



## Perseids Versus the Moon

**THIS IS AN OFF-YEAR** for the annual Perseid meteor shower as it peaks on the night of August 12–13, just one day after full Moon. Before you completely give up hope, though, remember that the display produces plenty of bright meteors and many spectacular fireballs. Moreover, the stream is broad, so we can expect at least a few Perseids darting about on clear nights from mid-July through the end of August.

During the shower's peak under moonless skies, 90 meteors per hour streak across the sky from a radiant in Perseus, below the familiar W of Cassiopeia in the northeastern sky (see the chart above). However, moonlight will reduce that number by about half. Although this year's peak occurs around 1 UT on August 13th (9 p.m. EDT on the 12th), you'll likely spot more meteors from 2 a.m. till dawn local daylight-saving time on the 13th, when the shower's radiant stands at its highest.

▲ The annual Perseid meteor shower reaches maximum on the night of August 12–13 but with reduced numbers due to light from the nearly full Moon. The meteors will stream from the radiant, which stands about 20° high at nightfall but climbs to more than 60° by the start of dawn, when you'll see the most activity.

The Perseids are famous for out-bursts, in which the counts can briefly double or even triple. Last year during the small hours of August 14th, a day after the predicted maximum, only about 45 meteors per hour were anticipated. Instead, skywatchers got a big surprise, with more than two streaks per minute. The reason? Earth ran into an unexpectedly dense filament of dust deposited by the shower's parent comet, 109P/Swift-Tuttle. What will happen this year? Moonlight or not, I'll be checking and encourage you to do the same. \*\*\*