

Eye on the Sky – February 2010

By Nancy Alima Ali

Lunar New Year

Besides being Valentine's Day, this February 14 also marks the Chinese New Year. The Chinese calendar is a lunisolar calendar in which each month starts with the new phase of the moon. As a general rule, the date of Chinese New Year is determined by the second new moon that occurs after the December solstice. Another method calculates the Chinese New Year as falling on the new moon closest to the traditional beginning of spring on February 4. This explains why Chinese New Year is also called the Spring Festival.

When translating the Chinese calendar to the 2010 Gregorian calendar, the second new moon after the December solstice occurs on February 14 in China. Technically, the moon is new in Hawaii one day earlier on February 13, but the start of Chinese New Year is based on China's standard time zone.

Elusive Mercury

As the closest planet to the sun, Mercury is a difficult planet to see because it is often lost in the sun's glare. This month provides a window of opportunity to observe Mercury before dawn in the eastern sky.

On February 3, Mercury rises at 5:40 a.m. and will be visible for over an hour until dawn arrives. As the month progresses Mercury rises later each day, shortening the length of visibility before dawn. By the end of the month the planet rises nearly 30 minutes before the sun, making it nearly impossible to see. Before dawn on the morning of February 10 is a particularly good time to look for Mercury because the nearby waning crescent moon can be used as a guide for finding the planet lower in the eastern sky. Appropriately, February 10 is a Wednesday, which is named after the Anglo-Saxon god Woden who was associated with Mercury.

Constellation Spotlight: Taurus

One of the zodiac constellations, Taurus can be easily seen in the evening sky throughout February. Look for the bull's V-shaped face near the zenith after sunset and watch it move towards the western horizon until it sets in the early hours of the morning. This asterism—a cluster of stars that make up part of a constellation—is also called the Hyades. The brightest star in the Hyades is Aldebaran, a red giant star that shines at magnitude 0.84. Imagine Aldebaran as the glaring eye in the bull's face. To complete the constellation, follow the lines of the V to two more bright stars that make up the horns of the bull, then imagine the bull's back and legs stretching behind the V.

In most constellation imagery, the Pleiades (another asterism) are clinging to the bull's shoulder. According to Greek mythology, Taurus the bull was placed in the

sky to protect the Seven Sisters (Pleiades) from Orion, whose romantic advances were unappreciated. Basically, Taurus acts as a permanent restraining order against the celestial stalker Orion.

GOT QUESTIONS OR COMMENTS?

Please email nancyali@hawaii.edu or call 808-236-9169.

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