# **Cache Valley Clear Skies**

The Journal of the Cache Valley Astronomical Society

CVAS Executive Committee



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### **Meeting Announcement**

Our monthly meeting will be held on Thursday, November 19, 2015 at 7:30pm at the Physics Conference Room (room 244) in the Science Engineering Research (SER) building directly east of the library (see the map below).

Club member Dave Hansen will be speaking to us about "The Physics of Light". This will help us to better understand the imagery that we see in our telescopes and binoculars. This should be a very interesting and informative talk.



## The President's Corner By Dell Vance, CVAS President

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As I came in this morning from some "early morning observing", I was thankful for the CVAS and the great people we have to associate with. A few weeks back Tom Westre, former president of CVAS, mentioned that he was going to do some of his wintertime observing now by getting out early in the morning and viewing the wintertime constellations, while the weather is much milder than during the Cache Valley winter. We both chuckled about events where the temperature was well below zero and only lasting for a few minutes making observations. I decided that Tom's idea has a lot of merit. So I went out this morning and took some shots of the planets. Venus and Jupiter are very close to each other and Mars is just a little below them. Very spectacular!

However, the most exciting event was observing Mercury rising about 6:45 AM over the Eastern Mountains. I was able to observe it through my 6" telescope, then visually, and then with my 15X70 binoculars. I realize for those of you that are avid amateur astronomers this is probably old hat. For me it was my first time to see it visually and with binoculars, absolutely the first time I have seen it rising. I am thankful for Dale Hooper's notice in the Newsletter last month and the reminder at our monthly meeting about this great event.

Dale mentioned that it may be challenging to see Mercury coming up on the East, but may be possible on the west side of the Valley. That was enough of a challenge for me, after all I live out in Newton and we are definitely on the west side of the Valley. It was great! I had about 30 minutes to make the observation before the sunrise washed out all the stars.



Mercury - Photo by Dell Vance

Sharing of knowledge with CVAS members is what we are all about. These two gentlemen are a wealth of knowledge and are always ready to share or show you what you don't know. We have many individuals with various talents in astronomy. As a group we can take advantage of this great resource. I would like to challenge each of you to share what you know with other members and don't be afraid to ask questions. After all if we are not learning we are not progressing.

Have a great month of observing. Clear Skies!

#### **Serendipitous Lunar Occultation**

On Friday October 16<sup>th</sup> I had planned on having some neighbors over to let them look through the telescope I have in my observatory. It turned out they were given tickets to the USU/Boise State football game so I told them to go to the game and we would get together another time. This meant I had some time to relax and look at some fun stuff through the telescope. There was a waxing crescent moon that night so I decided to take a look at it after I had a look at Saturn.

When I put the telescope on the moon I was surprised to see that it was just a few minutes away from occulting a fairly bright star. It was very easy to see the earthshine on the dark limb of the moon so I had a really good idea of how close they were. After observing for about five minutes I was treated to the "bloink" of the light from the star instantly disappearing. The moon travels eastward about one lunar diameter every 50 minutes.

It brought back memories of a grazing lunar occultation of Regulus that I had observed about ten years ago. In that case I saw the light of the star disappear then reappear and then disappear several times. It was a lot of fun.

I later went back and checked using the free planetarium program Cartes du Ciel (Sky Charts) and it appears that I saw an occultation of the magnitude 7.2 star HD148198 (RA 7h33.0m, Dec -17°46'). We sometimes forget that over the course of nearly any night (when it is observable) the moon will occult a number of stars. Some of these are fairly bright.

If you've never observed an occultation before, you should try – they are very fun to observe. When the moon is in a waxing crescent phase it is fairly easy to see stars disappear as they pass behind the dark side of the moon. So, the dark side of the moon isn't just interesting for Pink Floyd fans.

Clear skies, Dale.



Spotlight on Sculptor, the Sculptor Submitted by Dale Hooper

IAU and Sky & Tel - Roger Sinnott & Rick Fienberg

Sculptor never gets very high in the sky from our location. However, it is worth observing because of galaxies, galaxies, galaxies. This is home of the Sculptor group of galaxies near the south galactic pole. One of my favorite galaxies to observe, NGC 253 is part of this group. It should be on everyone's bucket list.

I am only listing the galaxies that rate at least four stars in *The Night Sky Observer's Guide* (Sculptor is in Volume 1). There are a number of additional galaxies which rate three stars which I haven't listed. As usual, the table is organized according to increasing Right Ascension values.

Object	R.A.	Dec.
NGC 7793 (Galaxy mag 9.2)	23h57.8m	-32°35'
κ-1 Sculptoris (Double star)	00h09.3m	-27°59'
NGC 24 (Galaxy mag 11.3)	00h09.9m	-24°58'
NGC 55 (Galaxy mag 8.1)	00h14.9m	-39°11'
NGC 134 (Galaxy mag 10.4)	00h30.4m	-33°15'
NGC 253 (Galaxy mag 7.6)	00h47.6m	-25°17'
NGC 288 (Glob Cluster m8.1)	00h52.8m	-26°35'
NGC 613 (Galaxy mag 10.0)	01h34.3m	-29°25'
$\tau$ Sculptoris (Double star)	01h36.1m	-29°54'
ε Sculptoris (Double star)	01h45.6m	-25°03'

#### **CVAS Minutes – October 2015**

Dell Vance was appointed club President by the Executive Committee. A motion was made and ratified by the members in attendance to recognize Dell as the President until the next annual general meeting.

Dale Hooper discussed the current sky events. There will be several noteworthy conjunctions in October. The best conjunctions will be in the morning.

Blaine Dickey was the featured speaker for the evening. Blaine discussed his astronomy blog. He has lots of Mallincam images and explanations of the images. This has allowed him to share astronomy with his family.

Blaine explained how to set up a blog. He used "Blogger by Google". This is a free tool and it will give you a blog at the URL blogspot.com. New post – allows you to add entries and pictures. Hit preview to see what it looks like, then save it and publish it.

It allows you to see the number of pageviews and you can also see where people are from that are visiting your blog.

Blaine next explained the tool RTGUI+S Real Time Astronomy Program with GUI which he uses to plan observing sessions. Blaine mentioned that it can be used for controlling a telescope. It allows you to enter important parameters such as location and time. It then searches its databases to make lists of great objects to observe. It will also display star charts with the objects. In addition, there is an observing log where you can record your observations. It provides several ways of searching for objects including a detailed search "wizard". There is also a provision for scripting.

## **Upcoming Star Parties**

Currently there are no organized club star parties planned for November.

## **Upcoming Events**

1 Nov	Daylight Saving Time ends
3 Nov	Last Quarter Moon
	Venus 0.7° south of Mars
6 Nov	Jupiter 2° north of Moon
7 Nov	Mars 1.8° north of Moon
	Venus 1.2° north of Moon
8 Nov	Edmond Halley born (1656)
11 Nov	Veterans Day
	New Moon
12 Nov	Saturn 3° south of Moon
	Voyager 1 flies past Saturn (1980)
13 Nov	Mariner 9 orbits Mars (1971)
15 Nov	William Herschel born (1738)
17 Nov	Leonid meteors
18 Nov	Leonid meteors
19 Nov	First quarter Moon
	Neptune 3° south of Moon
	Leonid meteors
20 Nov	Edwin Hubble born (1889)
22 Nov	Uranus 0.9° north of Moon
25 Nov	Full Moon
26 Nov	Thanksgiving Day
	Aldebaran 0.7° south of Moon
	First meteor photo (1885)
28 Nov	Venus 4° north of Spica
29 Nov	Saturn in conjunction with Sun