

### Now that's a good moon question

**By Vernon Whetstone**

*Amateur Astronomer*

Let's open the old letter bin shall we—here is a question: “Why does the moon keep coming into close contact with the planets, especially Jupiter? Seems we have had a lot of close pairings of those two recently.”

Okay, good question. If you have been paying attention, about once a month for the last several months there has been a close conjunction between the moon and the planet Jupiter.

In fact, there was another one just this past Monday.

There are several celestial objects the moon repeatedly passes in front of, or near on a regular basis. All these objects are located along a line called the ecliptic.

The solar system—the Sun and all its planets—is kind of like a flat pancake.

The Sun is in the middle and the planets and other orbiting objects travel around it in orbits that are not all circular, some are rather oval in shape and are frequently tilted up or down from a direct circular path around the Sun.

As observed from Earth, the Sun seems to pass in front of the same series of constellations on a regular basis each month. This is the ecliptic.

The constellations in the background along the ecliptic are called the zodiac. The planets travel in front of them along the ecliptic too.

All the orbiting bodies in the solar system follow this same path.

That is why we will, from time to time, observe one or more planets in the same vicinity of space together.

Now, let's thrown in Earth's moon. It follows a path around Earth also, but its path is inclined about five degrees so it will sometimes appear above and sometimes below the imaginary mid-point line of Earth's middle called the equator.

Now, let's really confuse the mix. Here we have the moon orbiting Earth and Earth orbiting the Sun. As the view of the background stars and planets change throughout the year as seen outward in our night sky, the moon travels in front of this background too, sometimes passing the planets as viewed from Earth as the planets follow the ecliptic, thus we have repeated close sightings of planets themselves and with the moon as it orbits Earth.

Now, has the mud cleared a little?

Two tragic space-related accidents occurred during this week in history.

On Jan. 27, 1967, astronauts Ed White, Gus Grissom, and Roger Chaffee lost their lives when a flash fire engulfed the oxygen-rich cabin of the Apollo 1 capsule during a systems test.

The second tragedy occurred 19 years later when the space shuttle Challenger exploded just after launch taking the lives of all seven crew members, Commander Dick Scobbe, and crew members Michael Smith, Ronald McNair, Ellison Onizuka, Gregory Jarvis, Judith Reskick, and

the first teacher in space, Christa McAuliffe.

SKY WATCH: Full moon, Saturday, Jan. 26. Dwarf planet Ceres can still be seen near the star Elnath in Auriga. Find the "V" of the face of Taurus, the Bull, follow a line left along the upper horn of the bull to the star in the lower right corner of Auriga.

Put the star on the extreme left side of your binocular field of view and Ceres should be close to the middle of the field. Ceres is now moving westward against the background stars but will soon stop and start back to the right, or eastward. By March 3, it will be very, very close to the star Elnath. If you have good, clear, dark skies it would be worth your while to track the small asteroid (oops, dwarf planet) over the coming few weeks.

In fact, Vesta, a sister asteroid, I mean dwarf planet, can be found just below Jupiter slightly to the left. They will both be in the same field of view. Go take a look.

NEXT WEEK: More astronomical blathering.