

FEBRUARY 2008 ASTRONOMY

From the Herbert Trackman Planetarium at Joliet Junior College
www.jjc.edu/planetarium/ <<http://www.jjc.edu/planetarium/>>

The most exciting happening in February's night sky will be the total lunar eclipse on February 20th. The eclipse starts at 7:45 pm, enters totality at 9:02 pm, and is over at 11:08 pm. There will be an eclipse watch along with telescope viewing of Mars and Saturn at the Plum Creek Nature Center. Call 708-946-2216 for details. And, of course, that also means the full moon is on the 20th since only a full moon can be eclipsed.

We don't have an eclipse during every full moon because the moon's orbit is on an angle that can take from five degrees above to five degrees below the sun's shadow. The next lunar eclipse is in the middle of the night of December 21, 2010. The next total solar eclipse visible from this area (southern tip of Illinois) is on August 21, 2017. Solar eclipses are huge events that draw people from all over the world.

If you are up before sunrise on February 2nd, look low in the southeast sky and you will see the planets Jupiter and Venus nestled together. Venus is moving towards the sun and will pass behind it, while Jupiter is rising four minutes earlier each day on its way to being an evening planet this fall. Venus, meanwhile, will pass behind the sun and become an evening object in June.

This is a leap year February so there is one extra day. We need the extra day in our calendar because the earth actually take six hours more than 365 days to orbit the sun. So every four years we add a day to the calendar to bring it back in line with the stars.

It's time to debunk a couple of wild rumors that are going around. The earth is not going to be changed or destroyed in 2012. The Mayans, the Hopi Indians and Nostradamus are all supposed to have predicted that it would, according to some who interpret their works. Predictions of the world's impending demise run wild on the internet every couple of years. And regarding the photos of the "little people" on Mars - they are an optical illusion. The figures are only a couple of inches high and don't move, and are sand piles. On a lighter side, there is a crater on Mars with a smiley face in the center!

And with Valentine's Day approaching, the guy who will name a star after someone for you is pushing for fifty of your hard earned dollars. The ONLY organization that can name a star after someone is the International Astronomical Union - and they don't do it for money. The guy on the radio will send you a nice certificate and a map showing which star you bought, but only you and the huckster are going to know the star by that name.

Our free public program on February 25th at 7:30 pm is "Marsquest". The show will be followed by a thirty minute update on the current missions to Mars. We are exploring Mars both on the surface and from above the surface, in preparation for our landing men and woman there in the future.

The night sky is still dominated by the huge constellation of Orion. As you look in the southern sky, he is impossible to miss. High above him is the red planet, Mars.

As you look to the east in mid-evening, you will see two bright "stars". The one higher in the sky is Regulus in the constellation of Leo. The one farther to the east appears yellow and it is the planet, Saturn. The earth's orbit is between Saturn and the sun and we move faster in our orbit. We are going to pass Saturn on the 23rd when we will be the closest to the ringed planet for this year - 770.5 million miles.

Below Orion's belt is a nebula, or star cloud, that is new stars forming out of interstellar gasses. The Orion Nebula is an interesting sight in binoculars.

On February 16th, the sun will move from Capricorn into Aquarius. (All of you who are over thirty-five can start humming, "It is the dawning of the age of Aquarius...")

One sure sign of spring is the Big Dipper overhead in the evening. By the end of February, this familiar constellation will be high in the southeastern sky.

Our children's shows at the Trackman Planetarium this month are "Our Place in Space" on February 7th and "Rusty Rocket" on the 21st. Both shows start at 6:30 pm.

Our general audience shows are "Starflight" on February 12th and "Marsquest" on the 26th. The general audience shows start at 7:30 pm. All shows include a quick trip through the sky on the planetarium dome, and weather permitting, a trip around the outdoor sky after the show.

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