

Give me five minutes and I'll give you Saturn in 2015

The best time to see the planet Saturn in 2015 is now! On May 22-23, 2015, Earth passes between this planet and the sun. As a result, the ringed planet is at its brightest and out all night long. Saturn is the sixth planet outward from the sun and farthest world that's easily visible to the unaided eye. You need a telescope to see the planet's wide, encircling rings, but Saturn is also fun to watch with the eye alone. It shines with a steady light and golden colour. Saturn has been visible throughout 2015, but it's been inconspicuously placed in the late-night or early-morning sky. In late May, Saturn begins rising at sunset and the planet will be out all night long, or nearly so. The reason is that we'll pass between Saturn and the sun on May 23. At that time, Saturn will be opposite the sun as seen from Earth, to rise in the east at sunset, climb highest up at midnight and to set in the west at sunrise.

Saturn lodges fairly close to the bright zodiacal star Antares in the constellation Scorpius throughout 2015. Look for three closely-knit, modestly-bright stars to the west (left) of Antares to view the very recognizable Crown of the Scorpion. The nearby golden light will be the planet Saturn. **To find Saturn in 2015, look for the star Antares and the Crown of the Scorpion.**

Last year (2014), Saturn was in front of Libra near Libra's two brightest stars, Zubenelgenubi and Zubeneshamali. In 2015, Saturn is at the top of Scorpius. Why the difference?

Earth takes a year to orbit the sun. Saturn takes 30 years. So Saturn moves entirely around our sky, with respect to the stars, once every 30 years. In early May you had to wait until mid-to-late evening to see Antares and the Crown of the Scorpion rise in the East. By the time June arrives, Saturn and Antares – and the intervening Scorpion's Crown – will be seen above the horizon at nightfall. **Saturn rises first, followed by the Crown of the Scorpion and then Antares. From then on, you'll see Saturn and Antares adorning the evening sky until October 2015.**

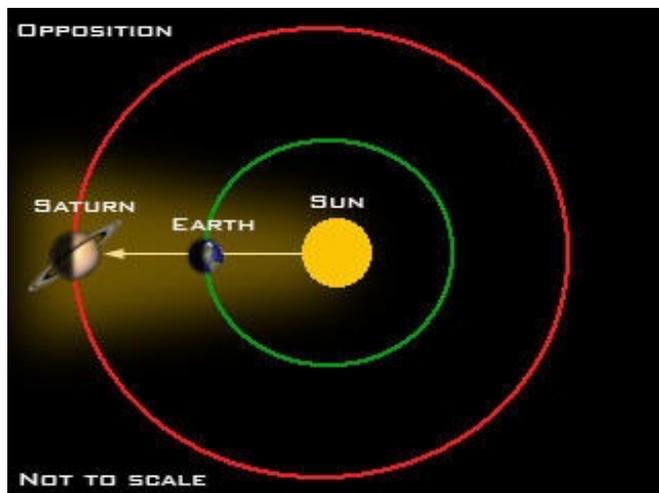
Although Saturn and Antares shine relatively close together on the sky's dome this year, you can distinguish Saturn from Antares by colour. **Saturn exhibits a golden hue whereas Antares glowers red.** If you have difficulty discerning colour, try your luck with binoculars.

If you're handy with a Planisphere or a Star Disc, you can estimate Antares' position in your sky – then use this star to locate Saturn. Because we will pass Saturn – the sixth planet outward from the sun – from an inside track around the sun, the ringed planet will look as if it's going backward (retrograde) in front of the fixed stars of the Zodiac for several months. **In 2015, Saturn retrogrades (moves away from Antares and the Crown of the Scorpion) from March 14 until August 2.**

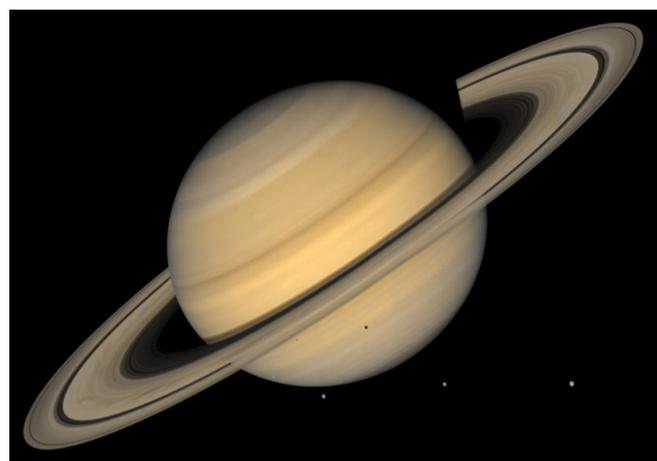
By the way, Saturn's yearly opposition happens about two weeks later with each passing year. The 2009 opposition was on March 8. The 2010 opposition was on March 21. The 2011 opposition was on April 3. The 2012 opposition was April 15. The 2013 opposition was April 28. The 2014 opposition happened on May 10. The 2015 opposition will occur on May 23, and the 2016 opposition on June 3. So you see that Saturn – like most objects in the heavens – is really very orderly in its comings and goings in our sky. Once you learn to identify it, you can recognize it from year to year.

One last thing, for you telescope users: from February 11, 1996, to September 4, 2009, the south side of Saturn's rings was facing in Earth's direction. Since then, we've been looking at the north side of the rings. **In May and June 2015, the rings are inclined at more than 24° from edge-on.** The inclination will shrink to a minimum of 24° in August and will increase to a maximum of 26° by the end of the year.

Can you see the rings of Saturn if you look with the eye alone? No, you need a small telescope to see the rings. But, to the unaided eye, Saturn will appear as a bright golden "star" ... very beautiful. And unlike the twinkling stars, Saturn will shine with a steady light. That might help you identify it.



Saturn is closest, brightest, opposite the sun on May 23.



A view of Saturn by the Cassini spacecraft. Cassini

