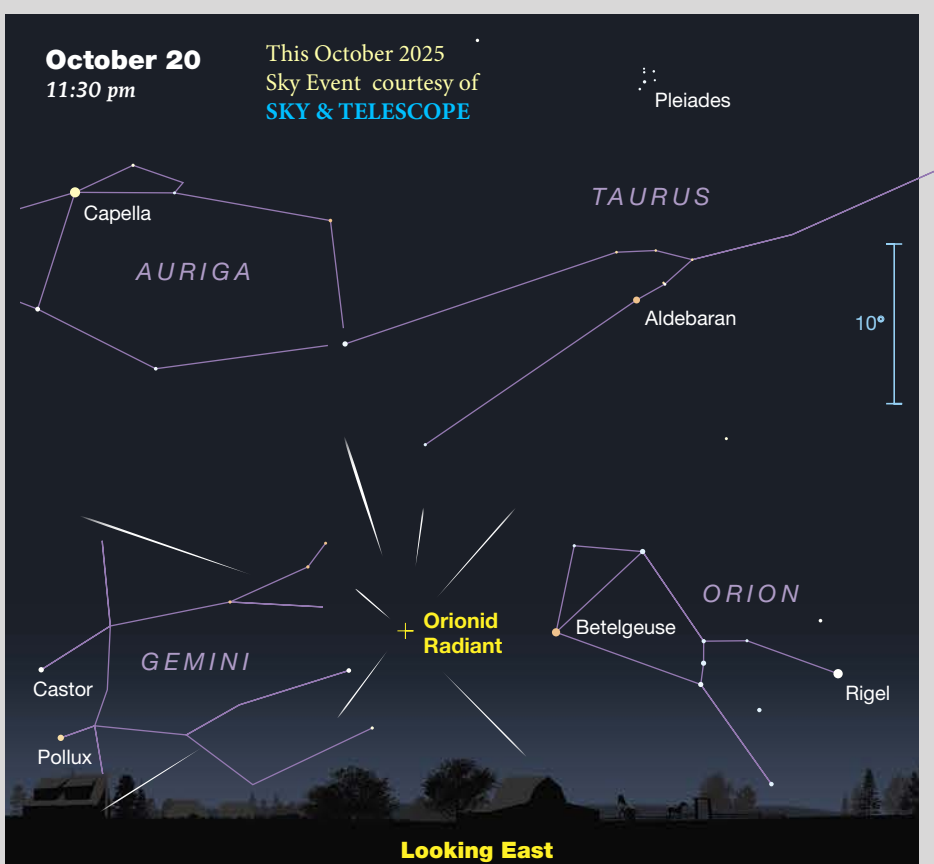


October 20
11:30 pm

This October 2025
Sky Event courtesy of
SKY & TELESCOPE



Orionid Perfection

CIRCUMSTANCES COULDN'T be better for this year's **Orionid meteor shower**. The **peak occurs on the night of October 20–21**, when the Moon is absent (new Moon is at 8:25 a.m. EDT on the 21st) and when the worst of the smoke from wildfire season is hopefully behind us. The Orionids usually produce from 10 to 30 speedy meteors per hour when observed from a dark-sky site. Suburban skywatchers can expect to see half as many. No outbursts are predicted this year, but several have occurred in the past. In 2006 and 2007, some observers recorded rates of 60 to 80 meteors per hour.

Orionids appear to fly out from their namesake constellation but actually originate with Halley's Comet. During its periodic visits to the inner solar system, heat from the Sun vaporizes the comet's dust-laden ices, releasing material into space along its orbital path. These grains are composed of silicates, carbon-rich organic compounds, and

▲ Orionids originate from Halley's Comet and stream from a radiant located in Orion's up-raised club. The shower's peak occurs on the night of October 20–21. Orionids can appear in all parts of the sky, but their paths all point back to the radiant.

small amounts of iron- and magnesium-rich metals. Each particle is about as large as a tiny grain of sand.

Earth flies through the comet's debris trail in October, turning the bits of sand into kamikaze-like meteors that strike the atmosphere at more than 66 kilometers per second (148,000 miles per hour). Most Orionids are on the faint side, but their swiftness will make your head turn. As the chart above shows, the meteors stream from a spot located in the Hunter's upraised club. Although the radiant clears the horizon around 11 p.m. local daylight time, wait a few hours until Orion commands the southeastern sky before settling in to enjoy the shower. The best time to watch is from 2 a.m. to 6 a.m.