

MAY 2010 ASTRONOMY
From the Trackman Planetarium at Joliet Junior College

The sun is continuing its eastward trek through the winter stars we've been watching in the evening sky. The earth is actually doing the moving - not the sun. If you walk around an object, the background changes as you "orbit" the object. The same thing happens as we view the sun from earth's orbit. The background stars change as the earth moves around the sun.

The sun is also setting later each day and it will continue to set later each day until June 21st. We will add another 40 minutes to sunset time as compared to May 1st. The reason the sun appears higher in the sky and sets later in the evening is because the earth's poles are on a 23 degree angle from the plane of the sun. In the summer the sun appears high in the sky and in winter it crosses low in the sky. The sun will be so high in the sky that on May 14th, the sun will rise in Barrow, Alaska - the northernmost city in the United States - and it won't set again until July 28th. Barrow will have twenty-four hours of sunlight every day. (As you go south, the opposite is true. On June 21st, we have over an hour more sunlight than New Orleans.)

Taurus has disappeared in the evening twilight and Orion will be gone by mid-May. In their place are the summer constellations of Bootes, Leo, Ursa Major and Hercules. By 9 PM in mid-May, the very bright star Vega will be in the eastern sky. Vega is one of the summer triangle of stars. The Big Dipper is directly overhead in the evening sky and easy to find.

Mars is still high in the evening sky as it orbits into the constellation of Leo. The moon will be just to the west of Mars on May 19th. Look below and to the east of Leo and you will see a yellow "star" that is actually the planet, Saturn. Saturn will be just above the moon on May 22nd. Venus is the very bright planet in the western sky after sunset. By the end of May, Venus won't be setting until almost 11 PM. Mercury orbited in front of the sun on April 28th and it will be at its highest in the eastern sky before sunrise on May 25th. Jupiter also is in the morning sky at sunrise, but higher in the sky than Mercury. The full moon is on May 27th.

The Eta Aquarids meteor shower peaks on May 5th. The meteors are leftovers from Haley's Comet. The best time to view them will be about midnight because the moon rises at 1:56 the next morning.

The sun is still acting somewhat mysterious. We should have a large number of sunspots at this time in the sunspot cycle and we don't. Recently there have been several large Coronal Mass Ejections - an ejection of plasma from the solar corona. When these ejections reach the earth, they can sometimes override the earth's magnetic shield and produce some spectacular Northern Lights. There have been a few occasions when Northern Lights could be seen from our latitude. If you see green "clouds" dancing in the northern sky, you might be looking at Northern Lights. (Aurora Borealis)

The sun starts the month in Aries and on May 14th moves into Taurus where it will stay for the rest of the month.

Our public shows aimed toward young astronomers during May are:

May 13th - 6:30 PM "Comets and Asteroids"

May 27th - 6:30 PM "We Go To The moon"

Our public shows for general audiences during May are:

May 4th - 7:30 PM, "The Seasonal Skies for May"

May 18th - 7:30 PM, "Search For Intelligent Life"

And finally, here's a little song you can play off the internet that will teach you or your children some basic astronomy. It is done by the folks from Monty Python. Warning! You will catch yourself humming it all day.

<http://dingo.care2.com/cards/flash/5409/galaxy.swf>

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