

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 May. 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

Star parties are back! The weather is much warmer than it was in February and there are nights that you can stay out until you are tired. The temperature is great. We are having a Star Party with the Boy Scouts at the Scout-O-Rama on May 6th at the County Fairgrounds. There will be over 1500 people in attendance and we can use all members with their telescopes to help provide this experience for these young men.



We are making the transition from our winter meetings to summer Star Parties. Therefore, we will also have more star parties and solar parties lined up for the public and all our members. The dates are on our calendar, which can be seen on our web page at CVAS-utahskies.org. We are providing service to the Conastoga Ranch for observing the heavens with their patrons on some Friday nights all summer long.

We had a good time at our meeting in April with great participation. There is certainly a wealth of experience among our membership. They are very

willing to share their knowledge with each of us. Be sure to seek them out and learn from them.

We certainly have opportunities for everyone. I encourage you to come have fun with us.

Clear Skies!

CVAS Shares the Sun with Cache Valley for Earth Day

Several CVAS club members were able to share great views of the sun with members of the public during the Cache Valley earth day celebration, held at the Old Courthouse in Logan on April 16th.

There was a very large sunspot group which could be observed even without magnification (though solar glasses). In addition, there were several very nice prominences and filaments that could also be observed.



CVAS shares the Sun during earth day celebration - photo courtesy Ned Miller

CVAS attends Nibley Spring Festival

By Tom Westre

Lyle and I presented an Astronomy exhibit at the first Annual Nibley Spring Festival, Saturday April 30th. This is the first year Nibley hosted this event in conjunction with the Stokes Nature Center. The Stokes Nature Center owns land at 50 W 2600 South in Nibley. The theme is to get people to take

advantage of the outdoors and our great natural environment. When I contacted the city of Nibley to find out if CVAS could be included in the list of organizations, the city was very enthusiastic. CVAS was one of 15 other valley organizations to give displays.

We set up a tent with table at 10 am. The CVAS display included a 10 inch Dob, Tom's PST solar telescope, a sun display, a homemade planetarium, a meteorite, and several other photos and charts.

During the Festival which lasted from 11 am to 2 pm we talked with a steady stream of children, parents and seniors. We handed out 20 club business cards and could have handed out 20 more if we had brought that many. The sky was cloudy and made it impossible to actually view the sun but that didn't seem to dampen the overall enthusiastic response the community gave our presentation. We had two chairs but didn't have time to sit. It was a wonderful experience to share astronomy with the many people that came by our tent.

One of the more interesting contacts was with a representative from the Zoo. They are interested in having CVAS present some star parties at the zoo.

This year our club seems to be in high demand with the Conestoga Ranch schedule, Boy Scouts on May 6, being invited to give a star party at the zoo, and doing a star party or two at Tony Grove for the Forest Service. This was a very good opportunity to educate the public about astronomy and CVAS.

We will need a lot of club members to help support these events, but it will be worth it to reach out to the community and hopefully attract new members into the astronomy club.

Spotlight on Ursa Major, the Great Bear

By Dale Hooper

Ursa Major, the Great Bear is more commonly recognized as the asterism "the Big Dipper" in the United States. Like the little bear (Ursa Minor) this constellation figure is somewhat unusual because it is a bear with a very long tail. Some mythological

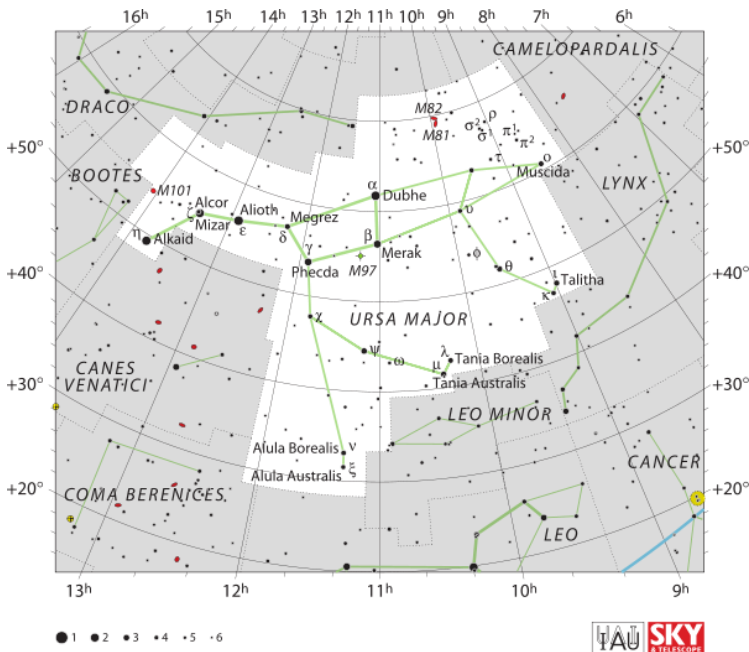
stories about the great bear say that she got her great tail when she was thrown into the sky.

The stars Dubhe and Merak in the bowl of the big dipper have served as pointer stars to the north star, Polaris for centuries. Alcor and Mizar (also called the horse and rider) in the handle of the big dipper, serve as a very useful visual acuity test. Of course, when we look at this “double star” with a telescope we see that Mizar itself is a double star.

Ursa Major contains a very nice planetary nebula (the Owl Nebula, Messier 97) as well as many of the most visually pleasing galaxies. Everyone should have observing M81 and M82 on their bucket list. At low power, M81 and M82 can often be seen in the same field of view. They are great for showing the contrast between face-on and edge-on galaxies.

All of the objects in the list rate four or more stars in *The Night Sky Observer’s Guide* (Ursa Major is in Volume 2). All of the galaxies listed should be observable with an 8” to 10” scope. There are many additional galaxies in this constellation which also rate three stars.

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



IAU and Sky & Tel - Roger Sinnott & Rick Fienberg

Object	R.A.	Dec.
NGC 2654 (Galaxy mag 11.8)	08h49.2m	+60°13'
NGC 2681 (Galaxy mag 10.3)	08h53.5m	+51°19'
NGC 2768 (Galaxy mag 9.9)	09h11.6m	+60°02'
NGC 2787 (Galaxy mag 10.8)	09h19.3m	+69°12'
NGC 2841 (Galaxy mag 9.2)	09h22.0m	+50°58'
NGC 2985 (Galaxy mag 10.4)	09h50.4m	+72°17'
Messier 81 (Galaxy mag 6.9)	09h55.6m	+69°04'
Messier 82 (Galaxy mag 8.4)	09h55.8m	+69°41'
NGC 3079 (Galaxy mag 10.9)	10h02.0m	+55°41'
NGC 3077 (Galaxy mag 9.8)	10h03.3m	+68°44'
NGC 3184 (Galaxy mag 9.8)	10h18.3m	+41°25'
NGC 3198 (Galaxy mag 10.3)	10h19.9m	+45°33'
M 108 (Galaxy mag 10.0)	11h11.5m	+55°40'
Messier 97 (Planetary Neb)	11h14.8m	+55°01'
ξ Ursae Majoris (Double star)	11h18.2m	+31°32'
NGC 3631 (Galaxy mag 10.4)	11h21.0m	+53°10'
NGC 3675 (Galaxy mag 10.2)	11h26.1m	+43°35'
NGC 3726 (Galaxy mag 10.4)	11h33.3m	+47°02'
NGC 3877 (Galaxy mag 11.0)	11h46.1m	+47°30'
NGC 3941 (Galaxy mag 10.3)	11h52.9m	+36°59'
NGC 3953 (Galaxy mag 10.1)	11h53.8m	+52°20'
Messier 109 (Galaxy mag 9.8)	11h57.6m	+53°23'
NGC 4026 (Galaxy mag 10.8)	11h59.4m	+50°58'
NGC 4036 (Galaxy mag 10.7)	12h01.4m	+61°54'
NGC 4051 (Galaxy mag 10.2)	12h03.2m	+44°32'
NGC 4088 (Galaxy mag 10.6)	12h05.6m	+50°33'
NGC 4096 (Galaxy mag 10.8)	12h06.0m	+47°29'
NGC 4100 (Galaxy mag 11.2)	12h06.2m	+49°35'
NGC 4144 (Galaxy mag 11.6)	12h10.0m	+46°27'
NGC 4157 (Galaxy mag 11.3)	12h11.1m	+50°29'
NGC 4605 (Galaxy mag 10.3)	12h40.0m	+61°37'
Mizar (Double star)	13h23.9m	+54°56'
Messier 101 (Galaxy mag 7.9)	14h03.2m	+54°21'

CVAS Minutes – April 2016

The meeting was held in the Bonneville Room of the Logan Library.

It was announced that we will be helping with the Scout-O-Rama on May 6th until about 11pm. Tom Westre has been very successful with the display that he has used at Macy’s. He has recently handed out twenty-five star charts using this display.

Dale and Tom discussed objects that are currently observable in the night sky.

A handout was provided to help those that attended the meeting to determine what type of telescope would be best for them.

The time was then turned over to Dell Vance for his presentation, "How to Choose and Use Your First Telescope". Dell first discussed the basics different telescope types and then defined a number of terms which are helpful for selecting a telescope.

He discussed things to watch out for such as claims of high magnitude, cheap lenses and coatings, wobbly mounts, limited accessories and high volume stores which are unable to provide help or answer questions. He also mentioned that when purchasing used equipment it is helpful to take someone with you. It is also important to verify that software is up to date and make sure that all the required equipment is included.

Dell then discussed the question, "what do you want to do?" He discussed related issues such as the ease of finding objects, tracking, do you want to take images, do you want to take it to remote locations and how often do you want to use it?

He also discussed tips for using the telescope. Helpful advice was given such as: practice before dark, make sure you know how to set it up, learn how to use the hand controller, a tarp under the scope will help find dropped items. Some helpful items he mentioned are: a red light, a table, appropriate clothes and an observing plan.

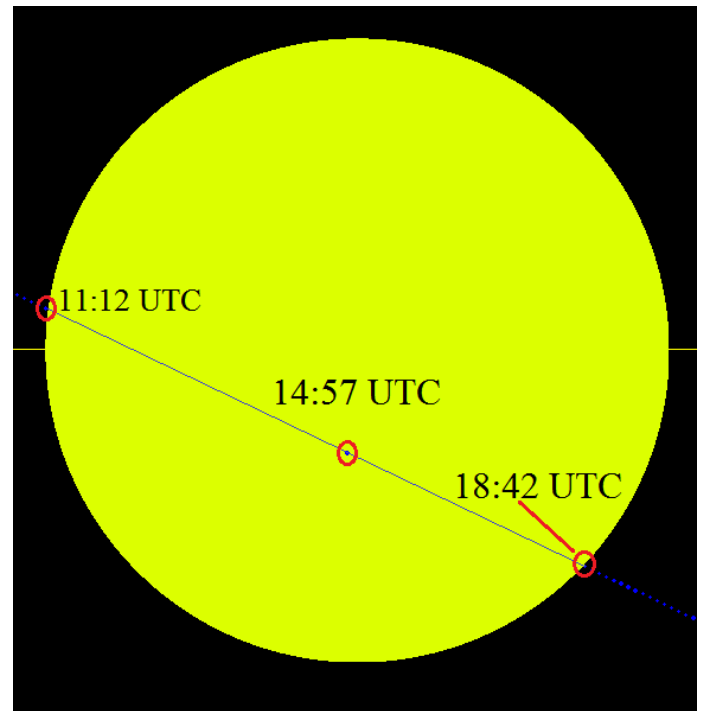
Dell concluded with much more helpful advice: set up the scope before dark, set up away from lights, take notes, try several scopes, talk to people and go to star parties and use your telescope frequently.

Upcoming Star Parties

- 06 May Star Party at the Fairgrounds for the Scout-o-Rama (7:30pm)
- 13 May Public Star Party – Heritage Park, Nibley
- 14 May Solar Party – Logan Library (10am)

Upcoming Events

- 1 May Gerard Kuiper discovers Neptune's moon Nereid (1949)
- 5 May Alan Shephard, first American in space (1961)
Eta Aquarid meteors
- 6 May New Moon
- 8 May Mother's Day
Aldebaran 0.5° south of Moon
- 9 May **Transit of Mercury, in progress at sunrise. Ends approximately 12:45pm MDT**
Warning: Only look at the sun using projection or a properly filtered image



Mercury Transit - 9 May 2016 - Image courtesy Wikipedia

- 13 May First quarter Moon
- 14 May Skylab launched, (1973)
- 21 May Full Moon
- 22 May Mars at opposition
- 29 May Last quarter Moon
- 30 May Memorial Day
Mars closest approach (Mars 18.6" across)