

# Which type of clouds make it harder to see the April 8 solar eclipse?

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With less than a week away from the solar eclipse, weather forecasters are keeping an eye on the cloud cover, which can make or break a person's chance to see the event.

Different types of clouds have different effects on a person's viewing experience. When the moon completely covers the sun April 8, it will be the first total eclipse in North Texas since 1878.

Generally, clouds are divided based by their height: low-level, mid-level and high-level.

## **What are stratus clouds?**

The type of clouds does depend on the system, which is the movement of warm and cold air. But in the springtime, there's a good chance the Dallas-Fort Worth area gets many stratus clouds, said Monique Sellers, a meteorologist with the National Weather Service in Fort Worth. They are low-level cloud layers that sometimes appear as ragged sheets, per the National Oceanic and Atmospheric Administration.

Multiple layers of clouds are possible in the area, she said, but most times, lower cloud decks are observed locally. In North Texas, Sellers said, the altitude of the layers don't vary as much: lower clouds can vary anywhere from 1,500 feet to 6,000 feet in the air, mid-level clouds are anywhere between 6,500 to 23,000 feet up and high-level clouds are anything above that.

At each cloud level, the biggest thing that varies, Sellers says, is the water droplet size.

"As you get higher up, you're actually dealing with ice and not necessarily dealing with liquid water," Sellers said. "So, you get the ice filaments, they're actually thinner which is why the high clouds can appear almost like transparent... Whereas if you're lower, your droplet size is a little bit bigger."

Because of the larger water droplets at lower levels, she said it can

actually obscure one's ability to view things in the sky. Stratus clouds at the lowest layer are very difficult to see through because they appear as big sheets in the sky, making them one of the worst to appear the day of the eclipse.

## **What are cumulus clouds?**

The weather service has said on social media that it's possible if stratus clouds form, they can break up into cumulus clouds in the afternoon, which may allow for some viewability. NASA has listed online it expects totality to begin about 1:40 p.m. in Dallas and last about four minutes.

Sellers said cumulus clouds can be puffier and they'll appear as individual cells. In that instance, the hope is as the temperature rises during the day the cloud decks can break up, she said.

"It looks like the clouds are almost like melting away," she said. "They're starting to basically circulate themselves apart."

Lower clouds, such as stratus clouds, are usually the ones that obscure everything in the sky, she said. It's still possible to have a thicker medium or high cloud deck, but often she said high clouds in Dallas-Fort Worth are pretty thin and some sunshine filters through them.

## **What are cirrus clouds?**

Cirrus clouds are composed of ice crystals and appear as patches or narrow bands, according to the NOAA.

The forecast for April 8 is not yet finalized. Sellers said the event falls between two storm systems and "the timing of how that works out is really going to dictate what we see on eclipse day or not."

The weather service forecasts a chance for a system that will move through late Saturday and Sunday—and that could generate not only clouds but some rain.

"We might squeak out on Monday where there's kind of a front that goes through our area and dries some of the layers out a little bit," Sellers said. "We might still have some high clouds over the area and maybe even some middle clouds, but it may push the low clouds closer to the coast.

"And if it does that, we can still see the eclipse through the high clouds."

Still, the forecast has been changing, she said, and plenty of things can change as it gets closer to Monday.

"We're just trying to squeeze in the eclipse real quick," Sellers said.

According to Sellers, if there's any [cloud cover](#) on the celestial event, the best case would be some high [cirrus clouds](#).

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