



ASTROFILES

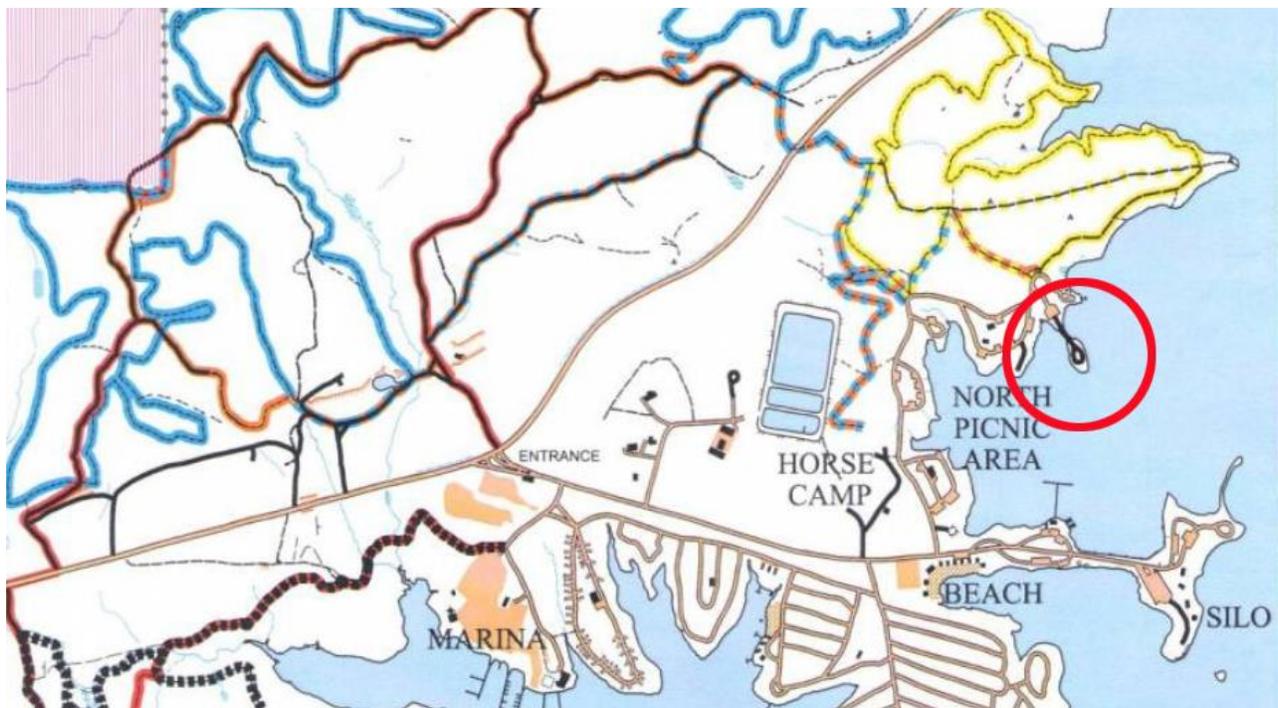
Auburn Astronomical Society Newsletter

July 2018

John Wingard - Secretary/Treasurer - Auburn Astronomical Society - jwin1048@gmail.com

Upcoming Events

The next meeting/star gaze of the AAS will be Saturday, August 18, 2018 at Wind Creek State Park near Alexander City, AL. This will also be our planned cookout and I have been informed that there will be hot dogs on the grill with fixins', or you can bring your own food if you like. We may be able to secure a pavilion by the time of the event, but we will have to wait and see if it is available at that time. The location will be the same as the previous star gazes, the island peninsula near the North picnic area. Here's a map of the park with the area circled in red. As usual, members plan to arrive before dark to set up scopes. If you tell someone at the entrance that you are with the astronomy club, they can direct you to the site.



Additional Scheduled Events at Wind Creek State Park

- Saturday, September 15, 2018 – Star Gaze/Club Meeting – Wind Creek State Park

Report on Star Gaze for Lee County Autism Resource (Children’s Harbor)

On Saturday, July 7th, 2018, the AAS assisted with a star gaze at The Lee County Autism Resource Center, Children’s Harbor, located on Lake Martin in Alabama. Although weather conditions were not initially favorable, it did clear up enough for some views. AAS members Allen Screws and Mike Lewis were there and here’s Mike’s report along with some photos.

“I’m pleased to report that last night’s stargazing program was a success. We didn’t think it would be ideal early on but conditions ultimately proved favorable for some viewing. We had no rain, despite storms threatening to the east and south. Humidity was not a problem and there was a slight breeze at times making the evening enjoyable. We did contend with substantial cloud cover in the east, which prevented views of Saturn and Mars. However, overhead and to the west, skies were generally clear through much of the observing session from 8:30-10PM. Allen and his wife, and David and I, brought a total of three telescopes (our 3.5 and 5-inch refractors, and Allen’s 10 inch dobsonian). David and I showed Jupiter and Venus. Allen showed Jupiter and M51, I think. According to Maria Gutierrez, of the Lee County Autism Resource and Advocacy (LCARA) group, they had over 40 persons (children, parents and camp leaders) participate in the stargaze which was promoted as part of their weekend camp at Children’s Harbor at Kowaliga/Lake Martin. From my observations, everyone enjoyed it very much and lines were long at each of the scopes. Maria Gutierrez was very appreciative of the club for once again providing views of the heavens for camp kids. Lots of “wows” and lots of smiles. And this time we got plenty of photos thanks to the LCARA folks and my smart phone.”







Report on July 14th Star Gaze at Wind Creek State Park

The AAS hosted a star gaze at Wind Creek State Park on the evening of Saturday, July 14th, 2018. Once again, the weather conditions did not look very promising, but AAS members Allen Screws and Mike Lewis took a chance and showed up. Conditions did eventually clear somewhat, and a few views were afforded the park visitors that did attend. Here is Mike's summary of the event:

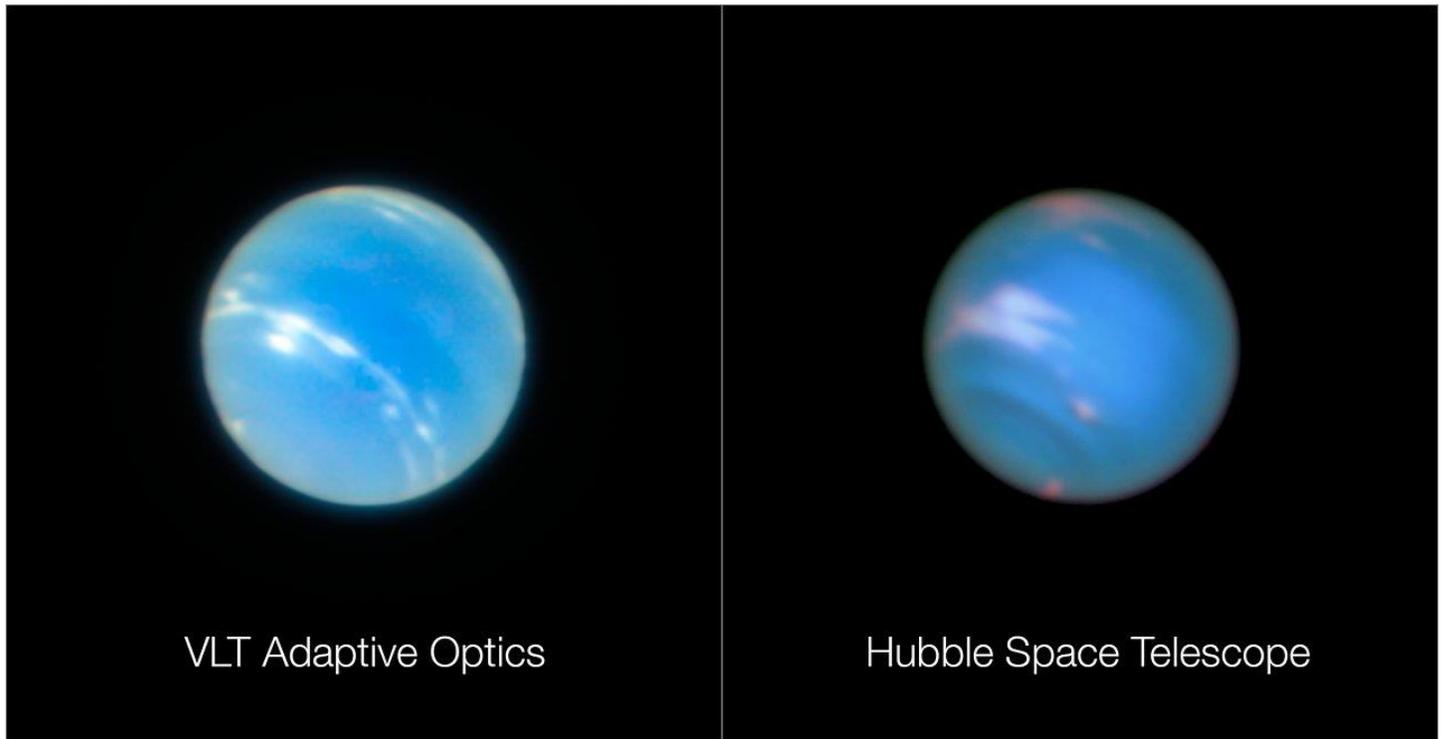
"A short report on last night's WCSP stargaze session. It was not a total bust.

Allen Screws and his wife and my son David and I were in place by 7PM on Snake Island point. Conditions were mostly overcast with some sprinkles. By nightfall, the sprinkles departed with thinning of clouds in the west. By 8:30pm, clouds thinned enough in the northwest to allow Jupiter to shine through. Approximately 20 park guests attended the observing session with 15 staying to see Jupiter when it became visible. In addition to Jupiter observation in a 90mm refractor, we also talked about telescopes and handed out printed star maps to the kids. Attached is a photo with a light beam. I think that was from the glare of another cell phone flash."



An Exciting New Development in Ground-Based Imaging Technology

ESO's Very Large Telescope (VLT) has achieved first light with a new adaptive optics mode called laser tomography — and has captured remarkably sharp test images of the planet Neptune, star clusters and other objects. The pioneering MUSE instrument in Narrow-Field Mode, working with the GALACSI adaptive optics module, can now use this new technique to correct for turbulence at different altitudes in the atmosphere. It is now possible to capture images from the ground at visible wavelengths that are sharper than those from the NASA/ESA Hubble Space Telescope. The combination of exquisite image sharpness and the spectroscopic capabilities of MUSE will enable astronomers to study the properties of astronomical objects in much greater detail than was possible before.



For additional information about the club and our activities, check out the following links:

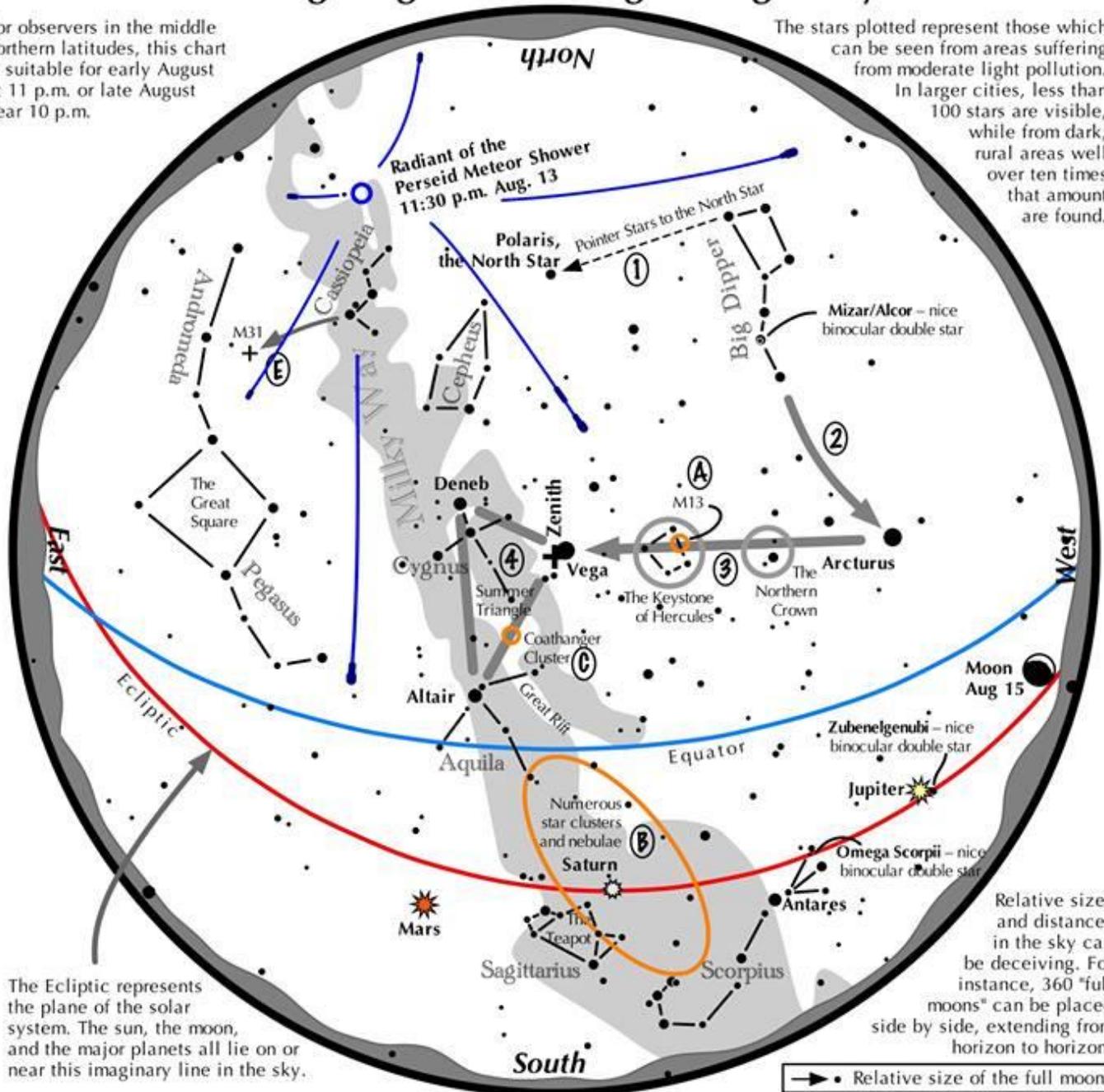
The Auburn Astronomical Society web page: <http://www.auburnastro.org>

The AAS Facebook page: <http://www.facebook.com/groups/79864233515/>

Navigating the mid August Night Sky

For observers in the middle northern latitudes, this chart is suitable for early August at 11 p.m. or late August near 10 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



The Ecliptic represents the plane of the solar system. The sun, the moon, and the major planets all lie on or near this imaginary line in the sky.

Relative sizes and distances in the sky can be deceiving. For instance, 360 "full moons" can be placed side by side, extending from horizon to horizon.

→ • Relative size of the full moon.

Navigating the mid August night sky: Simply start with what you know or with what you can easily find.

- 1 Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
- 2 Follow the arc of the Dipper's handle. It intersects Arcturus, the brightest star in the June evening sky.
- 3 To the northeast of Arcturus shines another star of the same brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
- 4 High in the East lies the summer triangle stars of Vega, Altair, and Deneb.

Binocular Highlights

- A: On the western side of the Keystone glows the Great Hercules Cluster.
- B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
- C: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
- D: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.
- E: The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.





Auburn Astronomical Society Membership Application Form

Name:

Address:

City: _____ State: _____ Zip: _____

Phone: _____ Date of Application* ____/____/____

E-mail:

Telescope(s):

Area(s) of special interest:

Enclose: \$20.00 for regular membership, payable in January. *Full-Time* student membership is half the Regular rate.

If you are a NEW member joining after the first of the year, refer to the prorated table below

Jan \$20.00	Feb \$18.33	Mar \$16.66	Apr \$14.99	May \$13.33	Jun \$11.66
Jul \$10.00	Aug \$8.33	Sep \$6.66	Oct \$4.99	Nov \$2.33	Dec \$1.66

Make checks payable to: Auburn Astronomical Society and return this application to:

Auburn Astronomical Society
c/o John Wingard, Secretary/Treasurer
#5 Wexton Court
Columbus, GA 31907

For questions about your dues or membership status, contact: jwin1048@gmail.com

Thank you for supporting the Auburn Astronomical Society!