

Tunguska – the World’s Largest Impact Event



Image: www.forbes.com

What was the Tunguska event?

On 30th June 1908 in the Tunguska region of Siberia, people witnessed a bright light, as bright as the sun, moving across the sky. Shortly afterwards a gigantic explosion occurred, one large enough to be felt as far away as Washington, D.C. It flattened 80 million trees over an area of two thousand square kilometres, yet somehow managed to cause only three unconfirmed deaths due to the remoteness of the location. **If the explosion had occurred in a populated area, it would have destroyed a large city.** The shock wave from the event measured 5.0 on the **Richter Scale**, and it knocked people off their feet and shattered windows hundreds of kilometres from the site. For many days afterward, the area glowed with a light bright enough to allow people as far away as Scotland to see at night.

What caused the explosion?

The Tunguska event is called an **impact event**, even though in its case no actual impact occurred. An impact event happens when a **meteorite** makes contact with Earth’s surface and leaves a crater. In Tunguska, it is thought that the meteorite exploded in mid-air, in Earth’s atmosphere. The Tunguska event is the largest impact in recorded history, though it is thought that larger impacts might have happened in prehistory. **Can you think of any meteorite strikes that might have been larger, or at least more important, than the Tunguska event?**

Activities:

Imagine you were living near the site of the Tunguska event on the morning of 30th June, 1908. Describe the events in your own words.

What do you think would happen if a meteorite landed in your back garden, or somewhere near your house? What would you find? How would it sound? What would you do?

Look up the differences between meteors, meteorites, asteroids, and comets.

Write a story where you spot an asteroid approaching Earth through your telescope. What do you do? Who do you warn? How do you save the world?