

Meteors

Meteoroid, meteor and meteorite are all words used when talking about meteor showers and sometimes it is a little confusing to know what the difference is!

Meteoroid

A meteoroid is generally accepted as a piece of debris moving through space that is under about 1 metre in size.

Meteor

When a meteoroid comes close enough to the Earth to enter the atmosphere they become a meteor; meteors are what we often refer to as a shooting or a falling star.

Meteorite

If a meteor manages to survive the trip through the Earth's atmosphere and make it down to the surface it can then be referred to as a meteorite.

What are Meteor Showers?

It is possible to see a meteor, or shooting star, on any night of the year. However, if a number of these 'shooting stars' appear to fall from one area of the sky we tend to call them a meteor shower. These collections of meteor showers are caused when the Earth passes through a cloud of space debris that can interact with our atmosphere.

Amount of Meteoroids

There are a huge amount of Meteoroids, micrometeoroids and space dust that drift around our planet.

Around 15,000 tonnes enter Earth's atmosphere each year.

Allan Hills 84001 Meteorite

On August 6 1996, A meteorite called 'Allan Hills 84001' was thought to have evidence of fossilised bacteria-like lifeforms.

The claim proved controversial however, and it has yet to be verified as the first example of extraterrestrial life.

Watching Meteor Showers

Meteor showers can be spectacular sights to watch in the night sky. Here are some tips on how to get the most out of your shooting star searches.

1. Find Somewhere Dark

The darker your viewing area the more you will be able to see in the sky during a stargazing session.

Try and stargaze somewhere rural and away from sources of light.

2. Do Some Research

Find out as much about the meteor shower you are hunting beforehand.

All meteor showers have a peak - the point at which the rate of shooting stars will be more active - and this is generally the best time to view.

3. Be Prepared

Be prepared for the cold as stargazing outside in the small hours of the night can be a chilly experience. Dress warmly and bring a warm drink along.

4. Relax, Enjoy and ... Be Patient!

Patience is an essential commodity for a meteor shower hunter. Sit back and relax and don't be put off if you don't spot something straight away.

Meteoroid Dangers

Meteoroids prove a risk not only to us on Earth, but to our astronauts as well.

Space debris is extremely fast moving and can cause damage to spacecraft. Astronauts need to always be aware of impacts and be able to cover and/or repair damage.

Barwell Meteorite

On Christmas Eve 1965, a meteor shower damaged properties in Barwell and most notably, the engine of a car. The insurance company declined compensation for the owner, stating that it was an 'Act of God'.

He then asked the local church to pay for the damage, who also declined!

Sizes of Space Objects

2 Micrometeoroids would fit inside one of the smallest bacteria; *Haemophilus influenzae*.

Micrometeoroids
Up to 0.001mm

Meteoroid
Less than 1 metre

You can fit more than **4 million** meteoroids in Wembley Stadium.

Asteroid **2004 BL86** is 325 meters across and has a small moon.

Asteroid
More than 1 metre

Annual Meteor Showers

As meteors never really move, the Earth has a number of predictable meteor showers that happen every year. Below are a select few.



For more information, please visit: www.spacecentre.co.uk