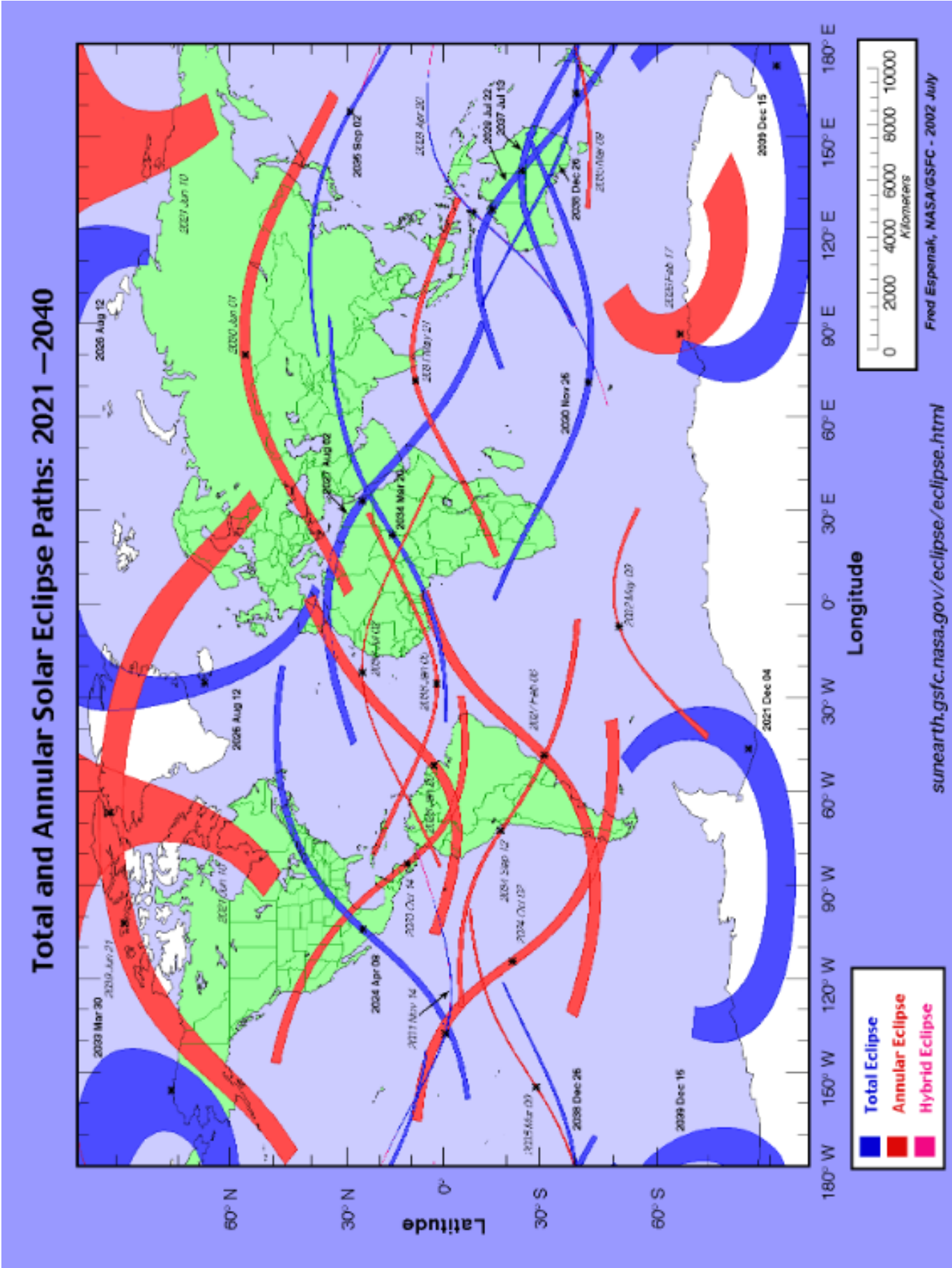


Solar Eclipse Map



During a Solar Eclipse

What is a solar eclipse?

Whoa! It's the middle of the day—so why is the sky getting dark?

It's a **Solar Eclipse**

Partial Solar Eclipse

Total Solar Eclipse

Corona

Path of Totality

U.S. Total Solar Eclipses

2017 AUGUST 21

2024 APRIL 8

U.S. TOTAL SOLAR ECLIPSES

For more information, visit [spaceplace.nasa.gov](https://eclipse2017.nasa.gov/safety)

NASA
National Aeronautics and Space Administration

Sometimes the moon only blocks part of the sun's light. This is called a partial solar eclipse. Other times, the moon blocks all of the sun's light. This is called a total solar eclipse.

A solar eclipse happens when, at just the right moment, the moon passes between the sun and Earth.

In that path, the moon completely blocks the sun's light for a few minutes. It gets so dark that it looks like night time during a full moon! If you don't know what's happening, it can be confusing. Animals can get confused too. But this total darkness can also be kind of cool for scientists who study the sun's atmosphere, called the corona.

As the moon blocks the sun's light, it casts a shadow on part of the Earth. The moon's shadow creates a path as Earth rotates. This path is called the path of totality. If you want to experience total darkness during an eclipse, you have to be in the path of totality.

But when they do happen, the moon gives scientists—and the rest of us—a glimpse at the corona's beautiful streams and ribbons. Thanks, moon!

YOU'RE WELCOME!

The corona is very dim. It's usually hard to see because the sun is so much brighter. But, when the moon blocks the sun's light during an eclipse, all you can see is the light from the corona!

Total solar eclipses over the land—where people can see them—don't happen very often.

CHIRP! CHIRP!

BARF! BARF!

GOVERNMENT SPACE PLACE

Note: For information about how to safely view an eclipse, go here: <https://eclipse2017.nasa.gov/safety>

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PARTIAL SOLAR ECLIPSE

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CORONA

PATH OF TOTALITY

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Creating a Citizen Science App

Step 1:

Work with your partner to choose what you want users to observe during a solar eclipse. Some of the things that change during a solar eclipse are: light, temperature, plant behavior, bug behavior and animal behavior.

During a solar eclipse, we will ask users to observe changes in _____

Step 2:

In the box below, sketch what you want citizen scientists to see on the 1st screen of your app that teaches them about how solar eclipses happen as well as when and where they will happen in the future.

Creating a Citizen Science App

Step 3:

In the box below, sketch what you want citizen scientists to see on the 2nd screen of your app. This screen should give them spaces to input information about a change that happens during a solar eclipse. Don't forget to ask for information about when and where they see the solar eclipse.

Creating a Citizen Science App

Step #4

In the box below, sketch what you want citizen scientists to see on the 3rd screen of your app. This screen should allow them to submit comments and questions about the app to the Natural History Museum. Think about any questions you can ask here that will help the museum improve the app in the future.

Creating a Citizen Science App

Step #5

In this box, draw the form that you will ask citizen scientists to fill in to input their observations.