

Meteor shower fizzles here, sizzles in Europe



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To quote from the American Heritage Dictionary: "ham - Something false or empty purporting to be genuine." Add to that definition: "The 1993 Perseid meteor shower."

To say that the Perseid shower was disappointing is an understatement. For a meteor shower that is, on average, one of the best of the year (60 meteors per hour), the Perseids left much to be desired; for a shower that had the potential to be even better than average in 1993, the Perseids should be banished to the

deepest regions of outer space. I personally saw a whopping two meteors in a 15-minute period, and one of those appeared to be not a Perseid but a Lyrid meteor. Another observer reported seeing only 11 in 90 minutes. However, European observers saw a nice display.

This is what "Sky & Telescope's" on-line news bulletin reported: "One of the best meteor showers in years struck the Earth on the night of Aug. 11. Even so, the Perseids confounded and disappointed millions of eager viewers by producing no 'meteor storm' anywhere in the world. Astronomers had forecast a great display following the return last December of the shower's source, Comet Swift-Tuttle."

Worldwide media attention turned "Perseid night" into the more qualified night-sky event since Comet Halley in 1995. NASA even postponed a Space Shuttle mission to avoid endangering the astronauts.

"While much of the public dubbed it a dud, the Perseid shower was in fact much richer than average. Moreover, observer reports received here say it contained an unusually high proportion of very bright meteors. The display got off to a slow start... when the Earth crossed the comet's orbit plane, the rate picked up for observers in Europe. Meteors were coming much faster... as dawn began to break over France, where the zenithal hourly rate may have surpassed 300."

Here in North America, observers across the United States typically saw 60 to 110 per hour under conditions that probably translated to a zenithal hourly rate of a couple hundred or so. But many regions were clouded out. "Sky & Telescope" magazine is available at bookstores or from Sky Publishing, P.O. Box 9111, Belmont, Mass. 02178.)

This "zenithal hourly rate" is not what one would actually see, mind you. The "Observer's Handbook," published by the Royal Astronomical Society of Canada, defines the ZHR as "the number of meteors a single experienced observer would see (from a shower with radiant directly overhead) in a dark sky location under exceptional conditions where plus-6.5 magnitude stars are visible."

Well, sounds like the far side of the moon would be a great location; however that is a bit remote, so one might have to settle for the rarefied atmosphere on top of a terrestrial mountain. Alas, southeastern Michigan is not noted for its towering peaks, in spite of the number of "heights" we have around here (Sterling, Madison and Dearborn).

The sky in the northern suburbs developed a light haze shortly after midnight which, unfortunately, was the prime observing time, so skywatchers who went Perseid hunting earlier in the evening had better viewing conditions. Oh, well; one can hope for a better display from the Geminids in December.

Meanwhile, four of the five naked eye planets will be visible the first part of September. Venus

will continue to dazzle the eye in the pre-dawn sky; Mars and Jupiter will be seen in the west at dusk, although not for long, and Saturn will be visible all night.

The moon, just past full phase, began rising in the east shortly after sunset Sept. 1. Notice the "star" 26 degrees to the right of the moon; this will be the planet Saturn.

Saturn will rise in the east southeast at 7:38 p.m. (which is 33 minutes before sunset) and will set at 6 a.m. (about an hour before sunrise) the following morning. This means the planet will be visible all night, skimming low across the sky in the constellation of Capricornus.

Meanwhile, look toward the west southwest on the same evening and you will see Mars, Jupiter and Spica. Jupiter will be the brightest of the three. Nine degrees to the left of Jupiter will be Spica, the brightest star in the constellation of Virgo; two degrees below and to the right of Jupiter will be Mars, the father of the three. (Binoculars will help you spot Mars.) In one week, Mars will slip less than one degree below Jupiter, but the conjunction (grouping) will be difficult to see because of interference from the

glow of evening twilight. Venus will be found 12 degrees above the eastern horizon on the morning of the 2nd. Notice the star 16 degrees above Venus; this will be Pollux, one of the "twin" stars in Gemini. His "brother," Castor, will be seen five degrees higher.

Mars will be within one degree of Jupiter for three nights, beginning Sept. 4. Their closest approach will be 0.8 degree on Sunday, the 5th. Is there a risk of "worlds in collision"? No, the planets are millions of kilometers apart. A conjunction makes for an attractive grouping and nothing more.

Look toward the east, 45 minutes before sunrise on Sept. 6, and try to spot Regulus, the "heart" of Leo the lion. Regulus will be 18 degrees below bright Venus, but only four degrees above the horizon. Venus will pass one-half of a degree to the left of Regulus in two weeks.

The moon will be approaching the Pleiades star cluster on the morning of the 7th. Use binoculars to observe this tiny "dipper," above and to the left of the moon. The Pleiades marks the "shoulder" of Taurus the bull. On the following morning, the moon will be to the left of the Pleiades, approaching the red "eye" of Taurus, Aldebaran.

The moon will be at last quarter phase at 2:26 a.m. on Sept. 9.

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