

Observing Meteor Showers



APOD

Meteors are streaks across the sky caused by an object from space hitting the Earth's atmosphere. Most meteors we see are from meteoroids the size of a grain of sand. They burn up before reaching ground. Larger ones end up landing and become meteorites.

Objects hit the Earth at all times and from all directions. However, sometimes our planet moves through a dense region of meteoroids left by a comet. This usually happens around the same date each year. All those meteors seem to come from the same location in the sky and are named after the constellation of the radiant. The best showers are the Perseids around Aug. 12, the Geminids (Dec. 14) and the Quadrants (Jan. 3). Those dates are not that useful for school groups in Canada.

For a list of showers see

https://en.wikipedia.org/wiki/List_of_meteor_showers ZHR is the number expected at the zenith visible from a dark sky site. While the mid

August Perseids have a zenith hourly Rate of 100 (about 2 per minute) most observer see only a fraction of that number, especially from near towns and during bright moon phases. Just before dawn, more meteors can be seen than in the evening.

To observe, a comfortable lounge chair is useful. If several of you make a circle then all meteors can be seen. If club members want to help scientists, there are ways to report observations:

(https://www.lpi.usra.edu/science/kring/epo_web/meteorites/reports/)

There are camera installations to make videos of the whole sky to capture meteors. If a large bolide streaks through the sky close to cameras, the origin of the object can be calculated.

Some years, the Earth passes through a particular dense group of meteoroids and we have a meteor storm such as this 1833 Leonid storm in mid November. Seeing that many meteors at once is extremely rare perhaps less than once a century.



Wikipedia