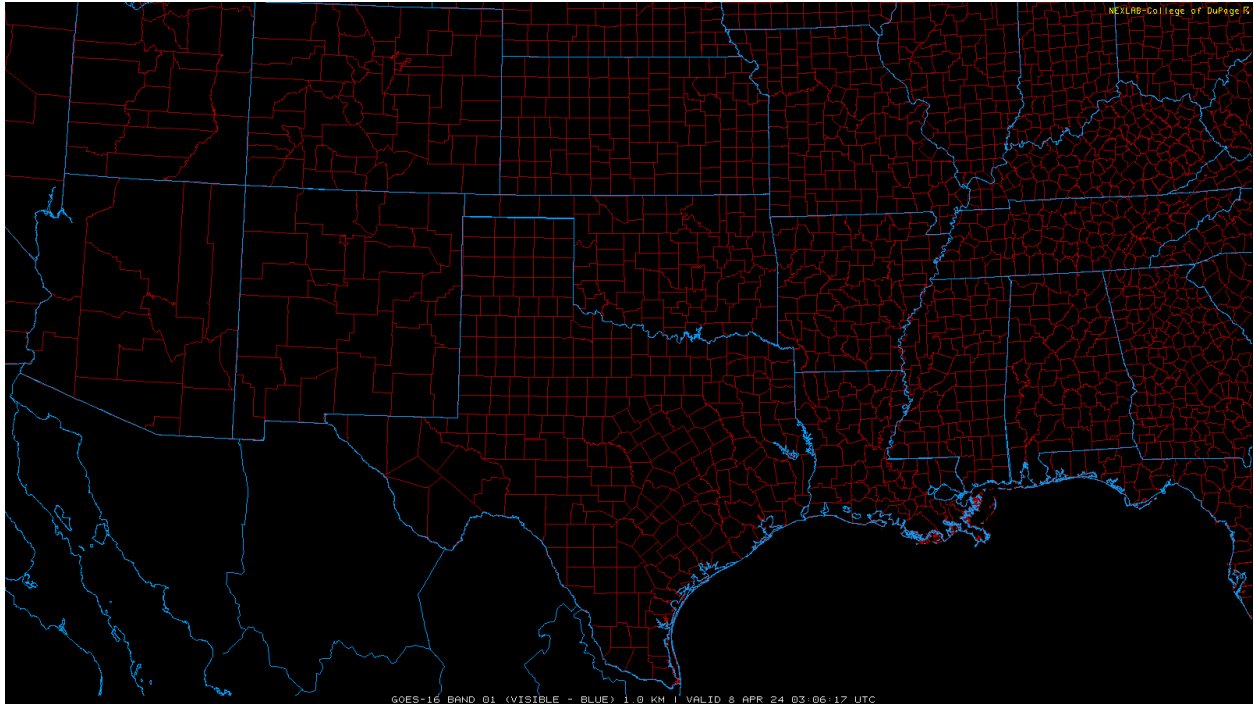


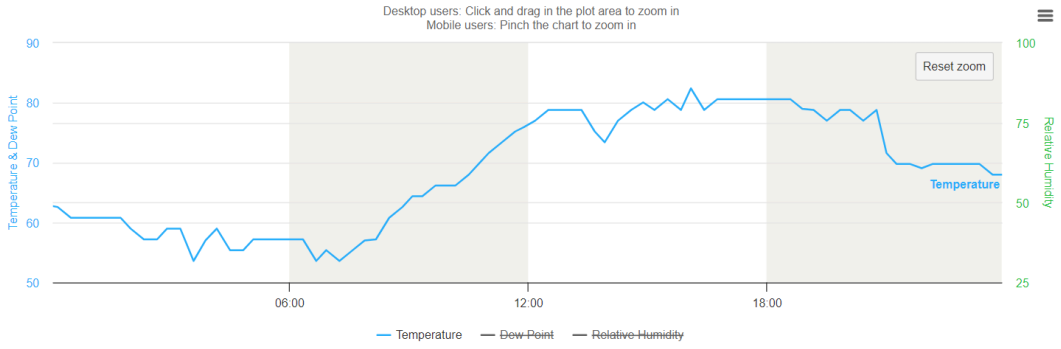
Weekly Climate Summary: 4/7/2024-4/13/2024

Climate in the News:

The long awaited total solar eclipse 2024 has finally come to pass! This astronomical spectacle was witnessed by millions of people across the State. Tension was high as models hinted at potential thick cloud cover across much of Texas during the event. For most in Northern and Central Texas, clouds thinned enough to allow those in the path of totality to witness this rarer than once in a lifetime event. We hope you enjoyed this spectacle in its full glory!



*Visible satellite loop from 03:36 to 19:36Z (10:36 pm to 2:36 pm Central Daylight Time) showing the moon's shadow blazing across the Earth's surface at speeds over 1,000 mph!
Courtesy: College of DuPage*



Weather conditions for:
 Dallas/Fort Worth International Airport, TX (ASOS/AWOS - FWD)
 Elev: 541.0 ft; Lat/Lon: 32.89743/-97.02196

Apr 8, 2:30 pm	79	64	61	SE	8	10.00	CLR	29.26	29.84	
Apr 8, 2:25 pm	77	64	65	SSE	6	10.00	CLR	29.26	29.84	
Apr 8, 2:20 pm	77	64	65	SSE	8	10.00	CLR	29.26	29.84	
Apr 8, 2:15 pm	77	64	65	SSE	7	10.00	CLR	29.26	29.84	
Apr 8, 2:10 pm	75	64	69	SSE	6	10.00	FEW035	29.26	29.84	
Apr 8, 2:05 pm	75	64	69	SSE	7	10.00	SCT035	29.27	29.85	
Apr 8, 2:00 pm	73	64	74	SSE	8	10.00	SCT035	29.27	29.85	
Apr 8, 1:55 pm	73	64	74	SSE	7	10.00	SCT035	29.27	29.85	
Apr 8, 1:53 pm	75	63	66	SSE	8	10.00	SCT035 BKN210	1010.40	29.28	29.86
Apr 8, 1:50 pm	75	63	65	SSE	7	10.00	SCT035	29.28	29.86	
Apr 8, 1:45 pm	75	63	65	SSE	8	10.00	BKN035	29.28	29.86	
Apr 8, 1:40 pm	75	64	69	SSE	10	10.00	BKN035	29.28	29.86	
Apr 8, 1:35 pm	75	63	65	SSE	7	10.00	SCT035	29.28	29.86	
Apr 8, 1:30 pm	77	63	61	SSE	6	10.00	BKN035	29.29	29.87	
Apr 8, 1:25 pm	79	63	58	SSW	9	10.00	BKN035	29.29	29.87	
Apr 8, 1:20 pm	79	63	58	SSW	12	10.00	SCT035	29.29	29.87	

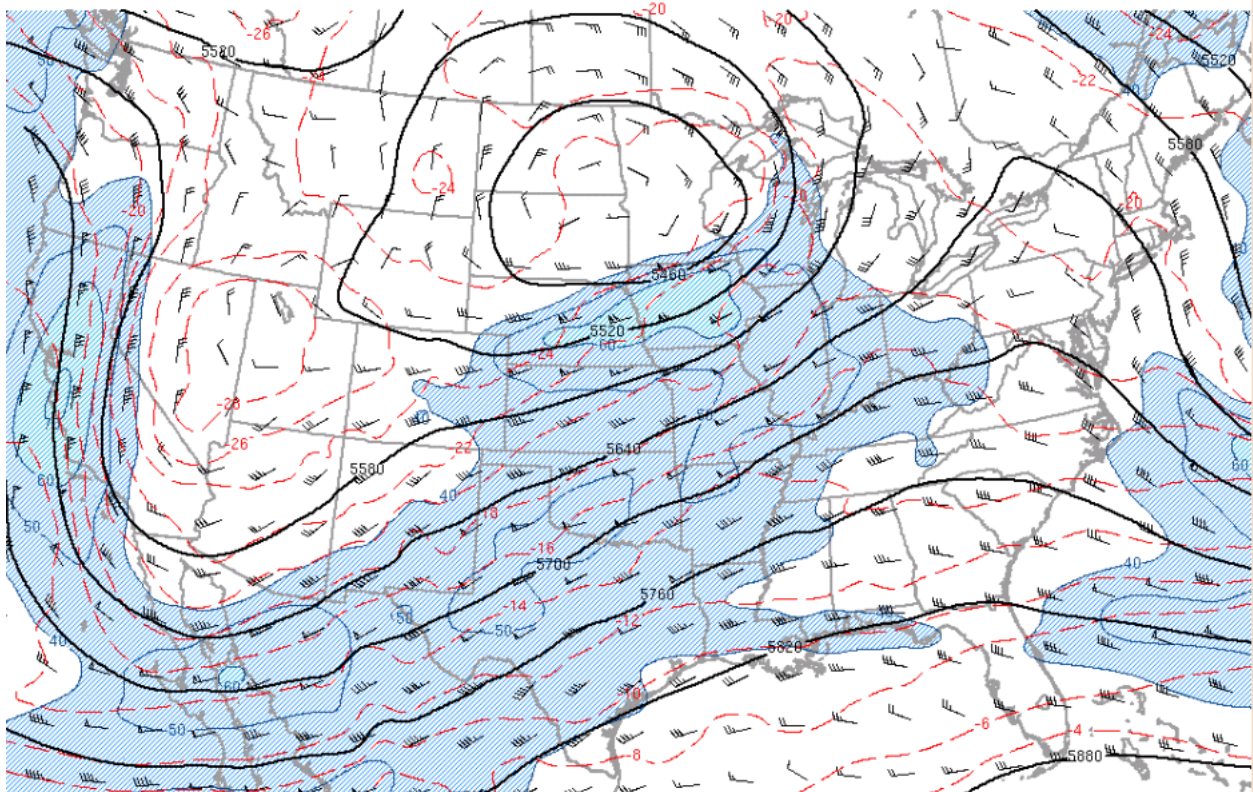
Multiple views of the eclipse and its impacts on surface temperature. At top left, a stunning image of the 'diamond ring' captured by Texas A&M meteorology student Priscilla Marin. At top right is an image captured with a telescope courtesy of Citizen CATE team #8. At center left, an image captured using a telescope showing polarization of light from the sun's corona from Citizen CATE team #7. At center right, Texas A&M meteorology student Alonso Lopez recorded a temperature drop from 79°F to 73°F with an amateur weather station in Cumby, Tx during the duration of the eclipse. A reading of 80°F was noted, but not pictured, establishing a temperature drop of 7°F in the span of about one hour. The time on this weather station is not updated to daylight time. At bottom, A temperature graph for DFW airport for April 8, 2024. A notable dip in temperature can be seen between 1 and 2 pm local time. Beneath the graph, 5-minute observations for DFW airport are shown between 1:20 and 2:30 pm local time. The temperature falls from 79°F to 73°F, then rises back to 79°F in the span of 70 minutes.

Weather Synopsis: As the week commenced, folks had their mind on the solar eclipse of April 8, 2024, yet this day also presented a threat for severe weather. The 8th going onto the 9th was the defining severe weather episode for the week of April 7-13, 2024. This event wielded a double threat as the slow motion of thunderstorms enhanced a localized flooding threat on April 9. An axis of heavy rainfall totals set up oriented southwest to northeast from Bell and Falls Counties up to Panola and Shelby Counties. The departure of the storm system was marked by very gusty winds across North Texas on April 10, with reports of up between 40 and 55 mph noted in several locations.

NOAA/NWS/Storm Prediction Center

State Track Refresh

Mesoscale Analysis Data

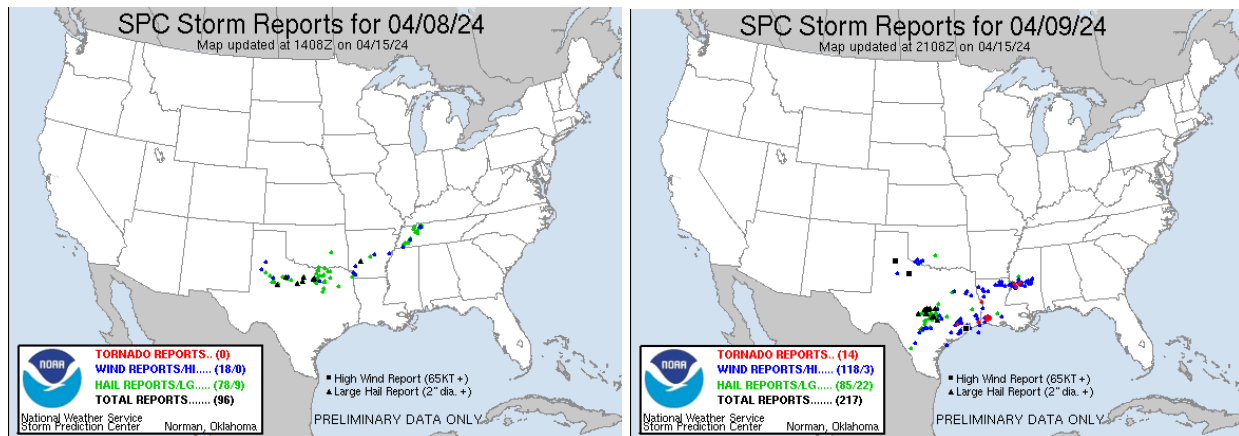


240408/1200V001 500mb height (m MSL, black), temp (C, red), and wind (kt, hatched >= 40 kt)

This map shows the upper level pattern in part responsible for the severe weather on April 8. It essentially shows winds and the height of pressure surfaces (which can be thought of as isobars) at about 18,000 feet above the ground. Areas to the east of a trough (large dip in the 'isobars') are typically favored for rising motion, which can aid in creating an environment suitable for thunderstorm development. Courtesy: SPC Mesoanalysis Archive.

Severe Weather: The severe weather episode of the week impacted Texas on April 8-9, 2024. This two day event saw 189 reports across Texas, with 124 hail reports, 63 wind reports, and 2 tornado reports. Broken down by day, April 8th and 9th are characterized by the following:

- ❖ April 8, 2024- Severe weather reports were mainly concentrated across the southern reaches of the Texas Panhandle, progressing eastward into North Texas. The day saw:
 - 51 hail reports with the largest reported hail diameter being 3.0” in Wise County
 - 8 wind reports with the highest measured gust being 69 mph in Garza County
 - 0 tornado reports
- ❖ April 9- Spotty extreme wind reports were noted in the Southeastern portion of the Texas Panhandle, with most of the significant concentration of severe weather shifting south into South Central and Southeast Texas. The day saw:
 - 73 hail reports with the largest reported diameter being 4.25” near Briggs, TX in Burnet County
 - 55 wind reports, with a peak measured gust to **88 mph** in Briscoe County
 - 2 tornado reports, including one EF1 tornado 5 miles SE of Katy, TX in Harris county



Map of storm reports from the Storm Prediction Center showing the significant severe weather outbreak of April 8-9, 2024. Nearly 200 reports were seen across the State of Texas, with many high end severe reports (Hail >2.00” and wind > 75 mph). An EF1 tornado also occurred near Katy, TX, tracing a damage path 1.5 miles in length. Peak winds were estimated at 90 mph with this tornado.



Path of EF-1 tornado that touched down in the Katy area on April 10, 2024. (Copyright 2024 by KPRC Click2Houston - All rights reserved.)

The 1.5 mile path of the EF1 tornado in the Katy area as outlined by KPRC Chief Meteorologist Frank Billingsley.

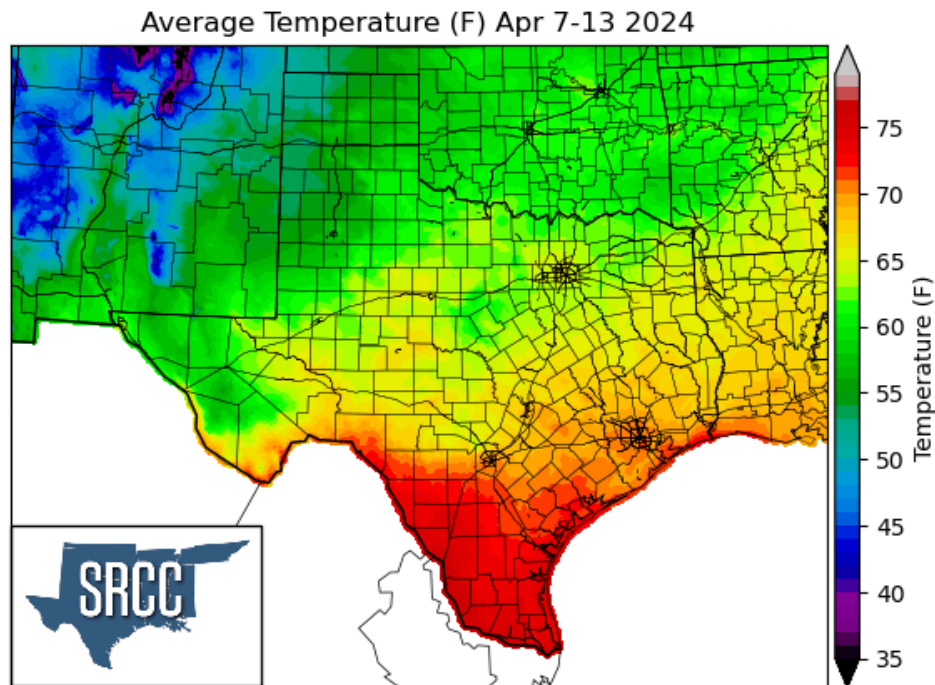


Damage to a large car repair shop in Katy from the EF1 tornado. Courtesy ABC13 Houston

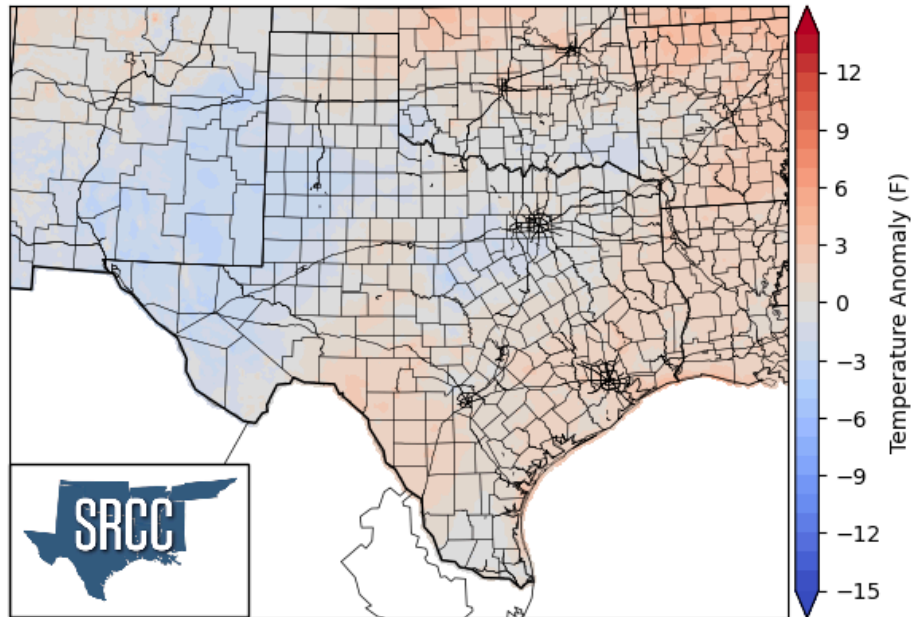
Temperature:

The week began with above normal temperatures for the State, cooling to below normal values with the departure of the system responsible for the early week rain and storms. Return flow from the south quickly pulled temperatures to near and above normal values by the end of the week. The State of Texas saw a mixture of departures from slightly below to slightly above normal values. Average weekly temperatures across the state generally ranged from 50°F to 75°F, with the hottest stations above the upper limit. The statewide extremes in average weekly temperature are as follows:

- The Muleshoe National Wildlife Refuge in Bailey County and the Friona co-op site saw the lowest weekly average at 51.7°F
- The Laredo International Airport in Webb County saw the highest weekly average at 77.7°F



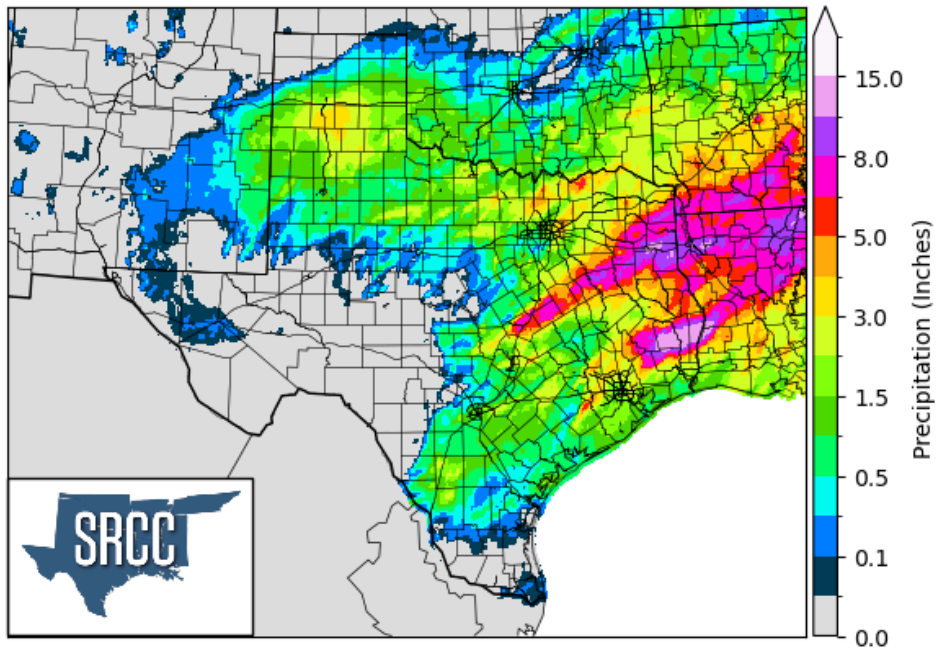
Mean Temp Anomaly (F) Apr 7-13 2024 vs 1991-2020 Normals



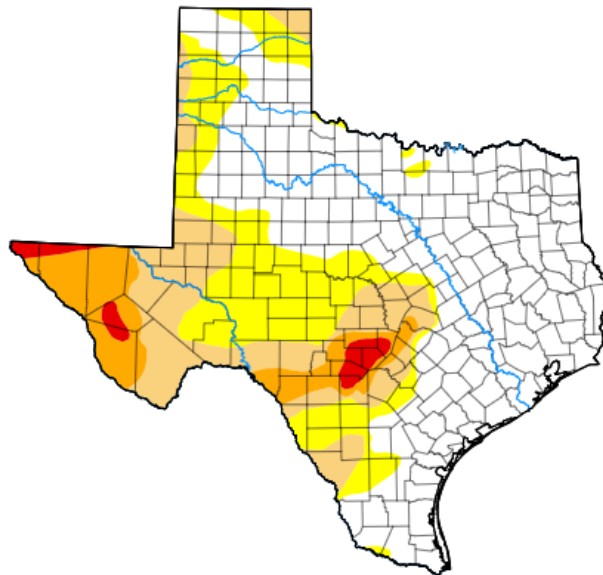
Precipitation:

Rainfall across Texas occurred in conjunction with the severe weather event that ravaged a large swath of the State. Unlike the previous few weeks, the week of April 7-13, 2024 saw significant precipitation accumulations across parts of the State, particularly where a disorganized line of thunderstorms stalled across Central and East Texas. Unfortunately the bulk of the heaviest precipitation fell across areas not experiencing drought, so no improvements are likely to be noted in the U.S Drought Monitor due to this event.

Accumulated Precipitation (Inches) Apr 7-13 2024



Texas



Map released: Thurs. April 11, 2024

Data valid: April 9, 2024 at 8 a.m. EDT

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors

United States and Puerto Rico Author(s):

[Brad Pugh](#), NOAA/CPC

Pacific Islands and Virgin Islands Author(s):

[Anthony Artusa](#), NOAA/NWS/NCEP/CPC

Statewide extremes:

-The hottest recorded temperature of the week was 100°F at the at the Laredo International Airport in Webb County and the Faith Ranch Airport in Dimmit County on April 9, 2024

-The coldest recorded temperature of the week was 27°F at the Bravo Co-op station, in Bailey County on April 10, 2024

-The most precipitation recorded in the week of April 7-13, 2024 was *13.11*" at the Town Bluff Dam Co-op site in Tyler County.

-6 stations broke or tied a record high in the week of April 7-13, 2024.

-6 stations broke or tied record lows for the same week.