



THE STAR DIAGONAL

THE JOURNAL OF THE OGDEN ASTRONOMICAL SOCIETY



OAS Executive Committee

President - Lee Priest - (801) 479-5803
LeVae@aol.com

Vice Pres- Ron Vanderhule - (801) 726-8554
deepsky100@msn.com

Secretary- David Dunn - (801) 544-7705
dunndave@aol.com

Treasurer- Doug Say - (801) 731-7324
dougsay@comcast.net

Past Pres- Craig Browne - (801) 388-6556
cbrowne@Readytek.net

ALCOR- George Barber – (520) 269-0954
georgebarber@msn.com

Vol. 44 Number 11

August 2016

Connect with Us

Web: <http://ogdenastronomy.com/>

Private Email Group: OAS_News@yahoogroups.com

Email: OgdenOAS@gmail.com

Twitter: @OgdenOAS

Facebook: [Ogden Astronomical Society](https://www.facebook.com/OgdenAstronomicalSociety)

Meeting Announcement

No formal meetings until September. See you at Monte Cristo.

President's Message

Hi All,

The countdown begins; it is a little over a year until the August 21st, 2017 total solar eclipse. If you are planning to get a room and don't have reservations yet you should be looking into making them soon. There are several different locations that club members are planning to go so at this point we don't have a club sponsored event. We will be talking about this in the coming months so if you have any ideas or questions let us know. One option is AstroCon, this is the Astronomical League's 2017 convention in Casper Wyoming with the eclipse just after the convention. You can get more information at <https://astrocon2017.astroleague.org>.

One of the best web sites for information on the eclipse is at

<http://eclipse.gsfc.nasa.gov/SEgoogle/SEgoogle2001/SE2017Aug21Tgoogle.html>

Our next club meeting will be Thursday September 8th at 7:30 in the Ott Planetarium. We will have elections for new officers and we will be excepting nominations until the elections begin at the meeting. My term as president will end after the meeting I have enjoyed these last two years and my association with all of you. I would like to thank everyone for your support.

Thanks,
Lee Priest

Star Parties

Public

- 8/26 – Ranger Program and Star Count
- 9/16 - Snowbasin
- 9/24 – Antelope Island
- 10/1 – North Fork Park

- 10/22 – Antelope Island

Requested

Private

- 8/31-9/5 – Monte Cristo
- 9/30-10/1 – North Fork Park
- 10/28-29 - Curlew

External

- 9/29-10/1 – Great Basin Astronomy Festival

Monte Cristo Star Party and Family Camp Out

With summer heating up it's time to start thinking about our premier activity of the year, the family camp out and star party at Monte Cristo. For those not familiar with this activity it will be held Friday and Saturday September 2nd and 3rd at the Monte Cristo campground. We have several people go earlier in the week and some who just come up for the evening and don't camp, whatever will fit your interest and schedule.

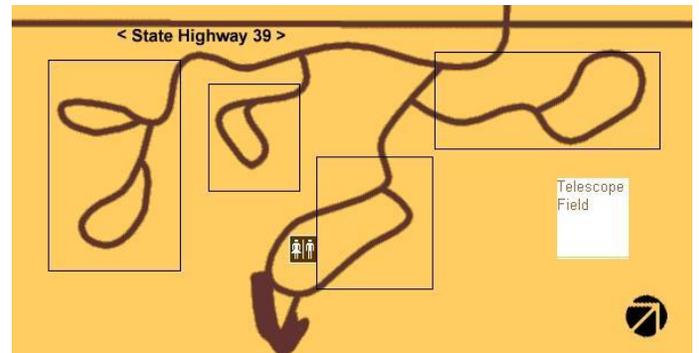
To get there from Ogden, go East on Highway 39 about 40 miles up Ogden Canyon to the top of the mountain, you will be about 9000 ft. elevation when you get there. We try to get in loop E, to get there just keep turning left after you enter the campground. Monte Cristo is a National Forest campground, they don't take reservations. They have paved roads with tables and fire pits at each camp site, a restroom with flush toilets and a few water taps located around the loop. Last year the fee was \$20.00 per night.

We set up telescopes in a field northeast of the campground and have permission from the Forest Service to drive out there. Day time activities include Tea parties in late morning on Friday and Saturday location to be determined. These are informal gatherings bring your own beverage, if you have a snack to share bring it, we always have

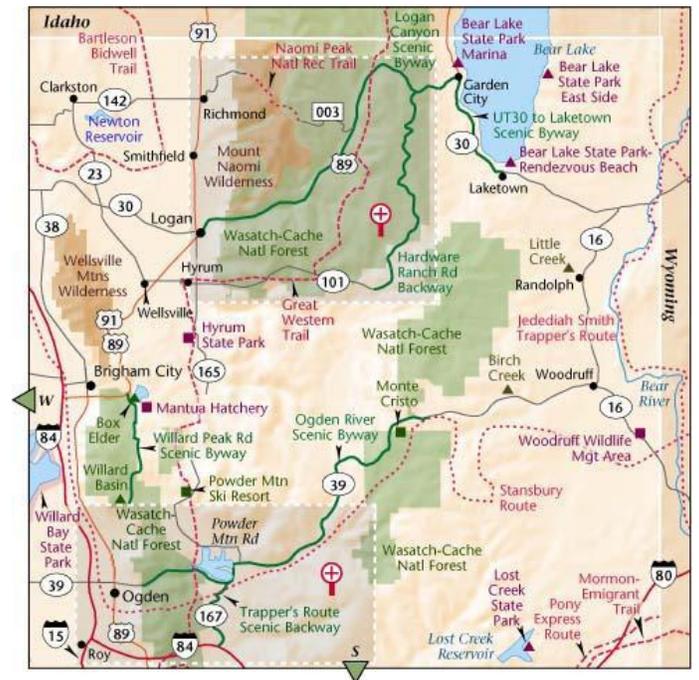
plenty so come and enjoy. We also have pot luck dinners Friday and Saturday evening at 6:00; bring your own something to BBQ and a dish to share. We have a few BBQ grills set up for everyone to use, if you have a portable grill we could use them.

If you have any questions contact anyone on the Executive Committee.

Lee Priest



Map of Monte Cristo campground. There are more restrooms than noted. You want to try to get in the small loop by the Telescope field. The other loop near the field is also close.



To all eclipse enthusiasts:

If you haven't decided where you are going to view the total solar eclipse of August 21, 2017, you are welcome to come to Casper, Wyoming. Casper has been identified by several of the leading eclipse websites as one of the best locations to see totality due to the likelihood of clear skies.

ASTROCON 2017 is a national convention being held in the days leading up to the eclipse. One of the elements of this convention will be a unique networking opportunity for astronomy clubs across the U.S. called the Amateur Showcase. Attached to this email is a sheet with more information. Please feel free to look at the event website at <http://astrocon2017.astroleague.org> for more information. Thank you.

<http://astrocon2017.astroleague.org>

www.eclipse2017.org

www.eclipsecasper.com



Amateur Showcase

Saturday afternoon, August 19, 2017 there will be a unique opportunity for amateur astronomy clubs across the U.S. to gather together and network with each other. A special event called Amateur Showcase will be a part of the ASTROCON 2017 convention in Casper Wyoming in advance of the total eclipse of the sun on Monday, August 21, 2017.

Would your club like to know how other clubs around the country:

- 1) Offer fun and interesting club meetings
- 2) Conduct public star parties
- 3) Build their own observatory
- 4) Enhance personal viewing experiences for club members
- 5) Get young people active in astronomy
- 6) Conduct digital imaging workshops
- 7) Collaborate with professional astronomers.

If this sounds interesting to your club, please respond to Rodger C. Fry, Amateur Showcase Coordinator at rcfry@comcast.net for more information and how to participate.

This opportunity is open to ALL amateur astronomy organizations, and being a member of the Astronomical League is not required.

We look forward to hearing from you.

Rodger C. Fry, Amateur Showcase Coordinator, rcfry@comcast.net
Lowell Lyon, ASTROCON 2017 Chair, bolide@sisna.com
<http://astrocon2017.astroleague.org>
www.eclipse2017.org (Look under "Community Links" for ASTROCON 2017)

This article is provided by NASA Space Place.

With articles, activities, crafts, games, and lesson plans, NASA Space Place encourages everyone to get excited about science and technology.

Visit spaceplace.nasa.gov to explore space and Earth science!



Venus and Jupiter prepare for their close-up this August

By Ethan Siegel

As Earth speeds along in its annual journey around the Sun, it consistently overtakes the slower-orbiting outer planets, while the inner worlds catch up to and pass Earth periodically. Sometime after an outer world—particularly a slow-moving gas giant—gets passed by Earth, it appears to migrate closer and closer to the Sun, eventually appearing to slip behind it from our perspective. If you've been watching Jupiter this year, it's been doing exactly that, moving consistently from east to west and closer to the Sun ever since May 9th.

On the other hand, the inner worlds pass by Earth. They speed away from us, then slip behind the Sun from west to east, re-emerging in Earth's evening skies to the east of the Sun. Of all the planets visible from Earth, the two brightest are Venus and Jupiter, which experience a conjunction from our perspective only about once per year. Normally, Venus and Jupiter will appear separated by approximately 0.5° to 3° at closest approach. This is due to the fact that the Solar System's planets don't all orbit in the same perfect, two-dimensional plane.

But this summer, as Venus emerges from behind the Sun and begins catching up to Earth, Jupiter falls back toward the Sun, from Earth's perspective, at the same time. On August 27th, all three planets—Earth, Venus and Jupiter—will make nearly a perfectly straight line.

As a result, Venus and Jupiter, at 9:48 PM Universal time, will appear separated by only 4 arc-minutes, the closest conjunction of naked eye planets since the Venus/Saturn conjunction in 2006. Seen right next to one another, it's startling how much brighter Venus appears than Jupiter; at magnitude -3.80 , Venus appears some *eight times brighter than* Jupiter, which is at magnitude -1.53 .

Look to the western skies immediately after sunset on August 27th, and the two brightest planets of all—brighter than all the stars—will make a dazzling duo in the twilight sky. As soon as the sun is below the horizon, the pair will be about two fists (at arm's length) to the left of the sun's disappearance and about one fist above a flat horizon. You may need binoculars to find them initially and to separate them. Through a telescope, a large, gibbous Venus will appear no more distant from Jupiter than Callisto, its farthest Galilean satellite.

As a bonus, Mercury is nearby as well. At just 5° below and left of the Venus/Jupiter pair, Mercury achieved a distant conjunction with Venus less than 24 hours prior. In 2065, Venus will actually occult Jupiter, passing in front of the planet's disk. Until then, the only comparably close conjunctions between these two worlds occur in 2039 and 2056, meaning this one is worth some special effort—including traveling to get clear skies and a good horizon—to see!

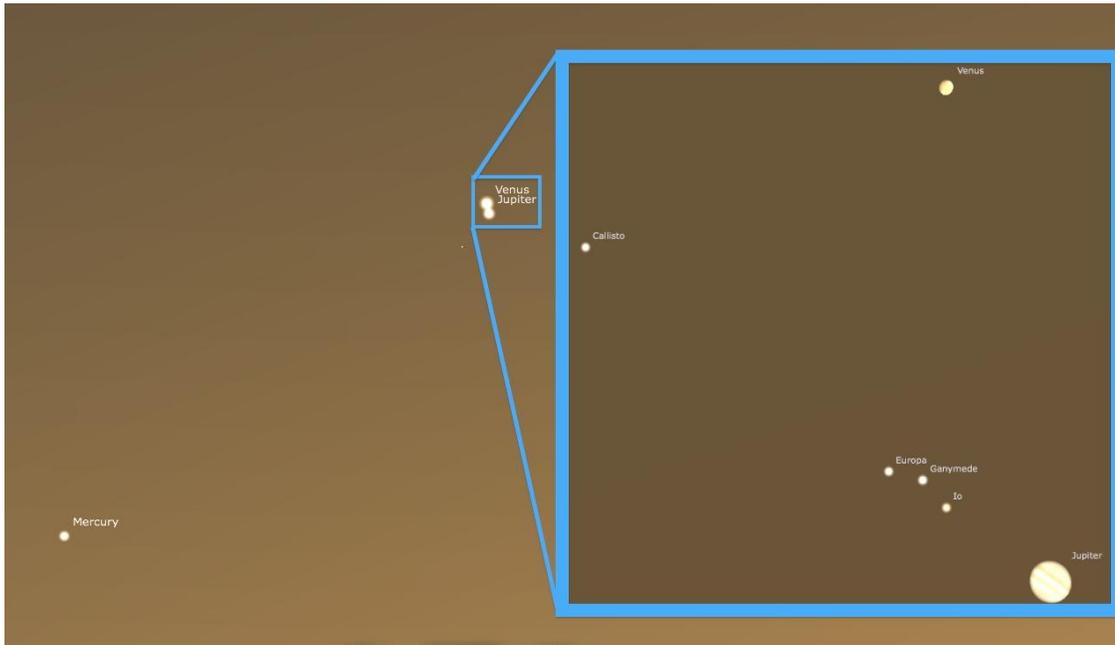


Image credit: E. Siegel, created with Stellarium, of a small section of the western skies as they will appear this August 27th just after sunset from the United States, with Venus and Jupiter separated by less than 6 arcminutes as shown. Inset shows Venus and Jupiter as they'll appear through a very good amateur telescope, in the same field of view.

To teach kids more about Venus and Jupiter, visit the NASA Space Place webpages titled “All About Venus” [<http://spaceplace.nasa.gov/all-about-venus/en/>] and “All About Jupiter” [<http://spaceplace.nasa.gov/all-about-jupiter/en/>].