

# The Asteroid Threat: How Long Do We Have Before Extinction?



## The Asteroid Threat: How long? by Artur Braun

★★★★☆ 4.7 out of 5

Language : English  
File size : 1130 KB  
Text-to-Speech : Enabled  
Enhanced typesetting : Enabled  
Print length : 8 pages  
Screen Reader : Supported  
X-Ray for textbooks : Enabled



Asteroids are a constant threat to our planet. These celestial objects, made of rock and metal, range in size from small pebbles to massive boulders that can be miles wide. While most asteroids orbit the Sun in a harmless belt between Mars and Jupiter, some do cross Earth's path.

The impact of an asteroid with Earth can have devastating consequences. A large asteroid impact could trigger earthquakes, tsunamis, and wildfires. It could also block out the Sun, causing a global winter. Such an impact could potentially lead to the extinction of life on Earth.

So, how long do we have before an asteroid wipes out humanity? The answer is not clear-cut. However, scientists are working hard to track asteroids and develop methods to deflect them if they pose a threat.

## The History of Asteroid Impacts

The Earth has been hit by asteroids throughout its history. Some of these impacts have been more devastating than others. The most famous asteroid impact in recent history occurred in 1908, when a small asteroid exploded over Tunguska, Russia. The blast wave from the explosion knocked down trees and caused widespread damage.

Another major asteroid impact occurred in 1994, when a comet crashed into Jupiter. The impact released more energy than a thousand atomic bombs. If a comet or asteroid of this size were to hit Earth, it could cause catastrophic damage.

## **The Threat of Near-Earth Objects**

Near-Earth objects (NEOs) are asteroids and comets that pass close to Earth's orbit. NEOs are a major threat to our planet because they have the potential to impact Earth.

There are currently over 25,000 known NEOs. Of these, about 2,000 are considered potentially hazardous asteroids (PHAs). PHAs are asteroids that are at least 460 feet in diameter and have a chance of hitting Earth.

The risk of an asteroid impact is relatively small, but it is not zero. In fact, scientists estimate that an asteroid the size of the one that exploded over Tunguska hits Earth about once every 1,000 years. And an asteroid the size of the one that hit Jupiter hits Earth about once every 10,000 years.

## **What Can We Do About the Asteroid Threat?**

The good news is that scientists are working hard to track asteroids and develop methods to deflect them if they pose a threat.

One way to deflect an asteroid is to hit it with a spacecraft. This would knock the asteroid off course and prevent it from hitting Earth. Another way to deflect an asteroid is to use a nuclear bomb to blow it up. This would break the asteroid into smaller pieces that would be less likely to cause damage.

Scientists are also developing methods to detect asteroids early enough to give us time to deflect them. One such method is called the Sentry system. Sentry is a computer program that tracks NEOs and identifies those that pose a threat to Earth.

The Sentry system has been in operation since 2002. In that time, it has identified over 1,000 PHAs. Sentry has also helped to determine that there are no known asteroids that pose an immediate threat to Earth.

The asteroid threat is a real and serious threat. However, scientists are working hard to track asteroids and develop methods to deflect them if they pose a threat.

The good news is that the risk of an asteroid impact is relatively small. However, it is not zero. That is why it is important for us to continue to track asteroids and develop methods to deflect them.

By working together, we can protect our planet from the threat of asteroids.



### **The Asteroid Threat: How long?** by Artur Braun

★★★★☆ 4.7 out of 5

Language : English

File size : 1130 KB

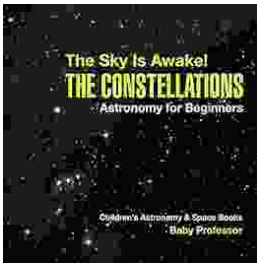
Text-to-Speech : Enabled

Enhanced typesetting : Enabled

Print length : 8 pages

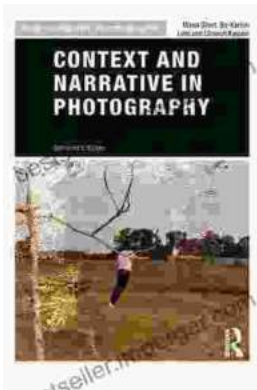
Screen Reader : Supported

X-Ray for textbooks : Enabled



## The Sky Is Awake: Astronomy for Beginners

Embark on an enchanting journey through the cosmos with 'The Sky Is Awake: Astronomy for Beginners.' This captivating book is designed to ignite...



## Unveiling the Essence of Photography: Context and Narrative in the Art of Image-Making

Photography, the art of capturing moments in time through the lens of a camera, extends beyond mere technical proficiency. It is an intricate interplay of context...