

By the Numbers

The 2017 Total Solar Eclipse

On Monday, August 21, the U.S. will experience a total solar eclipse. Below are some interesting numbers and facts about the day.

How long can a total solar eclipse last?



7.5
MINUTES

How fast does the moon move across the sun?



1,398
MILES PER HOUR

How large is the sun compared to the moon?



400
TIMES WIDER

How many solar eclipses occur each year?



Each year, there are between two and five solar eclipses.

How many people in North America will see the eclipse?

An estimated **500 million** people will be able to observe the August 2017 total solar eclipse, in partial or total form.



391
MILLION



35
MILLION



119
MILLION

When was the last total solar eclipse visible in the United States?

1979

38 Years Ago



Which direction does the eclipse path travel?

Eclipse tracks move **eastward** even though the earth rotates from west to east. **Why?** The moon moves to the east in its orbit at about **3,400 km/hour**.

5,000
YEARS OLD

How old are the earliest writings about eclipses?

The earliest writings showing that people paid attention to eclipses in any official way are around 5,000 years old.

Has the August 21, 2017 total solar eclipse ever passed over the U.S. before?



The path of the August 21, 2017 total solar eclipse has been crossed by the tracks of 15 previous eclipses over the continental United States between 1503 and 1970.

POPULATION OF NASHVILLE, TN: 684,410

What is the largest U.S. city in the path of the total solar eclipse?

Nashville, TN, is the largest city within the path of the total solar eclipse. It is also home to NASBA's corporate office. With the centerline of the eclipse about 20 miles north of Nashville, the eclipse will be visible for 2 minutes.

