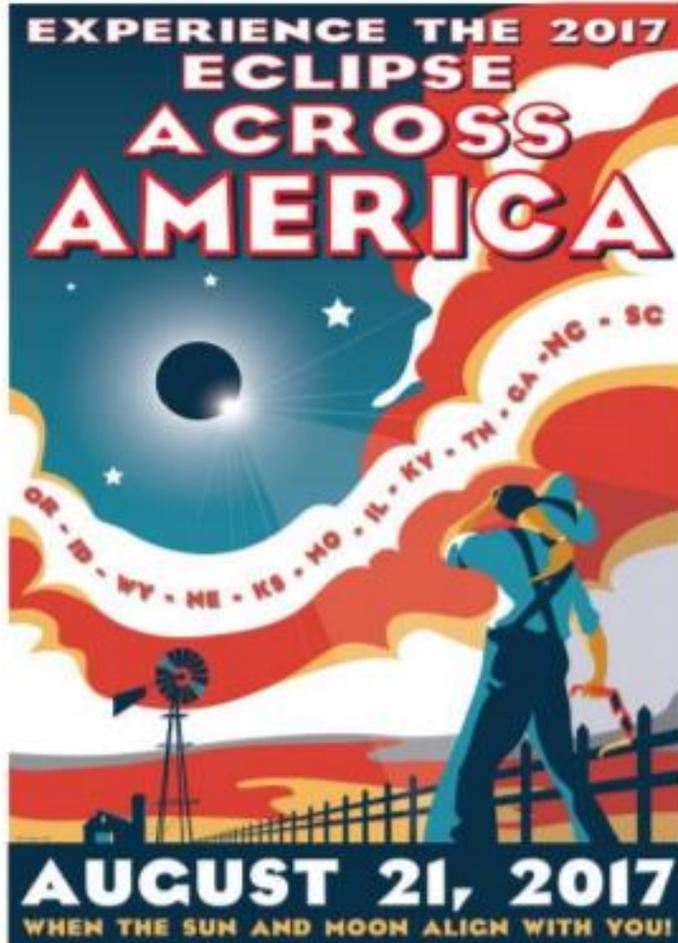


Great American Eclipse

August 21, 2017



Current Monday Forecast

- A chance of showers and thunderstorms after 7AM. Partly sunny, with a high near 94. Chance of precipitation is 30%. New rainfall amounts less than a tenth of an inch possible.



Safety Guidelines for Conroe ISD Student Eclipse Viewing



Safe viewing includes eclipse-viewing glasses.

- This partial solar eclipse is a rare opportunity and is significant.
- The principal has developed a plan for viewing the partial eclipse.
- Teachers and students can only participate if they have been properly trained and have access to the correct approved viewing solar lenses.
- There should be adequate supervision for the students allowed to view the eclipse. Supervision is not watching the eclipse with students but watching the students while they are viewing the eclipse to make sure that students are doing so properly.
- This means constant monitoring of students with zero tolerance for disregarding the viewing directions.



Safety Guidelines for Conroe ISD Student Eclipse Viewing

- The eclipse will begin at approximately **11:45 AM** and end at approximately **2:45 PM** with the peak coverage being at **1:17 PM** when approximately 67% of the sun will be eclipsed.
- There will not be a total eclipse in our area so and there will never be a safe time to view the eclipse without the proper eye equipment.



Safety Guidelines for Conroe ISD Student Eclipse Viewing

- Because we will experience a partial solar eclipse in our area, students will need to view the eclipse through eclipse glasses at all times.



- There is a risk of permanent damage to your eyes if you look at the Sun without proper protection.



Safety Guidelines for Conroe ISD Student Eclipse Viewing

- There is no set viewing time, but our recommendation is that you keep it fairly short by just allowing students to see the eclipse for a few minutes during the optimal viewing time. This way you can rotate more students through.
- There will be directions given about recess, athletic periods, or outside classes during the eclipse window to make sure that students are not attempting to view the eclipse without the proper solar glasses.
- There will be directions given to teachers if their classroom windows have a view of the Sun about covering their windows.



Safety Guidelines for Conroe ISD Student Eclipse Viewing

- Do not use sunglasses. They do not offer sufficient eye protection.



- It is not safe to view the partial eclipse through a camera, binoculars, or other optical devices that do not have the certified filters to block harmful rays.



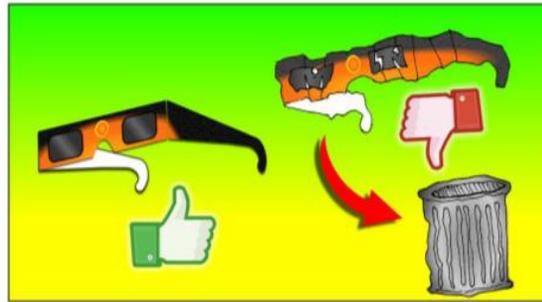
Safety Guidelines for Conroe ISD Student Eclipse Viewing

- Students should receive instructions prior to going to the viewing area.
- They should know how to use the eclipse glasses prior to going to the viewing area.
- Students should understand what to expect and about what part of the sky to look. The glasses are very dark and will not allow them to see much. If weather permits, they will see the Sun partially covered.



Safety Guidelines for Conroe ISD Student Eclipse Viewing

- Inspect the eclipse glasses before use. If the lens is damaged or creased in anyway, then cut up the eclipse glasses and destroy them.



- If the filters aren't scratched, punctured, or torn, you may reuse them indefinitely.



Safety Guidelines for Conroe ISD Student Eclipse Viewing

- It is a good idea to practice using them properly before the eclipse arrives to avoid wasting time during the eclipse itself.
- Eclipse glasses can be modified with elastic or tape around the back so they stay on young children's small faces.
- Students should not attempt to walk while wearing the eclipse glasses but should walk to the viewing area and not be looking at the Sun.



Safety Guidelines for Conroe ISD Student Eclipse Viewing

To use the eclipse glasses:

1. If students normally wear eyeglasses, they should keep them on. Tell them to put the eclipse glasses on over their glasses.
2. Once students are at the viewing location, they should turn their bodies toward the direction of the Sun. If the Sun is high overhead, it doesn't matter which direction they turn.
3. They will look down and then put their eclipse glasses on, making sure both earpieces are tucked behind their ears securely. If a student's hair is long, make sure it lays over the earpieces, not under them.
4. Once the eclipse glasses are secure, students may look up at the Sun. Keep in mind that they will not see anything until the Sun hits the "lens" portion of the glasses.
5. Tell students not to "peek" outside of their glasses if they do not see the Sun right away. Sometimes it takes a little practice, but they will find the Sun. Remind them they must not look at the Sun, even for a second, without the protection of the eclipse glasses.
6. Students should not stare continuously at the Sun. They should take breaks and give their eyes a rest.



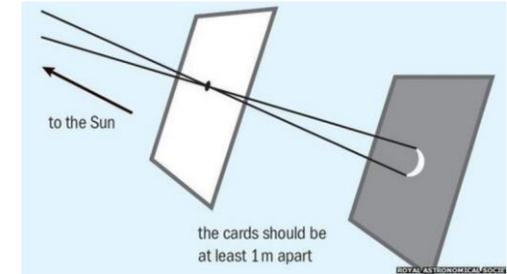
Safety Guidelines for Conroe ISD Student Eclipse Viewing

Safe alternate ways to view the Eclipse - Pinhole Projection

- Pinhole Camera-

- Requires only 2 pieces of white card stock, aluminum foil, tape, pin or paperclip
- Step-by-step directions at:

<https://www.jpl.nasa.gov/edu/learn/project/how-to-make-a-pinhole-camera/>



- Pinhole camera with your own hands.

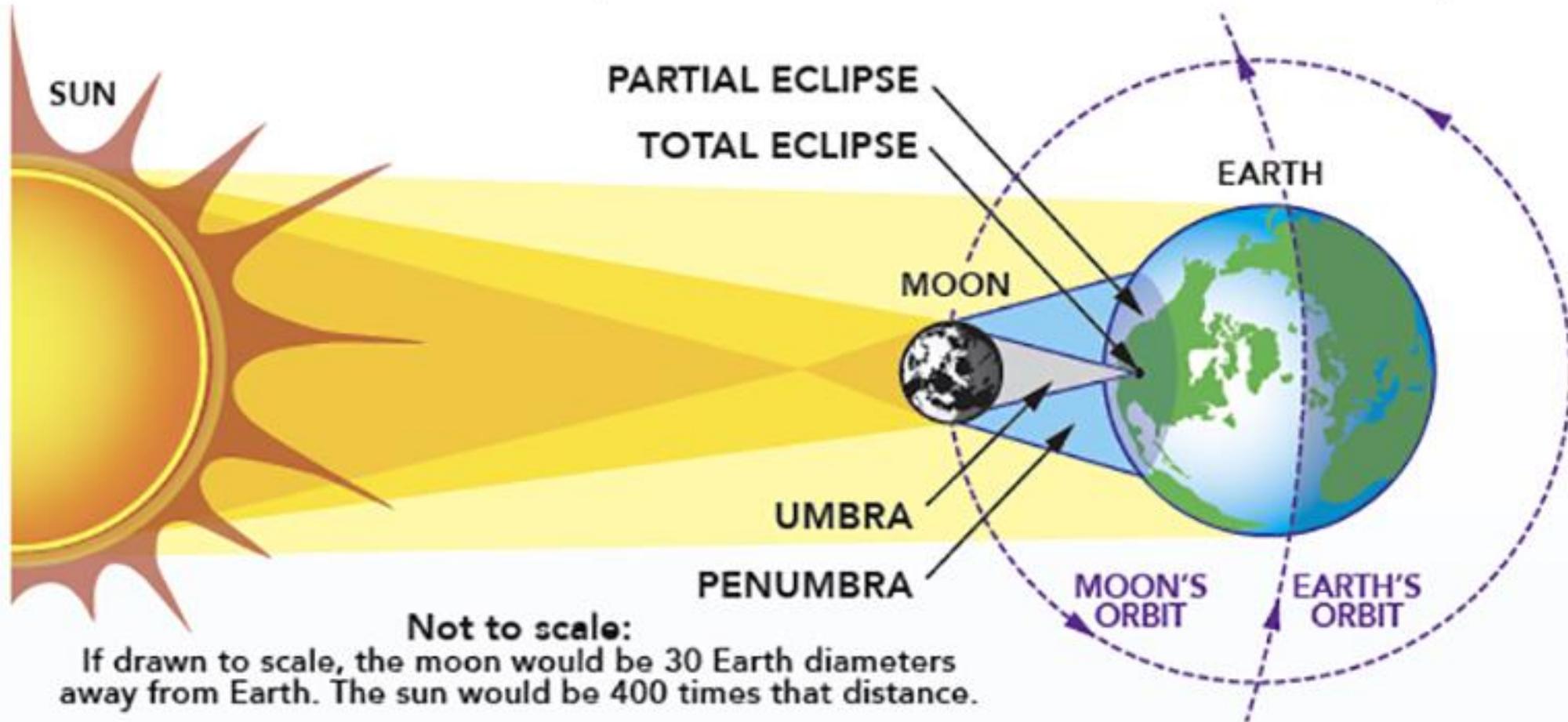
- Cross the outstretched, slightly open fingers of one hand over the outstretched, slightly open fingers of the other, creating a waffle pattern.
- With your back to the Sun, look at your hands' shadow on the ground. The little spaces between your fingers will project a grid of small images on the ground, showing the Sun as a crescent during the partial phases of the eclipse.



Eclipse Information

TOTAL SOLAR ECLIPSE: Monday • August 21, 2017

This will be the first total solar eclipse visible in the continental United States in 38 years.



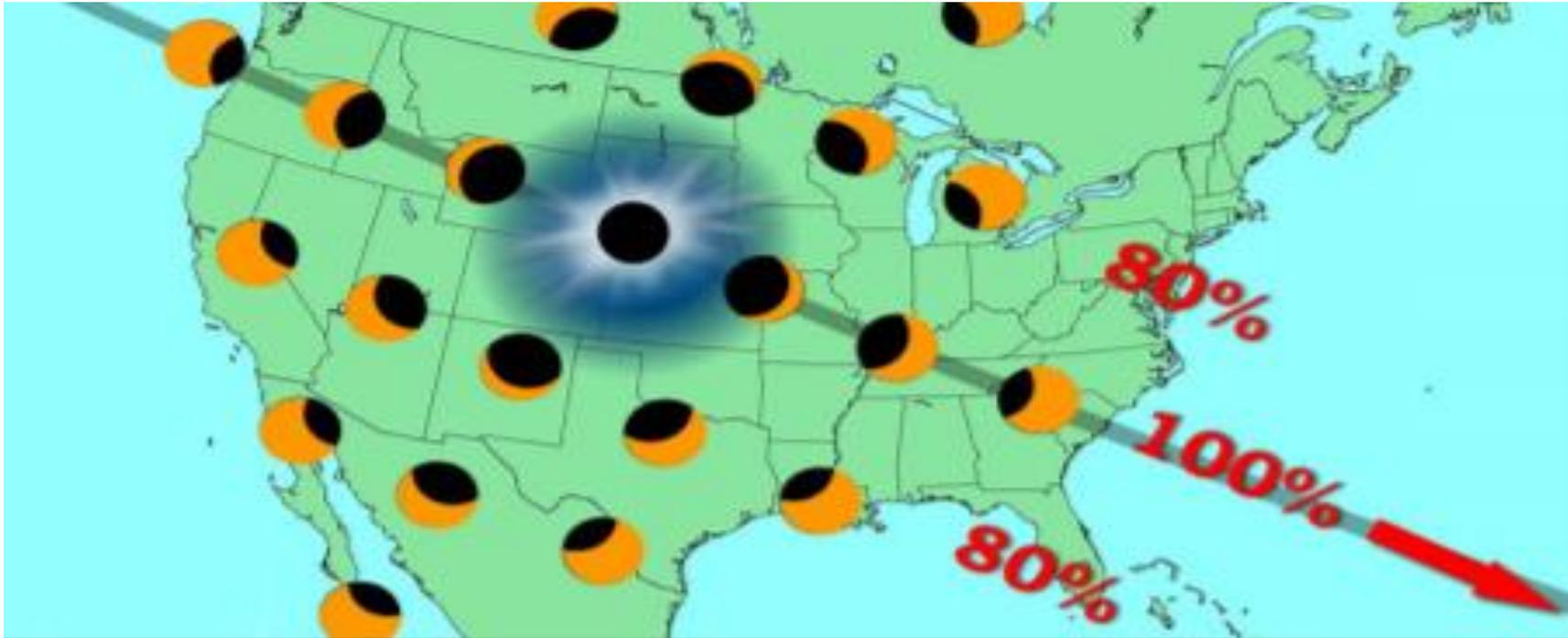
Eclipse Information

The path where the Moon will completely cover the Sun can be seen from Salem, Oregon to Charleston, South Carolina.



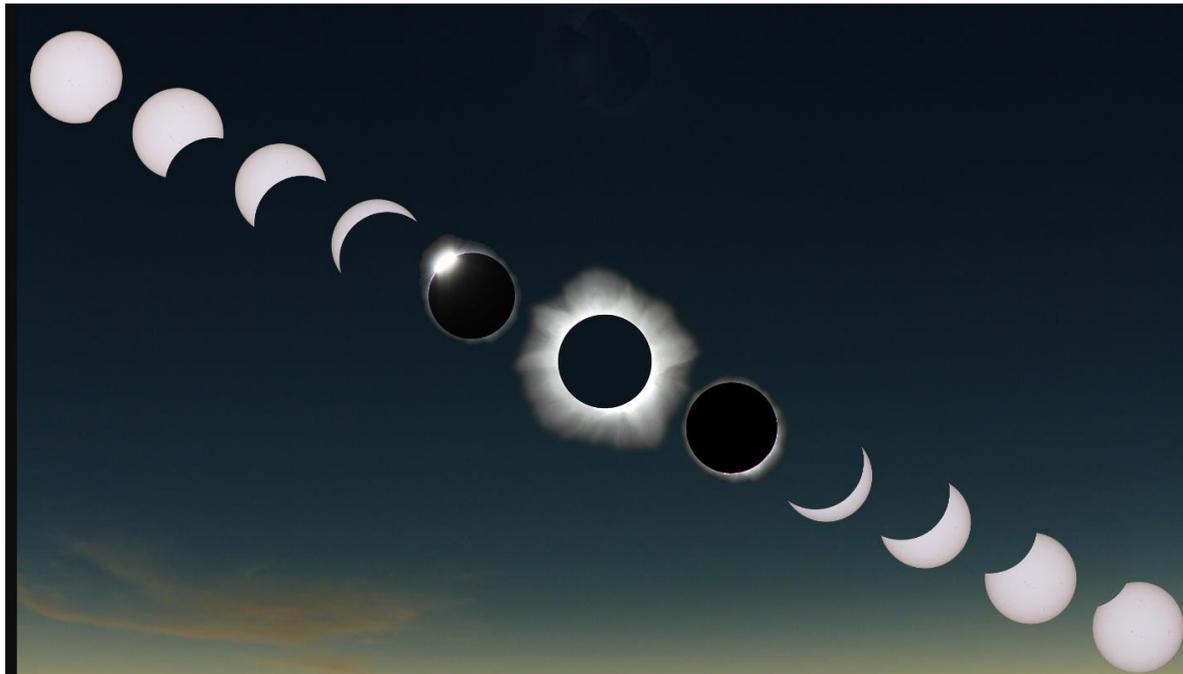
Eclipse Information

Eclipse Path- Total and Partial Viewing



Eclipse Information

We see the steps of what happens during an eclipse. First, the Moon just covers a little bit of the Sun. Then more and more of the Sun is covered. In the middle, we see the total eclipse, when the Moon exactly covers the Sun.



Eclipse Information

- A Solar Eclipse has four distinct “contacts” which define its stages.
 - First Contact (C-1) - point at which the Moon makes its first notch on the Sun
 - Second Contact (C-2) - point at which the Moon completely covers the Sun
 - Third Contact (C-3) - point at which the Sun appears again
 - Fourth Contact (C-4) - point at which the Moon no longer covers the Sun, marking the end of the eclipse



Eclipse Information

Before C1	* There is no eclipse *				You MUST use the Solar Viewer
C1	Partial phase begins at:	11:47			You MUST use the Solar Viewer
Mid-Eclipse	Occurs at:	1:17			You MUST use the Solar Viewer
C4	Partial phase ends at:	2:46			You MUST use the Solar Viewer
After C4	* There is no eclipse *				You MUST use the Solar Viewer

(Note that there are no C2 and C3 times listed, since the eclipse is not total at your location!)



Great American Eclipse

August 21, 2017

