Topic Page: meteor shower

Definition: **meteor shower** from *The Penguin Dictionary of Science*

The appearance on the same dates of the year of ➤meteors, seeming to radiate from the same point in the sky. They are observed when the Earth passes close to the orbit of a ➤comet, and occur as the Earth encounters dust particles shed by the comet that have spread around its orbit.

Image from: **radiant Meteors from a common source, occurring...** in *Astronomy Encyclopedia*

Summary Article: **meteor shower**
From *The Columbia Encyclopedia*

increase in the number of meteors observed in a particular part of the sky. The trails of the meteors of a meteor shower all appear to be traceable back to a single point in the sky, known as the radiant point, or radiant. A shower is named for the constellation in which its radiant is located, e.g., the Lyrids appear to come from a point in Lyra, the Perseids from Perseus, and the Orionids from Orion.

Meteor showers usually occur annually and with varying intensity. While the average counting rate of meteors for the entire sky is between 5 and 10 per hr, an observer may see twice this number in one part of the sky during a shower, depending on atmospheric conditions and the degree of darkness, and in the case of the Perseids, possibly more than 100 in an hour. The Leonids produce spectacular displays roughly every 33 years, as they did during the meteor storm of 1966 (with a peak of a thousand a minute) and the intense shower of 2001 (with a peak of several thousand an hour). The Taurids, though not intense in number of meteors, is noted for the spectacular fireballs it displays.

Most meteor showers are closely associated with comets. When a comet approaches the sun, a swarm of particles is shed along its orbit. If this orbit intersects that of the earth, a meteor shower will be observed. The shower will be particularly intense in those years when the original comet would have been observed. The Geminids are an exception; they are associated with the asteroid 3200 Phaethon. The Andromedids are associated with Biela's comet, the Eta Aquarids and Orionids with Halley's comet, the Leonids with Comet Tempel-Tuttle, the Lyrids with Comet Thatcher, the Perseids with Comet Swift-Tuttle, and the Taurids with Comet Encke. Some of the better-known meteor showers and their approximate peak dates are: Lyrids, Apr. 21; Perseids, Aug. 12; Orionids, Oct. 20; Taurids, Nov. 4; Leonids, Nov. 16; Geminids, Dec. 13.

The Columbia Encyclopedia, © Columbia University Press 2018

APA

meteor shower. (2018). In P. Lagasse, & Columbia University, *The Columbia encyclopedia* (8th ed.). New York, NY: Columbia University Press. Retrieved from https://search.credoreference.com/content/topic/meteor_shower

Chicago

"meteor shower." In *The Columbia Encyclopedia*, by Paul Lagasse, and Columbia University. 8th ed. Columbia University Press, 2018. https://search.credoreference.com/content/topic/meteor_shower

Harvard

meteor shower. (2018). In P. Lagasse & Columbia University, *The Columbia encyclopedia*. (8th ed.). [Online]. New York: Columbia University Press. Available from: https://search.credoreference.com/content/topic/meteor_shower [Accessed 13 November 2019].

MLA

"meteor shower." *The Columbia Encyclopedia*, Paul Lagasse, and Columbia University, Columbia University Press, 8th edition, 2018. *Credo Reference*, https://search.credoreference.com/content/topic/meteor_shower. Accessed 13 Nov. 2019.