

AUGUST 2010 ASTRONOMY
From the Trackman Planetarium at Joliet Junior College

August is the month when we telescope jockeys recapture the evening skies from the golf club brigade. After eight weeks of late sunsets, the August sun sets noticeably earlier each evening. By the end of August, the sun sets at 7:20 PM. (Sorry, golfers.)

Venus is the bright object in the western sky after sunset, and will continue its eastward movement until August 19th. At the beginning of the month, Venus is just to the west of Saturn and Mars. By the tenth of the month, Venus will be below Saturn and Mars (Saturn is to the right) and on the twentieth, Venus passes less than two degrees below Mars. On August 12th, the moon joins Venus, Mars and Saturn.

By the end of August, Saturn will be lost in the twilight but Mars and Venus will still be in the evening sky until September. Mercury, a very difficult planet to find, will be in the western sky after sunset in the first part of August. Mercury will be at its farthest from the sun on August 6th. Look below and to the right of Venus to find Mercury. By mid-month, Jupiter is rising at 9:30 PM. On August 20th, Neptune will be at its closest to the earth. The farthest planet from the sun will be 2.7 billion miles away from earth.

One of the best meteor showers of the year is the Perseids Meteor Shower. The Perseids meteoroids are rocks that were spread across the earth's orbit by Comet Swift-Tuttle as it approached the sun. The sun's heat melted the comet when it got inside the orbit of Mars and that resulted in a tail of water and rocks. On the evening of August 12th, the earth will pass through this rocky debris and when the rocks (meteoroids) hit the earth's atmosphere they burn and leave a trail through the night sky. When they are visible crossing the night sky, they are known as meteors. If they are large enough to make it to the earth's surface (very rare), they are meteorites. (Meteors are sometimes incorrectly referred to as "Shooting Stars".) The moon will set early on the 12th so any time after 10 PM, look to the northeast and you should see several Perseid Meteors every hour.

The Big Dipper has circled around and it is now in the northwestern sky after sunset. In the center sky after dark are the three stars of the "summer triangle" - Vega, Deneb, and Altair. Deneb marks the tail of Cygnus, the Swan. Cygnus is easy to pick out in the starry sky since it looks almost like a cross. The Milky Way runs through Cygnus and can be seen in dark skies or with binoculars. Look to the southern sky and you will see the claws of Scorpius. The claws are five stars forming a line down to the horizon and the body extends to the left and bends towards the horizon. To the left of Scorpius is Sagittarius. Sagittarius is supposed to be an archer but looks more like a teapot. The Milky Way passes through Sagittarius and the center of our galaxy is right at the spout of the teapot.

The full moon is on August 24th. The sun starts the month in Cancer and on the tenth it moves in to Leo where it spends the rest of August.

The 2010-2011 schedule for the Public Shows at the planetarium will be available on our website soon. The first show is at 7:30 PM on Tuesday, September 14th and will be *The Skies of Autumn*. The skies will be dark by the time the show ends and weather permitting, we will continue the show outdoors looking at the real sky.

Christine McKittrick is now scheduling shows (last week of August) for school classes, scout groups, etc. for the coming season. All of our shows are provided at no cost as a public service of Joliet Junior College. Contact Christine between 7:00 AM and Noon at 815-280-NOVA.

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