

EAST-CENTRAL #SCIASTRO STAR PARTY!

Don't forget the first ever East-Central #sciastro Star Party at the Twin Lakes Star Party, held at the Land Between The Lakes Recreation Area near Golden Pond, KY. The dates are September 30 - October 4. Early arrival and free observing on your own is on Tuesday - Thursday. The formal star party begins Friday. Registration is \$16 per person, or \$22 per family, and includes camping. There is primitive camping on site, with power available for scopes, and potties. There is a nice campground five miles south of the observing field, with showers, etc. The Golden Pond Visitors Center features an 82-seat planetarium, and an on-site observatory with a 4.5" refractor piggybacked on a 12.5" reflector and a 17.5" Dob. For more information, contact Ross Workman at (502) 797-8959. Previous attendees report getting mag 16.8 objects thru a 16". The Land Between the Lakes Recreation area is right off I-24, about halfway between Nashville and Paducah. The star party is hosted by the West Kentucky Amateur Astronomers. For more information on this site, visit their web page at <http://www2.lbl.org/lbl>.

#SCIASTRO T-SHIRTS NOW AVAILABLE! Details for ordering appear elsewhere on the #sciastro website. Proceeds from t-shirt sales will go towards offsetting the expense of renting space for the #sciastro website, so order yours today!

ON MERIDIAN

ORION - MORE THAN JUST A PRETTY NEBULA

By saber101

The beautiful and deadly Scorpion is eternally forbidden to simultaneously occupy the heavens with its most famous victim - Orion. So with its quick exit below the horizon on these late summer nights, Scorpius' departure can only mean that the once mighty Hunter and his Dogs will soon begin their semi-annual aparition across our evening skies.

I caught an early morning preview of Orion in mid-August and greedily went for You-Know-What. Don't worry -it's as beautiful as ever (actually, I guess there is no bad view of the Great Nebula....). But I remember a similar morning about a year ago when I was there on business. I had several double stars to track down in the pre-dawn sky and enjoying the Incredible Star Factory had to wait.

It had been a revelation to me that there were no less than a dozen very interesting double and multiple stars in and around our most recognizable winter constellation. I actually felt somewht ashamed of myself for having spent Orion's previous appearances merely observing the all-important Messier and NGC objects. I just nevergot around to examining a lot of the individual stellar combinations that grace this already busy area of space.

But, it was better late than never. And I still find these to be some of my personal favorites. These stars are all found on Map 11 of Tirion's Sky Atlas 2000.0 and can be split with low- to medium-power in even the smallest scopes. In fact, I caught Orion as it was just rising above the horizon and the relatively thick atmospheric turbulence only served to enhance the colorful contrasts.

BETA ORIONIS - It's no coincidence that, like many of the brightest bad boys in the sky, Rigel also has its own diminutive companion. Among others; Regulus, Antares, Polaris, Procyon, Capella, and even Sirius never travel far from their

unsung, back-up "power-paks". Rigel is complemented by a bluish 7th magnitude sun, which is separated from its larger companion by an angular separation of 9". The extreme difference in brightness can make the pair a challenging, but worthwhile, double to split.

LAMBDA ORIONIS is easily located as the northern apex of a triangle whose base is formed by the stars Betelgeuse and Bellatrix. It has a nice 5.5 magnitude companion at 4.4" and, upon further inspection, a tiny blue tag-along at position angle 180.

If you just can't wait any longer, go ahead and get M42/43 centered in your eyepiece. At the heart of the Nebula is the quadruple star system THETA 1 ORIONIS. Collectively known as the Trapezium, these and several much dimmer components were all formed from the same clouds of gas and dust that comprise this huge stellar nursery. THETA 2 is a wide 5th and 6th magnitude duo found just south and east of the Trapezium.

ZETA ORIONIS (better known as Alnitak) is a telescopic triple, having a 4th magnitude companion at a neighborly 2.4" and a 10th magnitude runt at an unsociable 58". If this arrangement looks familiar, it may be due to the uncanny resemblance to Castor's triple system, which is located next door in Gemini. To distinguish themselves, Alnitak's more distant component shines a nice shade of blue, while Castor's is a definite red.

Finally, just south of Alnitak, is the multiple system SIGMA ORIONIS. My 8" with the reducer/corrector can just squeeze Zeta and Sigma into the same field. Sigma is composed of three easily separable suns that check in at 4th, 6th, and 7th magnitude. With a sharp eye - or increased power - you should detect a faint wannabe-Sigma at about 10"/P.A. 250. Adding to the beauty of this system, the dimmer components each seem to radiate a different shade of blue against the white-gold of the parent star.

So yes, the Orion Nebula is spectacular - even irresistible. But the next time you find yourself in the Hunter's neighborhood, you might want to seek out some of the colorful light-shows that frame our winter showpiece.

(Steve - use my picture of the Orion belt/sword region for this article, with the following caption: The Belt and Sword region of Orion. The star that marks the bottom of the Sword is IOTA ORIONIS, an easy and attractive triple star, even for small telescopes. The closer companion is a bluish star of 6.9 magnitude, 11" away. The more distant companion, at 50" angular separation, is 11th magnitude. Early astronomers described this trio as "white, pale blue, and grape red". See if you can spot the three different colors. An easy double star, Struve 747, lies in the same field with Iota, about 8' to the southwest. Photo by Portia.

THIS ISSUE'S BAD ASTRONOMY QUOTE: This quote came from an actual advertisement for a telescope. We have omitted the brand name of the telescope. "There may or may not be a tenth planet in our solar system out there, but for \$300 you can own a telescope stronger than the one Galileo used to chart the movements of one through nine."

OREGON STAR PARTY

By Sealth

BYTES AND PIECES

DG has recently taken possession of a brand-new Meade 8" LX-50. Congrats, DG!

Several #sciastro-ites went to Stellafane this year, including algenib, Rob_in_NJ, UnderMutt, and NebM42. algenib was kind enough to send us some pictures she took at the star party; they appear at the bottom of the newsletter.

CosmicOne, StormGazr, and ICStars, among other #sciastro-ites, just returned from AstroFest. Cosmic won an award for telescope design and craftsmanship with a mount he designed and built himself. Four views of this amount appear below. It will hold up to 150 lbs of equipment, and is shown with a 6" f/3.6 Schmidt-Newtonian, a 3" refractor guide scope, and a bogen head camera mount on top. Cos tells us he is doing a web page on its design and construction; as soon as he has it finished, we'll publish the URL in the newsletter. Congratulations, Cos!

CRAWLING THE WEB

Want to "drive" around Mars? Try <http://www-pdsimage.wr.usgs.gov/PDS/public/mapmaker/mapmkr.htm#map>. This amazing website will show you various landscapes on Mars that you select yourself from a map. You can even zoom in on areas and "explore" them in more detail. Thanks to joe3 for this one!

Everything there is to know about mirror cooling times, and temperature measurements can be found at http://cfg-www.harvard.edu/cfa/oir/MMT/mmt/foltz/mmt_conv5/node96.html Thanks to CosmicOne for this site - great information!

Here is one that AstroCady says is the best-ever use of JAVA he has yet seen! Try <http://www.junior.apk.net/~jbarta/idiot/idiot/html> This one comes from billyD.

A great newsletter for the amateur astronomer, Regulus, can be found at <http://www.cnh.mv.com/ipusers/regulus/regulus.html> Thanks to AstroCady for this one.

These two photos were taken by helium and are apparently water vapor from the Shuttle Discovery. They were taken on August 15 at 8:44 UT, with a 55mm lens working at f/1.2 and hypered Kodak Gold III.

Here are some photos of Stellafane, courtesy of algenib. Thanks, algenib, for sending them!