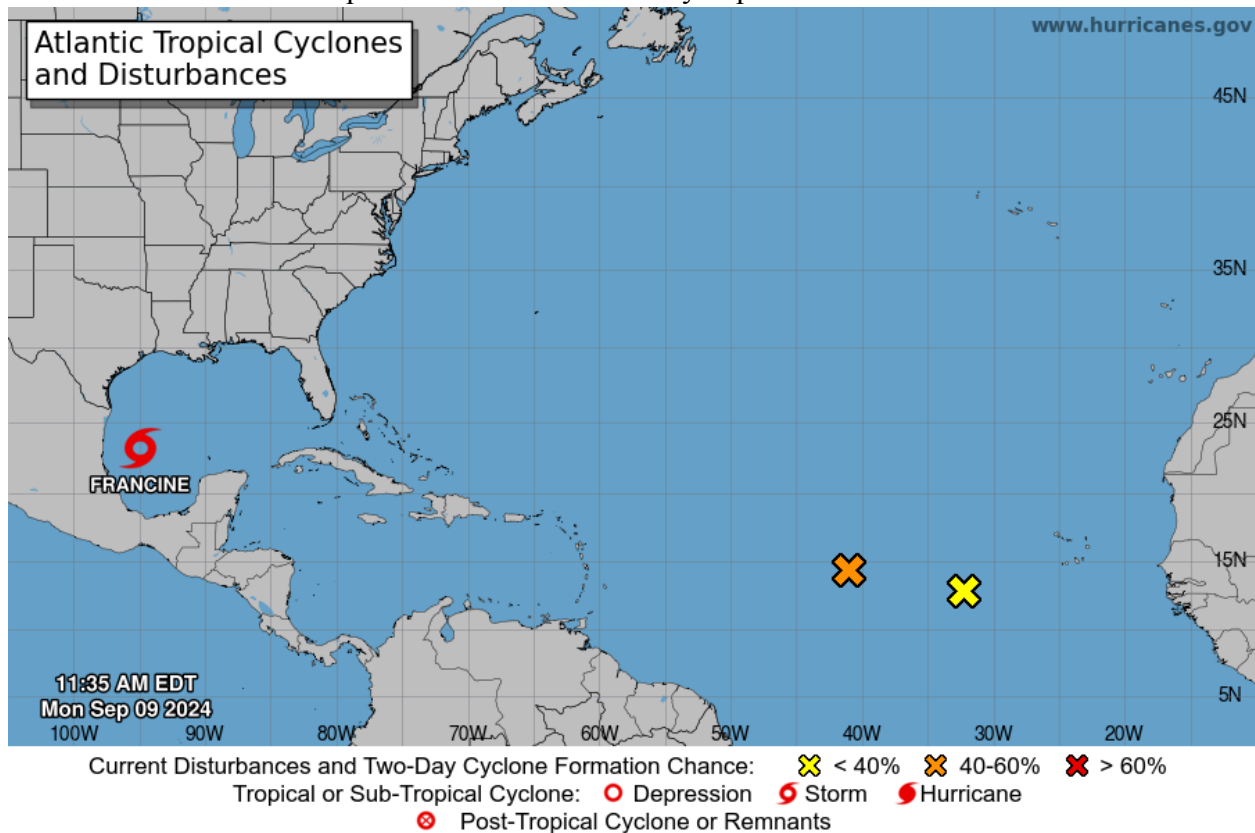


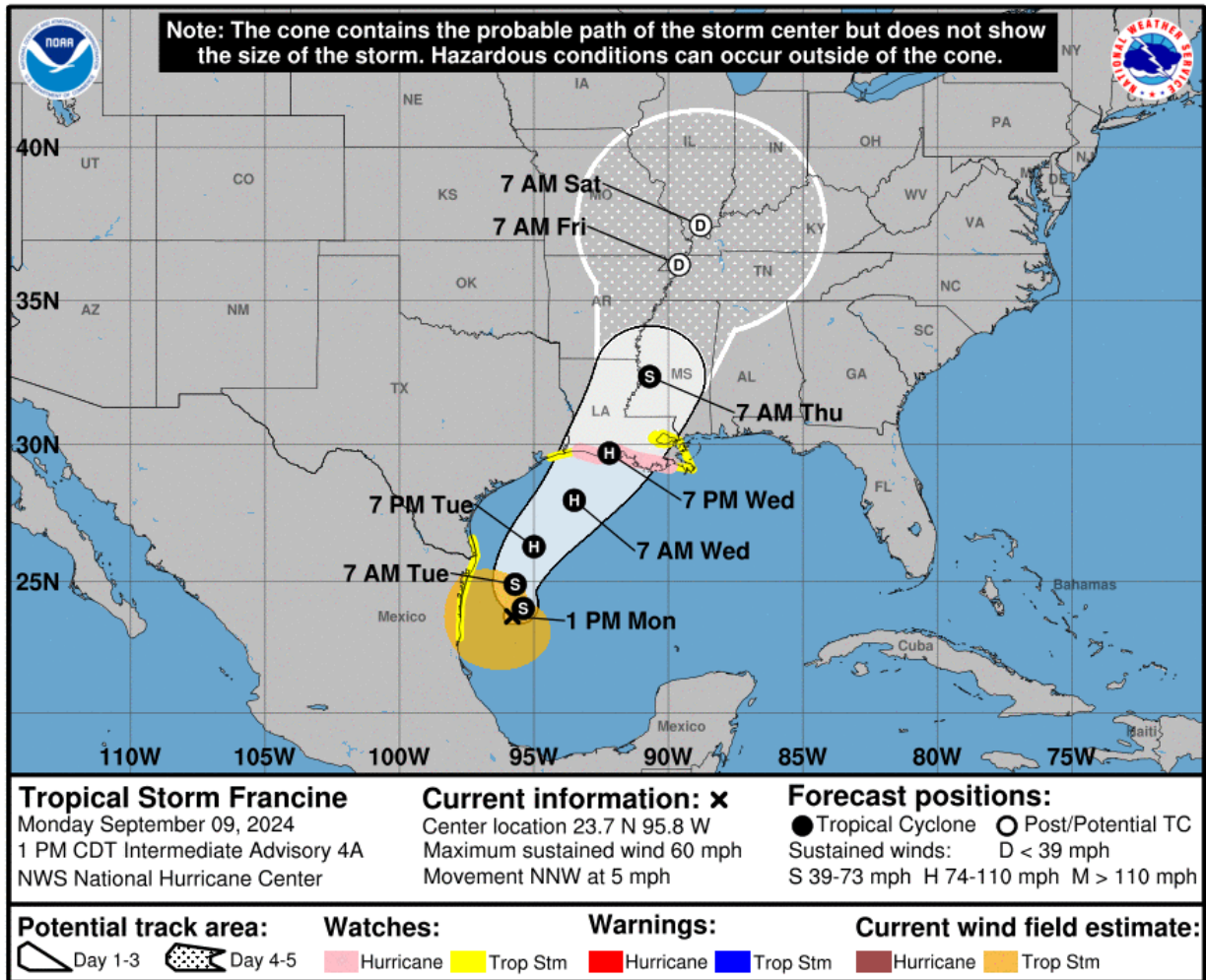
Weekly Climate Summary: 9/1/2024-9/7/2024

I. Climate in the News:

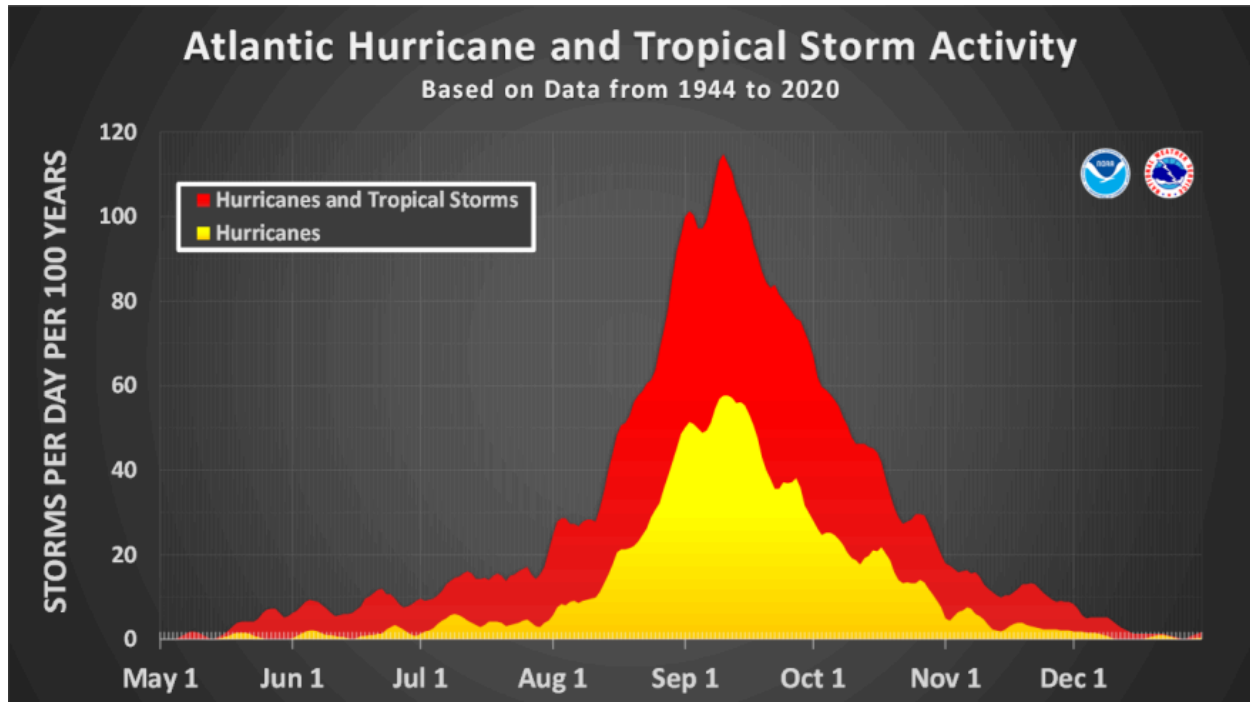
The summer and into early fall is typically when Texas experiences its quietest weather, where there is typically not much to talk about other than heat and drought. For the upcoming week, we turn to the tropics to see what our future holds in the weather department. Tropical storm Francine has formed in the Gulf of Mexico, and has its sights set on the United States. As of this writing on September 9, 2024, the storm has maximum sustained winds of 60 mph, and is drifting to the North at about 5 mph. The current forecast has the center of Francine making landfall in the middle Louisiana coast, however, interests near and along the Texas Coast should keep an eye on this system as impacts from the storm could extend well away from the center. With the current track, parts of the Texas coast and far Southeast Texas could receive gusty winds and periodic heavy rain from any outer rainbands of Francine. Deviations in the track could result in different impacts than what is currently expected.



Map showing all the tropical cyclones (red symbol) and disturbances (marked by X). Tropical storm Francine has developed in the Gulf of Mexico and is slowly moving toward the mainland of the U.S. Map courtesy of the National Hurricane Center.



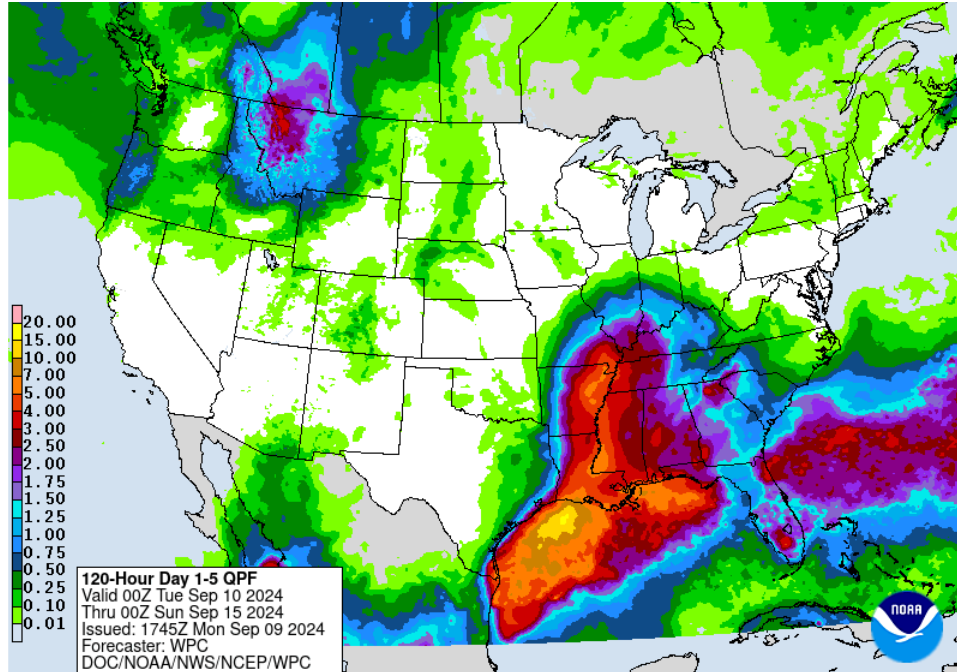
Map showing the forecast track of Tropical storm Francine. Francine is expected to strengthen to a category 1 hurricane with maximum sustained winds of 85 mph as it makes landfall along the Louisiana coast. The cone shows the uncertainty of the track, and the storm could reasonably be anywhere within the cone at the given times. The cone does not factor in the size of the storm, so hazardous conditions can occur outside the cone. Map courtesy of the National Hurricane Center.



Map showing the frequency of tropical cyclone activity. We are essentially in the peak of hurricane season, so the presence of a tropical system in the Gulf of Mexico is not entirely unexpected. Graph courtesy of NOAA's National Weather Service.

II. Weather Synopsis:

The presence of Tropical Storm Francine will serve as an influence to the weather in East Texas, however areas west of the I-35 corridor will likely miss out on any meaningful impacts from the storm. Tropical cyclone forecast tracks typically have some degree of uncertainty due to the behavior of large scale weather systems that can influence the path of the storm. Unlike what happened with Hurricane Beryl, there seems to be a high agreement between different models on what path Francine will take. Locations that miss out on the impacts from Francine will likely return to hot and dry conditions, though to a lesser extent than was seen in weeks prior.



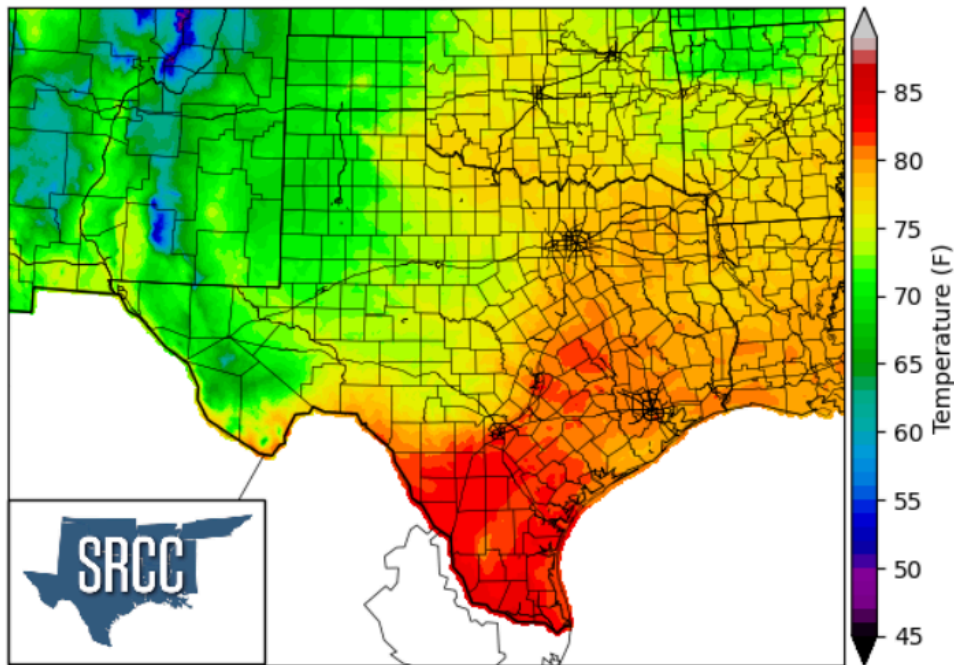
Map showing the forecast precipitation accumulation for the next seven days. Areas not impacted by Tropical Storm Francine will likely remain dry for the upcoming week. It is worth mentioning that the axis of heavy rain is subject to change with any modifications made to Francine's forecast track. Map courtesy of the Weather Prediction Center.

III. Temperature:

The beginning of September was essentially marked in a very remarkable way when it came to temperature in Texas. Early in the week, temperatures were held to below normal values by scattered to numerous showers and thunderstorms across the state. The thunderstorm activity mainly served to cool down afternoon highs to below normal values while keeping nighttime lows near normal. As the week concluded, a notable cold front slid in from the north, ushering air that is a preview to autumn conditions. Dry air took hold for much of the state leading to very cool nighttime temperatures. Overall, most of Texas experienced temperatures between 2 and 4°F below average, with select locations across the Trans Pecos regions seeing departures approaching 10°F below normal.

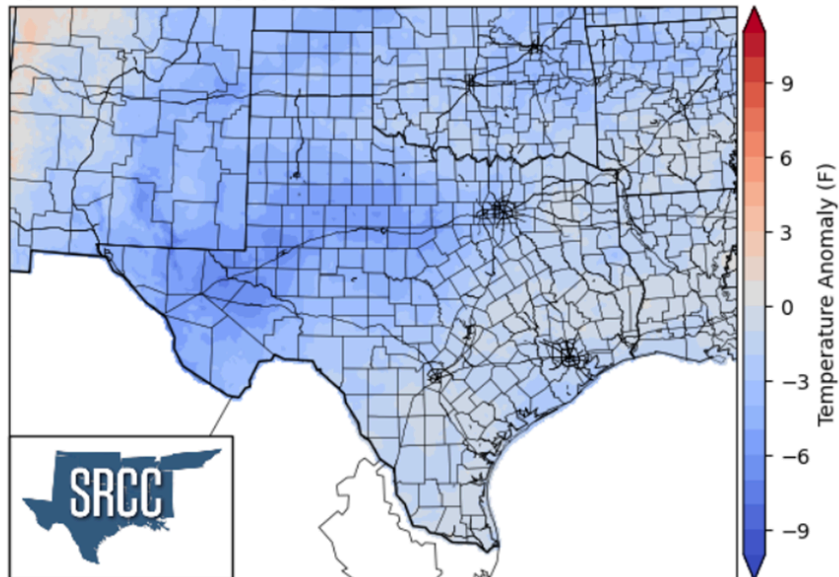
- The Guadalupe Peak Texas RAWS station in Culberson County saw the lowest weekly average at **54.6°F**
- The average temperature for Texas stations was **78.3°F** (-4.7°F from last week)
- The McAllen Miller International Airport in Hidalgo County saw the highest weekly average at **86.3°F**

Average Temperature (F) September 1-7 2024



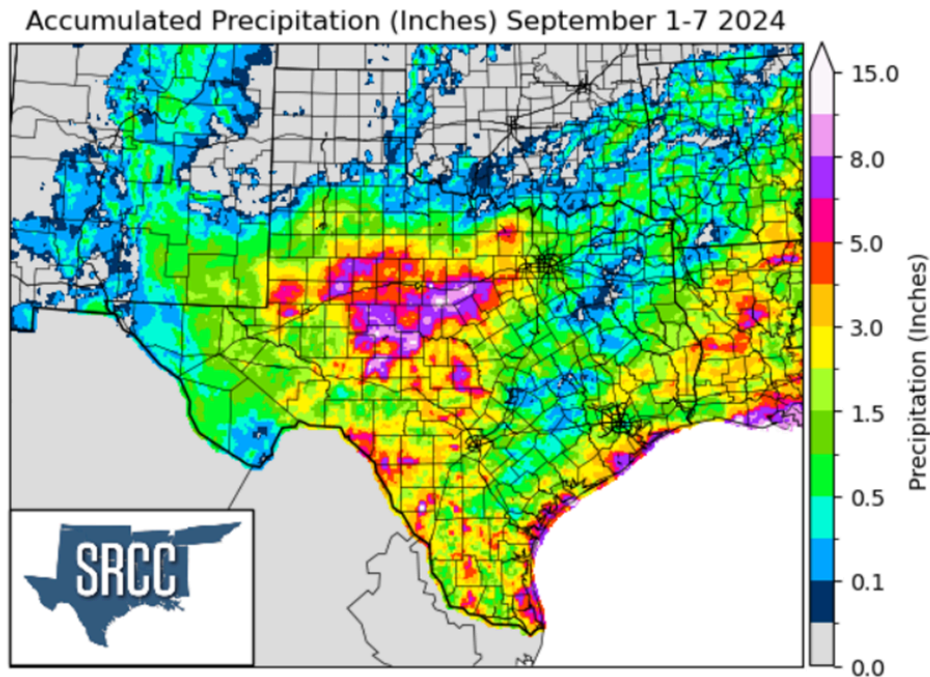
Map showing the average temperature across the state (taking into account both highs and lows). The scale has been adjusted so that the cooler temperatures typically featured in the fall show up more appropriately. This leads to the map having more yellow and red than last week's map in August (summer edition) even though conditions were much cooler overall this week.

Mean Temperature Anomaly (F) September 1-7 2024 vs 1991-2020 Normals

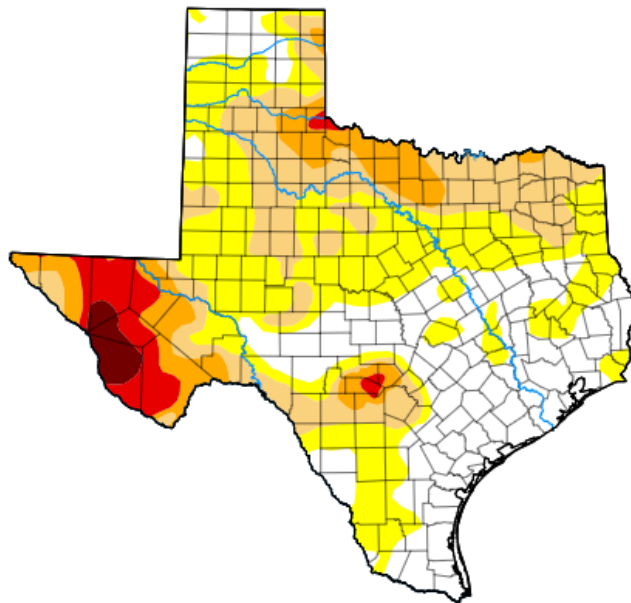


IV. Precipitation

An active pattern throughout the week led to some rather impressive precipitation totals. A stalled frontal boundary early in the week served as a focus for storm initiation. The light winds through the depth of the atmosphere led to slow thunderstorm motion, allowing areas that saw thunderstorms to accumulate significant rainfall totals. By the end of the week, a cold front ushered drier air into the state, bringing an end to the rainy pattern that the first few days of September brought us



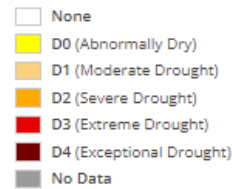
The current drought map shows some improvement from last week's map thanks to the rainy transitional period between August and September. Much of the improvement was seen in West Central Texas where the greatest precipitation totals fell early in the week. The drought map includes the precipitation recorded up until Tuesday, September 3, 2024, meaning that it takes into account the bulk of what fell this week. This implies that next week's map should not exhibit any major changes due to unaccounted rainfall for the week of September 1-7. With the drier weather expected the week of September 8-14, massive drought improvements are unlikely to continue, except for locations with some of the heavier rain September 1-7 as the landscape responds to the plentiful moisture.



Map released: Thurs. September 5, 2024

Data valid: September 3, 2024 at 8 a.m. EDT

Intensity



Authors

United States and Puerto Rico Author(s):

[Lindsay Johnson](#), National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s):

[Richard Tinker](#), NOAA/NWS/NCEP/CPC

V. Statewide extremes

- The hottest recorded temperature of the week was **103°F** at the Falcon Dam Co-op site in Starr County on September 3, 2024
- The coldest recorded temperature of the week was **47°F** at the Kent 8SE Co-op site in Jeff Davis County on September 4, 2024, the coldest temperature recorded in Texas since May 31, 2024 (47°F in Pleasanton, Tx)
- The most precipitation recorded in the week of September 1-7, 2024 was **9.81"** at the Surfside Beach 1.2 SW CoCoRahs site in Galveston County
- The rainiest day at any site across the State of Texas was September 3, 2024 where **8.14"** of rain was reported at the Cross Plains 6.5 WNW CoCoRahs Site in Callahan County