## What's Up?

## August 2017

For about ten years, I have been telling my students about a very special event that is going to take place. It's almost time. That event is the total solar eclipse 21 August 2017. While all solar eclipses are special, what makes the August 21 total solar eclipse so special is that it will be visible across the US from Oregon to South Carolina.

## NEVER LOOK AT THE SUN WITHOUT PROPER EYE PROTECTION!!



Partial eclipse on 23 October

The eclipse will take place on Monday, 21 August 2017 (first day of flex week). For Southern California, the Moon just starts to cover the Sun at 9:06 am PDT and will move off the Sun at 11:46 am PDT. The maximum eclipse will take place at 10:22 AM PDT.

There are several website to visit if you would like more information: http://eclipse2017.nasa.gov

http://www.greatamericaneclipse.com

The last time a total solar eclipse was visible on US soil was 1991. The last time a total solar eclipse was visible on the mainland was 1979. The last time a total solar eclipse that swept across the US was in 1918. Unfortunately, the last time a total solar eclipse was visible in Southern California was in 1724 .... and another won't be visible until... well... after the year 3000.

So, what is a total solar eclipse? Incredibly, as seen from the Earth, the Sun and the Moon appear to be (almost) the same size. Approximately once a year, the Moon comes directly between the Earth and the Sun creating a shadow on the Earth. Because of the relative sizes and distances of the Moon and Sun, the shadow caused by the Moon only falls on a very narrow path on the Earth.

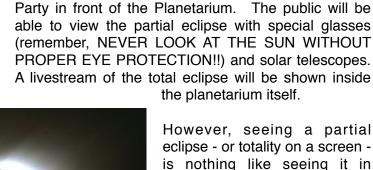
Observing a total solar eclipse allows the observer to see the outer atmosphere of the Sun (the Corona), stars, and planets normally hidden by the bright Sun. Unfortunately, Southern California

(in fact, all of California) will not be able to see the total solar eclipse able to observe a partial eclipse.

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Please feel free to send your comments or suggestions to Morrie Barembaum (barembaum morrie@sccollege.edu)

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Santa Ana College will be holding a Solar Eclipse

eclipse - or totality on a screen - is nothing like seeing it in person. If you are unable to go and see the eclipse (or are clouded out), there are more coming up. The next total solar eclipse, visible in the US, will be on 8 April 2024. Another eclipse will also be visible in the US on 12 August 2045.

Either way, I hope you enjoy one of nature's rare and awesome sights.



2015 Total Solar Eclipse, Fred Espenak/NASA's Goddard Space Flight Center

