

April 2008 Astronomy

*From The Trackman Planetarium at Joliet Junior College
www.jjc.edu/planetarium*

Welcome to April. The sun is now in the northern hemisphere and the warming of the earth and lakes has begun. By the end of April, the average high temperature is 62 degrees an increase of 11 degrees compared to April 1st. We also gain an hour and sixteen minutes of daylight.

Mars and Saturn are in the night sky this month. Mars has orbited to the east from Orion and is now near the bright stars Castor and Pollux in Gemini, above and to the left of Orion. We are closer to the sun than Mars is and therefore orbiting faster and moving away from Mars. On April 1st, Mars is 83.5 million miles from earth. On Christmas, when Mars was at its closest, it was 55.1 million miles. Ironically, Mars was in the constellation of Gemini on Christmas. Because we passed it in orbit, Mars appeared to move backward to Orion and now is moving westward again as we pull farther away. This backward motion is the same optical illusion you get as when you pass a car on the highway and it appears to move backward for awhile and then appears to move forward again. With planets, the movement is called retrograde and it gave early astronomers fits because it didn't fit any model of the universe they designed. Once it was determined that the planets went around the sun and not around the earth, retrograde motion made sense.

Mars will continue to move eastward until it passes Saturn on July 9th. Saturn is moving eastward also, but at a much slower speed than Mars. Slower, because it is farther from the sun.

Meanwhile, Saturn is directly overhead in the evening sky and a beautiful sight in telescopes, as those who attended "Telescope Night" on March 25th can attest.

We are losing Orion in the western sky until next year. The Big Dipper is overhead and to the north in the spring sky. Look at the center star in the dipper handle and see if you can see two stars. They are Alcor and Mizar and legend says the ancient Arabs used their ability to decipher the two stars as proof they had good eyesight.

Follow the arc of the Big Dipper's handle and you come to the bright red star, Arcturus, in the constellation Bootes. According to Chicago historians, the light from Arcturus was used to cut the ribbon at the Worlds Fair of 1933. Arcturus was believed to be forty light years away (it is actually 37 light years away) and since it had been forty years since the closing of the Columbian Exposition, they used light that was forty years old to open the new fair. (At least, that's what they said.)

The full moon is on April 20th. Venus can still be seen in the morning before sunrise but will move toward the sun during the month, until it is lost in the sun's glare. Meanwhile, Jupiter is high in the early morning sky before sunrise.

The International Space Station will be crossing the evening sky through April 15th. Go to Heavens-Above.com and use their data base to set it for your town. If you are having a problem, E-mail me your town and I will set it up for you.

Earth Day is being celebrated by the Will County Forest Preserve District on April 19th. The friends of the planetarium will be there from 10 am until 4 pm to show the daytime skies and then back at 8 pm until 10 pm to show the evening skies. Call 708-946-2216 for details.

Will County Forest Preserve will also be sponsoring an Astronomy Night at Messenger Woods Forest Preserve in Homer Glen on April 18th at 8 pm. Call 815-886-1467 for details.

The April shows at the planetarium are:
6:30 pm on April 3rd Our Place in Space
7:30 pm on April 8th This Month's Sky

6:30 pm on April 17th ^ Rusty Rocket
7:30 pm on April 22nd ^ Clouds of Fire

All the shows (except "This Month's Sky") are preceded by a tour of the night sky on the planetarium dome.
7:30 pm shows will be continued outdoors if weather permits.

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