

SKYWATCH: September, great month for viewing the night sky

Jim Rutenbeck, Popular Astronomy Club, Sep 5, 2021



A full moon as seen from Davenport on Aug. 21, 2021. The next full moon will appear around Sept. 21 in the Quad-Cities. Photo by Thomas Geyer.

September is a great time of the year to view the night sky. During the month that brings the end of summer and start of fall, it becomes dark earlier in the evening and temperatures are generally mild.

At the beginning of September, the sun sets at about 7:30 p.m. By the end of the month, sunset occurs at about 6:45 p.m.

Shortly after sunset this September, on a clear evening, look to the west. You will see a bright object, one that rates as the second-brightest in the night sky behind only the moon. It is the planet Venus.

A half-hour after sunset, look to the southeast. You should see two bright “stars,” objects that are actually planets. The one to the left, and the brighter of the two, is Jupiter. The one to the right is Saturn.

They are the largest planets in our solar system. If you have a telescope in a dark place with clear skies, you may see rings around Saturn and as many as four little dots of light in a line around Jupiter. The dots are the four brightest of Jupiter’s many moons.

September 2021 provides some of the best views we’ll have of Saturn and Jupiter because they recently have been in opposition. That means that they are closest to the Earth and also visible most of the night.

Depending on the day of the month, our moon may be visible. The moon rotates around the Earth in a little under a month (the word “month” is derived from moon) and so goes through four different phases.

Sept. 6 brings the new moon, which means that the moon is between the Earth and the sun and therefore not visible on this night. By Sept. 13, the moon has moved to a position that we call the first quarter, with one half of its surface lit and visible in the southwest until it sets at about 11:30 p.m.

By Sept. 21, the moon is full, which means it is directly opposite the sun in its orbit. It will rise in the east at about the same time that the sun sets in the west and be visible nearly all night long, setting in the west about the time that the sun rises in the east the next morning.

By Sept. 28, the moon will be at third quarter, appearing as a half-lit object rising in the east at about 11:30 p.m. and moving to nearly halfway up the sky by dawn.

Along with the moon and planets, there are many stars in the sky, but some can be difficult to see from the city because of bright artificial lights. If you can travel to a location away from city lights, you can see much more in the sky, especially around the time of the new moon when moonlight doesn’t wash out dimmer stars.

If you are in a dark location, look to the south and overhead. You should see white “cloud of light.” This is the densest part of our galaxy, the Milky Way. Our sun is just one of more than a billion stars that call the Milky Way home.

It is a joy to look at all these stars so far away that blend together to look like clouds in the night. With binoculars or a telescope, more stars and other objects can be resolved.

During September, you are welcome to attend two public viewing nights held by local astronomy clubs. On Saturday, Sept. 18, the Popular Astronomy Club will hold an observing session at Niabi Zoo in Coal Valley. The following Saturday, Sept. 25, the Quad Cities Astronomical Society will offer a public viewing session at the Wapsi River Environmental Education Center, located north of Dixon, Iowa.

Both events will begin at about sunset and are free and open to everyone. Please join us so you can learn more about the wonders of the night sky in September, and the year round.