

THE SKY THIS MONTH

MARCH 2009

SATURN'S RINGS ARE SHY THIS YEAR

The planet Saturn is widely known for its phenomenal ring system, yet many do not know that its rings become invisible to us every 15 years.

Saturn's year is 29.4 of our years long; therefore Saturn's seasons last 29.4 times longer than ours; over 7 years each. Saturn's rotation axis is also tilted as Earth's is, thereby giving Saturn seasons as well.

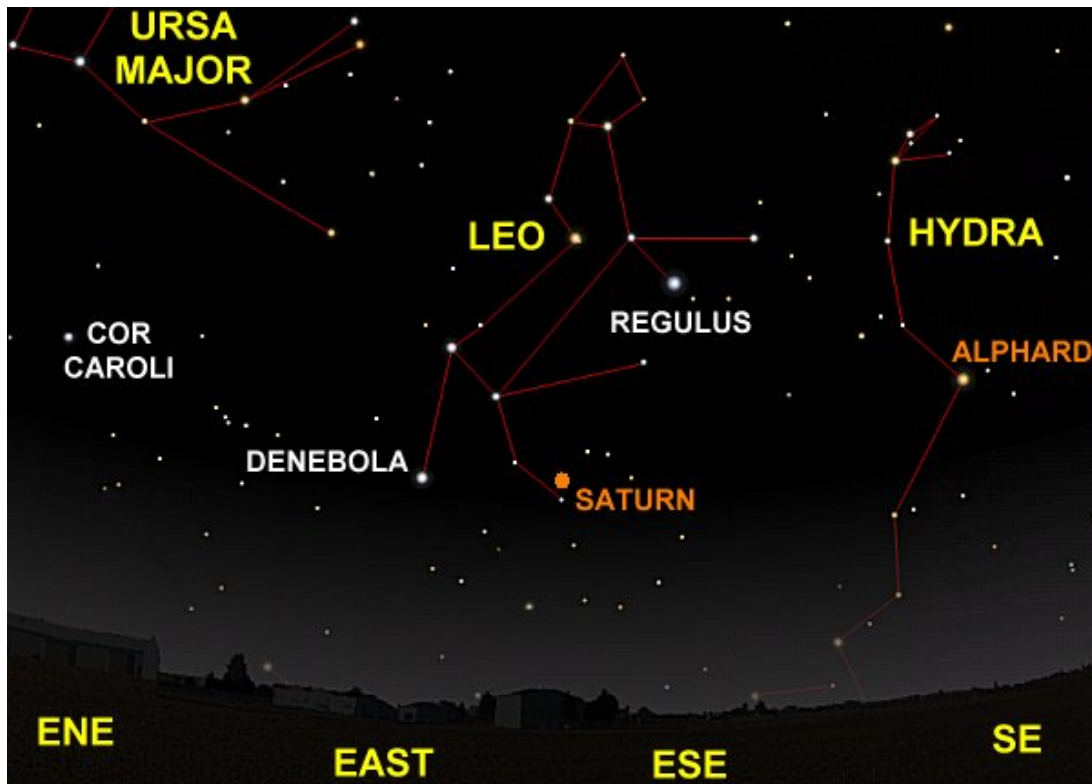
Saturn's ring orientation can be used to determine Saturn's season. This month, Saturn's rings will be tilted about 3 degrees; very thin to telescopic observers. Saturn's northern hemisphere is about to say goodbye to a winter that began in 2002. You thought our winters were long!

On September 4th, the rings will appear edge on to us for the first time since May 1994. At that time, only the planet will be seen and the rings will be invisible to us. Since the rings are only 10 metres thick (about 10 walking paces) the edge-on rings will appear an astronomically slim 0.000000004 degrees thick to us. This is nearly 40,000 times smaller than the best resolution of any telescope on or orbiting the Earth, including Hubble.

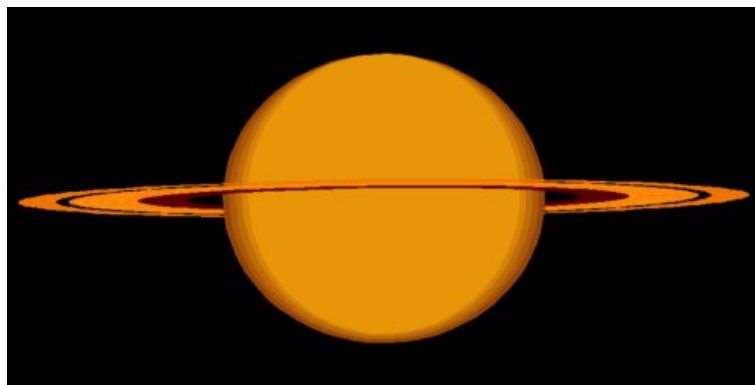
On March 1st, Saturn's rings will appear 2.3 degrees wide. By March 31st, the rings will appear 1 degree wider. If the rings will be edge on by September 4th, why will the rings appear to widen this month? The answer will be featured in an upcoming issue!

As a naked eye object, Saturn will not get rave reviews this year. The rings are the most reflective part of Saturn. When the rings appear their widest to us, they add significant brightness to the planet as seen with the naked eye. When the rings look thin or edge on, Saturn dims considerably and has the brightness of an average star.

Saturn rises at sunset this month. By early evening it will be easily seen above the eastern horizon as an orange-yellow object near the hind leg of Leo the Lion. Saturn will finally leave Leo on September 3rd, when it will enter Virgo for the first time since the summer of 1983.



Saturn at 8:00 p.m. EDT March 20th, 2009. Image by Software Bisque TheSky Version 6.



Saturn's rings as they will appear through a small telescope on March 20th, 2009. Image by Software Bisque's TheSky Version 6.

OTHER NEWS

Those who have enjoyed Venus' amazing brilliance this winter will have their last chance to see it in the evening sky. Venus will quickly appear to head for the Sun and will disappear from the evening sky by the end of March. It will re-emerge in April's eastern dawn sky.

Daylight Saving Time begins at 2 a.m. Sunday March 8th.

The Vernal Equinox (first day of spring) officially begins at 7:44 a.m. EDT March 20th; the first day of the NSC Spring Astronomy Course!

Go to **www.castor2.ca/nsc/05_Courses** to enroll in the NSC Spring Astronomy Course and begin your astronomical adventures!

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