

Observing Shooting Stars

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What are Shooting Stars?

As unromantic as it sounds, a shooting star is the “last act” of a small piece of dirt (from dust-sized to pea-sized, for the most part) that hits the Earth’s atmosphere at enormous speed. As it burns up from friction, it produces a brief bright flash of light. Shooting stars have nothing to do with stars, but got their name long ago, before we understood their true nature. Astronomers call them *meteors*.

When is the Best Time to See the Shooting Stars?

While a random shooting star can be seen on any night, there are times when the Earth encounters many particles in space and we can see a larger number of meteors every hour. A list of these “meteor showers” is given at the bottom of this page. (These swarms of dusty particles are actually left over from the evaporation of various *comets* (larger bodies of dirty ice) that come by the Sun regularly, and leave freed dust and dirt in their wake.)

What is the Best Way to Observe Shooting Stars?

Meteor showers (or storms) are nicely democratic – the flashes of light can happen anywhere in the sky, and do not require any special equipment to see. In fact, using telescopes or binoculars will limit your view to a small spot of sky, and you are likely to miss most of the shooting stars. The biggest problems in seeing the faint meteors are city lights, clouds, and moonlight. So try to see them in as dark a place as possible, with a good view of the full sky. Give your eyes 15 minutes to get adapted to the dark. You might want to take someone along with whom you like to sit in the dark! Sit or lie back comfortably, and be patient. (It’s not fireworks; the flashes are quick and subtle, but over the course of time, you will see a number of them.)

Some Good Annual Meteor Showers

<u>Name</u>	<u>Duration</u>	<u>Best Dates</u>	<u>Comet It Came From</u>
Quadrantids	Jan. 1-6	Jan. 3-4	Unknown
Lyrids	Apr. 19-25	Apr. 21-22	Thatcher
Eta Aquarids	Apr. 24- May 20	May 4-5	Halley
Delta Aquarids	July 15-Aug. 20	July 28-30	Unknown
Perseids	July 23 - Aug. 20	Aug. 11-13	Swift–Tuttle
Orionids	Oct. 16-27	Oct. 20-22	Halley
Leonids	Nov. 15-20	Nov. 16-17	Tempel–Tuttle
Geminids	Dec. 7-16	Dec. 13	Phaethon (an asteroid)