



Cache Valley Clear Skies

The Journal of the Cache Valley Astronomical Society



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www.cvas-utahskies.org

No Meeting This Month

There is no club meeting scheduled for July. During the spring and summer months we will instead hold club (private) as well as public star parties. Most of the public star parties will be held around first quarter moon and most of the private star parties will be held around new moon. The main location for public star parties this year will be **Heritage Park** which is located at 2456 South 800 W, Nibley. Please see the club website, the **Upcoming Star Parties** section of this newsletter or contact a member of the executive committee for more information. Our next scheduled meeting is the Annual General Meeting in September.

The President's Corner By Dell Vance, CVAS President

It must be summer! The opportunities are coming fast and furious for us as a club.

- We are still providing support for the folks up at Conestoga Ranch on Friday Nights.
- We had our annual Club Social at the first of the month.
- We had a booth at the Nibley Heritage Days with a Solar Observation display.



- We provided a star party for a Young Women's Group at their camp.

There are even more opportunities to serve if we can get support from the club. Needless to say our "outreach" effort is working, even better than we had anticipated. We can use everyone that is available to help with these opportunities.

I have only had a limited time to be able to do observing on my own, but I am working with a new wedge for my 6" SCT. It has some great

possibilities and challenges. I also built a support frame for my 15X70 binoculars. I plan to use them for quick observations. It is amazing how much stability they add to my observing with binoculars and they are much easier to use than with the tripod that I used previously. It has been proposed that we have a workshop prior to our September Business Meeting to assemble a set for those that are interested. Be sure to let us know if you would be interested in making one.

Be sure to work in some time to show your friends and families the great celestial objects at your gatherings. This may include using a telescope, binoculars, or as Lyle Johnson reminded us earlier this year even visually. The planets are sure to make a hit with all people. I love it when a young person says, "Wow, Saturn really does have rings!"

Stay safe through the summer Holidays.

Clear Skies!

Bryce Canyon Astronomy Festival

CVAS members Jacob Olsen, Tom Westre and Janice Bradshaw attended the Bryce Canyon Astronomy Festival this year. Bryce Canyon is known for having some of the darkest skies in the country.

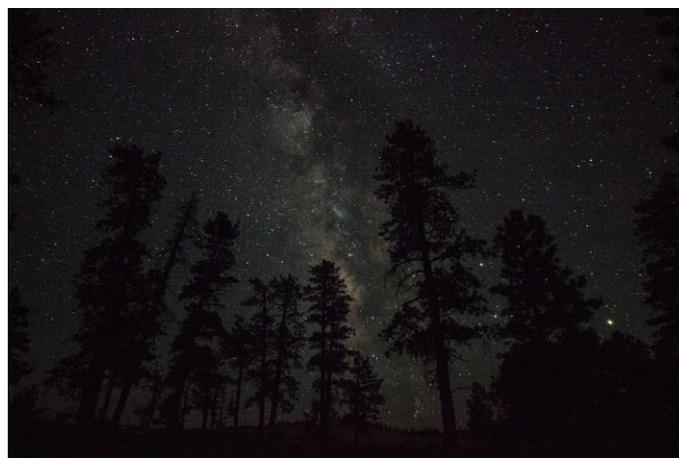
Jacob sent us the following three beautiful Milky Way Vista photos. Thanks Jacob!



Milky Way from Bryce Canyon #1, courtesy Jacob Olsen



Milky Way from Bryce Canyon #2, courtesy Jacob Olsen



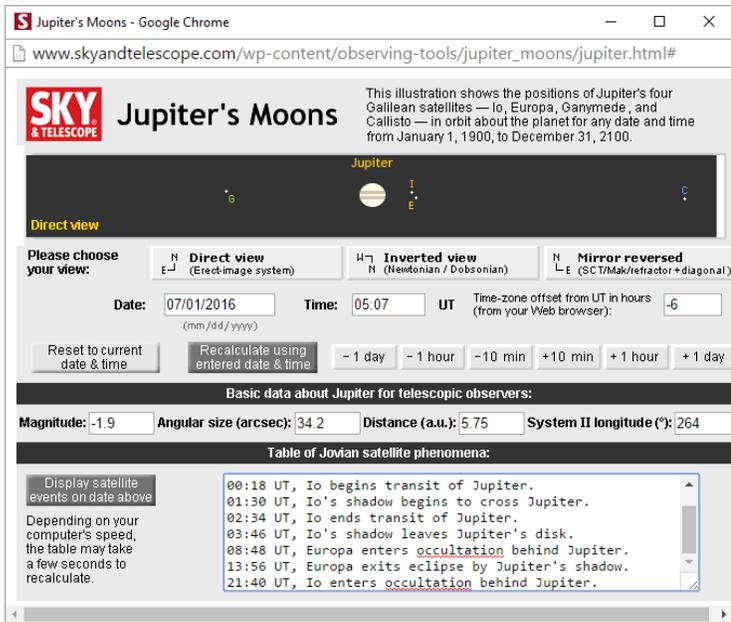
Milky Way from Bryce Canyon #3, courtesy Jacob Olsen

Planet Utilities

The Sky & Telescope website has some great utilities that will come in handy with observing the planets over the course of the next few months. All three utilities are written in javascript so they will execute in your web browser. The Jupiter and Saturn moon utilities will require you to register on the Sky & Telescope website (www.skyandtelescope.com). But a subscription isn't required to register. The URL for the Jupiter utility is:

<http://www.skyandtelescope.com/observing/celestial-objects-to-watch/jupiters-moons-javascript-utility/#>

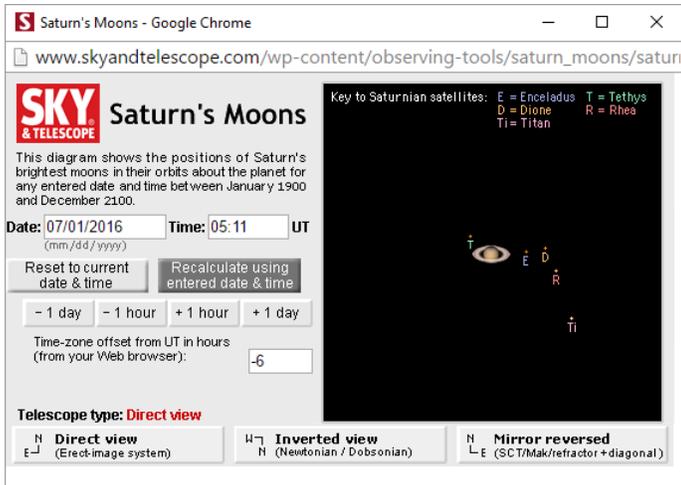
Here is a screen shot of the first utility, which shows the positions of the Galilean moons and also provides info for other Jupiter satellite interactions.



The URL for the Saturn moon utility is:

<http://www.skyandtelescope.com/observing/celestial-objects-to-watch/saturns-moons-javascript-utility/#>

And here is a screen shot:

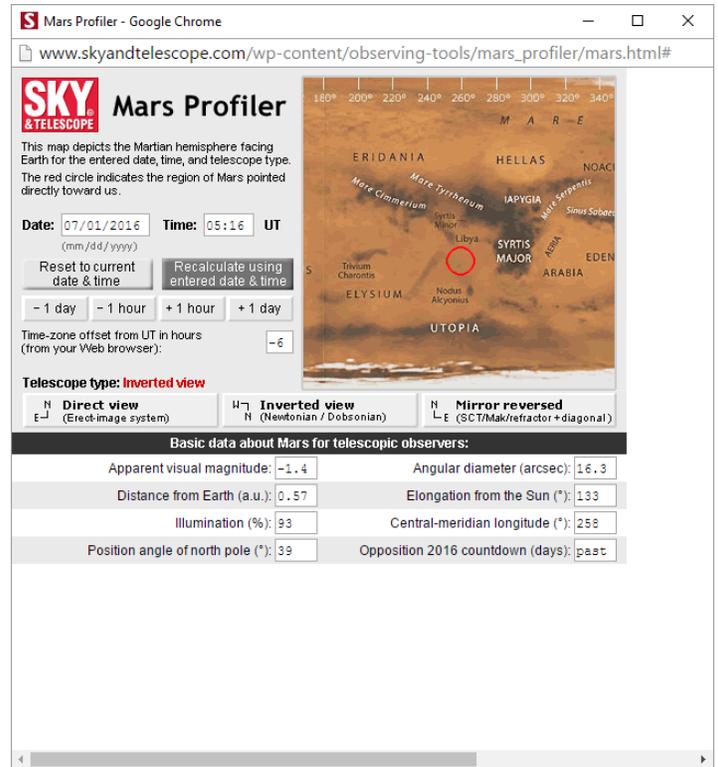


This utility shows the positions of Saturn's moons Titan, Dione, Enceladus, Rhea and Tethys. Dell and I have certainly learned that it is easier to spot these moons if you know their relative positions.

The final utility is an interactive Mars map which I have now referred to several times to identify significant markings. The URL for this utility is:

<http://www.skyandtelescope.com/observing/celestial-objects-to-watch/mars-which-side-is-visible/#>

And here is a screen shot:



You can also reach these utilities from the home page of the Sky & Telescope website from the Observing > Interactive Tools menu.

Clear skies,
Dale.

Spotlight on Serpens Caput, the Snake's Head

By Dale Hooper

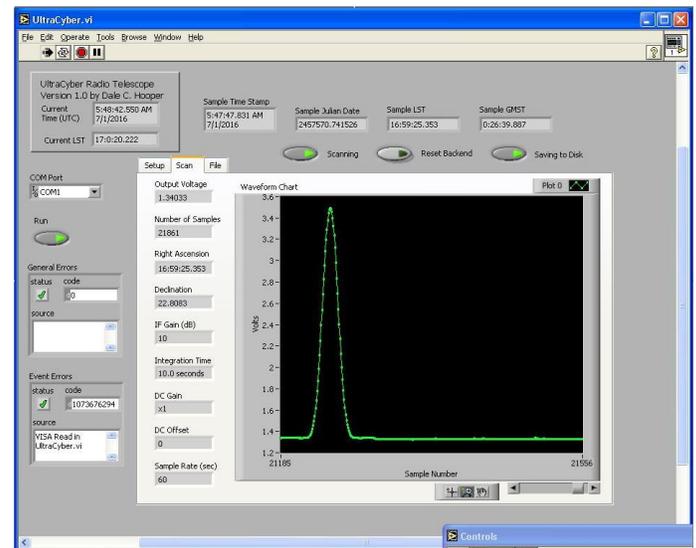
This month we are going to spotlight “half” of a constellation. Serpens is unique because it is split in two by Ophiuchus. The two parts are Serpens Caput – the snake’s head and Serpens Cauda – the snake’s tail. We are spotlighting Serpens Caput first because it is higher in altitude this month. Serpens Caput is the home to several nice multiple star, globular cluster M5 and several descent galaxies. It is nestled between Hercules, Bootes and Ophiuchus.

The Sun on the Radio

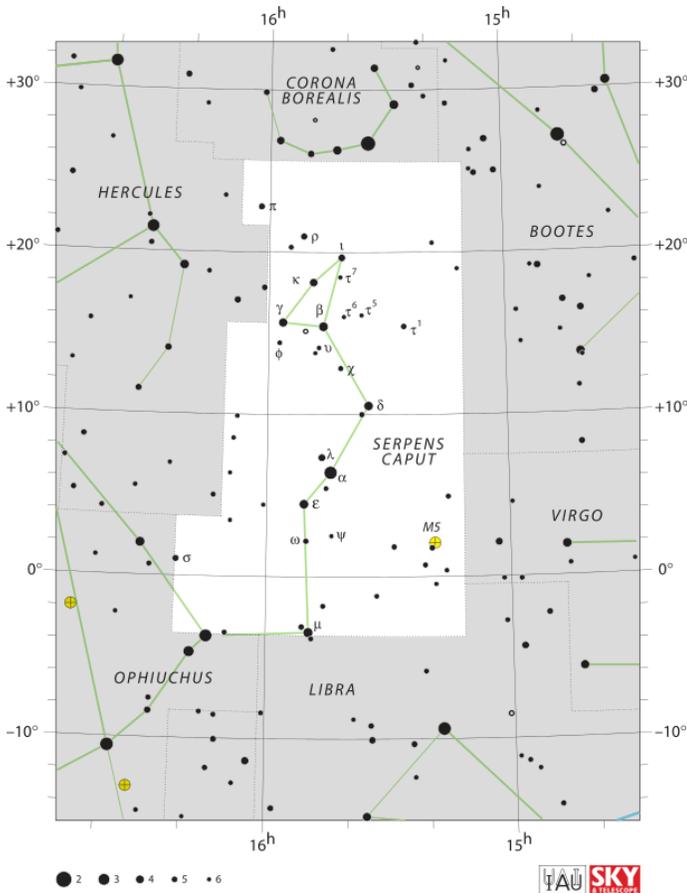
By Dale Hooper

I'm in the process of re-calibrating the pointing for my radio telescope. As part of this process I am doing some drift scans of the Sun. This involves pointing the dish at the expected altitude of the sun and then letting the earth rotate to bring the Sun onto the dish.

Below is a screen shot of a solar drift scan that I did June 30th. It's always fun to "look" at a radio object where it is obvious that you are seeing it.



Total Power Solar Drift Scan, 30 Jun 2016 (1420 MHz)



IAU and Sky & Tel - Roger Sinnott & Rick Fienberg

The galaxies listed rank three start and the rest of the objects in the list rate four or more stars in *The Night Sky Observer's Guide* (Serpens Caput is in Volume 2).

As usual, the table is organized according to increasing Right Ascension values.

Object	R.A.	Dec.
Messier 5 (Globular cluster)	15h19.3m	+02°05'
5 Serpentis (Triple star)	15h19.3m	+01°46'
NGC 5921 (Galaxy mag 10.8)	15h21.9m	+05°04'
13 Serpentis (Quadruple star)	15h34.8m	+10°32'
NGC 5957 (Galaxy mag 11.7)	15h35.4m	+12°03'
NGC 5962 (Galaxy mag 11.3)	15h36.5m	+16°37'
NGC 5970 (Galaxy mag 11.5)	15h38.5m	+12°11'
OΣ300 (Double star)	15h40.2m	+12°03'
β Serpentis (Triple star)	15h46.2m	+15°25'
NGC 6070 (Galaxy mag 11.8)	16h10.0m	+00°43'
NGC 6118 (Galaxy mag 11.7)	16h21.8m	-02°17'

CVAS Minutes – June 2016

There was no meeting in June.

Upcoming Star Parties

- 08 Jul CVAS Star Party – Heritage Park
- 09 Jul Solar Party – Logan Library (10am – 11:30am)
- 15 Jul Public Star Party – Heritage Park
- 05 Aug CVAS Star Party – Heritage Park
- 06 Aug Solar Party – Logan Library (10am – 11:30am)
- 12 Aug Public Star Party – Heritage Park

Upcoming Events

- 01 Jul Aldebaran 0.4° south of the Moon
- 04 Jul Independence Day
New Moon
Crab Nebula supernova first seen,
(1054)
Mars Pathfinder lands on Mars (1997)
Earth at aphelion (94,512,904 miles
from the Sun)
- 07 Jul Pluto at opposition
- 09 Jul Jupiter 0.9° north of the Moon
Voyager 2 flies past Jupiter (1979)
- 11 Jul First Quarter Moon
- 14 Jul Mariner 4, first Mars flyby (1965)
New Horizons flies past Pluto (2015)
- 16 Jul Comet Shoemaker-Levy 9 smashes
into Jupiter (16-22 July 1994)
- 17 Jul First photo of a star [Vega] (1850)
Apollo/Soyuz mission (1975)
- 19 Jul Full Moon
- 20 Jul Apollo 11 first manned Moon landing
(1969)
Viking 1 lands on Mars (1976)
- 22 Jul Friedrich Bessel born (1784)
- 23 Jul Chandra X-ray Observatory deployed
(1999)
- 26 Jul Last Quarter Moon
- 28 Jul First photo of a total solar eclipse
(1851)
Delta Aquarid meteors
- 29 Jul Aldebaran 0.3° south of Moon
NASA founded (1958)
Delta Aquarid meteors
- 30 Jul Mercury 0.3° north of Regulus