



# Connect with Your Audience

**O**bserving the sky is a part of being human, and eclipses are no exception. Every culture that has seen an eclipse has developed an understanding and knowledge around eclipses. These tellings have been entrusted to us, so let us honor the cultures who have shared them with us.

**T**ake time to share an experience of an eclipse that inspired you. A good way to connect with people is to ask them questions. Here are a few to start off:

- Have you experienced an eclipse? Lunar or solar?
- Where did you see the eclipse? Who were you with?
- Has anyone ever told you an eclipse story?
- What makes eclipses so special?
- Why do you think so many cultures have stories and ways of knowing about eclipses?

# Ways of Knowing: Solar Eclipses Around the World

Image credit: Alma Thomas, The Eclipse, 1970, Smithsonian American Art Museum, 1978.40.3



**ECLIPSE  
AMBASSADORS**





# Cultural Sensitivity

**W**e are sharing these tellings to illustrate how astronomy, and especially eclipses, belong to all of us. Every culture has observations and ways of knowing about the sky. Many knowledge holders and story keepers shared their words to make these cards. Here are some ways you can honor and appreciate them:

- \* Indigenous people are still alive today. Many people use the past tense when talking about them, but please use the present tense! Instead of saying “The ancient people who once lived here,” say “The Indigenous people who live here.”
- \* These traditions are ongoing and often very important within a larger cultural framework, so again, use current terms.
- \* There isn’t one way to understand the universe. There are reasons that these traditions have been passed down, and they are not always obvious to modern Western understanding. Each culture has its own references and meanings – we shouldn’t expect to get all the nuances.
- \* Present these findings with the same reverence used with scientific understanding. All interpretations are valid and important.
- \* In general, courtesy goes both ways. We have been entrusted with these eclipse tellings, so please present them respectfully.

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Image credit: Howard Hack,  
(From Blue Print series) #8,  
Noonlight, 1972, Smithsonian  
American Art Museum, Gift  
of Larry Epping Building Co.,  
1981.29.9

The stewards at the Astronomical Society of the Pacific recognize that any single telling will be incomplete. We have collaborated with trusted colleagues and strive to stay true to the first-person cultural accounts. If you would like to suggest edits or add more ways of understanding eclipse from your culture, please reach out to us: [eainfo@astrosociety.org](mailto:eainfo@astrosociety.org)

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# Not Viewing the Eclipse

**S**ome cultures do not look at solar eclipses. There are many reasons for this, but most are based in reverence, not fear or misunderstanding.

**Please honor the spirituality of all people. Do not try to convince anyone to watch an eclipse, especially by saying things such as “that’s just an old superstition.” There is no need to reassure people that have different traditions that it is not dangerous to view, etc. Many Indigenous cultures have a deep relationship and understanding of the sky.**

## How to be respectful of these cultural differences

- \* One way is to mention any eclipse imagery before showing it, whether they be animations, cartoons, or direct pictures.**
- \* If possible, have some versions of materials you give away, such as solar viewers without images of an eclipse, that do not show eclipses on them available. You can also cover the imagery with stickers or tape if you don’t have other options.**

 **To access this and other resources:  
[astrosociety.org/eclipse](https://astrosociety.org/eclipse)**

# Ways of Knowing: Solar Eclipses Around the World

**Image credit: Courtesy of the Exploratorium - “A hogan, traditional dwelling and ceremonial structure of the Navajo.” Nancy C. Maryboy, Ph.D. and David Begay, Ph.D., Indigenous Education Institute (IEI)**

In addition to the credits featured on each card, the team would like to thank:

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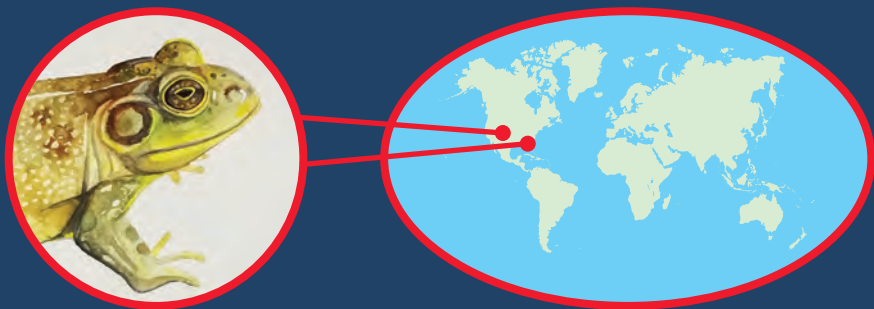




2021

# Cherokee

**T**he Cherokee elders tell of a giant frog that lives in the sky. During an eclipse, the frog will swallow the Sun or Moon. Community members gather to make noise by drumming and shouting, which frightens the frog away, and the Sun or the Moon is released.



Ways of  
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United States  
of America

Image credit: Artist Kindra Swafford

Text credit: Cherokee Elders,  
as told to Kindra Swafford





# Diné - Navajo

“When an eclipse begins, Navajo elders strongly instruct their community to go inside the hogan (their traditional dwelling) to ensure they don't look up at the Sun. It is considered a time of interaction between the Sun and the Moon. They sit quietly and in contemplation, or recount traditional teachings about the origins of the Sun and Moon. These practices are grounded in their deeply held respect for the cosmic order.”



## Ways of Knowing: Solar Eclipses Around the World

### United States of America

Image credit: Elsie Holiday, artist, The Utah Museum of Natural History, ET513.CB-12

Text credit: Nancy Maryboy, as shared by the Exploratorium webpage: [bit.ly/sunandus](http://bit.ly/sunandus)

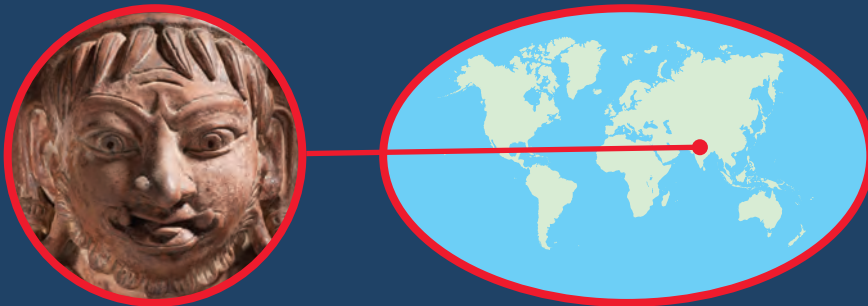






## Hindu

**T**he mortal Rahu is said to have attempted to attain immortality. The Sun and Moon told the god Vishnu, who punished Rahu by cutting off his head. Ever since, Rahu has chased the Sun and the Moon across the sky. At the time of a solar eclipse Rahu actually catches the sun and devours it. The Sun slowly disappears into Rahu's throat – only to reappear from his severed neck.



## Ways of Knowing: Solar Eclipses Around the World

### India

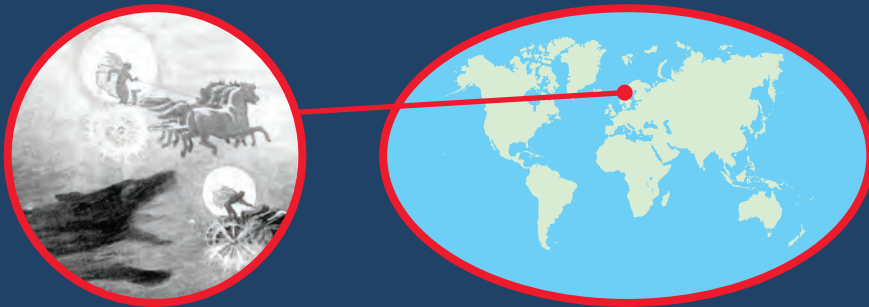
Image credit: Rahu, The Demon of Eclipses. India, Uttar Pradesh, circa 500-550. Sculpture Terracotta (M.83.221.1)

Text Credit: Dr. Shani Virani, Instructor of "Ancient Skies" at George Washington University



## Norse

**S**köll (“skohl” - One Who Mocks) and Hati (“haht-ee” - One Who Hates) are two wolves who are pursuing Sol and Mani, the Sun and Moon, through the sky in hopes of devouring them. At Ragnarok, the downfall of the cosmos, they catch their prey as the sky and Earth darken and collapse.



# Ways of Knowing: Solar Eclipses Around the World

## Scandinavia

Image credit: “The Wolves Pursuing Sol and Mani” by J.C. Dollman (1909)

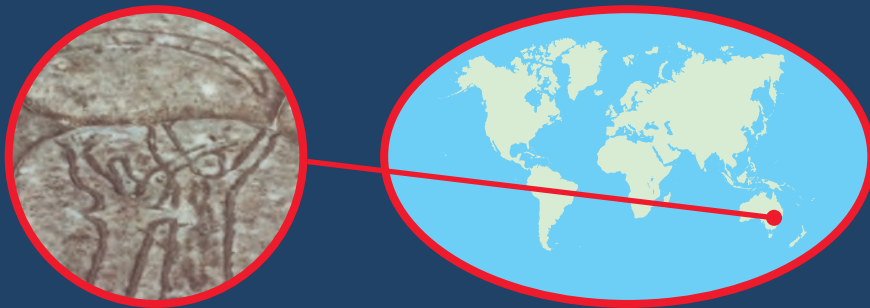
Text Credit: Daniel McCoy  
[norse-mythology.org](http://norse-mythology.org)





# Indigenous Euahlayi

**I**n the astronomical traditions of the Aboriginal peoples of Australia, the relationship between the Sun and the Moon is well known. In Euahlayi (you-al-ee-eye) traditions of New South Wales, Uncle Ghillar teaches that the Moon (Bahloo) and the Sun (Yhi) fall in love with one another, but Yhi is promised to another man. A solar eclipse is the Sun and Moon embracing in secret.



Ways of  
Knowing:  
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## Australia

Image credit: Australian  
aboriginal rock art, Ku-ring-  
gai Chase National Park,  
NSW. 1982, by Thorkild C.  
Bøg-Hansen

Text credit: Dr. Duane  
Hamacher

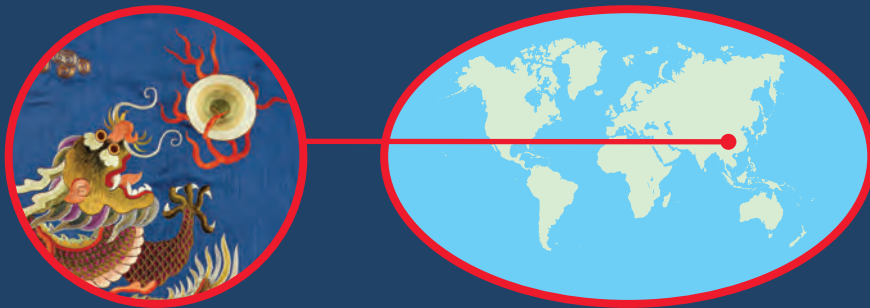






## China

The word “shih” in Chinese means “eclipse” – and also “to eat”. The Chinese have the legend of an animal eating the Sun during a solar eclipse. The Sun usually symbolizes the Emperor. A dragon eating the Sun is not necessarily bad. However, a dog eating the Sun... that’s bad for the empire. So the context is very important.



## Ways of Knowing: Solar Eclipses Around the World

### China

Image credit: Embroidered Court Robe. Period: Qing dynasty (1644-1911), Tongzhi period (1862-74). Accession Number: 29.36

Text credit: Dr. Lancelot Kao

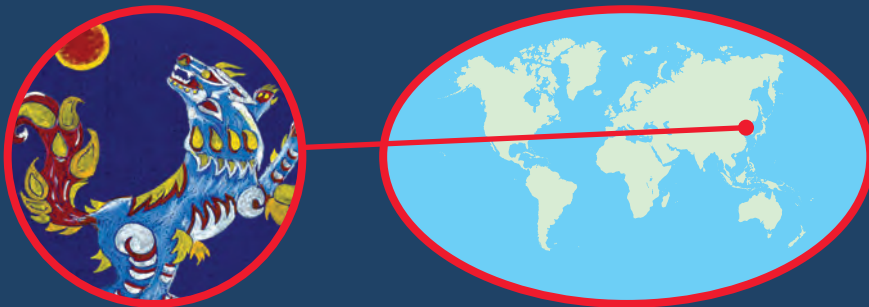


一七.

## Korea



long time ago, a king was concerned about how dark his kingdom was. He ordered a fierce fire dog to steal the Sun. The fire dog tried to carry the Sun in his mouth, but it burnt the dog's mouth. He found a more ferocious dog to steal the Moon. But the Moon was so cold that its mouth froze. It is believed that during a solar eclipse, the dark section is where the fire dogs are biting the Sun.



## Ways of Knowing: Solar Eclipses Around the World

### Korea

Image credit: "The Legend of Bulgae. Artist: Kyungjin Cho

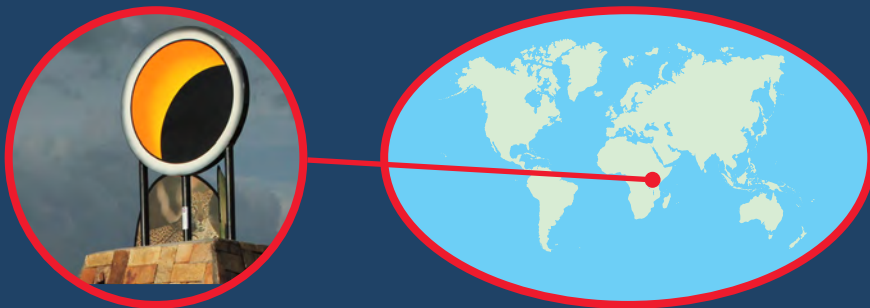
Text Credit: "Bulgae" from Hangugiseolhwa (Folk Tales From Korea) Translated by: LeeJiyoung





## Bahmia

**T**wo phrases are used to describe an eclipse of the Sun “Eizooba kyakira” (eyes-oh-ba chi-a-kila) which means the Sun is dark and “Eizooba kyeshereka” (eyes-oh-ba chi-eh-shay-leka) which means the Sun hides. The Bahima people refer to the Sun’s halo as “ekikaari ky’eizooba” (eh-chi-kah-ali chi-eyes-oh ba) meaning the enclosure of the Sun. This shows that the Bahima people witnessed total eclipses of the Sun, for during a total eclipse the Sun’s halo is visible.



# Ways of Knowing: Solar Eclipses Around the World

## Uganda

Image credit: “The monument to the Pakwach eclipse. Igongo Cultural Center/Voice of America

Text credit: Dr Jarita Holbrook



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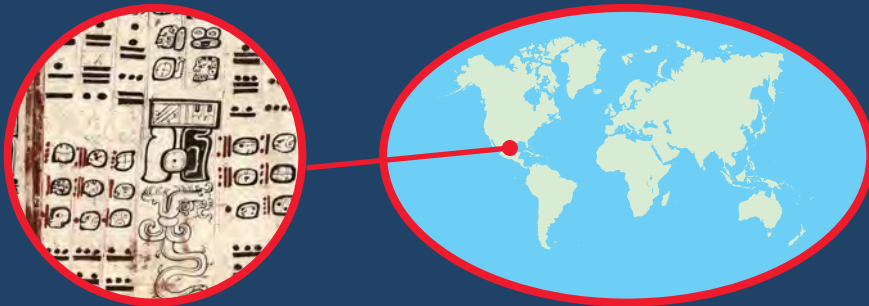
Handwritten text in the top section of the right page, consisting of several lines of stylized characters and symbols. The characters are drawn with thick black outlines and some are filled with black ink. The symbols include vertical lines, dots, and various geometric shapes.





## Maya

**W**hen a total solar eclipse occurs, the Mayans consider that the Sun has been completely “eaten” [by the Moon] and that, if it persists for a long period of time, the Earth will completely darken and that kitchen utensils and dishes will take lives by eating people. So they put greater emphasis on making noise to scare away the Moon and breathe with great relief when the Sun begins to illuminate the Earth again.



# Ways of Knowing: Solar Eclipses Around the World

## Mexico

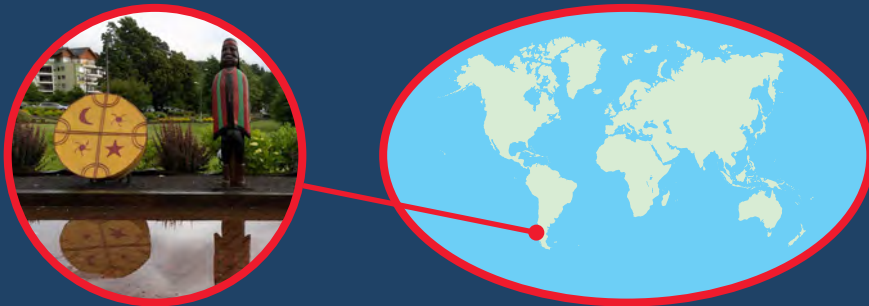
Image credit: Reproduction of the eclipse tables of the Dresden Codex (Maya, pre-Columbian). The symbol of the right page shows a solar eclipse. Illustration Credit: Patricia Martin Morales, Muna, Yucatan, Mexico. Courtesy of the Exploratorium

Text credit: Milner Rolando Pacab Alcocer; Yaxcabá, Yucatán, México



## Mapuche

**T**he Mapuche people have witnessed solar eclipses (Lan Antü) many times in their history. At the time of “Zumiñ” (umbra), they say the Sun was attacked by cosmic monsters. People tried to help the Sun by throwing stones at the monster, igniting fires with sacred branches and shouting special words to communicate with spirits. When the Sun reappeared, hopeful ceremonies included the burning of cinnamon and laurel branches, whose smoke rose to the cosmos to search for the new balance of solar energy.



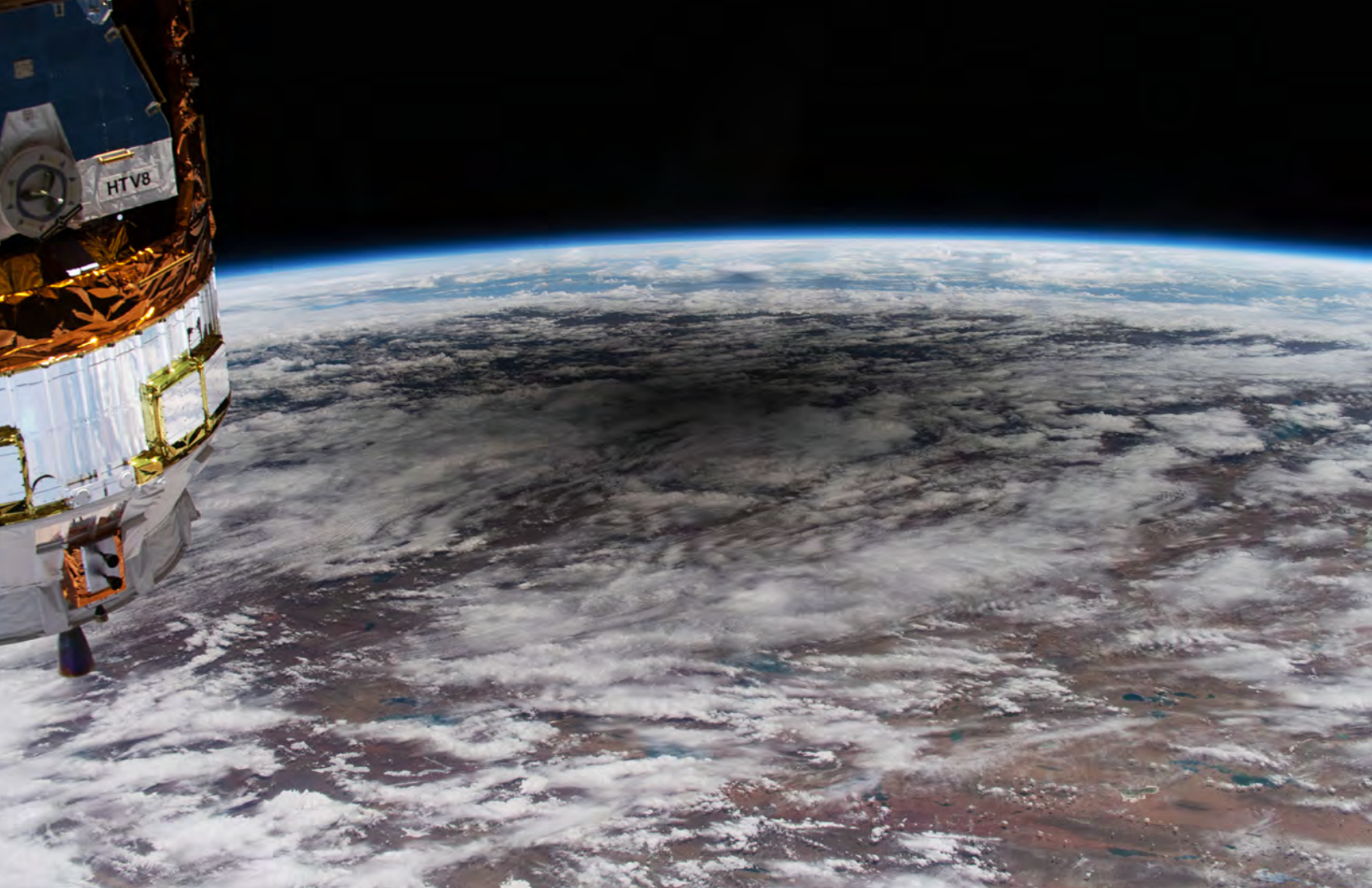
## Ways of Knowing: Solar Eclipses Around the World

### Chile

Image credit: The reflection of Wenufoye flag design and a Mapuche statue, by Matias Basualdo

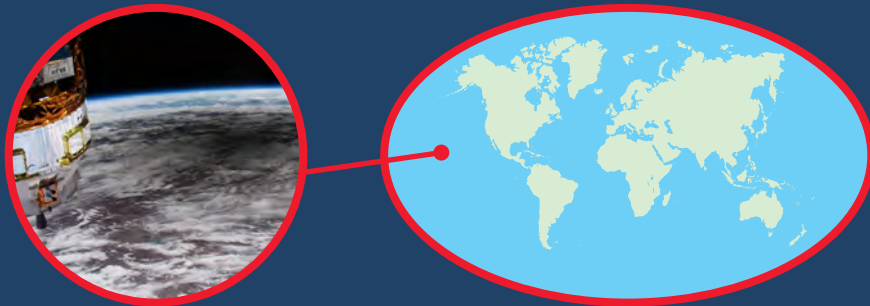
Text credit: Milner Rolando Pacab Alcocer; Yaxcabá, Yucatán, México





## Western Science

**W**e experience solar eclipses when the Earth, the Moon, and the Sun align and the shadow of the Moon crosses the Earth. In addition to inspiring artists and musicians, eclipses have driven numerous scientific discoveries. Total solar eclipses are particularly important because they allow scientists to see a part of the Sun's atmosphere – known as the corona – which is too faint to see except when the bright light of the Sun's surface is blocked.



## Ways of Knowing: Solar Eclipses Around the World

### Practiced Worldwide

Image credit: NASA, An astronaut aboard the International Space Station shot a photograph of the Moon's shadow crossing the Earth on June 21, 2020.

Text credit:  
[science.nasa.gov/eclipses](https://science.nasa.gov/eclipses)