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UTA Planetarium



The Planetarium offers live stargazing and prerecorded programs to the public, school groups, and UT Arlington students all year round.

Using state-of-the-art technology and a 60-foot dome screen, the Planetarium is an immersive space theater facility with endless capabilities.

Public show pricing

Adults	\$6.00
Seniors	\$4.00
Children	\$4.00
Students	\$4.00
UTA Students	\$4.00
Children 0-2	Free

U.S. Solar Eclipse

Around 9:00 a.m. on Monday, August 21 beginning in Oregon, the visible disk of the Sun will start to disappear, starting from its edge and progressing towards its center, as the Moon begins to move in front of the Sun. Near the city of Madras, Oregon, daylight will start diminishing around 10:00 a.m., turning the sky to night time. At 10:19 a.m., the Sun's visible disk will be entirely blocked by the Moon for approximately two minutes, and stars will be visible. About an hour later, people in Idaho Falls, Idaho will experience the same thing. The eclipse's path of totality will move across eight other states before leaving the United States from Columbia, S.C. to the Atlantic Ocean around 4:00 p.m.

	Eclipse Begins	Totality Begins	Totality Ends	Eclipse Ends	
<i>Madras, OR</i>	09:06 a.m.	10:19 a.m.	10:21 a.m.	11:41 a.m.	PDT
<i>Idaho Falls, ID</i>	10:15 a.m.	11:33 a.m.	11:34 a.m.	12:58 p.m.	MDT
<i>Casper, WY</i>	10:22 a.m.	11:42 a.m.	11:45 a.m.	01:09 p.m.	MDT
<i>Lincoln, NE</i>	11:37 a.m.	01:02 p.m.	01:04 p.m.	02:29 p.m.	CDT
<i>Jefferson City, MO</i>	11:46 a.m.	01:13 p.m.	01:15 p.m.	02:41 p.m.	CDT
<i>Carbondale, IL</i>	11:52 a.m.	01:20 p.m.	01:22 p.m.	02:47 p.m.	CDT
<i>Paducah, KY</i>	11:54 a.m.	01:22 p.m.	01:24 p.m.	02:49 p.m.	CDT
<i>Nashville, TN</i>	11:58 a.m.	01:27 p.m.	01:29 p.m.	02:54 p.m.	CDT
<i>Clayton, GA</i>	01:06 p.m.	02:35 p.m.	02:38 p.m.	04:01 p.m.	EDT
<i>Columbia, SC</i>	01:13 p.m.	02:41 p.m.	02:44 p.m.	04:06 p.m.	EDT

Figure 1: U.S. cities on the path of totality. Source: NASA website.

This total eclipse on August 21 will only be visible from North America. Therefore, it is called a North American eclipse.

During a total solar eclipse, the day turns into night for a few brief moments. This may be frightening to those who do not know the astronomical meaning of eclipses, but they are natural phenomena.

The Sun is 400 times further from Earth than the Moon. The Sun is also 400 times bigger than the Moon. This ratio cancels out and makes the apparent size of the Sun and Moon in the sky approximately the same. The angular diameter of the Sun (or Moon) is 0.5 degrees in the sky.

Solar eclipses occur when the Moon and Sun come into an alignment and the Moon casts its shadow on Earth. However, the Moon is much smaller than Earth, and so is its shadow. The Moon's shadow only covers about 70 miles circular area on the surface of the Earth.

Contact Us

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Featured Public Show



Plays for public:

Fridays and Saturdays

6:00 pm

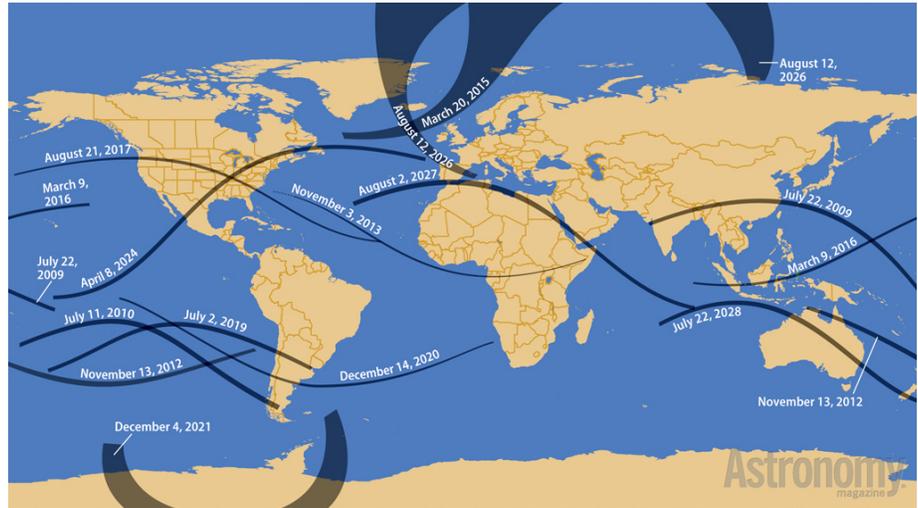
About the Starry Messenger

The Starry Messenger is the monthly newsletter of UTA Planetarium.

Editor: Levent Gurdemir
Co-Editor: Greg Pederson

Rare and not so rare

Approximately two to five solar eclipses occur on Earth in a year. However, most of the eclipses occur over uncivilized areas or over the oceans. For a specific area (like the U.S.), total solar eclipses are rare and may not occur for hundreds of years. The last total solar eclipse in the U.S. was 38 years ago. The next solar eclipse that will visit North America will be in 2024. At that time, Texas will experience the totality.



Solar eclipses between 2008-2028. Image source: Astronomy Magazine.

Eye Safety

The light that comes from the Sun is extremely bright and may harm our eyes. One should never look at the Sun directly. In particular, looking at the Sun with binoculars or a telescope will result in immediate, permanent eye damage. Only specially made solar filters provide safe solar observing. If you plan to watch an eclipse, obtain a pair of solar filter glasses.

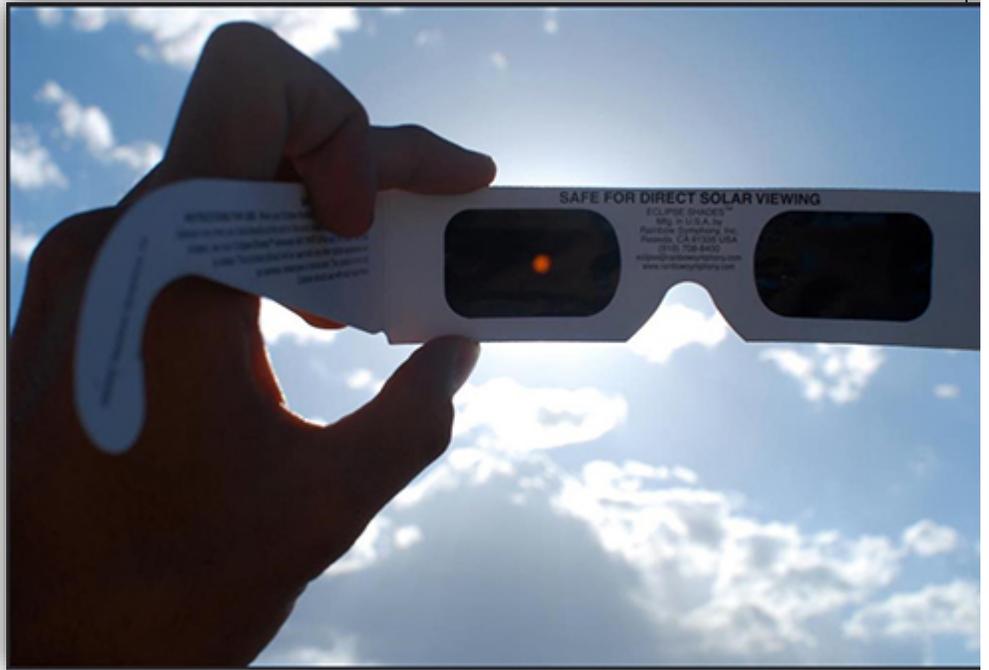


Eclipse Shades or Eclipse Glasses



Solar Eclipse Facebook Q&A on August 14

Ramon Lopez, UTA professor of physics, will host a live Q&A session on Monday, August 14 about the upcoming total solar eclipse. To participate in the live Q&A, go to the [UTA Facebook](#) page beginning at 11:30 a.m. on August 14. The path of totality for the August 21 solar eclipse will include a 70-mile wide swath beginning in Oregon and finishing in South Carolina. Observers in North America who are outside the path of totality, including Texas, will still see a partial solar eclipse, where the moon covers part of the sun's disk. Lopez, who also serves as co-director of UTA's UTeach Arlington math and science teacher preparatory program, studies space physics and is highly regarded for his efforts to strengthen K-12 science education and for his advocacy of increasing opportunities for under-represented minorities in STEM fields. He has won numerous awards for his research, teaching and mentoring.



Solar Eclipse Event on Monday, August 21

To celebrate the solar eclipse, the UTA Planetarium will host a special event on Monday, August 21. The event will start at 12:00 p.m. with a special planetarium show, *Astronomy 101: Solar Eclipses*. Eclipse observing and other activities will follow the Planetarium show until 2:30 p.m.

There will be no charge for the activities except the Planetarium show. Tickets will be sold for the show at the regular rate (\$6.00 general admission, \$4.00 discounted admission for students, seniors, and children).

Special eclipse glasses (or eclipse shades) will be available at the Planetarium's gift shop and can be purchased for \$2.50 /each.

The eclipse will be streamed live from the Planetarium's YouTube channel:

<https://www.youtube.com/user/utaplanetarium>

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