

Catch a Falling Star By LuAnn LePere

“There goes one!” is the cry of night sky observers as a flash of light streaks across their field of view. What are commonly called “falling stars” are not stars at all, but much, much smaller particles much, much closer to Earth. Every August the most reliable meteor shower of the year coaxes enthusiasts from their beds hoping to enjoy the show. This month’s event is called the Perseids because the streaking meteors seem to originate in the constellation Perseus.

What we actually see are bits of rock and dust burning up as they encounter the earth’s atmosphere. These bits of cosmic debris are called meteoroids and are often found in our solar system in regions that loosely correspond to the path of comets that passed through years ago. The Perseids are remnants of the comet Swift-Tuttle that last appeared in 1992. This comet also visited the sun in 1862. Each pass of the comet leaves a filament of particles in its wake that range in size from a boulder to a grain of sand. The next projected visit from this comet is 2126.

Every year as Earth’s orbit reaches this area of Swift-Tuttle’s path, meteoroids hit our atmosphere at thousands of miles an hour. They start to burn up at 30 to 80 miles above the ground, causing flashes or streaks of light we call meteors. In rare cases, a meteor may survive the trip through the atmosphere and hit the ground. We then call it a meteorite.

This year Perseid meteors should be visible starting in late July, increasing in frequency up through August 12 and then diminishing for the rest of the month. The constellation Perseus rises in the northeast during the month of August with best viewing of the showers projected between midnight and dawn on August 12

In order to view meteors, you do not need special equipment. For the best chance of seeing the most meteors this month, pick a location as dark as possible where you can see as much of the sky as possible. Lie down or sit facing the northeast and get comfortable. You can expect to see some meteors any time it is dark this month with the best chance coming when Perseus is high in the sky between 2AM and dawn in the middle of the month.

Astronomers estimate that this year’s Perseids may show up to 100 meteors an hour around the projected peak on August 12th. Unfortunately, the moon will be prominent during the peak hours of this year’s shower. Moonlight will wash out some of the fainter meteors. Nevertheless, both casual and regular observers will be on the lookout this month for meteors streaking across the night sky.

Visit the Cameron Park Rotary Observatory in Placerville for more information on meteor showers and other night sky phenomena. The observatory is open free to the public on Friday, Saturday and Sunday nights. Please visit our website, www.communityobservatory.com for more details.