

Two Challenging October Meteor Showers—the Draconids & Orionids

IF YOU'RE A cup-half-full sort of meteor watcher, you'll be interested in two modest displays this month: the Orionids and the Draconids.

First up is **the Draconid meteor shower**, which appears to radiate from the Dragon's head, at a spot midway between Beta (β) and Nu (ν) Draconis. (Both stars are labeled on our star map on pages 42 and 43.) Famous for the spectacular storms of 1933 and 1946, the shower's nominal rate is a piddling five meteors per hour. This year's peak occurs on the 8th around 13 UT, making **the night of October 7–8** your best bet. At least the Moon isn't a bother — the thick waxing crescent sets around 9 p.m. local daylight time on the 7th.

In contrast to the speedy Orionids, the Draconids are among the slowest of all meteors — a trait that aids in their identification. There's a small chance for

a minor outburst arising from two dust trails laid down in 1852 and 1859 by the shower's parent, Comet 21P/Giacobini-Zinner. The dust trails approach Earth between about 6:30 and 7:00 UT (2:30 a.m. and 3:00 a.m. EDT) on the 8th. Keep an eye out for enhanced activity.

The Orionids peak during the night of October 20–21 at 6:00 UT on the 21st, but the waning gibbous Moon compromises the display. During a typical Orionid shower, you can spot up to 20 swift meteors per hour streaming from the radiant near Betelgeuse, in Orion. But conditions this year likely mean that number will be at least halved. You can make the most of the less-than-ideal circumstances by alternating between meteor watching and using your scope to gaze at the Moon and Jupiter, which happen to be in conjunction on the night of the Orionid peak. ***