

January's Quadrantid Meteor Shower Should Be Easily Visible

Astronomers at the Pisgah Astronomical Research Institute (PARI) alert the public to the Quadrantid Meteor Shower in early January.

Meteors result from particles of dust causing the atmosphere to glow as the particles enter the upper atmosphere of the Earth. Most meteor showers are caused by debris from comets, but a couple, like the Quadrantids, are known to originate from asteroids. The particles that cause the Quadrantid meteor shower originate from the asteroid 2003 EH1. Since the orbit of 2003 EH1 is highly inclined to the orbit of the Earth, the Earth passes through it very quickly. Thus, the Quadrantid meteor shower is an extremely short one, lasting only a few hours.

In 2012, the Quadrantids are predicted to reach a peak of about 120 meteors per hour about 2 a.m. on Wednesday, Jan. 4. The radiant, i.e., that point from which the meteors seem to radiate from, is almost circumpolar from our latitude. Therefore, we might see a

few Quadrantids coming out of the north around as early as 8 to 9 p.m. However, since this meteor shower has a narrow peak, centered this year on 2 a.m., and a waxing gibbous moon will be in the sky, we should have better luck looking to the northeast after moonset about 3:30 a.m. In any case, one should observe from a clear, dark location with a good horizon. Look for meteors appearing to radiate out of a point between the constellations of Hercules, the strong man and Boötes, the herdsman. Binoculars or telescopes are not needed to observe meteors.

Incidentally, meteor showers are usually named after the constellation out of which the meteors seem to originate, i.e., their radiant point. However, there is no modern constellation of Quadrans. Instead, this shower retains its name from the obsolete constellation of Quadrans Muralis an instrument used to measure the positions of stars.

PARI is a not-for-profit

public foundation established in 1998. Located in the Pisgah National Forest, PARI offers educational programs at all levels, from

K-12 through post-graduate research. For more information about PARI and its programs, visit www.pari.edu.