

STARLIGHT JOURNAL

AUGUST 2026



The Fireworks Galaxy -NGC 6946

The *Fireworks Galaxy* is a grand design, face-on, intermediate spiral galaxy with a small bright nucleus. Its location in the sky straddles the boundary between the northern constellations of Cepheus and Cygnus. The galaxy was discovered by William Herschel on 9 September 1798. Its distance from Earth is about 25.2 million light-years, making it outside our local group of galaxies and part of the great Virgo cluster of galaxies.

Due to its prodigious star formation, it has been classified as an active *starburst galaxy*. The red-magenta-colored areas are highlighted when imaged with a hydrogen-alpha narrowband filter, in addition to the usual clear, red, green, and blue palette. They show areas of highly ionized hot hydrogen gas, where new star formation is occurring.

However, the moniker *fireworks* comes from its extraordinary production of super-novae. Over the last century it has produced ten times the rate observed in our Milky Way galaxy, even though the Milky Way has twice as many stars. The Fireworks Galaxy has hosted 10 supernovae over the last century, more than any other known galaxy. The Fireworks Galaxy is a popular target for astronomers studying the evolution of massive stars, as well as for amateur astronomers looking for bright targets for small and medium telescopes. It is truly a rare, spectacular heavenly body. - **Image and article by DMAS member JR Paulson**

SAVE THESE 2026 DATES!



August 7 **"How to Photograph the Night Sky"** by Heather Johnson - TBA

August 8 **"Our Address in the Universe"** by JR Paulson 8:00 p.m.

August 22 **"Astronomy Fun Facts"** by Jim VandeBerg 8:00 p.m.

AUGUST 2026 – President's Report

Our Annual Summer Picnic in July was another wonderful success!! It is always great when members can be together and catch up, talk shop and enjoy delicious food! Thank You to everyone who attended and to everyone who brought food to share.

A few of our DMAS members attended the Nebraska Star Party again this summer. I look forward to hearing about everyone's experience, whether they are a repeat attendee or a first-timer. I myself have been able to attend one year and despite the warm weather and wind, I enjoyed the many activities offered outside of night sky viewing. Delicious meals are catered most evenings and lectures scheduled in the middle of the week were very interesting. I also met astronomers from many states and enjoyed listening to their experiences and knowledge. This might be an event to put on your bucket list one year.

The opportunity to have Bortle 1 dark skies is not to be overlooked!

Our new Planewave telescope provides exceptional views of night sky objects.

The Observatory Committee continues to work on the alignment process, but the telescope is quite functional as it is right now. Just requires a bit of manual alignment at times.



Discussion continues on our Timberline property. Club member Norm Van Klompenburg maintains contact with representatives from the Iowa Natural Heritage Foundation. The Foundation's Board has accepted our offer of their obtaining our Timberline property and the next step is to update the current property abstract.

- JoAnn Cogil

**The Des Moines Astronomical Society
Monthly Members' Meeting Agenda
August 1st, at 6:30 P.M.
at Ashton Observatory**

- Call to Order – Introductions
 - Secretary's Report – June meeting minutes (printed in July Starlight Journal)
 - Treasurer's Report
 - Observatory Director's Report
 - Timberline Report
 - Member Comments
 - *Ashton Observatory Construction* – courtesy of Dave Lynch
 - Other Business
 - Dean Regas – Zoom presentations // zooms scheduled to begin at 6:00 P.M. CDT
 - August date TBA – no topic provided as yet
 - September 1st – *Ancient Greek Astronomy*
 - October 6th – *Monsters in the Sky – Constellations of Fall*
 - Drake Observatory – Fall Lecture Series will begin in September
 - September 18 & 25
 - October 2, 9, 16, 23 & 30
 - November 6, 13 & 20
 - All lectures begin at 8:00 PM
 - Next Membership Meeting Date: September 5th at Ashton Observatory
 - Time is 6:30 PM
 - Adjourn
- 

Observatory Committee Report

August, 2026, Greg Woolever, Observatory Director



Whew! ... blistering temperatures, and humidity that overwhelms your stamina. And all that before it's August. These challenges do come and go, and

that's all basically

"normal." Regardless, visitors still come, and DMAS members who greet and host and operate telescopes help our visitors to find excitement in experiencing the night sky.

The annual DMAS picnic was once again fun for all who attended. Thanks to everyone for their contributions and hospitality. Some people brought family and guests, and that's great.

The observatory committee continues to work on setting up the PlaneWave CDK14 telescope. We finally had sky conditions

that allowed Dave Heck to connect a camera and succeed at getting good test images through the CDK14, using the software that guides the Paramount mount. That's major progress in our efforts to reprogram the Paramount for this new telescope, to allow it to point accurately.

Once we get a night of good viewing conditions, and schedules that are aligned, that will allow us to gather photos of at least 75 stars to build a new pointing model. Until then, our operators are able to center the views manually. Progress is underway.

JR Paulson has provided some new photos in the classroom, so check them out. And JR and I have been tinkering with refinement of the museum lighting to improve the display of the photos. In some cases, a narrower beam of light provides a better display for some photos. Photos, lighting, and time are all donations from JR.

Greg Woolever & the Observatory Committee: Dave Heck, Norm Van Klompenburg, Jim VandeBerg, JoAnn Cogil, Greg Woolever.

Iowa PBS Dark Sky Program *Protecting Iowa's Night Sky: Light Pollution and Dark Sky Solutions*

Here are three ways to view this very interesting 7-minute video story:

<https://www.youtube.com/watch?v=9Y3juy5dNDY>

<https://www.pbs.org/video/dark-sky-iowa-ziyon0>

<https://www.iowapbs.org/shows/iowalife/clip/14116/protecting-iowas-night-sky-light-pollution-and-dark-sky-solutions>

The Night Sky for July 2026

By JoAnn Cogil

This year's **2026 Total Solar Eclipse** is set to be one of the most spectacular space events of the year. Unfortunately for us here in the United States we are not able to view this great happening. The eclipse is slated for Spain, Egypt, Greenland & Iceland. This happens to be Europe's first total solar eclipse since 1999. So, pack your bags and passport if you can make this trip!

Mercury - should be visible all month as it reaches its greatest western elongation on the 2nd and will be high in the east about 1 hour before sunrise, just right of the bright star Pollux. On the 11th, this tiny planet will be south of the Moon. It reaches solar conjunction on the 27th.

Venus – our 'Evening Star' sets about 90 minutes after sunset with the moon close by many nights. It reaches dichotomy, when the planet shows a 50% lit phase, on the night of 11th & 12th. On the evening of the 31st, Venus will be SW of Spica, the brightest star in Virgo, showing a smaller phase of 39%.

Earth – the 'Dog Days of Summer' are upon us from July 3rd to August 11th when Sirius the Dog Star rises and sets right alongside of the Sun.

Mars – still in our early morning skies as it rises about 2 AM this month. This small red planet is between the horns of Taurus the Bull & will pass another red object which is Aldebaran, a bright star in the Taurus constellation. What a sight, 2 pretty red objects in the same area of the sky. On the 9th, it joins the Moon for a time, but you will have to get out of bed early for this pairing at about 4:30 AM to find the Moon positioned between the Twins of Gemini and Mars in Taurus. (Image of August 9th, from Stellarium)



Jupiter – this planet is a 'no-show' the first half of August as it is moving towards our morning skies. By the 15th, it rises about 1 hour before sunrise, but with possible clearer skies that time of day, it makes for a nice morning view! On the 16th, it meets with Mercury.

Saturn – is quite bright as it positions itself in Pisces this month, but best time to see our ringed planet is after midnight. On the 4th, it is south of the Moon with these 2 starting the show low in the east then continue to rise higher the rest of the night. (Image of August 4th, from Stellarium)

Uranus – may make for a nice binocular target this month in our predawn sky as it rises by 1:30 AM. Mid-month finds it near the Pleiades.

Neptune – this lovely blue planet starts to rise about 10:30 PM as the month begins, and almost 8:30 PM by month's end. Still best to see it after midnight with darker skies. And could be nice binocular target.



Moon

5th – Last or 3rd quarter

12th – **NEW** Moon @ 12:36 PM

19th – 1st quarter

27th – **FULL** Moon @ 11:18 PM

August's full moon is known as the Sturgeon Moon, Green Corn Moon and the Grain Moon.

On August 7th, watch the Moon as it passes in front of the Pleiades in the eastern sky with the best time to observe the fun after midnight.



August 20th enjoy the Moon as it sits next to Antares, the bright red star in Scorpius, about 9:30 PM above our southern horizon. (Image credit: Stellarium)

Partial Lunar Eclipse happens this month on the 27th-28th!! This event will create a 'Blood Moon' with its deep red hue. In our location, the Moon may be about 96% covered by Earth's shadow. It is expected to begin about 8:22 PM CDT with the maximum moment slated for 11:13 PM. The eclipse ends about 2:03 AM, making the total eclipse event about 5 hours and 38 minutes.

Comet

Comet 10P/Tempel 2 – reaches perihelion on the 2nd with its closest approach to the Sun. The comet rises above the horizon after midnight and may have a magnitude of about 8. You may see this in binoculars but is best in a dark sky location. Tempel 2 was discovered in July 1873 and has a size comparable to the city of Boston, giving it about a 7-mile-wide diameter. It is not classified as potentially dangerous to Earth as it does not get close enough. It has an orbital period of about 5.5 years and scientists expect this to be its best return to our area since the 1960's.

Meteor Showers

Perseids Meteor Shower – This should be an excellent time to view this meteor shower as the peak of the shower coincides with a new Moon, giving us very dark skies. The shower runs from 7/14 – 9/1 and will peak the night of 8/11-12 but keep watching as you may see meteors beyond mid-month. We may enjoy up to 90-100 meteors per hour due to the darkness of the night sky, but 50 per hour may be more realistic. As always with meteor showers, best viewing time is usually from midnight to dawn hours. Some of these meteors may be “fireballs” which are exceptionally brilliant meteors with fluorescent trails called “persistent trains”. This meteor shower comes from the Comet 109P/Swift-Tuttle which has an orbital period of 133 years. The Perseids are definitely a favorite of many observers!!

Astronomical League

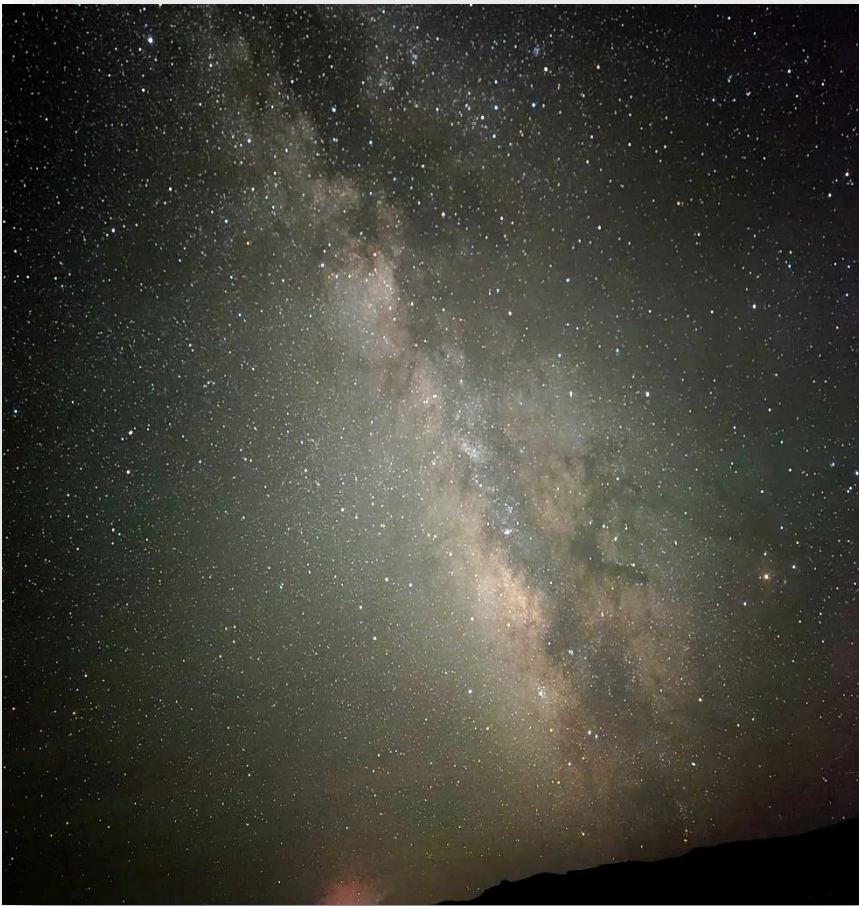
Explore these Rewarding and Educational Observing Programs

The **Astronomical League** is an umbrella organization of amateur astronomy societies. Currently their membership consists of over 330 organizations across the United States, including the **Des Moines Astronomical Society**. You can find numerous useful astronomy resources on their website:

[Home - Astronomical League](https://www.astronomicalleague.org/)

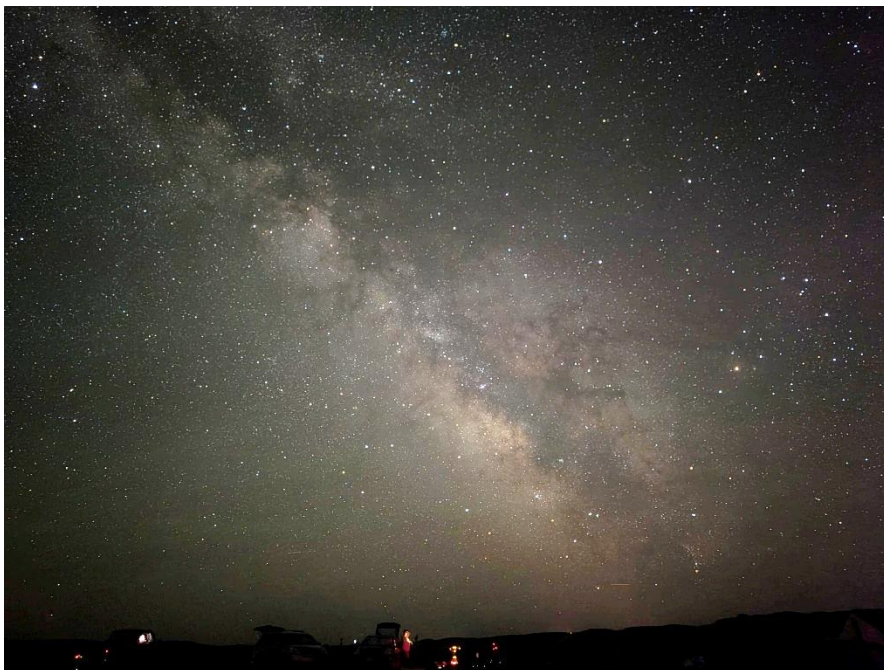
- Astronomical League Store
- Observing Programs
- Observing Certificates
- Night Sky Tools
- Past Issues of the *Reflector* magazine





Nebraska.

Perhaps next year some of you folks can come and enjoy the dark skies and fellowship with other astronomers.



First day of the Nebraska Star Party, July 12th. Seems like most of the attendees had showed up then. A good meal last night and great observing/photographing the awesome dark sky. The stronger winds of the daytime had really subsided but a few mosquitoes hit us. The stars of constellations were really bright as well as the Milky Way. You can easily see a few of the Messier objects too.

The rest of the week for observing looks mostly the same with clear skies, moderate winds, high temps in the mid 90's and lows in the mid-60's. Merritt Reservoir is listed as a National Dark Sky Place. Take a look at a "light pollution" map of the country and you'll see a large dark area of where we are. The week is now getting busy here for us. After dinner tonight, there will be door prizes handed out. There are people here from coast to coast to witness these dark skies of North Central

For these Milky Way photos, I'm using my new Google Pixel 10 Pro XL. It has adjustable ISO settings and F/1.8 aperture. These photos were taken with the Night Sight setting and 3 minute exposure (15 seconds exposures stacked). Not guided.

Another great night of observing and photos!!!

This makes 4 nights in a row so far !! The supper was the best.

Today, we are at the Valentine High School for events until around 4 pm. Today's lunch and dinner are on you and then had back to Merritt Reservoir for another great night of observing. The forecast calls for clear skies every night

through Friday and then come Saturday rain is forecast. I'm heading back home then. Next year's NSP is scheduled for August 1-6, 2027.

Perhaps some of you can attend this great Star Party. There are just over 400 amateur astronomers here to observe in these dark skies. It is worth the trip from wherever you live. – L. Allen Beers

Fun Educational Opportunity!

Dean Regas is **an astronomer, public speaker, author, and podcaster** who brings the complicated universe down to Earth for audiences of all ages.

Dean is an honorary member of the Des Moines Astronomical Society.

He is also the host of the “Looking UP” podcast.

Visit Dean at his astronomy website: <https://astrodean.com/>



Free Online Zoom Classes in 2026 with Astronomer Dean Regas

Feb 11: Life and Times of Galileo

Mar 11: Comets and Meteors

Apr 7: Top 10 Things to See in the Night Sky

May 5: It's About Time - How We Use the Sky

June 2: Webb and Rubin Telescope Updates

July 1: Along the Milky Way

Aug: TBD (depending on the itinerary of my eclipse trip)

Sep 1: Ancient Greek Astronomy

Oct 6: Monsters in the Sky - Constellations of Fall

Nov 3: Life and Death of Stars

Dec 1: Exoplanets News 11

(archived ... still available to DMAS members)

DMAS members will receive an email with free links to all of Dean's programs!

Bruce Mumm, Treasurer



Because of the Summer Picnic there was no business meeting and so no Treasurer's report.

If you would like to join the Des Moines Astronomical Society or just make a contribution to further our efforts, scan the QR code above to use PayPal.

Many Thanks!!!



Summer Star Parties in Our Region:

- o Northern Nights Star Fest (Minnesota): September 9–14, 2026
- o Northwoods Starfest (Wisconsin): September 11–13, 2026
- o Eastern Iowa Star Party, IA: September 11-13, 2026
- o Illinois Dark Skies Star Party, IL: October 8-10, 2026
- o The 2026 Iowa Star Party, IA: October 8-11, 2026

Please give a warm welcome to these new DMAS members:

**Ben Sinclair
James Rankin
Julie Walker
James Bruton
Sally Cone
William Cone
Bryn Clarke & Family (lifetime)
Eric Song
Marv Lind
Mason Winger (associate)
Bruce & Verlane Edwards**

The Des Moines Astronomical Society is on Facebook

Recent notices, articles and images are posted on our Facebook page. Be sure to like us when you visit our DMAS Facebook page.

Space Tourism Guide Lists Ashton Observatory!

The on-line **Space Tourism Guide** has considerable information about space and stargazing. Their mission is to “help every traveler find wonder among the stars.” They recently published **10 Incredible Spots for Stargazing in Iowa**, including Ashton Observatory. Click on this link to see which 10 spots they chose in Iowa for stargazing!

<https://spacetourismguide.com/stargazing-in-iowa/>

THIS MONTH IN DMAS HISTORY

From the StarLight Journal 25 Years Ago, August 2001

President Bryan [Butcher] announced during the July picnic that the Jasper County Conservation Board has decided to fund the new addition for Ashton Observatory. The county board would like to see construction begin as soon as possible with completion of the project by fall of this year. The fundraising effort for the new addition will continue. Jasper County is funding the project with the understanding that the society will continue to seek matching funds for half the cost of the new addition.

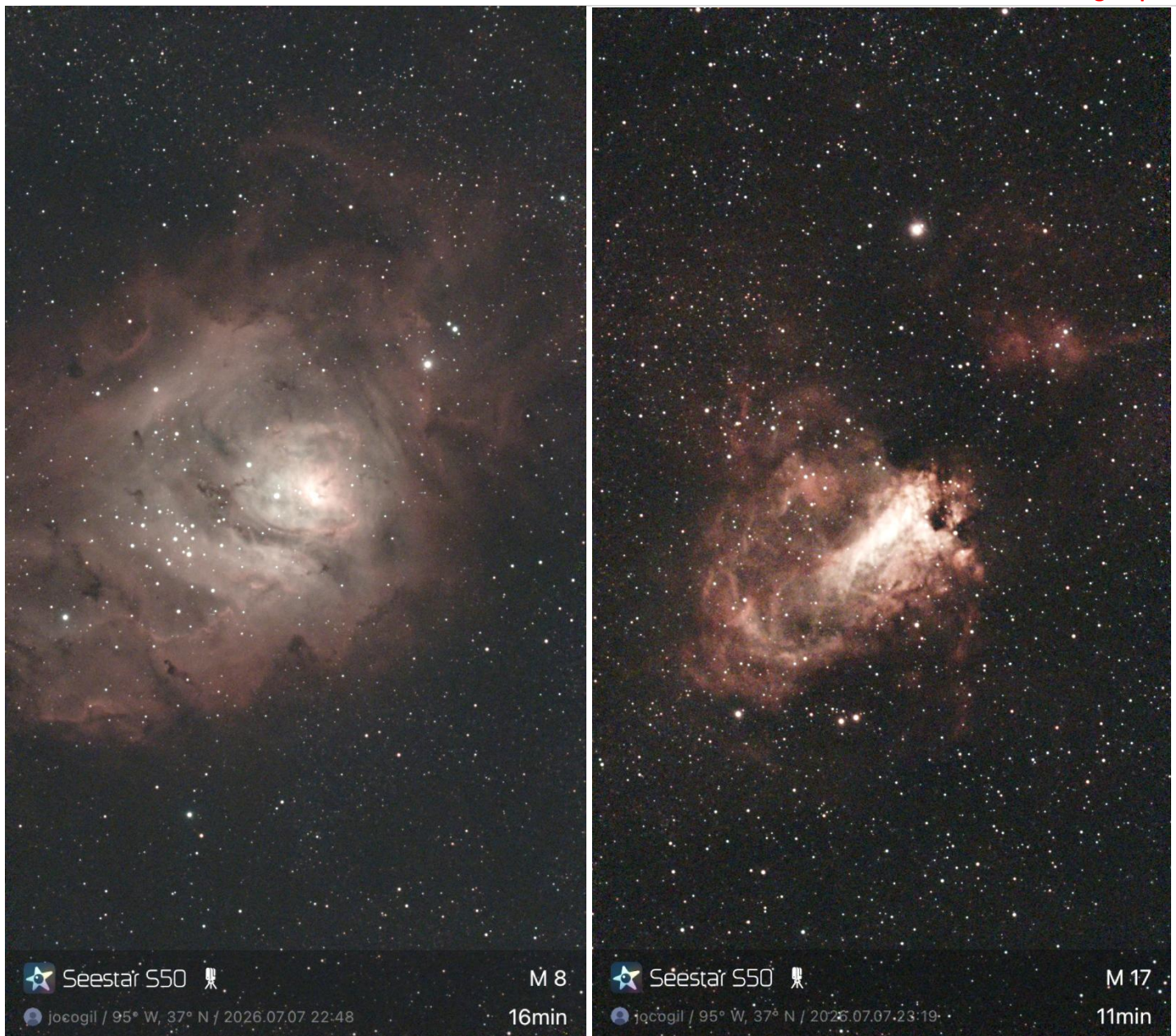
There are still details to be worked out, and a meeting between Jasper County and DMAS will be held next month.

From the StarLight Journal 10 Years Ago, August 2016

*Norm Van Klompenburg, Dave Lynch, and I (Greg Woolever), hosted the **Civil Air Patrol at Ashton**, July 5, as part of their encampment week at Camp Dodge. This is the third year we've presented to them, and they find our program a meaningful contribution to their STEM curriculum. The young participants come from many*

*surrounding states. **This year they came with a drone equipped with a camera with which they photographed the Ashton compound.** They sent copies of photos one of which you see above. There was also a video from the high view angle that panned 360 degrees -- pretty cool, and something we can show at our next (August) meeting.*





These two nice images from DMAS member and President, JoAnn Cogil. A great sixteen-minute image of M8 (Lagoon Nebula) in the constellation Sagittarius and an eleven-minute image of M17 (Swan Nebula) also in the constellation Sagittarius.

DRAKE MUNICIPAL OBSERVATORY PUBLIC NIGHTS 2026

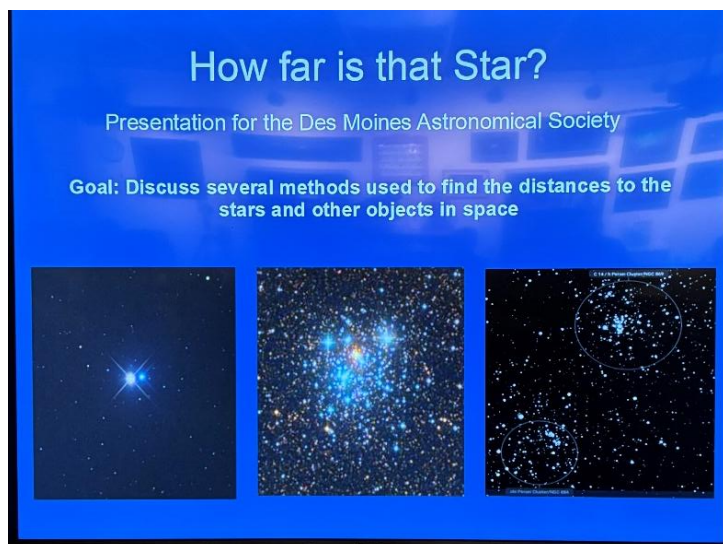
Dear friends and supporters of the Drake Observatory, dates for our expanded Fall Series are below, topics to be announced.

Drake seems to be updating our website, so I am sending you this information by email. As those of you who are able to attend regularly already know, we lost our usual summer public night series due to a conflict with summer golfing hours. I've been able to compensate for the lost public nights by expanding both the Spring and Fall series and adding a few observing nights during the Summer.

September 18th & 25th
October 2nd 9th 16th 23rd and 30th
November 6th 13th and 20th
Looking forward to seeing you, Herb



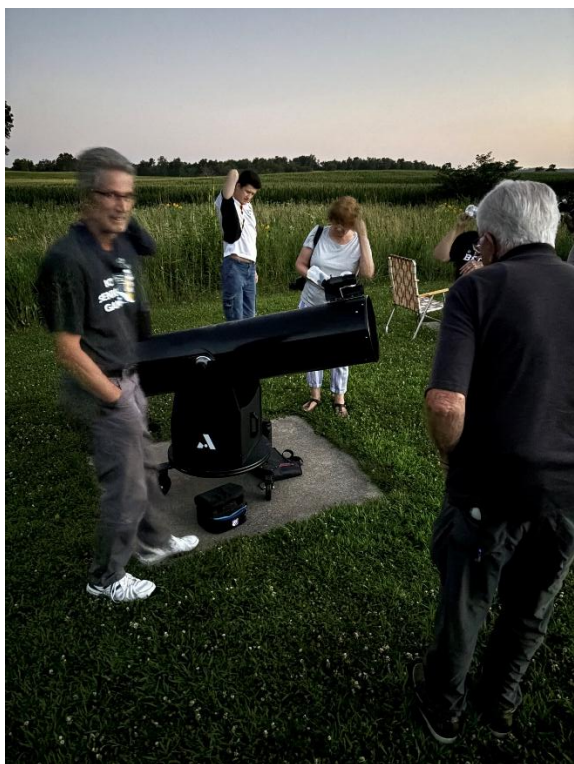
I heard from Brian Ritchey that our long time DMAS member Doug Rudd passed away on July 6th. He served in several leadership roles at DMAS.
That's all we know for now. Doug is at peace now.
Lord be with his family. - L. Allen Beers



DMAS member Paul Caligiuri provided an interesting program on "How far is that Star?"

DES MOINES ASTRONOMICAL SOCIETY SUMMER PICNIC!

In addition to great food, our members and guests were treated to a nice, long flyover of the international space station. Several members set up their telescopes in the starfield and enjoyed the beautiful, clear skies!







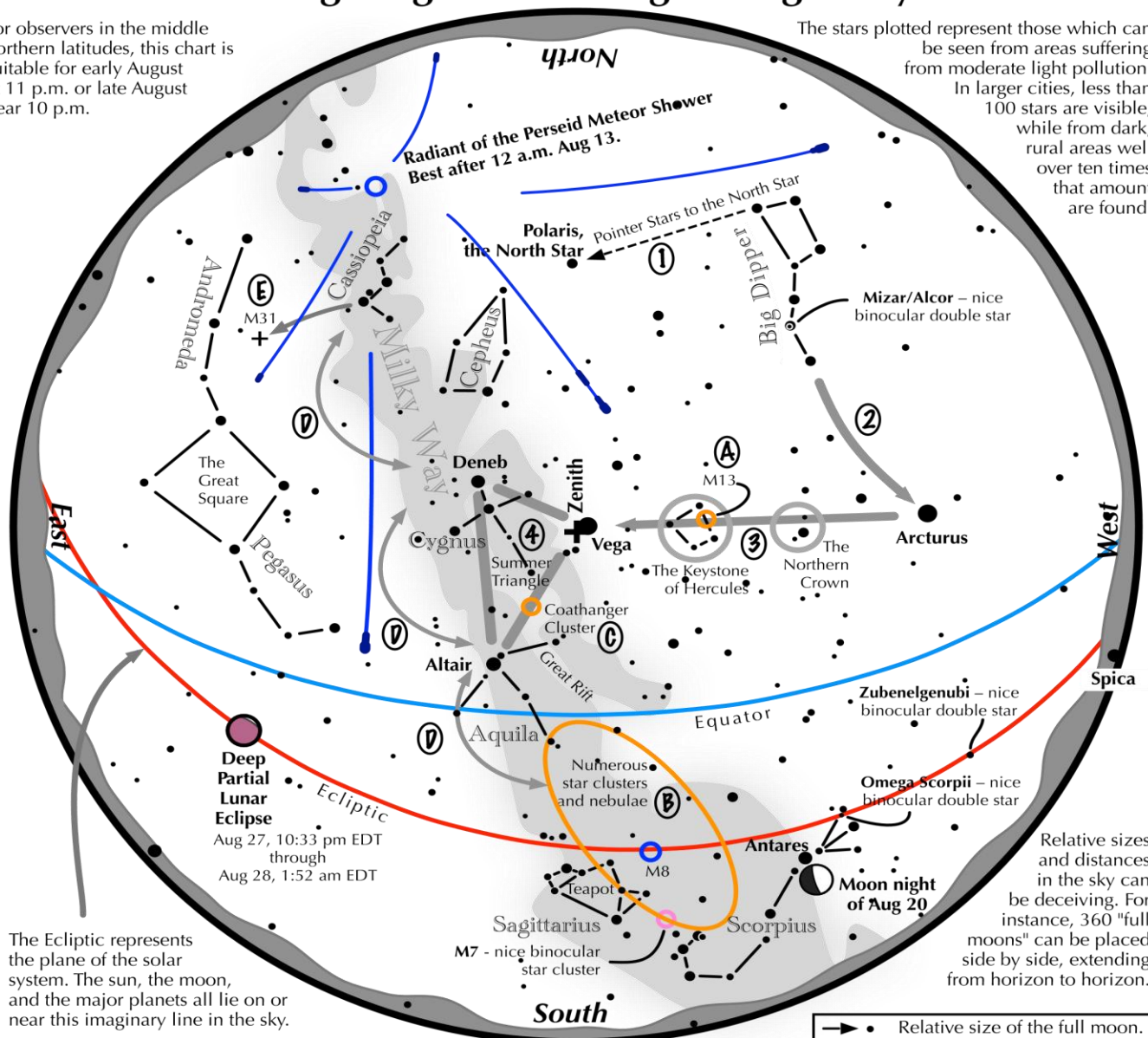
The Stars have Star Parties, too!

Navigating the mid August Night Sky

2026

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.



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 lie 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.





Your 2026 Des Moines Astronomical Society Officers, Directors & Observatory Committee

President: JoAnn Cogil

Vice-President: Pat Meade

Secretary/ALCor: Jim VandeBerg

Treasurer: Bruce Mumm

Observatory Director: Greg Woolever

At Large Director: Norm Van Klompenburg

At Large Director: Jessica Weinreich

At Large Director: Dave Bailey

Observatory Committee: Greg Woolever, Norm Van Klompenburg, Dave Heck, JoAnn Cogil and Jim VandeBerg

info@DMastronomy.com



The *Starlight Journal* is the monthly newsletter of the **Des Moines Astronomical Society, Inc.** P.O. Box 111, Des Moines Iowa 50301-0111. Our Observatory is located in Ashton Wildwood Park, 8755 West 122nd Street North. Founded in 1970, we are a non-profit, 501(c)(3) organization. Our website is DMastronomy.com. More information and photos can be found on our Facebook page.

Article Deadline: Before the 21st of the month, please send your articles, photos, sketches, poems, cartoons, and news to Jim VandeBerg (FinePineCabin@gmail.com) Articles may be edited to fit the allotted newsletter space. Copyrighted material must have permission from the copyright holder. Views and opinions expressed within submissions are those of the author and not necessarily those of the Des Moines Astronomical Society, Inc.

The Purpose of our Society

- Secure the pleasure and benefits of an association of persons interested in amateur astronomy
- Promote the science of astronomy
- Encourage and promote activities of an astronomical nature
- Foster observational, computational, technical, and creative skills in various fields of astronomy
- Pursue activities with other amateurs and professionals
- Educate the public

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