

What's in the Sky

February 2023

February 5: Full Moon

February's full moon is called the Snow Moon. It gets its name from the cold snowy weather conditions this time of year. It is also the smallest Full Moon of the year. The Snow Moon will rise in the North Texas sky around 6:00pm.

February 20: New Moon

Without the glow of the Moon to interfere, the New Moon is the best time to view celestial objects and February is the best time to view M42, the Orion Nebula. Look just below the 3 stars of Orion's Belt and you should see a very small group of 3 stars. These are in Orion's Sword. The middle one is fuzzy. That is the Orion Nebula. At the center of the nebula are 4 stars grouped very close together. That is the Trapezium Cluster. Here is a great image of the cluster from the NASA Hubble Telescope.



Here is a picture taken with my phone from my beginner telescope without any filters, shivering in the cold and rather windy night. No comparison to the Hubble image, but I think it is pretty cool.



The Planets

On February 1st, Saturn will be setting shortly after the Sun and quite difficult to see. Beginning on the 20th, look to the western horizon around 7:00pm. The Venus-Jupiter separation is less than 10° . That is about the distance from the thumb to pinky finger on your fist at arm's length. Even though the two planets will appear close in the western sky, they will actually be hundreds of millions of miles apart. At this point Venus will be at one of its brightest stages. Though not rare, a Venus-Jupiter conjunction is a spectacular sight and their conjunction is one of the year's celestial highlights. On the 22nd, Jupiter will disappear behind the crescent Moon at approximately 7:16pm, again just above the western horizon. Mars will be in the sky in the evening from dark until after midnight most of the month. On the 27th, Mars will slip behind the moon around 11:15pm and the pair will set in the West together at approximately 2:20am on the 28th.

Globe at Night

Globe at Night, an international citizen-science campaign, is inviting citizen-scientists to measure their night sky brightness and [submit their observations](https://www.globeatnight.org/submit-their-observations) from a computer or smart phone. More than 200,000 measurements have been contributed from people in 180 countries over the last 14 years. Any student or adult can be a citizen-scientist and participate in the 2023 campaign. All you need is a tablet or smartphone. There are just 6 easy steps.

<https://www.globeatnight.org/6-steps.php> For the month of February you will observe the constellation Orion, one of the most recognizable constellations in the sky. Just look for the 3 stars in a row. That is Orion's belt. Then follow the steps. By participating you will be contributing to a worldwide database that is used to compare trends over years and with other data sets (like on animals) to see what effects light pollution has on them. This can be a fun activity or science project for a student. You can observe from your own back yard or even a shopping center parking lot. Multiple observations from a variety of locations are welcome. For more information google [Globe at Night](https://www.globeatnight.org)