



Unusual origin

Voiced by Chris Lintott.

Most meteor showers are caused by icy comets – but the Geminids are different.

They originate from Phaethon, which is described as a rocky comet.

This is because it looks like an asteroid, yet some astronomers think it might be an extinct comet that's lost its ice.

As it orbits, Phaethon passes very close to the Sun – even closer than the planet Mercury.

When this happens it's thought that the stress of the intense solar heat causes surface material to crumble, before it tumbles off into space.

As a result, it leaves a trail of rocky debris in its wake.

The Earth passes through this trail each year as it orbits around the Sun.

When the pieces of debris hit our planet's atmosphere they burn up as meteors... producing the spectacular Geminid meteor shower.