AUGUST 2008 ASTRONOMY

From the Trackman Planetarium at Joliet Junior College.
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August is the last full month of astronomical summer, and the earth's motion through its orbit makes the sun appear lower in the sky each day. We lose about an hour and ten minutes of sunlight this month and by the end of August we are receiving the same amount of sunlight and warmth as we do in mid-April. The ground, lakes, buildings, etc. are warm and keep our temperatures warm well through September.

Before sunrise in the morning you can see Sirius, the brightest star in the night's sky. Sirius is in the southeastern sky rising at about 5 am at mid-August. Sirius was one of the first "calendar" stars. When Sirius rose just before the sun - as it does in August - the early Egyptians knew it was the time of the year for the Nile River to overflow its banks. Sirius is in the constellation Canis Major or the Big Dog, and is known as the "Dog Star". It is because of the Dog Star's rising in August that the days of August are known as the "dog days" of summer.

Jupiter is the bright object in the southern skies each evening. Jupiter is the largest of all the planets and is over four hundred million miles away. Venus is the bright object in the evening sky easy to see in the western sky after sunset starting mid-August. Venus is the third brightest object in the sky after the sun and moon, and is easy to find. Venus sets about an hour after sunset. On August 31st, Venus, Mars and Mercury will be in a close triangle in the western sky after sunset.

Saturn has worked its way close to the sun and is barely visible after sunset. Mars has moved eastward in its orbit and will be visible through the end of the month.

The three bright stars of the Summer Triangle are overhead in the evening. They are Deneb, Altair, and Vega. Vega is the highest and the brightest in the sky. Our Milky Way galaxy is turning toward Vega and we will be nearing it in about eight million years. Look to the east of Vega with binoculars to see the stars of the Milky Way.

The Perseids meteor shower centers on August 12th. The Perseids is one of the best meteor showers of the year and is especially inviting because it comes during warm weather. Unfortunately, the moon is not cooperating this year and won't set until after one in the morning. Even with the moon, it will still be worth taking a break from routine in the late evening to scan the northeast sky for some Perseids meteors.

The full moon is on August 16 th. The August moon had many Native American names, almost all having to do with fowl shedding their feathers, or corn and berries ripening. And for many of us, it's the "Back to School" moon.

The public shows at the planetarium will be starting on September 16th at 7:30 pm with "The Skies of September and October". `Meanwhile, school groups will start visiting right after Labor Day.

Joliet Junior College is sponsoring an Astronomy Camp for children on August 11th & 12th from 9:00 am until 11:30 am. Call Brenda Large at 815-280-1504 for details.

A new object is crossing our skies and will be visible starting this month. A 1,400 pound piece of equipment jettisoned form the International Space Station one year ago is sinking into a lower orbit each day and is now visible as it crosses the evening sky. The Early Ammonia Servicer (about the size of a double refrigerator) will eventually enter the earth's atmosphere and burn up like a large meteor. Meanwhile, you can get the viewing times from: http://www.spaceweather.com/flybys/index.php?PHPSESSID=kfsm1sjk7kmo5r826gkf6mu385

This website will give you times and places for objects crossing your sky. All you need to do is enter your zip code.

Looking for an interesting challenge? The Japanese Space Agency is going to launch a satellite named GOSAT, which stands for Greenhouse Gases Observation Satellite. The Japanese Space Agency has invited Americans to participate in a contest to give the satellite a nickname. The challenge is: all the entries must be in Japanese Characters.

The International Astronomical Union has given dwarf planet 2005FY9 a name. It will henceforth be know as Makemake. Because this dwarf planet is outside the orbit of Neptune, it qualifies as a Plutoid as well.

NASA's little digger on Mars, called Phoenix, has found water in the Martian ice. The spacecraft digs small scoops of Martian surface and puts it in a heater to analyze. Finding water is complicated because of the low atmospheric pressure on Mars. The atmospheric pressure on Mars is only five percent of what we have on earth and the water goes directly from solid (ice) to gas.