

# WEEKLY STARGAZERS' NEWSLETTER

by Dr. Bob

Volume 7, Issue 10

These are the notes that I use for the weekly radio broadcast on Rome Radio Station WLAQ AM 1410 and FM 96.9. The program airs at 7:50 a.m. each Tuesday morning. The radio station also has a live FaceBook broadcast at the same time: WLAQ-Rome. Send questions to: ryoung@highlands.edu

**OBSERVATION PERIOD:**  
03/07/23 – 03/13/23

Etowah GYSTC  
Website QR code



## FUN FACT OF THE WEEK:

**Daylight Saving Time – Sunday March 12<sup>th</sup>, 2:00 a.m. Spring Forward.**

("Although *daylight saving time* is considered correct, *daylight savings time* (with an "s") is commonly used.") The first two words are sometimes hyphenated (*daylight-saving[s] time*). Merriam-Webster's also lists the forms **daylight saving** (without "time"), **daylight savings** (without "time"), and **daylight time**.

Most of Arizona does not use DST but With the exception of the Navajo Nation. However, a part of the Hopi Nation, which lies within the Navajo Nation, follows Arizona's no-DST rule. To confuse matters more, there is also an even smaller Navajo Nation territory within the Hopi Nation within the Navajo Nation. In addition to this, there is another Hopi area adjacent to the main Hopi Nation territory.

As a result, if driving the correct route from the Arizona state border through both Navajo and Hopi areas to the other side one can end up changing one's clock 7 times driving in and out of DST areas.

## MOON FOR THE WEEK:

The Moon is Full today (Tuesday), 3/7. The March Full Moon is called the **Worm Moon**. At the time of spring the ground begins to soften and earthworm casts reappear, inviting the return of robins. This is also known as the **Sap Moon**, as it marks the time when maple sap begins to flow and the annual tapping of maple trees



Full Moon

begins. The Moon was at apogee last week so it is getting a little closer, day by day. Currently, the Moon's range is 398,906 kms, on the 3<sup>rd</sup> it was 405,889 km away from Earth.

To convert kms to miles, multiply kms by 0.62 miles/km.

### **HORIZON TO HORIZON PLANET VIEW**

The sun rises at 7:03 a.m. and sets at 6:41 p.m. This means that there are 11 hours, 38 mins of daylight hours compared to 11 hours, 23 minutes of daylight hours compared to last week.

The Sun is still in the **constellation Aquarius**. TAs last week, the constellation is the Water Carrier, and is a zodiac constellation.

The is Earth 0.992 AUs from the Sun compared to 0.9904 AUs from the Sun last week. It is 50.2 degrees altitude at the meridian compared to 47.5 degrees last week.

### **The Planets:**

**Mercury** rises about 10 minutes before the Sun. It rises at 6:50 a.m. This means that Mercury is too low to see the best time to view Mercury.

**Venus** sets at 8:31 p.m. which is 2.5 hrs after sunset. This planet is the easiest planet to see. Venus is the hottest planet even though it is the second planet from the Sun.

**Mars** rises up in the eastern horizon in the early afternoon and crosses the meridian at 7:04 p.m. The planet sets at 2:36 a.m. Look for its amber (redish) hue. It will be to the left of Jupiter and Venus. If you look at it through a telescope, you will see its two moons: Phobos and Demos.

**Jupiter** sets at 8:43 p.m. At sunset, it will be a bit lower and to the of right Venus in the evening sky. If you have been watching Jupiter and Venus, you have noticed that the two planets passed each other on March 1<sup>st</sup>. Now Jupiter is lower and to the right of Venus. This means they are close together by line of

sight. When you are watching Venus and Jupiter, look for the four Galilean moons: Io, Callisto, Ganymede, and Europa.

You can identify the moons by name if you go to [https://skyandtelescope.org/wp-content/plugins/observing-tools/jupiter\\_moons/jupiter.html](https://skyandtelescope.org/wp-content/plugins/observing-tools/jupiter_moons/jupiter.html). This is a great interactive tool to identify the four Galilean moons of Jupiter.

**Saturn** is still too close to the Sun this week to see it. It will be a couple weeks before we see Saturn again in the evening sky.

### MARS ROVER PERSEVERANCE

To get regular and current updates on the progress of NASA's Perseverance rover on Mars, go to the website:

<https://www.space.com/news/live/mars-perseverance-rover-update>

### SATELLITES FOR THE WEEK (ISS PASSES)

<a href="#">09 Mar</a>	-3.6	06:03:16	11°	NW	06:06:30	75°	NE	06:09:52	10°	SE	visible
<a href="#">10 Mar</a>	-2.6	05:19:32	34°	N	05:20:20	41°	NE	05:23:33	10°	ESE	visible
<a href="#">11 Mar</a>	-0.7	04:36:29	16°	E	04:36:29	16°	E	04:37:32	10°	E	visible
<a href="#">11 Mar</a>	-2.6	06:09:38	16°	W	06:11:34	26°	SW	06:14:26	10°	S	visible
<a href="#">12 Mar</a>	-3.0	06:27:21	39°	S	06:27:21	39°	S	06:29:53	10°	SSE	visible
<a href="#">13 Mar</a>	-2.2	20:45:58	10°	S	20:48:20	20°	SE	20:48:20	20°	SE	visible

### STAR PATTERNS IN THE SKY

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## **STAR PATTERNS IN THE SKY**

### **BeeHive Cluster**

The Beehive Cluster, also known as Praesepe (Latin for "manger"), M44, NGC 2632, or Cr 189, is an open cluster in the constellation Cancer. It is one of the nearest open clusters to the Solar System, and it contains a larger star population than most other nearby clusters.

Under dark skies the Beehive Cluster looks like a hazy object to the naked eye; thus it has been known since ancient times. The classical astronomer Ptolemy looked it with the naked eye and it was among the first objects that Galileo studied with his telescope.

The cluster's age and proper motion coincide with those of the Hyades open cluster in Taurus the Bull, suggesting that both share a similar origin.

The cluster's distance is often cited to lie between 160 and 187 parsecs (520-610 light years.) The age is at about 600 million years. This is equivalent to the age of the Hyades (~625 million years).

The Beehive is most easily observed when Cancer is high in the sky; in northern latitudes this occurs during the evening from February to May. The cluster fits well in the field of view of a pair of binoculars or a telescope of low power.

## **SPACE HISTORY OF THE WEEK**

### **March 7, 1837: Henry Draper was born.**

was an American doctor and amateur astronomer. He is best known today as a pioneer of astrophotography.

He directed an expedition to photograph the 1874 transit of Venus, and was the first to photograph the Orion Nebula, on September 30, 1880. Using his 11-inch

Clark Brothers photographic refractor he took a 50-minute exposure. He photographed the spectrum of Jupiter in 1880.

**March 8, 1979: active volcanos were found to be on Io, closest to Jupiter of the 4 Galelian Moons.**

Viewed by Voyager 1 imaging. Observations of Io by passing spacecraft (the Voyagers, Galileo, Cassini, and New Horizons) and Earth-based astronomers have revealed more than 150 active volcanoes. Up to 400 such volcanoes are predicted to exist based on these observations.

Io's volcanism makes the satellite one of only four known currently volcanically active worlds in the Solar System (the other three being Earth, Saturn's moon Enceladus, and Neptune's moon Triton).

**QUESTION OF THE WEEK:**

**I work 2<sup>nd</sup> shift and get home around mid-night and I am sure there are satellites that pass my area during that time. Why don't you tell us about satellite passes around mid-night that we can see? Penny M.**

Yes Penny, there are satellites that pass overhead 24 hours a day. The problem is, we can only see satellites that pass overhead when the satellite is in the sunlight while at the same time it is dark at our location. This situation only occurs 1.5 hrs before sunrise and 1.5 hrs after sunset.

It is important to remember that satellites do not have their own light source but rather reflect sunlight. It is the reflected sunlight that we can observe.