ASTRONOMY CLUB OF TULSA

OBSERVER

JUNE 2024

Bringing Stars to the eyes of Tulsa since 1937

Editor – John Land

A beautiful Aurora display taken from Tulsa's Mohawk on May 10, 2024
Photo by Bob Lieser using his regular iPhone camera app

On May 8 & 9 Sunspot AR3664 hurled a series of Four Conoral Mass Ejections toward the Earth. By May 10, 2024 a series of very strong geomagnetic storms began producing stunning aurora displays visible at low latitudes over large areas of both the Northern and Southern Hemispheres for several hours. The geomagnetic storm remained in the Severe to Very Strong levels for 27 hours and was still active at high levels another 12 hours. Aurora were visible in Peurto Rico at latitude 18.1 N and Nambia's Etosha National Park latitude 18.9 S **Update: 5/28** - Sunspot AR3664 is still producing X class solar flares and large CMEs. It is about to rotate onto the Earth facing side of the sun again. Keep watch at https://spaceweather.com

You can see many Aurora images here.

Observatory Stargazing Nights

Our GUESTS & Members nights are open to anyone. We do ask guests to try to RSVP.
Large groups need to make separate arrangements.

Members Only Nights are Open to members and their family
Details, Times and Direction Maps are posted on our Website
https://www.astrotulsa.com/events

Observatory Visitation Star Nights

Friday June 7 - 8:15 PM Member's Night at the Observatory.

Friday June 14 - 7:45 PM Special Interest Group for help learning to use your telescope. Location at a Tulsa Park to be Announced.
Advanced RSVP Requested – see President message page 2

Friday June 28 - 8:15 PM Guest & Members Observatory Night –
Guest requested to RSVP

Friday July 5 - 8:15 PM
Member's Night at the Observatory

SATURDAY July 13 - 7:45 to 10 PM in Sand Springs
Public Sidewalk Telescope night at Case Community Center
1050 W Wekiwa Rd, Sand Springs

Friday July 26 - 8:00 PM Guest & Members Observatory Night –
Guest requested to RSVP

Saturday August 3 - 6:30 PM ANNUAL CLUB PICNIC and
Member's Night at the Observatory

SATURDAY Aug 10 - 7:30 to 10 PM in Sand Springs
Sidewalk Telescope night at Case Community Center 1050 W Wekiwa Rd, Sand Springs

Friday Aug 23 - 7:15 PM Guest & Members Observatory Night –
Guest requested to RSVP

Friday Aug 30 7:30 PM Member's Night at the Observatory

If a Friday event must be cancelled due to weather, we will attempt to try again on Saturday at the same time.
- Always check the website for event updates

President's Message
Don Bradford

If you have been reading my President's Page or attending club meetings, you are aware of our efforts to develop Special Interest Groups (SIGs) which can cover any imaginable topic and any form of implementation or organization to address that topic. And SIGs are beginning to gain momentum. One new SIG is planning to provide help to any member who has "new" telescope equipment for which he/she needs help configuring, setting up or using. The plan is to meet at local parks in the evening this summer and invite any member who needs this kind of help. Experienced members will be there and eager to help. We are planning the first official event for that SIG on Friday June 14 at 7:45 PM at a place to be announced. Watch the website for notices and I will be announcing the details of that event by email. Hopefully these events will provide an easily accessible site to offer this kind of help to our members. **Proving again that membership in the Astronomy Club of Tulsa is the best deal around.**

So, take advantage of your membership and get actively involved in events offered and in SIGs by simply asking a question to broaden your knowledge and enhance your enjoyment of your hobby. It is really that simple, and you can ask your questions in at least three ways:

(1) engage a member at any meeting, observing night or any other club event,
(2) email me at astrotulsa.pres@gmail.com, or
(3) use the "Contact" link on the club website.

We need your feedback and questions. New events and SIGs spring up through creative thoughts seeking to fulfill your enjoyment of astronomy. But we can't read your creative thoughts, so please help improve the club by your participation and communication. We plan to install a "suggestion box" feature on the club website to make that process even easier, so watch for that and give us your confidential feedback.

Don't forget the other summer events beginning in June: June 7 Members Night, June 28 Guest Night and of course the other events scheduled for July and August. And be sure to take a look at the article by Brad Young in this Newsletter for ideas to expand your observing experiences. I look forward to seeing you at one of our many events and projects.

"Bringing Stars to the Eyes of Tulsa since 1937"

Don Bradford - President

Vice President Message
Jonathan Fussell

TESS Exoplanet Update by Jonathan Fussell

A new catalog of 126 worlds beyond the solar system reveals a diverse array of newly discovered planets, some with extreme and exotic characteristics, while others could potentially support life. This collection of planets demonstrates the vast variety of worlds that exist beyond our own solar system, highlighting the uniqueness of our planetary neighborhood. Despite the differences between these exoplanets and Earth, they may still provide valuable insights into the formation and evolution of planetary systems, helping us understand Earths place in the cosmos.

This catalog was created using data from NASA's Transiting Exoplanet Survey Satellite (TESS) in collaboration with the W.M. Keck Observatory in Hawaii. It marks a significant step in answering questions about where our solar system fits into the broader tapestry of planetary systems. The TESS-Keck Survey catalog stands out because it contains comprehensive data about most of the included planets. It provides both mass and radius measurements, which are crucial for understanding what these planets are made of and how they formed. This combination of data offers a more complete picture of these distant worlds. The catalog was built over three years, using 13,000 measurements of the tiny "wobbles" that planets cause as they orbit their stars. This method, known as the radial velocity method, measures the gravitational pull a planet exerts on its star, which helps determine the planet's mass. The survey confirmed the mass of 120 exoplanets and identified six exoplanet candidates.

Among the newly cataloged exoplanets are some particularly intriguing ones. For instance, two planets orbiting a sun-like star called TOI-1386, located about 479 light-years away, have been highlighted. One of these, TOI-1386 b, is a "sub-Saturn" planet, with characteristics between those of Saturn and Neptune. It orbits its star every 26 Earth days. Its neighbor, TOI-1386 c, is a gas giant with a year lasting about 228 Earth days. Another fascinating exoplanet is TOI-1437 b, a sub-Neptune with over ten times the mass of Earth, orbiting its star at 14% of the distance between Earth and the sun, completing its orbit in just 19 days. This planet is one of the few sub-Neptunes known to transit its star with well-defined mass and radius.

The release of the TESS-Keck Survey's Mass Catalog allows astronomers to explore in depth the findings of TESS, which launched in April 2018, and assess how it has expanded our understanding of exoplanets. With thousands of planets from the TESS mission still awaiting confirmation, such exoplanet catalogs are expected to become more common, further enriching our knowledge of the universe.

The exoplanets described in this catalog are detailed in the May 23 edition of The Astrophysical Journal Supplement.

Summer Nights Under the Stars

By Brad Young Observing Chair

Summer is just around the corner. Time to look forward again to the best season for stargazing. For me summer means warm nights staring at distant objects in my telescope or laying in gravity chair with a slight breeze as I gaze deep into the Milky Way overhead. Later, as I pack everything away and drive back home, I pass through sleepy, silent small towns. Finally, I pull in my driveway under the dim light of dawn.

We all have our summer routine of where to go, what to look at, etc. and it often reminds us of great nights observing we had before. But summer is also a great time to try new things. The weather is warm and, although the nights are short, there's still enough to enjoy many hours under the stars. This summer, consider trying new things that you haven't looked at before, or you could revisit the well-known hits in the summer sky but look at them in a new way. In support of this, instead of putting out a list of objects to observe this summer, this is more a guide to help you develop your personal list that will bring you the most enjoyment.

If you are a beginning level astronomer, most of the objects in the sky will be new to you anyway. For you I would suggest that you try one of the Astronomical League observing programs such as the Messier list, or one of the other beginning or intermediate level programs. It's in that “sophomore” period (after you have acquired some equipment and started to learn the sky) that it is important to look at many different things to find what your particular interest may be.

These objects or ideas are described from the viewpoint of a visual astronomer (me). However, many can be adapted for imaging also, or at least lead to new ideas. As just a guide, you might consider trying to do the following in the upcoming summer observing season.

The Beginning Astronomer, or ideas for all:

The Mexicans called it very poetically the "little white sister of the many-colored rainbow."
- The Stars in Their Courses by Sir James Jeans

- **Observe the best part of the Milky Way**. Of course! This should go without saying, but though winter's Milky Way has many bright stars and deep sky objects, summer's portion wins hands down. Get to a dark sky (this applies to almost all the objects in this article), lean back and enjoy, even just with your eyes. If you're asking, "what's new?" then make it this – stay and look at the Milky Way in a relaxed position for five minutes. Just look at it only, no phone, no scope, no distractions.

- **Try sketching.** This applies if you don't already, and of course, is meant for visual observers. No need to stress over it, just make a record of what you saw. Add notes about the shape, brightness, etc. that support the sketch. The most rudimentary drawing may prove useful to see a supernova in a galaxy, or record the look with different filters, etc. (see item below).

One of the noticeable features of the Milky Way now to be seen is the great bifurcation, or separation into two branches. The split can be traced from Cygnus where it begins … and halfway to the southern horizon. - Astronomy for Everybody by Simon Newcomb

- **Observe the heart of our galaxy**. Even if you don't sketch it, follow the Milky Way, the galaxy we live in, from SW in Scorpio to the NE in Cassiopea or thereabout. See that it has an amazing split in it, which is a dust lane, as is seen in many other spiral galaxies like our own. Since we are inside the galaxy, we see a dark lane half the visible length of the Milky Way in summer. This can also be done with very wide field imaging.

- **Observe a contrasting pair of stars** in their color, for example Albireo in Cygnus. You can also look at pairs that are very different in brightness and compare the view of very wide pairs at low power, and close pairs at high power. Get a feel for how multiple star systems look in different configurations. Sky & Telescope has a great article about this on p. 24 of the June 2024 issue.

Then felt I like some watcher of the skies
When a new planet swims into his ken; - John Keats

Note: You may not discover a new planet. Even Keats would struggle rhyming "uncatalogued nebula".

- **Explore the Milky Way for groups and clusters of stars**. Use star charts to see if something you run across is a cataloged cluster or just an interesting asterism or grouping. Even today, amateurs are finding clusters and nebula not yet cataloged.
  See WASP February 2023 p.23 for an article on this subject.

- **See how far south you can see stars** with just your eyes, and then with binoculars in a constellation like Scorpius. Or turn it around and find some stars very near the southern horizon and identify them. They may be in a constellation you don't normally think of like Telescopium.

- **Try two or three objects that are too small or faint for you to see.** You may not find them, or they might not be much to look at, but at least you'll have the thrill of the hunt and pushing yourself.

- **Look at the Cat's Eyes** in southeast Scorpius; these are two bright naked eye stars. Because they are always low in the sky, they twinkle wildly.

- **Go to a star party or a public outreach event** this summer. If you've not been to one, it can be a great way to meet others in the hobby or share the sky with others.

The Intermediate Observer, or if you finish those ideas:

For the intermediate observer, there's a good chance that you already looked at a lot of the show piece objects in the summer sky such as the Lagoon Nebula (Messier 8), the North American Nebula (NGC 7000) etc. There are certainly plenty of additional objects that may be fainter or harder to find, but as with the beginning list I've tried to indicate more a type of observation than specific objects to look at:

- **Find a comet.** Comets, as unreliable as they are, are fantastic sights under the summer sky. C/2023 A3 Tsuchinshan-ATLAS is supposed to be good this late spring / early summer, and you never know when one will come around.

- **Track an asteroid.** Pallas is still visible relatively bright in early summer and there are lots of asteroids you can see with a small telescope. Ariadne, Ceres, and Herculina are all brighter than mag 10 right now.

- **See how far south you can see deep sky objects.** What is the elevation limit for deep sky objects? Just as with the beginners' list above, try searching for objects far in the south. The Milky Way drops out of sight in our southern sky in summer, and you may have heard there's no way you can see some of the objects low in the sky. What is the limit for galaxies? Nebula? Globulars? How is each affected by low elevation? Are certain weather patterns and moon phases more disturbing?

"The head of the Great Rift is often referred to as the Northern Coal Sac"
The Milky Way by Bart and Priscilla Bok

- **Try to see the dark lanes and other features in the Rift**. Again, a dark sky is crucial to this sort of object, but they are amazing to see. If you can't see anything specific, note the sudden change in density of stars at the edges of the Rift, especially in low power, wide field instruments or images.

- **Try two or three objects that are supposed to be too small or faint for you to see or image.** Be sure and use averted vision, binning, and other techniques to improve your chances, like slightly tapping the scope to make the field move just a bit. Another article in S&T June 2024, p.58 discusses the Abell Galaxy Clusters, a real challenge visually, even for big scopes.

- **Look at or image two dissimilar objects in the same field.** One example is a beautiful spiral galaxy (NGC 6946) and an open cluster (NGC 6939) in the same low power field in Cepheus. This and many other groupings like this can be found in the Two in the View Observing Program by the Astronomical League.

- **Compare different versions of the same type of object**. One pair of globular clusters would be M 80 and M 5 which are both in Scorpio and near to each other. Which one is looser and can be resolved a little into stars on the edge?

- **Revisit an object with different equipment**, such as a different telescope or different power. If it's applicable, try looking at it with a filter such as a colored filter for a planet or a nebula filter or OIII filter for a deep sky object. Of course, the possibilities for imagers to tweak the imaging and processing are myriad.

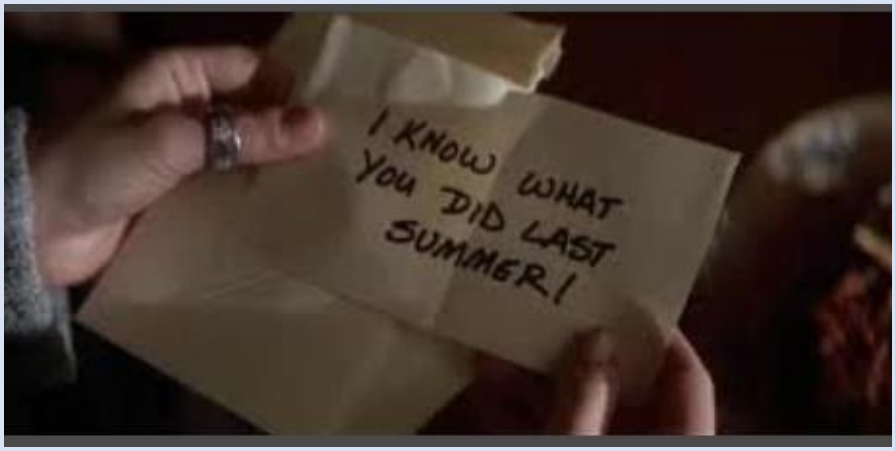
- **Look at the Cat's Eyes** - if you have a small telescope, there is a little globular cluster just east of them in a line with them and a small star.

- **Volunteer at a star party or a public outreach event** this summer. Even if you've been to many, this is an even better way to meet others in the hobby and pay forward those who first shared the sky with you.

Even very experienced observers can find new challenges:

- **See or image a type of object rarely seen.** Few of us have seen quasars, such as 3C 273 in Virgo (look early in the summer for this one) or the visual companion star to Cygnus X-1, a black hole. Dave Tosteson writes articles for Sky & Telescope that provide guidance for seeing some truly astounding things visually.

- **Stop just being visual, or an imager, or both.** Take up visual astronomy if you only image, or vice versa. Or go way out and try some radio observing, remote imaging, spectroscopy, or anything you've never tried – summer's as good a time as any for new experiences.



Let me know if this article and some of the suggestions here in help you this summer to enjoy the warm nights and learn a little more about our universe. Then if you like you can give us a short report in our September meeting just like the "What I Did Last Summer" reports we all did in grade school. And, by getting out and observing this summer and trying some new things, you may be able to carry some of that inertia over into fall and winter when the weather can be great for observing but maybe more challenging due to the conditions and circumstances.

Brad Young
https://hafsnt.com/
Astronomy Club of Tulsa
Mid States Region Astronomical League Co-Astronomer of the Year 2023
Platinum Level Astronomer #1, Astronomical League
Contributing Member of International Astronomical Union Centre for Protection of the Dark and Quiet Sky from Satellite Constellation Interference https://cps.iau.org/
ORCID 0000-0001-6268-7790
Retired Registered Professional Chemical Engineer

Click on these images to links on the Internet

***** The NEW CLEAR OUTSIDE icon above is a link to an extensive site showing cloud cover %, Seeing, Transparency, Moon Phase, Temp in ^{O} C and many other useful tools**

GOT A NEW TELESCOPE? Here are some sites to help you get started with you telescope.

Getting Started with Your New Telescope
https://skyandtelescope.org/astronomy-news/getting-started-with-your-new-telescope-2/

Astronomy for Beginners | Night Sky Facts, FAQs & Resources
https://skyandtelescope.org/astronomy-information/

What to Know Before Buying a Telescope
https://skyandtelescope.org/astronomy-news/what-to-know-before-buying-a-telescope/

See Website Observation Station for a collection of Interactive Sky Watching Tools
Moon phases - Sun rise & Set - Make your own custom interactive sky chart and more
Great website for printable Finder Charts of Solar System objects https://in-the-sky.org/

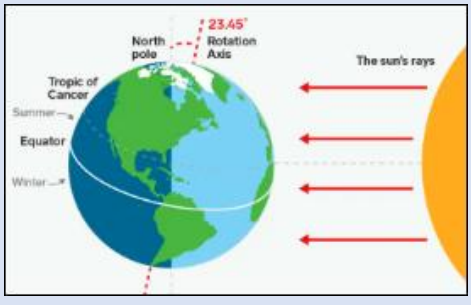
June - Moon Phases - -
New Thurs June 6 - - 1st Q Fri June 14 - - Full Fri June 21 - - 3rd Q Fru June 28

JUNE PLANETS – There are no evening planets in early June. On the morning of Tues June 4, Jupiter and Mercury pass within 1/10 degree of each other. You'll need a clear view to the ENE as they rise only about 40 minutes before sunrise. Binoculars may help you see the Pleiades cluster just 5 degrees above the pair. Look for a thin crescent moon about halfway between them and 1st mag MARS. Saturn is about 35 degrees up in the SE.
As the month progresses Jupiter, Mars and Saturn will continue to rise higher in the predawn sky. In late June, Venus and Mercury will emerge in the NW evening sky after sunset. Mercury has a favorable evening appearance in July. It passes through M 44 the Beehive Cluster in Cancer on July 6. On May 23rd Jupiter and Venus passed within 1/5 degree of each other. See an image from the SOHO satellite just 8 degrees from the Sun. Lunar conjunctions Morning Saturn May 30 & June 27, Mars June 2 & July 1 and Mercury & Jupiter on June 5.

Two Comets grace our evening skies. Comet 13P/Olbers at magnitude 7.5 is moving through the northern sky from Auriga toward Ursa Major. Comet C/2023 A3 (Tsuchinshan-ATLAS) starts the month at 9.7 mag in border of Leo & Virgo and proceeds in the retrograde (western) motion into Leo. By autumn it is predicted to reach Zero mag by October !

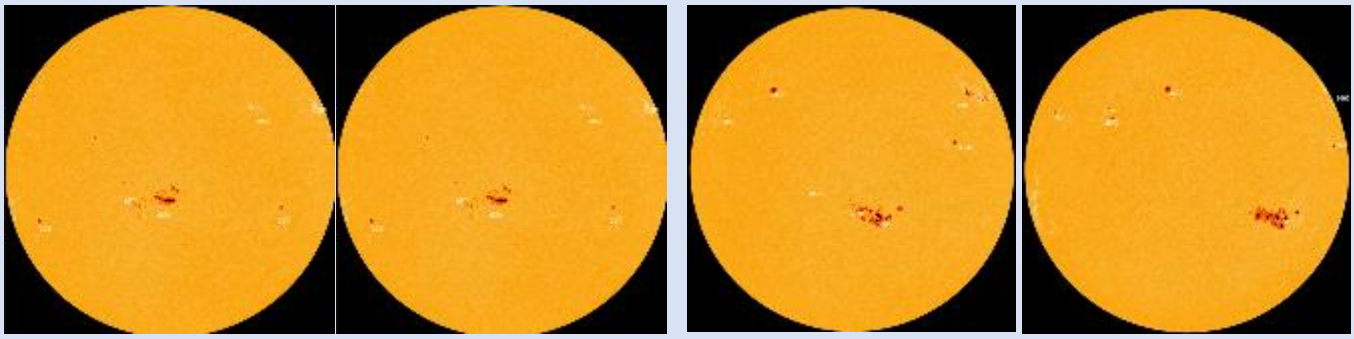
Comet Olbers chart & data **Comet Tsuchinshan chart & data**

Find more Comet Daily position charts here



The Summer Solstice occurs on June 20 at 3:51 PM when the sun reaches its highest altitude in the sky from Tulsa 77.4 ^{O}
At Right Ascension 06 hours and Declination +23^{O} 26'
Sunrise will be 6:06 AM and set at 8:43 PM –
14 hours 37 mins of daylight at Tulsa's latitude

On the evening of June 21, the full moon will be near where the sun will be on Dec 21 – the Winter Solstice. Its highest altitude will be only 25.4 ^{O} Making a good opportunity to see the extremes of the Sun's ecliptic path through the stars.



Sunspots Feb 8, 2024 Feb 10 May 8 May 10

Solar Sunspot Cycle 25 is becoming very active. Far exceeding the predictions that it would be weak like cycle 24. Several sunspot groups have become large enough to see by simply using your Eclipse Glasses. Many of us likely got Solar Filters for our telescopes or cameras to view the April 8 solar eclipse. Sunspots can be seen easily in low power telescopes and even in binoculars as long as you are using safe solar filters.

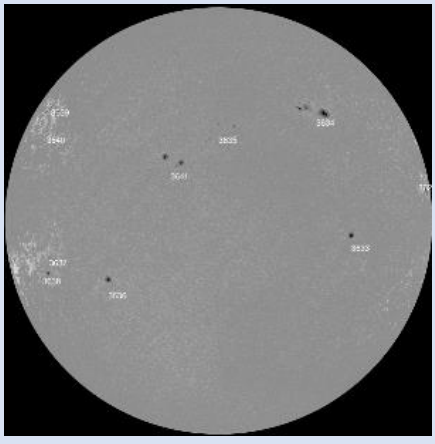
Now would be a great time to earn your Astronomical League

SUNSPOTER OBSERVING CERTIFICATE

The goal of the observing program is to make observations of sunspots throughout a full solar rotation cycle of about 30 days. These can be done either by making sketches or images. Along the way you will learn the structure of a sunspot. How they move from day to day as the Sun rotates. Also watch how they grow or fade over time. You might even get lucky and witness a solar flare during one of your observations.

You will of course need a SAFE SOLAR FILTER.
The astronomical league has a page on observing the sun safely.
https://www.astroleague.org/how-to-safely-observe-the-sun/

Some suppliers of Safe Solar Filters & Viewers | Solar Eclipse Across America
https://eclipse.aas.org/resources/solar-filters
One reliable source our club has used several times is Rainbow Symphony
https://www.rainbowsymphony.com/collections/eclipse-glasses-safe-solar-viewers

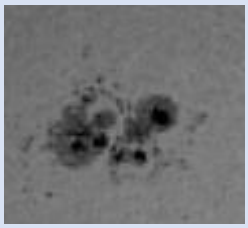


Making a Safe Solar Filter for your telescope.
Our **August 2023 Newsletter** has a 2-page article about how to make safe filter for use on telescopes or binoculars.

< < On May 15, 2024 the official sunspot count was 152
Which seems confusing since the image shows about a dozen.

The Formula is R=k (10g+s),

where R is the sunspot number; g is the number of sunspot groups on the solar disk; s is the total number of individual spots in all the groups; and k is a variable scaling factor (usually <1) that accounts for observing conditions and the type of telescope



The dark inner region of a sunspot is called the UMBRA which is the coolest region. The lighter surrounding area is the PENUMBRA.
Learn More at https://spaceweather.com/glossary/sunspotnumber.html

Treasurer Report
Cathy Grounds

As of May 20th, 2024, we have 174 members, with 10 new members so far this year. Let's welcome our newest members - Clifford and Colette Lemons!

We are pleased to announce that the PayPal glitch has been resolved, many thanks to Jennifer Jones and Seed Technologies for their efforts on this.

Please note that if you are renewing your membership late, you will still be credited a full 12 months going forward from the date you renew.

We are now able to take point-of-sale credit card payments via SquareUp. This will be a huge improvement for us and much more convenient. There is a processing fee of roughly 3% added by SquareUp.

As always if you have any questions or concerns or if your contact information (email, phone, postal address) has changed please send me an email at:
AstroTulsa.Tres@gmail.com

Accounts as of May 15, 2024
Checking: $ 4,456.47
Savings: $ 2,996.27
Investments: $36,111.71 (Value fluctuates with markets).

You can JOIN or RENEW memberships ONLINE using ANY MAJOR CREDIT CARD or MAILING in your dues with a check. The transactions are processed through PayPal, but you DO NOT need a PayPal account. A modest processing fee is added to online transactions.

Fill out the registration form at **https://www.astrotulsa.com/join**

Membership rates for **2024** are as follows:
Adults: $ 45 per year, includes Astronomical League Membership.
Sr. Adult: $ 35 per year for those 65 or older, includes Astro League Membership.
Students: $ 30 with League membership; Students: $ 25 without League membership.
Additional Family membership: $ 20 with voting rights and League membership.
$ 15 with voting rights but without League Membership.
The regular membership allows all members in the family to participate in club events but only ONE Voting Membership and one Astronomical League membership.

MAGAZINE SUBSCRIPTION RATES 2024 updates
A monthly astronomy magazine subscription is a great way to learn more about many aspects of our hobby. - Scientific articles, sky events, equipment reviews, imaging techniques and more
Use the links below to make your subscription

To learn about Sky and Telescope magazine see their home page
Digital $ 37.05 Print & Digital $ 45.75 includes a $ 10 club discount
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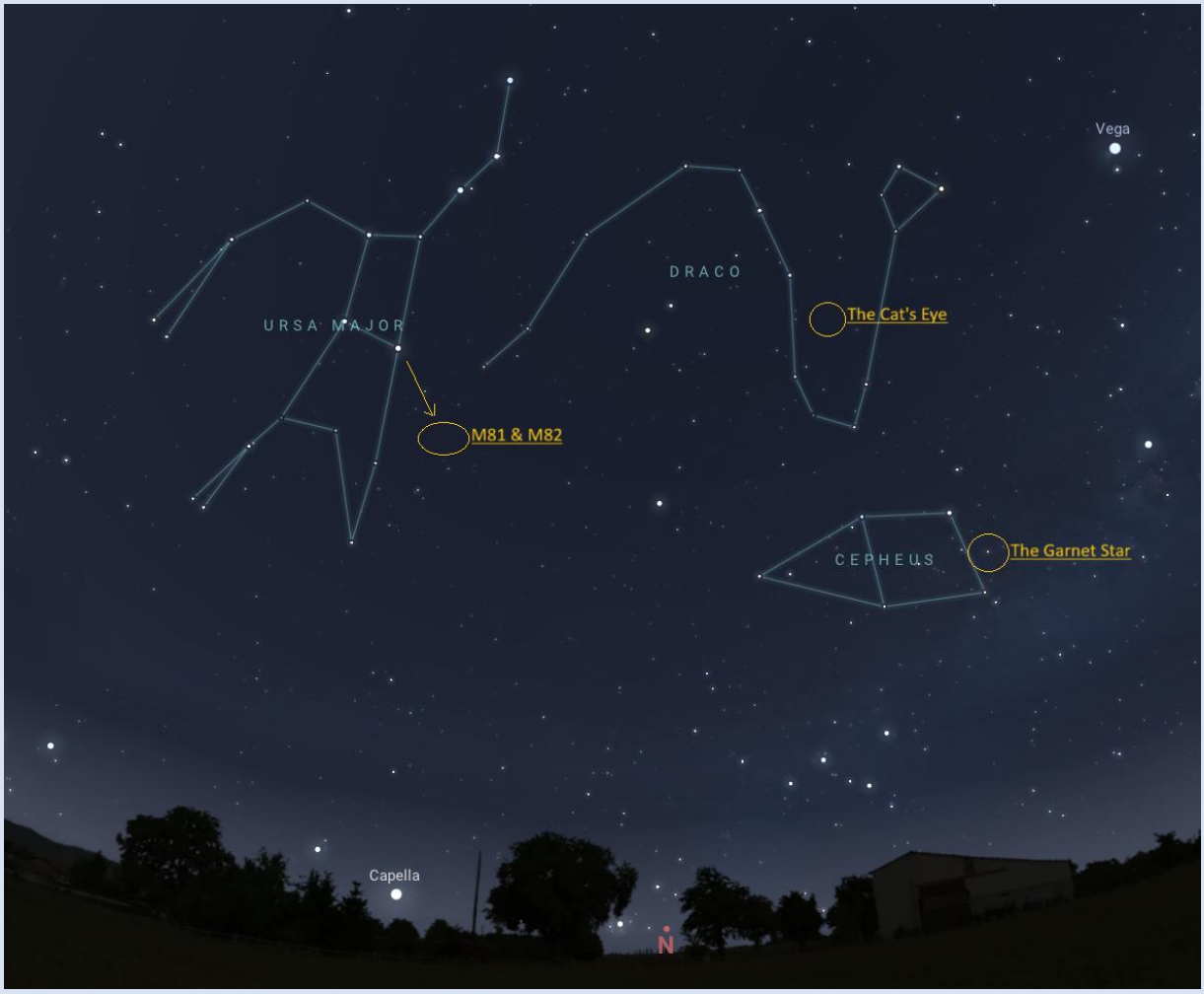
Use this **Astronomy Subscription Link** **Digital $ 39.95 Print & Digital $ 49.95** no club discount

Constant Companions: Circumpolar Constellations, Part III

By Kat Troche

In our final installment of the stars around the North Star, we look ahead to the summer months, where depending on your latitude, the items in these circumpolar constellations are nice and high. Today, we'll discuss **Cepheus**, **Draco**, and **Ursa Major**. These objects can all be spotted with a medium to large-sized telescope under dark skies.



From left to right: Ursa Major, Draco, and Cepheus. Credit: Stellarium Web.

- **Herschel's Garnet Star:** Mu Cephei is a deep-red hypergiant known as The Garnet Star, or Erakis. While the star is not part of the constellation pattern, it sits within the constellation boundary of Cepheus, and is more than 1,000 times the size of our Sun. Like its neighbor Delta Cephei, this star is variable, but is not a reliable Cepheid variable. Rather, its brightness can vary anywhere between 3.4 to 5.1 in visible magnitude, over the course of 2-12 years.

This composite of data from NASA's Chandra X-ray Observatory and Hubble Space Telescope gives astronomers a new look for NGC 6543, better known as the Cat's Eye nebula. This planetary nebula represents a phase of stellar evolution that our sun may well experience several billion years from now. Credit: X-ray: NASA/CXC/SAO; Optical: NASA/STScI

- **The Cat's Eye Nebula:** Labeled a planetary nebula, there are no planets to be found at the center of this object. Observations taken with NASA's Chandra X-ray Observatory and Hubble Space Telescopes give astronomers a better understanding of this complex, potential binary star, and how its core ejected enough mass to produce the rings of dust. When searching for this object, look towards the 'belly' of Draco with a medium-sized telescope.

The Cigar Galaxy. Credit: NASA, ESA, CXC, and JPL-Caltech

- **Bode's Galaxy and the Cigar Galaxy:** Using the arrow on the star map, look diagonal from the star Dubhe in Ursa Major. There you will find Bode's Galaxy (Messier 81) and the Cigar Galaxy (Messier 82). Sometimes referred to as Bode's Nebula, these two galaxies can be spotted with a small to medium-sized telescope. Bode's Galaxy is a classic spiral shape, similar to our own Milky Way galaxy and our neighbor, Andromeda. The Cigar Galaxy, however, is known as a starburst galaxy type, known to have a high star formation rate and incredible shapes. This image composite from 2006 combines the power of three great observatories: the Hubble Space Telescope imaged hydrogen in orange, and visible light in yellow green; Chandra X-Ray Observatory portrayed X-ray in blue; Spitzer Space Telescope captured infrared light in red.
-

Up next, we celebrate the solstice with our upcoming mid-month article on the Night Sky Network page through NASA's website!

This article is distributed by NASA's Night Sky Network (NSN).
The NSN program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit nightsky.jpl.nasa.gov to find local clubs, events, and more!

Astronomy and view the wonderful sights in the night sky.

Check the EVENTS section at https://www.astrotulsa.com/

During the school year our club holds a
Monthly General Club meetings at
Jenks Public Schools Planetarium
205 East B St, Jenks, OK
Located North of the intersection of
1st and B St

Meetings begin at 7:00 PM

When you enter the building lobby,
take the elevator to the 3rd floor.

Click for Google Map Link

ASTRONOMY CLUB OBSERVATORY
Located on a hilltop about 25 miles SW of Tulsa
Features: classroom, restroom, dome with 14-inch telescope and an acre to set up your telescopes.

Weather permitting, we host two types of observing nights.

GUEST OBSERVING NIGHT – RSVP requested
This event is open to our Guests – both individuals and families as well as our regular members. Several of our club members set up telescopes for public viewing.
***** Groups need to make separate arrangements.

MEMBERS OBSERVING NIGHT usually on a Friday near new moon
Reserved for club members and their families to allow them to pursue observing projects.
The Observatory is ONLY OPEN for SCHEDULED EVENTS.

Check the EVENTS section at https://www.astrotulsa.com/
Follow our map directions DO NOT USE GPS

Two Options for travel to the observatory

MOSTLY PAVED ROADS – Hwy 75 to 201st St S – through Mounds OK

Most DIRECT ROUTE – Hwy 75 to 241st St S – some coarse gravel & dirt roads

ASTRONOMY CLUB OFFICERS:

PRESIDENT – DON BRADFORD
astrotulsa.pres@gmail.com

VICE PRESIDENT – JONATHAN FUSSELL
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TREASURER – CATHY GROUNDS
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You may also contact club officers or board members using the CONTACT tab on our website

BOARD MEMBERS-AT-LARGE:
MIKE BLAYLOCK
JERRY CASSITY
BRYAN KYLE
JOHN LAND
JACK REEDER
JAMES TAGGART

STAFF:
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Public FaceBook Page Coordinator – Cathy Grounds

OBSERIVING CHAIR - BRAD YOUNG
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SIDEWALK ASTRONOMY – TIM GILLILAND

PR AND OUTREACH – Open Position

GROUP DIRECTOR – Open Position

Enjoy at Planetarium Show at Jenks High School

JENKS PLANETARIUM

Jenks High School Campus
205 East B Street, Jenks

TICKETS are $7

See our 2024 Spring Shows Schedule and ticket purchase links at
Shows and Ticket Link

Shows take place on Tuesday evenings or Saturday mornings
Must purchase tickets online in advance