

January 3: Quadrantids Meteor Shower

The Quadrantids meteor shower peaks in the early morning of January 3-4. Estimated meteor count is 40-100 meteors per hour. The brightness of the wanning moon will wash out our view somewhat. If you can get away from city lights your best chance of seeing the Quadrantids is shortly before dawn on January 4.

January 4: Earth at Perihelion

On this day Earth is at its closest point to the Sun, 91.4 million miles. Perihelion occurs 2 weeks after Winter Solstice.

January 6: Full Moon – Wolf Moon

January's full moon is known as the Wolf Moon because this is the time of year wolves are likely to be heard howling. January's full moon is a Micromoon this year (the opposite of a Supermoon). The January full Moon will be at its furthest point away from earth. This is called "apogee" in astronomical terms.

January 21: New Moon – Supermoon

Approximately 221,000 miles away, this is the closest supermoon for a few years. A supermoon is defined as a Full Moon or New Moon that occurs around perigee – the point in the Moon's orbit when it's closest to Earth. This one is a New Moon, so we won't be able to actually see it. New moons are the best time to view deep sky objects. One of the best of these objects is available to us right now and throughout the winter months. It is the Orion nebula. The highly recognizable 3 stars in a row are Orion's belt. Below this hangs Orion's sword. You can see this with your naked eyes. It looks like 3 stars very close together but the middle one look blurry. That's Orion's nebula. You can view this betterwith binoculars or any telescope.

Planets

Saturn is leaving the night sky. Shortly after sunset Saturn can be seen just above the horizon, but only for an hour or two and then it will set. Jupitar continues in the early night sky, setting about 11:00pm CST at the first of the month. By the end of the month Jupitar will set around 9:00 pm. Mars will continue to shine brightly all night and early morning.

Comets

Yes, we have a comet this month! It is called C/2022 E3 (ZTF). This comet was discovered in March 2022. It is not periodic and we will only see it pass through our solar system once or take more than 200 years to orbit the Sun. It was discovered in March 2022 using telescopes at the Zwicky Transient Facility. It can be seen right now with a telescope about an hour before sunrise low near the east-northeast horizon. 10x50 binoculars should also be able to capture it. The comet will be fairly dim early in the month but will continue to brighten until it reaches its brightest on February 1. It will also continue to be progressively viewable earlier in the sky until it is viewable all night around the last week of January. You can track it here: https://in-the-sky.org/news.php?id=20230112_19_100&town=4684888 (Be sure to change the location to Dallas Texas)