

GLOBE

# total ECLIPSE

temperature  
and clouds

## How cool is the Eclipse?

How Cool is the eclipse? You can be part of a national experiment to find out how cold the moon's shadow will get during the August 21 total solar eclipse by becoming a citizen scientist with GLOBE Observer.

### How do I get ready to participate in the experiment?

- Download the GLOBE Observer app (<https://observer.globe.gov/about/get-the-app>) and register to participate.
- Get a thermometer to be able to measure air temperature.

During a total solar eclipse, the Moon blocks light from the Sun. Without sunlight, temperatures drop and weather conditions, like cloudiness, may change. The experiment will measure just how an eclipse changes weather as the shadow moves across North America.

### What do I do during the eclipse?

- Set up or hang your thermometer in a shaded area.
- Wear eclipse glasses when looking at the Sun. (see: <https://eclipse2017.nasa.gov/safety>).
- Record temperature every 5 – 10 minutes in the GLOBE Observer Eclipse app, starting when the eclipse begins (first contact) and finishing when the Sun is completely uncovered (last contact). The app will tell you when to start and when to enter the temperature.
- Use the app to record and photograph clouds every 15 – 30 minutes or as you notice changes.

### Why should I participate?

Your data will improve our understanding of how solar energy is absorbed and reflected in Earth's atmosphere. We need the help of citizen scientists to collect data over the entire area experiencing the eclipse, whether total or partial. Lets find out how cold an eclipse can get!

[www.nasa.gov](http://www.nasa.gov)



# How the App Works

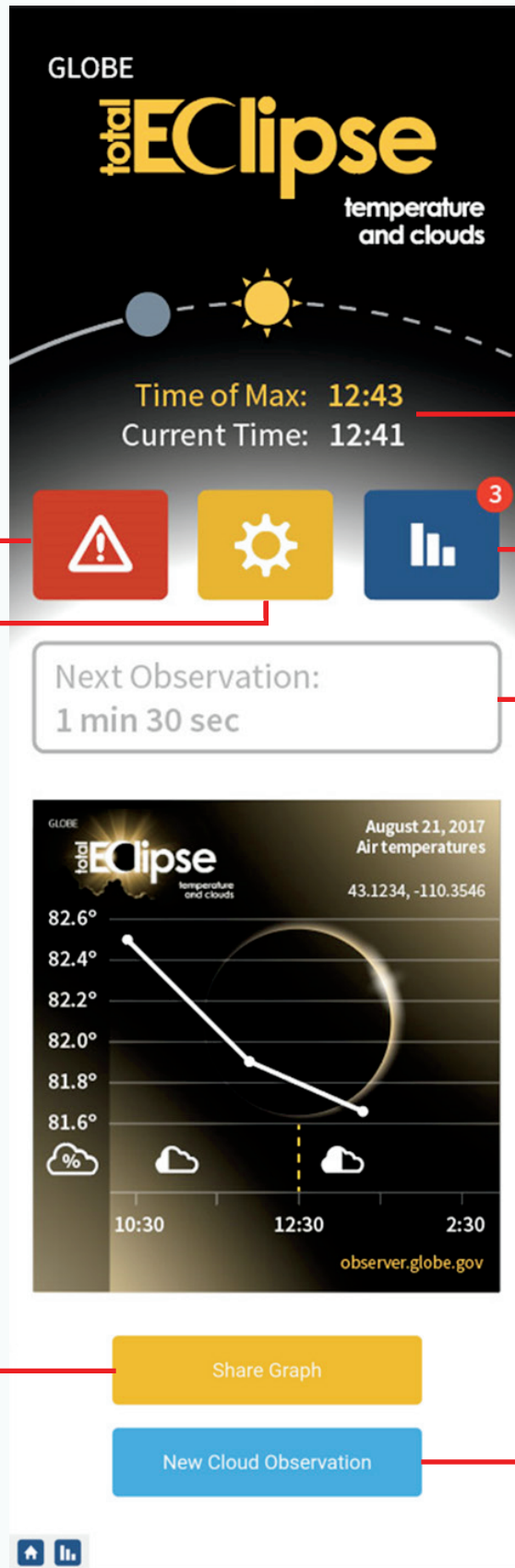
Starting August 18, 2017, you can begin familiarizing yourself with data entry and your thermometer. Taking a few measurements in advance will ensure that you are ready on August 21st and can provide useful data for the scientists.

Read further information, about how to make observations, including details about how to observe the eclipse safely.

Adjust your settings, including the type of thermometer you have, reporting in degrees (Celsius or Fahrenheit) and whether or not you want measurement alarms.



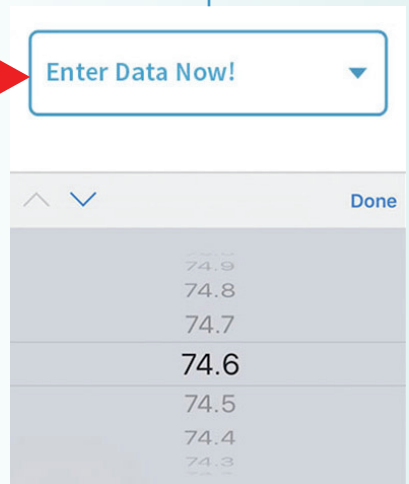
You can share your graph on social media to let others know you made eclipse observations and contributed to citizen science with GLOBE and NASA!



See the current time, as well as when the time of maximum eclipse will occur based on your location.

View, edit, or delete previous measurements.

See how long until your next observation. If you have turned on the Measurement Alarm, you will also get a notification. When it is time to enter data, click to get a scroll bar to report the current temperature



As you make temperature measurements, the app will periodically remind you to also observe the clouds, but you can make additional observations anytime, then return to the eclipse page.

For more information, visit: [observer.globe.gov/eclipse2017](http://observer.globe.gov/eclipse2017)