FOR MORE INFORMATION:
missouri.edu/eclipse

THROUGH THE EYES OF A SCIENTIST

How will the eclipse change the weather?

NASA will broadcast the total solar eclipse live from seven sites around the United States in its path. Eric Aldrich will be the meteorologist covering the eclipse as it passes through Missouri from NASA’s site in Jefferson City.

Dr. Janet Kavandi, an astronaut and director of NASA’s Glenn Research Center in Cleveland, Ohio, will be there, too, explaining what we are seeing. Dr. Kavandi was born in Springfield, Missouri, and got a Master of Science degree in chemistry from the Missouri University of Science and Technology in Rolla, Missouri.

Studying the weather during the eclipse

We will report how the eclipse is changing weather across the state by measuring variables like:

- Wind speed
- Wind direction
- Temperature
- Barometric pressure
- Humidity

We’ll get to see how the weather changes in Columbia during totality, that period when the moon covers the sun and we’re in darkness. We’ll compare those changes to weather in other areas like Springfield, Missouri, that are outside the path of the total eclipse.

Astronomical event impacts weather

To watch these variables change in a short period of time is really neat because an astronomical event is causing these changes rather than a meteorological, or weather, event here on earth.

When a cold front comes through and the temperature drops 10 degrees in a short time, that’s a weather event. On Aug. 21, the eclipse could cause the temperature to drop. That will happen because of an event way out in space. That’s part of the research — understanding why and how these changes happen.

What questions do you have about the eclipse?

Here are a few of mine to get you started:

- What would happen to a thunderstorm during an eclipse?
- What are the birds going to do? The insects? Will they think it’s nighttime?
- Are the street lights going to come on?
- Are possums going to come out? If they do, will they scurry back into their hiding places when the sun comes back out?

We’re all hoping for a nice sunny day on Aug. 21, but rain or shine, the eclipse will teach us a lot.

For most of us, this is a once-in-a-lifetime experience. We hope it will spark scientific interest that will grow.

Here’s the link to NASA’s live-stream feed:
https://www.nasa.gov/eclipselive