

# **OREGON STAR PARTY NEWS**

Oregon Star Party Newsletter— Volume 3, Issue 1

Early July 2017

# 2017 Solar Eclipse Details at OSP

# Oregon Star Party and The Great American Eclipse, August 21, 2017

The last total solar eclipse to take place in the United States occurred in 1979. The Great American Eclipse of 2017 makes land fall in Oregon and exits the US off the coast of South Carolina.

Never look directly at the Sun without proper eye protection. You can seriously damage your eyes and even go blind. Use the solar glasses provided to you in your observers packet.

#### **Eclipse Details**

August 21, 2017 (Intersection of the 800/802 Roads)

- 1m 23.6s (total solar eclipse)
   Obscuration : 100.00%

- Umbral depth from center line:
   Moon/Sun size ratio: 1.02715

End of partial eclipse (C4)

- 1m 28.1s (lunar limb corrected) Magnitude at maximum : 1.00346
  - 25.50% or 37.7km (23.4mi) Umbral vel. : 1.215km/s (2718 mph)





Source: http://xjubier.free.fr/en/site\_pages/solar\_eclipses/TSE\_2017\_GoogleMapFull.html by Xavier M Jubier

+53.2°

145.7°

07.6

11:42:50.1 am



# First Time at OSP?

### Top 5 Survival Guide

So this is your first Oregon Star Party? Maybe even your first star party ever? We expect there will be many first-timers at OSP this year and we want you to be prepared for the experience. While nothing can truly prepare you for the unrivaled beauty and darkness of the night skies, perhaps this list will help you anticipate the living conditions at our home under the stars, Indian Trail Spring.

#### Water & Power

Quite simply, there is neither water nor power on site. Funny, that a location with "spring" in its name isn't a lush, green oasis with a babbling brook. Not even close. Indian Trail Spring is quite desert-like. Identified as "scab land" by the Forest Service, our site closely resembles the surface of Mars. When it comes to water, you cannot have too much. In

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addition to fire suppression water which will be discussed later, you should bring at least a couple gallons of water per person, per day. Most big box stores sell 5-6 gallon containers with spigots that are excellent for transporting water. You'll need water for drinking, washing, and dishes (please contain your gray water and don't dump it on site). Showers can be purchased in the Information Tent for \$10 each, and are well worth it! [Pro Tip: Tie the corners of your folding canopy to full water containers to keep it from blowing away in the strong afternoon winds.]

Power is needed for many things -- or is it? Your answer to this question will determine to what length you will go to provide power. For many first timers, battery operated devices work fine for most everything. A red flashlight is the only power consuming device many people need. There are, however, a few options for providing more power should you need it. Many people charge battery packs with solar panels. About the least expensive solar set-up is available at Harbor Freight, but there are more effective systems on Amazon, staying below \$200. Of course a generator will provide electrical power. But beware, the Forest Service may decide that the fire danger is too high and not allow generators. They may make this decision at any time. If allowed, generators may be used between noon and 7:00 PM and we ask that you limit their use because they are noisy.

# Light

Most people who have never attended a star party are stunned by the brightness of the stars and the Milky Way. At OSP, light from the stars actually casts a shadow! Once your eyes are fully dark-adapted, you will be surprised that you can navigate the area quite easily using only starlight. But one quick blast of light will cause you to lose your dark adaptation for a long time. It can take up to 45 minutes to become fully dark adapted. That is why we only allow the use of red flashlights. Red light has less effect on dark adaptation than white light. Even so, we still request that you only use red flashlights when necessary, and keep the light contained -- only aimed down at the ground. Please be aware of the brightness of your light. A standard flashlight with one or two layers of red cellophane will still be way too bright. You can get help covering your flashlight at the information tent. Also please disable the interior lights of your vehicle and make sure lights don't flash when you lock or unlock the doors. Even white light used inside a tent can be problematic. I hope I've made the point that we take light very seriously. We hope you will too.

# What to do during the day

Let's face it, our primary activity takes place at night. All night. That's why our quiet hours last until 10:00 AM. Some people would argue that they should last longer. Summer days are long, and we have an activity schedule full of talks, a swap meet, a telescope walkabout, and other things to pass the time. Kids and teens can hang out in the youth tent and everyone can shop along "vendor row." Daytime is a good time to do maintenance on your equipment, plan the night's observing, or just read a book. Catch a nap in the afternoon,



# **Espresso Blast**

Shawna offers hot drinks including: Mocha, Latte, Cappuccino, Chai and Hot Tea.

Shawna also offers cold drinks including: Iced Mocha, Iced Latte, Mocha Ice Rage, Italian Soda, and Iced Teas, and Fruit Tea Smoothies.

Shawna will begin serving Friday afternoon and continue through Tuesday morning. Cash only, please.

# Oregon Star Party 2018

August 7 - August 12 2018 and you'll be ready for another great night of observing!

# Fire Prevention & Suppression

Mid August in the Ochoco Forest -- the fire danger is extremely high! We take fire prevention very seriously. Over the course of 25 OSPs at this location there have been two fires. Thanks to the preparedness and fast action of our attendees, these fires were contained and extinguished in short order. In both cases, the fire could have easily and quickly become out of control. Please read the Forest Service rules on our website and remember that open fires are not allowed on site. Cigarettes may only be smoked on gravel roads or inside vehicles, and they must be extinguished in the vehicle's ashtray. Each vehicle must carry a shovel, an ax, and 5 gallons of water for fire suppression.

# The Sun: Our Frienemy

The reason most first-timers will be at OSP this year is for the sun, or more specifically, the eclipsing thereof. Other than those long-awaited couple of minutes, the sun is something we try to avoid. At 5000 feet of elevation, the sun's UV rays have not been scattered and are very strong. Care must be taken to avoid their harmful effects. Hats, sunglasses, and sunscreen are the order of the day. Tarps, canopies, and tents are some ways to create shade in our desert-like environment. Just make sure they're tied down because the afternoon winds become strong and dust devils are fairly common. More than a few canopies have been carried away causing damage and in one instance, serious injury. The air can be hot and very dry so don't forget moisturizer and lip balm. You'll be amazed how fast your towel dries after a refreshing shower. This year the other protection from the sun should be apparent. Do not ever look directly at the sun. Make sure you're wearing your eclipse glasses!

Life at OSP is hot during the day, and it can be cold at night. The ground is rocky and the junipers are always trying to trip you. That's why we call them "dammit bushes." You'll see. Camping can be troublesome, but with planning, it is relaxing and enjoyable. That's why so many people have called it home for a week each of the last 25 summers.



## **Einstein's Incredible Universe**

# **IMAX film**

The producers of the IMAX film, "Einstein's Incredible Universe," are considering sending a team to film the Oregon Star Party and TSE.

They would like to know if any of the attendees has film/video experience and would be willing to work with them, particularly on time lapse photography, drone work or live action filming. For more information, please contact sophie@cosmicpicture.com.

# **Solar Eclipse Information Links**

EclipseWise.com (Fred Espenak): http://eclipsewise.com/solar/SEnews/TSE2017/TSE2017.html

MrEclipse.com (Fred Espenak): <u>http://www.mreclipse.com/MrEclipse.html</u>

Eclipse-Chasers.com (Bill Kramer): <a href="https://www.eclipse-chasers.com/php/tseNext.php?TSE=tse2017d">https://www.eclipse-chasers.com/php/tseNext.php?TSE=tse2017d</a>

Eclipse-Maps.com (Michael Zeiler): http://www.greatamericaneclipse.com/oregon/

Eclipse 2017.org (Dan McGlaun): http://eclipse2017.org/

Eclipsophile.com (Jay Anderson & Jennifer West): http://eclipsophile.com/oregon/

Interactive Eclipse Map (Xavier Jubier): http://xjubier.free.fr/en/site pages/solar eclipses/TSE 2017 GoogleMapFull.html

Solar Eclipse Mailing List: https://groups.yahoo.com/neo/groups/SEML/info

# **Rules for lights**

Quiet hours at the campsites are from 3 am until 10 am. Please respect your neighbors' sleeping and observing habits. Many people stay up all night observing and could use some quiet in the morning.

- The number one rule: don't use light unless you absolutely need it.
- Flashlights should only be used with red filters.
- Laptop must be covered and the screens must be shielded with red plastic.
- No white light after sundown, except for emergencies.
- Either disable your car's dome and trunk lights or cover them with red tape.
- Use only dim red light inside tents and RV's at night.
- Don't leave lights on when you're not using them.
- All RV's (except in the late arrival area) must have all interior lights completely shielded. No white light (not even faint white light) must be visible from the outside of the RV after dark. Those RV's in the late arrival area must keep light usage to a minimum.
- The use of green laser pointers is prohibited (except by OSP Committee for the Sky Identification, Limited Magnitude program and Youth Mentoring).

# Can we leave Indian Trial Spring to get closer to the centerline of the eclipse?

Yes, but we would strongly suggest that you observe from where you camp. Highway 26, Highway 97 and surrounding areas are expected to be packed with fellow eclipse watchers.

# **Special Sights During and Around Totality**

**Baily's Beads** - Occurs 10-15 seconds before and after totality. Baily's beads are little beads of light at the edge of the Moon. They are the result of gaps in the mountains on the Moon's surface allowing sunlight to pass through in some places but not others.

**Diamond Ring** - Occurs seconds before and after totality. As the last of the Baily's beads disappear, the Sun's corona forms a ring around the Moon. The coronal ring and the last Baily's bead gives the appearance of a diamond ring. The diamond ring occurs a second time when totality ends.

**Shadow Bands** - Occur about one minute before and after totality, shadow bands can be seen on plain-colored surfaces as moving wavy lines of alternating light and dark. Shadow bands are the result of the light emitted from a thin solar crescent being refracted by the Earth's atmosphere.

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#### **Star Dinners**

Friday Night

Herb Crusted Chicken with Champagne sauce

Wild Rice Pilaf with toasted almonds

Roasted Local Veggies

Local Green Salad with Goddess

Dressing

Beverage

# Saturday Night

Beef brisket with red wine reduction Garlic mashed potatoes w/gravy Roasted carrots with soy and ginger Green salad Beverage

# Sunday Night Lasagna w/Italian sausage & basil ragout Broccoli with garlic and butter Dinner rolls Caesar salad Beverage

# Monday Night Meatloaf Mexican corn salad w/jicama & red peppers Roasted red potatoes chips and salsa Beverage

Additional breakfast, lunch, dinner and snack options will be available

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# **Special Sights During and Around Totality**

**Sun's Chromosphere** - Becomes visible a few seconds after totality begins. The chromosphere sits between the photosphere and the corona, it appears as a rosy red glow. Solar prominences will rise up through the chromosphere from the photosphere.

The most common feature is the presence of spicules, strands of luminous gas which appear like fiery hair standing straight upwards from the photosphere below. Similarly, there are horizontal wisps of gas called fibrils.

**The Sun's Corona** - Becomes visible a few seconds after totality begins. The Corona can be seen as a faint ring of rays surrounding the dark Moon during totality.



# We Need Volunteers

Oregon Star Party 2017 will be the 30th year of this fun week of great night skies, good company, and lots of activities. The planning committee is hard at work, lining up interesting speakers, new observing lists, and more.

However, we can't do any of this without your help. Each year, nearly 100 volunteers make the star party happen by welcoming attendees in the Registration Tent, taking tickets at the Shower Tent, answering questions in the Info Tent, acting as youth or adult mentors, setting up and tearing down star party areas, and a host of other tasks.

Head over to the Volunteer page on the OSP website (<u>Volunteers</u>), browse the volunteer positions, and then send us an email telling us where you'd like to volunteer. For every 2 hour shift worked, volunteers receive one Caldwell Buck. Want to know more? Visit the website!

Once a Volunteer Coordinator has scheduled shifts for you, an email will be sent to confirm your shift(s). Please allow up to two weeks for your confirmation. Additionally, the volunteer co-coordinators will do their best to accommodate your needs. When you arrive at Oregon Star Party this year, your volunteer shift schedule will be included in your registration packet. Once on site, visit the Registration Tent for more information.

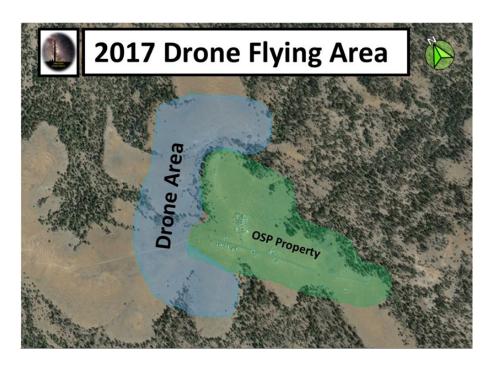
Thank you in advance for volunteering at Oregon Star Party 2017. We look forward to seeing you there!

# **Drone Policy for 2017**

All drone (and other small unmanned aircraft) operators are required to follow the federal rules set out by the Federal Aviation Administration. See the following PDF: <a href="https://www.faa.gov/uas/media/Part\_107\_Summary.pdf">https://www.faa.gov/uas/media/Part\_107\_Summary.pdf</a> In addition to the federal rules, Oregon Star Party adds the following operational quidelines:

- The OSP-established a drone flight area is in the clearings to the west, south and north of the OSP property (See below).
- There will be no flying drones over the OSP property unless prior permission has been given by the OSP.
- To conform to quiet hours, "no flying" time begins 30 minutes after sunset and continues until 10:00 AM.
- On the day of the solar eclipse (Monday, August 21), flying can begin at 8:00
   AM
- Please limit your flights so as not to impede the view of others during the solar eclipse.

Failure to comply with these guidelines will result in corrective actions.



# **Indian Trail Spring Location Data**

Latitude 44<sup>0</sup> 17' 55" N (44.2988<sup>0</sup> N)

Longitude 120<sup>0</sup> 8' 30" N (120.1417<sup>0</sup> W)

Elevation 5020' (1530m) at the Information Tent

GMT –7 hours (Adjusted for DST in effect)

Approx. Magnetic Declination 14.68 Degrees

# **Contact Us**

Website

**Contact Us** 

**Facebook** 

**Cloudy Nights** 

Visit us on the web at www.oregonstarparty.org



# **Youth Tent**

Children and their families can come and enjoy crafts, games, and art supplies (available for kids of all ages). Come explore and make yourself at home! Games and various art supplies can be checked out in the youth tent whenever kids and their families need them. Some of the activities include:

- Building and launching "stomp rockets"
- Solar System Walkabout
- Launching water rockets
- Kids vs. Adults astronomy quiz

The Youth Tent will be open F (Noon to 4 PM), Sat & S (10 AM to 4 PM) and M (1 PM to 4 PM)