



The Observer

October 2014 (#36)

Schedule of public programs on last page!

ECLIPSES! ECLIPSES! ECLIPSES!

Louisville area residents have seen one eclipse this month, and they are about to see another. The first, on October 8, was a lunar eclipse (more about it in a moment), in which the moon passed through the Earth's shadow. Coming up on October 23 is a more rare solar eclipse, in which the moon passes in front of the sun. This is a "partial" solar eclipse. The moon will only partially block the sun. However, the eclipse will be visible during sunset, which will be interesting, and will make the eclipse easier to view. On the following pages are illustrations of how the eclipse will progress.

If you decide to watch the eclipse, do not stare at the sun with your unaided eye. Doing so will damage your vision. Use a proper filter, such as a piece of shade 14 welder's glass, or the inexpensive but specially made "eclipse glasses" that you might find at a store that carries science-oriented products.

No, the sun is **not** more dangerous to look at during an eclipse than at any other time. However, people usually do not try to stare at the sun. They



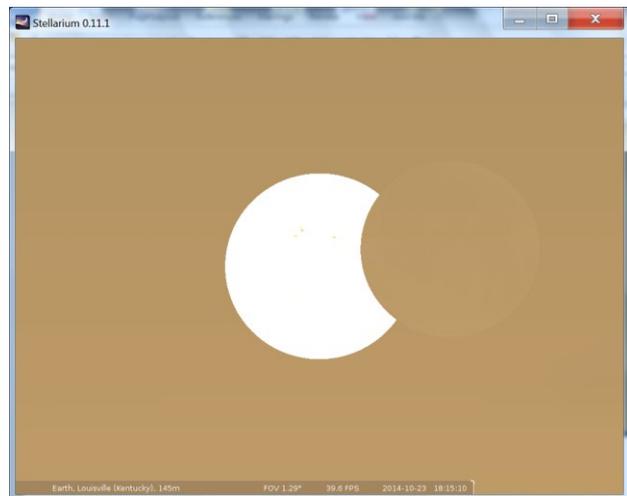
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might try to stare at the sun during an eclipse. Watching the sunset during the eclipse is no more dangerous than watching any other sunset.

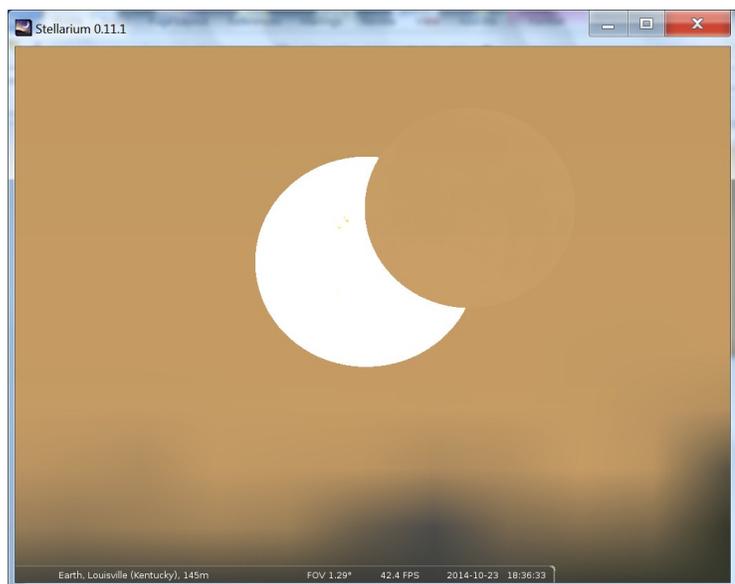
The October 23 eclipse will be very easy to see. It begins a little before sunset. At right is a simulation (created using the free Stellarium computer app) of what the sun will look like at 6:00 PM. At that time the moon will have just begun to cover the sun.



By 6:15 PM the moon will have covered a good deal more of the sun.



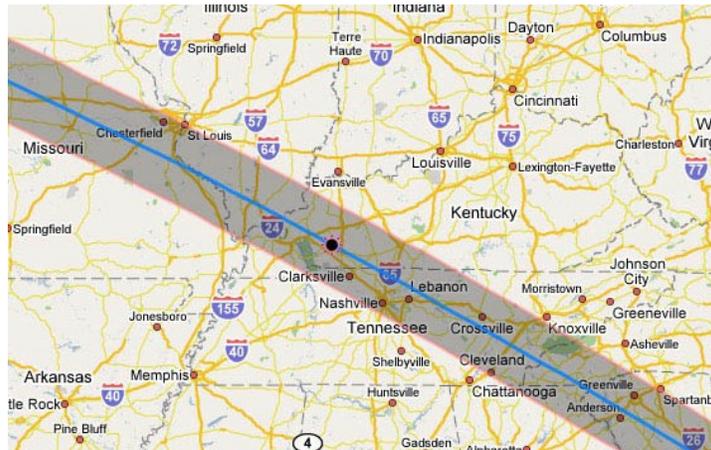
As the sun is setting, it will look something like this. If you want to see a unique sunset, Thursday, October 23 is the day for it! Try making a trip to the Big Four bridge in Louisville to watch it!



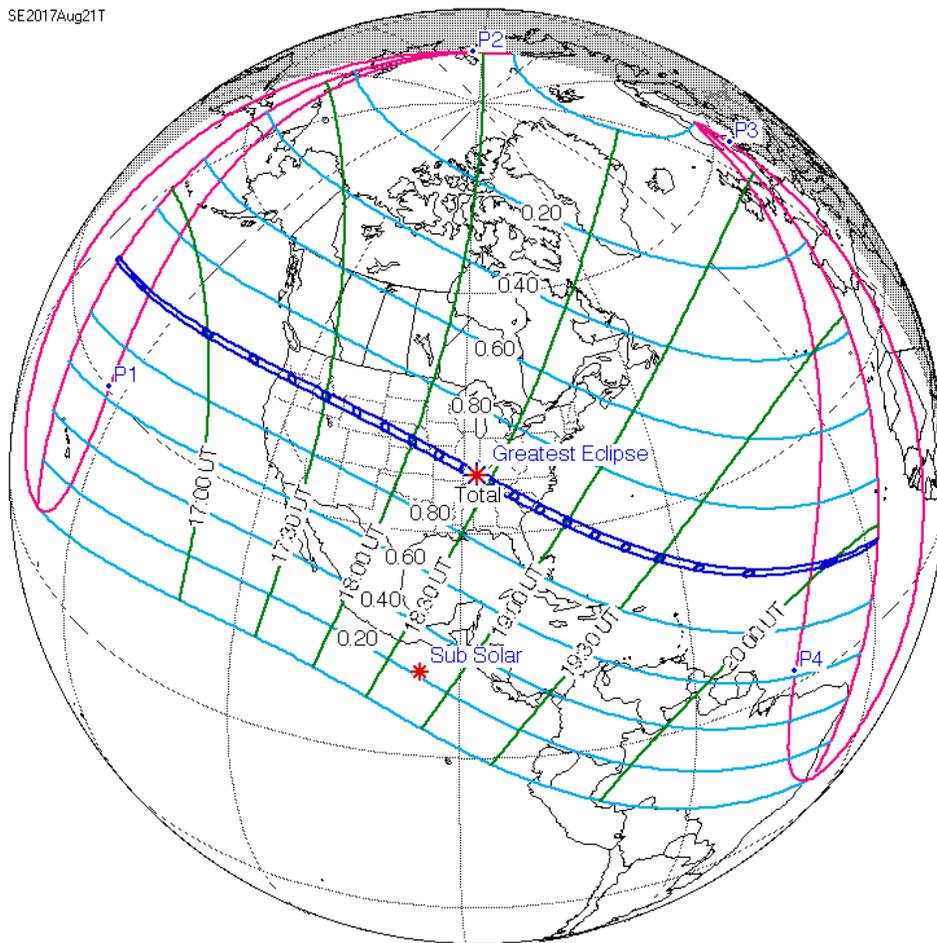
As for that lunar eclipse on October 8: South Harrison Park Astronomer Henry Sipes snapped these photos of it on his early morning commute. Note how the round shape of the Earth's shadow is clearly visible as it passes across the moon. This is one way that people who pay attention have always known that the Earth is round – it takes a round body to cast a round shadow!



But these eclipses are just small potatoes. The BIG eclipse is coming in 2017. The August 21, 2017 eclipse will be a total solar eclipse, and it will be best visible in Kentucky (and especially near Hopkinsville). The path of that eclipse is shown below. Expect a lot of excitement in the summer of 2017!



SE2017Aug21T





Jefferson



Community & Technical College

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2014 Schedule

South Harrison Park Observatory Events

DAYTIME PROGRAMS

Jan 25	11:00am to 1:00 pm
Feb 22	11:00am to 1:00 pm
Mar 22	11:00am to 1:00 pm
April 19	11:00am to 1:00 pm
May 17	11:00am to 1:00 pm
June 21	11:00am to 1:00 pm
Aug 16	11:00am to 1:00 pm
Sept 20	11:00am to 1:00 pm
Oct 18	11:00am to 1:00 pm
Nov 15	11:00am to 1:00 pm

NIGHTTIME PROGRAMS:

Feb 8	6:30 pm to 8:30 pm
Mar 8	7:00 pm to 9:00 pm
April 5	8:00 pm to 10:00 pm
May 3	9:00 pm to 11:00 pm
May 31	9:30 pm to 11:30 pm
June 28	9:30 pm to 11:30 pm
July 19	9:30 pm to 11:30 pm
Aug 2	9:30 pm to 11:30 pm
Sept 6	8:30 pm to 10:30 pm
Oct 4	7:30 pm to 9:30 pm
Nov 1	7:00 pm to 9:00 pm
Nov 22	6:30 pm to 8:30 pm

All programs at South Harrison Park are open if the state highways are drivable.

Daytime programs allow you to safely view the Sun using solar filters.

Nighttime programs allow you to view the Moon, Stars, Planets, and more.

The facility is handicapped accessible and we feature a video display system for cloudy days and/or nights.

Contacts: Park Astronomer – Henry Sipes Home 270-828-6191

Cell 270-668-2103

Harrison County Park Office – 812-738-8236

Websites: <http://www.harrisoncoparks.com/Observatory.html>

<http://www.jefferson.kctcs.edu/observatory/>

<http://astronomy2009.us/>

