

# WEEKLY STARGAZERS' NEWSLETTER

by Dr. Bob

Volume 7, Issue 11

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

Etowah GYSTC  
Website QR code



## OBSERVATION PERIOD:

03/14/23 – 03/20/23

## FUN FACT OF THE WEEK:

Neutron stars pack their mass inside a 20-kilometer (12.4 miles) diameter. They are so dense that a single teaspoon would weigh a billion tons. On average, gravity on a neutron star is 2 billion times stronger than gravity on Earth.

## MOON FOR THE WEEK:

The Moon is Third Quarter on Tuesday, March 14<sup>th</sup>, (Today). The Moon is getting a little closer, day by day. The Moon's range is 378,089 kms today and on March 19<sup>th</sup>, it will be at perigee 362,696 kms away. This is a difference of 15,300 kms. That calculates where the Moon will be getting closer to the Earth by 3,000 kms a day.



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 Pisces**. The constellation is the Fishes, and is a zodiac constellation.

The is Earth 0.994 AUs from the Sun compared to 0.992 AUs from the Sun last week. It is 52.9 degrees altitude at the meridian compared to 50.2 degrees last week.

### **The Planets:**

**Mercury** is too close to the Sun by line of sight to be seen this week.

**Venus** sets at 10:20 p.m. which is 3 hrs after sunset. The planet crossed the meridian at 3:52 p.m. Venus is the easiest planet to see in the Western sunset sky. 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 7:50 p.m. The planet sets at 3:07 a.m. Look for its amber (redish) hue as you look for it. It will be to the left of Venus as you watch Venus.

**Jupiter** crosses the meridian at 3:12 p.m. and sets at 9:23 p.m. At sunset, it will be a bit lower to the horizon than Venus in the evening sky. If you have been watching Jupiter and Venus, you have seen that these two planets continue to separate further from each other.

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="#">14 Mar</a>	-3.8	21:20:38	10°	SW	21:23:53	80°	WNW	21:23:53	80°	WNW	visible
<a href="#">15 Mar</a>	-3.6	20:33:01	10°	SSW	20:36:16	50°	SE	20:39:04	13°	ENE	visible
<a href="#">15 Mar</a>	-0.6	22:11:00	10°	WNW	22:12:04	14°	NW	22:12:04	14°	NW	visible

## STAR PATTERNS IN THE SKY

**Sextans** is a minor equatorial constellation which was introduced in 1687 by Johannes Hevelius. Its name is Latin for the astronomical sextant, an instrument that Hevelius made frequent use of in his observations.

Sextans as a constellation covers a rather dim, sparse region of the sky. It has only one star above the fifth magnitude,

The constellation is the location of the field studied by the COSMOS project, undertaken by the Hubble Space Telescope is within the boundaries of Sextans.

## SPACE HISTORY OF THE WEEK

### 1932, March 15, Alan Bean born:

an American former naval officer and aviator, aeronautical engineer, test pilot, and NASA astronaut; he was the fourth person to walk on the Moon. He was selected to become an astronaut by NASA in 1963 as part of Astronaut Group 3. He made his first flight into space aboard Apollo 12, the second manned mission to land on the Moon, at the age of thirty-seven years in November 1969. He made his second and final flight into space on the Skylab 3 mission in 1973, the second manned mission to the Skylab space station. After retiring from the United States Navy in 1975 and NASA in 1981, he pursued his interest in painting, depicting various space-related scenes and documenting his own experiences in space as well as that of his fellow Apollo program astronauts.

### 1930 March 17, Jim Irwin born:

an American astronaut, aeronautical engineer, test pilot, and a United States Air Force pilot. He served as Lunar Module Pilot for Apollo 15, the fourth human lunar landing. He was the eighth person to walk on the Moon and the first, and youngest, of those astronauts to die.

Irwin suffered at least two serious heart attacks, one near his home in Colorado Springs, Colorado from his heart problem on Apollo 15.

**1958, March 17, Vanguard 1 launched:**

the fourth artificial Earth orbital satellite launched (after Sputnik 1, Sputnik 2, and Explorer 1). It was the first satellite to be solar powered.[3] Although communication with it was lost in 1964, it remains the oldest manmade satellite still in orbit. It was designed to test the launch capabilities of a three-stage launch vehicle as a part of Project Vanguard, and the effects of the environment on a satellite and its systems in Earth orbit.

Heavens-above website can put you on a star that it will pass so you can see it with a small telescope.

**QUESTION OF THE WEEK**

**Do all planets move around the sun in the same direction that the Earth moves? Haley T.**

Astronomers have found that all the planets and moons in the solar system spin and rotate in the same direction. If the solar system is viewed from a spot in deep space to the Earth's north, all the celestial objects in our solar system are rotating and revolving counter clock wise except for two planets. Venus is spinning clockwise and Uranus is spinning on its side.

The two terms rotate and revolve can sometimes be confused. For clarification, rotating mean to spin on an axis like a spinning toy top. Revolve is to move around another object like the horses that go around a merry-go-round carrousel.

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