

THE MERIDIAN

Newsletter of the
Quad Cities Astronomical
Society

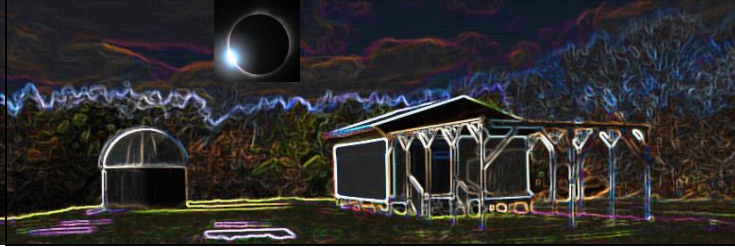
www.qcas.org



SEPTEMBER 2017

QCAS Mission Statement:

To stimulate an interest in the science of astronomy in the Quad Cities Area, to nurture an ongoing desire by Quad Cities Astronomical Society members to study the cosmos and to provide members of our community opportunities to experience the beauty and joy of Astronomy.



Presidents Greeting

Hi all!

All I can say is WOW! And I'm sure that even if you've seen other solar eclipses, you say the same!

I am thinking that due to the spectacle, we can dedicate this issue of the Meridian to the 2017 Great American Eclipse... and feature the pictures and stories that were submitted for publication... so thank you to Mike and Paul for their entries...

I'll also add a blurb about the first annual QCAS Meteor Shower, held at Pleasant Valley High School... we are on for next year too!

I also want to remind you that we have a public open house tomorrow night, Saturday, August 26th at our Jens-Wendt Observatory, at Sherman Park, in Dixon, Iowa... weather pending, I hope to see you there!

Also, don't forget, our September 18th meeting will be held at Saint Ambrose University in McCarthy Room 105... This is a really important meeting as we will be voting on the new Bylaws and the extension of the current officers term to be from October through December.

Time is flyin'... the Eastern Iowa Star Party will be held at the end of September... so far the dates are 9/22-24... If you didn't reply to my email to reserve a spot, please do so ASAP!

Our September public night will be held on the 30th... again at the Jens-Wendt Observatory...

Pending the outcome of the September voting, November will be election time and our Dinner Meeting... then we are into Christmas and the New Year... wow!

Things are shaping up for us... and making a little more sense in our scheduled outings... EISP is a must, and a Messier Marathon seems very appropriate for our amateur astronomer events, and now with PV in the mix, we can hold an annual Meteor Shower Party there, and Astronomy Day at Bettendorf High... great public events supporting our high schools!

Don't miss out on opportunities to be part of these fine activities!

Clear Skies!
Jeff

Last Society Meeting Minutes

Date/Time Location

CANCELED DUE TO THE ECLIPSE

Attendance

Presentations

Outings

Astro Suggestions and Tips

Publicity

Main Presentation

Treasurers Report

Review of Minutes

Old Business

New Business

Next Society Meeting

Date/Time Location

6:30 PM on Monday, September 18th
105 McCarthy Hall, St. Ambrose University
(Corner of Gaines and Lombard)

September Presentation

At our September 18th meeting, Christian Allen will be giving a talk on weather... should be quite informative as he does a lot of great work on his Facebook page, QC Weather...

Presentations for future meetings include Tom Field on Spectroscopy and the RSpec software, and Carl Wenning on the Astronomical League. Contact Jim Rutenbeck or Jeff Struve if you'd like to make a presentation.

Other Business

- 9/22 EISP Update
- Amendment to extend current term thru December Elections
- Vote on Bylaws
- November Banquet Meeting

Last Board Meeting Minutes

Date/Time Location

6:30 PM on Monday, August 7th

The Village Inn on Elmore and 53rd in Davenport, IA

Attendance

Jeff Struve – Present
Craig Cox – Present
Robert Mitchell – Present
Matt Neilssen – Present
Dana Taylor – Absent
Jim Rutenbeck – Absent

Guests

Paul Levesque - Present
Mike Dannenfeldt Present
Ian Spangenberg - Present

Agenda

- 8/12 Meteor Shower Party
 - Helpers
 - Craig, Matt, Mike D, Ian, Robert, Jeff
 - Assignments
 - Barricade and Power – Ian
 - Saw Horses and Cardboard Signs – Craig
 - Speaker – Mike D
 - Publicize, QCAS Facebook, QC Astronomy Facebook, TV/Radio/Newspaper – Paul
 - Presentations
 - Constellations
 - Perseid Meteor Shower
 - Stellarium on Screen
- 9/22-24 Eastern Iowa Star Party
 - Dates
 - Invitations
 - Guest Speakers
 - Dr. Paul Sipiera? – Meteors... will bring specimens
 - Cornelia Lang??? – Hawkeyes in Space
 - J. L. Anderson??? – Crater Impact Research
 - JAS – Numismatics
 - ~~Mary Stewart Adams – Star Lore~~
 - Food
 - Chili - Jeff
 - Stew - Craig
 - Munchies, pop, water, coffee
 - Freezer – Matt and Craig will coordinate
 - Power Cables – Everyone
 - Dixon Legion
 - Prizes
 - Maybe ES?
 - Explore Scientific Row
 - Jeff Struve – 80mm Carbon, 127mm Carbon, 152mm David Levy Comet Hunter
 - Craig Cox – 80mm Essentials, 16" Dob
 - Mike Ombrello – 127mm Carbon
 - Mike Gacioch – 127mm FCD100
 - George Bailey – 102mm AR and mount
 - ? Matt Neilssen – 152mm AR
 - ? Byron Davies – 152mm AR
 - ? Jim Rutenbeck – 80mm Essentials

- Amendment to extend the current officers term through 12/31/17, and move elections to the Annual Dinner
 - Meet on 8/08 at 3pm to do bylaws – Dr. Mitchells office
- Annual Dinner and Elections held in November
 - Elections – Yes
 - Bingo – Yes
 - \$100.00 for Prizes
 - Guest Speaker – Paul, Trivia
- Membership Drive – 6 Potential New Members – Send out invite to grandfather in...
 - Barry Garrels
 - Doug Branstetter
 - Justin Keith
 - Byron Davies
 - Clinton Law
 - Paula James
- Wayne Jens Achieve
 - Sunspot Sketches – Matt will digitize after we pick up from Wayne
 - Mirror grinding paraphernalia – Display at Menke
 - QCAS records – Matt will house
 - Slides and video tapes – try to hire done
- Bylaws
 - Meet on 8/08 at 3pm to do bylaws
- Website
 - Update old with meeting date changes
 - Matt will contact Dana
 - New website
- Join NASA Night Sky Network?
- Treasury
 - \$4,057.23
 - Eclipse MEC Donation
 - Menke Expansion MEC Donation

Things to do – Open Items

- Advertisement/Public Notification
 - QCAS Web Site, QCAS Facebook, Davenport Parks and Rec Web Site will be our primary means of advertisement.
- Public Nights
 - Make signs reminding public to shut off lights and park in the side lot...
 - Build trifold with info, membership form, and astronomy courtesy.
- Dues/Membership
 - Jeff modified the application forms – Maybe instead, just use the modified trifold, info/calendar/courtesy/membership form.
 - Let's start using the membership cards as receipts
 - We will talk about fees when we review Bylaws
- Misc
 - Block House Inventory
 - We need to go through gear stored in the dome and in (and under) the roll off roof building.
 - Shingle the Block House roof.
 - Other
 - Discuss moving our Society Meetings to SAU.
 - Discuss a High School Ambassador Program
 - Club Projects

- Learn PixInsight
- Build a Poncet Mount for the club dob

Next Board Meeting

Date/Time Location

Unless otherwise noted, Board Meetings will be held on the 1st Monday of the month at 6:30 PM at the Village Inn Restaurant on Elmore and 53rd in Davenport, IA. Please notify Jeff Struve if you plan on attending so seating arrangements can be made. Ordering from the menu is Dutch treat.

Agenda

- Discuss Elections and the November Dinner
- Society meeting relocation
- QCAS Observatory relocation
- Discuss re-roofing the Block House
- Discuss the new web site

New Business

- 2017 Biennial Report
- We need to talk to the caretaker at Menke Observatory about the club's access to the facility.
- Discuss selling our heavy fiberglass step ladder and replacing it with an aluminum ladder for use in the roll off roof building.

Submitted Articles:

First Annual Meteor Shower Party

Guests started to arrive around [8:00 PM](#) and a number of them stayed until midnight... there were about 50 in attendance...Cool!

Craig and I got done packing up signs and misc just after [1:00 AM](#)... and then had breakfast at Village Inn, so got home around [2:30 AM](#)...

Being in town, not a lot of Meteors were seen, but the ones that were seen were pretty spectacular... on the bright side, pun intended, as I was introducing the event and our head line speaker (Mike Dannenfeldt) who was about to start giving his presentation, the International Space Station gave us a lengthy fly by... we all waved of course!

In addition to Mikes presentation on constellations, Dr. Mitchell talked more about the Perseid Meteor Shower... what and why it was, and why now... I gave a talk on what a solar eclipse was and QCAS involvement with St. Ambrose and the Putnam Museum... and Dr. Mitchell and I talked about our perspective public open nights at Menke and Jens-Wendt Observatories...

Along with the ISS, we saw a couple of Iridium flares... one very bright and long in duration, a number of satellites, Jupiter and 4 of its moons, Saturn and at least 1 of its moons, the Andromeda Galaxy, The Double, Owl, and M13 Star Clusters, Double Stars Albireo and Mizar, the moon, and a few other objects...

In asking the crowd if they wanted us to continue this as an annual event, they responded with a resounding YES! In hearing this, I advised that we would do so, and also advised of our annual Solar Day event held in April at the Bettendorf High School... I also advised of our monthly meetings which are also open to the public, and to check Facebook for details.

A number of members brought telescopes, which very much helped fill in the gaps... Craig and Dr. Mitchell brought their Dobsonians... Matt and Byron (Byron joined QCAS that night) brought Refractors, Karl brought a Schmidt Cassegrain, and Doug (he and his sons Andrew and Jason also joined QCAS last night) brought a Newtonian... Mike Ombrello was also there doing a bit of DSLR work...

We were also visited by Channels 6 and 8... Channel 6 and I obliged, did an interview.

So all in all a great activity... unfortunately I kept so busy that I didn't get an opportunity to take any documentary photos... so if any of you reading this took pictures, please post them here!

Thanks to all the guests for attending, and see ya next time!

Clear Skies!
Jeff



TOTAL SOLAR ECLIPSE NEWS BITS

“Something wondrous to behold”

A first-hand account of the Great American Eclipse of 2017

By Paul Levesque, ASC Public Affairs

I can't remember when I first became aware of the Great American Eclipse of 2017, but as soon as I did, I knew that I had to see it.

First, a little background: I am a public affairs specialist, currently employed as an Army civilian employee for the U.S. Army Sustainment Command at Rock Island, Illinois, where I've worked since 1986. I'm a native of Rhode Island, which is where I was on March 7, 1970, when the path of a total eclipse just missed my hometown of Tiverton. (This is the “total eclipse of the sun” referenced in the Carly Simon hit, *You're So Vain*.)

On May 10, 1994, a crystal-clear day, the path of an annular eclipse – an eclipse in which the moon's shadow does not completely cover the sun – passed over the Quad Cities, where I live and where the Arsenal is located. The eerie effects I saw that day whetted my appetite for future eclipses, and I vowed that I would someday experience totality.

Years passed, as did my 50th birthday, and then my 60th. Viewing a total solar eclipse remained on my bucket list, unchecked.

Once I realized that the path of a total eclipse would pass to the south of my home in Moline, Illinois, on August 21, 2017, I began making plans. I figured that the closest point on the path of totality was a drive of about 250 miles, a distance that could be covered back and forth in a day if needed.

Since August 21 fell on a Monday, I immediately arranged to take the day off. On November 11, 2016 – the Veterans Day holiday – I drove down to Missouri, to the closest point via vehicle, making it in less than five hours. I even stumbled onto a good, private viewing spot. My eclipse scouting mission had been a success.

As per my request, the Christmas gifts I received that year from my wife, Dawn, were all eclipse-related – eclipse books, eclipse glasses, an eclipse t-shirt, an eclipse poster, etc. The more I learned about total eclipses, the more I knew that I had to see one for myself. I shared my enthusiasm with family members and friends, and began referring to myself as an “eclipse evangelist.”

One thing I learned about total eclipses is that they occur due to a celestial coincidence. The sun is approximately 400 times larger in diameter than the moon, but also about 400 times further away. When the two line up correctly, the moon's shadow can completely block the sun in a narrow band on Earth.

Another, more personal coincidence fell into place for the Great American Eclipse. My wife's mother, Helen Manning, was born in Missouri and raised near Linn, a town located about 110 miles west of St. Louis and right near the center of the path of totality. It turns out that Helen's 90th birthday would occur in August 2017, the same month as the eclipse.

In celebration of this milestone birthday, my wife's sister, Lori Bailey, arranged for the rental of a house near Linn, in a peaceful rural location on the banks of the Gasconade River – a perfect eclipse viewing spot. The rental period covered three days, including Eclipse Day, and Dawn and I were definitely invited.

I then invited my lifelong friend from Rhode Island, Alvin Lavoie, a retired PhD chemist who now lives in Pennsylvania and who's

become an avid amateur photographer. Alvin eagerly accepted the invitation and acquired the solar filters needed to capture an image of the eclipse.

The list of those who would stay in the “Eclipse House” came to include myself and my wife, Dawn; my friend, Alvin; my mother-in-law, Helen; Helen's daughter Lori and her husband, Dan Bailey; and another daughter of Helen, Debbie Wilson, and her husband, Derek.

Spring became summer, Eclipse Day approached, and I felt like a kid waiting for the best Christmas ever. But my anticipation was tempered by concern over the one thing that can spoil an eclipse viewing – cloudy, rainy weather.

Two weeks out, the forecast for Linn looked good – sunny and warm. One week out, the forecast included clouds, and a slight chance of thundershowers. The days that followed showed varying forecasts – partly cloudy, mostly cloudy, chances of rain at 10 percent, 20 percent, even 30 percent.

Dawn told me there was no use worrying about the weather, but I did anyway. Media coverage of the eclipse was building, just as I predicted, and there was a last-minute panic over counterfeit eclipse glasses – I checked, and ours were fine.

Alvin arrived on Saturday, the day Dawn drove to Missouri. We spent the day testing his photographic equipment and building pinhole eclipse viewing boxes. I took my first look at the sun through eclipse glasses; it was an orange ball, a bit smaller than I expected.

We drove to Missouri on Sunday and arrived in time for a delicious dinner of lasagna. The group spent Eclipse Eve playing cards. I was more than a bit tense. What if the weather didn't cooperate? What if the eclipse was a disappointment? What if the eclipse didn't occur at all, and all the hype was nothing but “fake news”?

I slept fitfully that night, just enough to be functional in the morning. I rose before dawn (lower- and uppercase) and took a walk down “County Road 811,” which was really nothing more than a dirt lane that went past a cattle farm and ended at a hog farm. The sun rose, bright and red – a good omen, I thought, though I fretted over any cloud I saw.

I later went for another brief walk with family members and Alvin. He thought that viewing conditions might be better to the south, but it was too late to move. Though few vehicles passed by where we were, traffic jams were expected elsewhere.

Before breakfast, my brother-in-law, Dan, said grace, during which he used the word “miracle.” As we ate, I said to those sitting near me that “miracle” was derived from a root meaning “wondrous to behold.” That certainly describes an eclipse, which we were about to behold.

Hopefully.

The television was tuned to the Today Show, and the local station out of Columbia added a “crawl” at the bottom labeled “Show Me Eclipse,” displaying the times the eclipse would begin and end in various towns and cities.

Okay, Missouri, show me your eclipse! There was a bottle of champagne chilling in the refrigerator, to be opened only after a successful eclipse viewing experience.

Alvin was in the front yard setting up camera equipment. I paced in and out of the house. The weather conditions remained mostly sunny, with high humidity, typical of August in central

Missouri. Glasses and camera lenses fogged up when taken outdoors from the air-conditioned house.

The television was now tuned to CNN, with wall-to-wall eclipse coverage. First contact – the time at which the moon first appears to shadow the sun – was confirmed on the coast of Oregon. First contact for Linn was scheduled for about 11:46 a.m., with totality beginning at about 1:14 p.m. and lasting for a little less than two minutes. I paced some more, constantly checking the time.

We headed outside, set up chairs, looked up with our eclipse glasses just after the time of first contact, and saw the tip of the moon's shadow over the sun. Alvin had begun taking photographs. We looked through the pinhole viewer, and saw a reflection of the sun with a semicircular shadow on it, getting a little larger with each view.

A toad hopped through the lawn and over the sidewalk. I decide that he was a lucky toad, and warned that we should not step on him. And our luck is holding – the sun, even in its diminished state, is winning out over the clouds.

Through the eclipse glasses and the pinhole viewer, the sun is now a crescent, well over half-covered. The light is beginning to change. We looked at the sidewalk, shaded by trees, and can see multiple shadows of the crescent sun.

I looked at my phone: 1:09 p.m. "Five minutes!" That's me, shouting as I pace. I looked up; nothing but blue sky westward of the sun. Clear skies for totality!

A few more minutes pass, and I looked at the sun again through the eclipse glasses. The crescent is down to a sliver. Now the light is rapidly fading, from all directions, quite unlike sunset, more like a dimmer switch steadily being turned down.

It's very close now, it's really going to happen, I drop to the ground to get a better view, and then:

TOTALITY!

Which is what I shouted as soon as the moon completely covered the sun. No need for eclipse glasses now. I lay on the ground, looking at the eclipsed sun, blackened by the disk of the moon, with the corona streaming out in an irregular pattern.

The air seemed a bit cooler, though not noticeably due to the humidity. Crickets began chirping. The horizon was reddened in all directions. In the distance, someone set off fireworks – perhaps, like the ancient Chinese, they were trying to scare away the dragon devouring the sun. The bright planet Venus appeared to the right of the darkened sun, though I saw no other stars or planets.

Around me I heard "Wow!" "Beautiful!" "How cool!" But, otherwise, silence. It was beyond words. I later learned that some had tears in their eyes.

I remained laying on the ground, fixated on the eclipsed sun, until the diamond ring – the first flash of sunlight that appears as totality ends – came spectacularly into view. Totality was over.

I still can't decide if watching the eclipse was the longest two minutes of my life, or the shortest. It almost seemed as if time was suspended and that the world stopped. For a brief period, we were outside of time – or at least outside of the way we normally experience and measure time.

Perhaps what I saw was a glimpse of eternity. It certainly fit the definition of miracle.

The light seemed to brighten quickly, instead of slowly fading back in. I don't know if this is psychological or physical, but in any case normal mid-day conditions soon returned.

It was time to pop the cork and pour the champagne. Everyone agreed that seeing the eclipse was well worth all the time and planning. I was toasted for my insistence on viewing the eclipse.

I spoke to my son, Andrew, who's in college at the University of Northern Iowa. Though I don't often give fatherly advice, I told him that he needed to go see a total eclipse sometime. I've since given the same advice to about everyone I've come into contact with – and now, I'm telling you. Don't let the opportunity pass you by.

We also spoke to our daughter, Chelsea, who now works as a teacher in Wisconsin, and I told her that seeing the eclipse was almost as wonderful an experience as seeing her born. I then re-emphasized the "almost."

A few peaks through the eclipse glasses and pinhole viewer showed the moon's shadow moving back across the sun. By about 2:30, the sun and moon were completely separated.

After a late lunch / early dinner, Alvin and I got back on the road to Moline. The skies became cloudier, and we eventually ran into some light rain, with lightning in the distance, all headed in the general direction of Linn. No doubt, we lucked out.

When we arrived home, we looked at some of the photos. A few of the images showed solar flares, making it appear that the moon was on fire. Awesome!

It was near midnight before I went to bed, ending one of the best days of my life. I witnessed a natural event like no other, among people I love and care for, including my mother-in-law, who'd never seen anything like it in her nine decades on Earth. It was an experience worth having, and well worth sharing.

Now it's time to plan for the next total eclipse to cross America, which takes place on April 8, 2024. I hope to be there, and I hope you can make it too.

Take my word for it: It truly will be wondrous to behold.



This composite photo shows of the eclipsed sun over Linn, Missouri, shows the sun's corona and solar flares. The star to the left of the sun is Regulus in the constellation Leo, visible to the camera but not the naked eye. (Photo by Alvin Lavoie)



Sunrise on the day of the Great American Eclipse near Linn, Missouri. The clear sky provided hope that the total eclipse would be visible when it arrived at 1:14 p.m. (Photo by Paul Levesque)



Debbie Wilson (left) and Dan Bailey look through pinhole viewers to see the partially eclipsed sun on the day of the Great American Eclipse near Linn, Missouri. Looking on are Alvin Lavoie (far left) and Lori Bailey. (Photo by Paul Levesque)



A herd of cows on a farm near Linn, Missouri, seem unaware that an eclipse will occur later that day, and may have headed back to the barn during totality. The high clouds in the background lifted before the eclipse began. (Photo by Paul Levesque)



Moments before totality, crescent suns are reflected on the sidewalk on the day of the Great American Eclipse in Linn, Missouri. (Photo by Paul Levesque)



Look up, everyone! Paul Levesque (center, in back) and members of his family use eclipse glasses to view the partially eclipsed sun during the Great American Eclipse near Linn, Missouri. (Photo by Dawn Levesque)



Alvin Lavoie sets up photographic equipment near Linn, Missouri, in preparation for the Aug. 21 solar eclipse. (Photo by Dan Bailey)



Paul Levesque gives the thumbs-up by a poster that was a Christmas present after returning home from Linn, Missouri, to view the Great American Eclipse. The verdict: Everyone should view a total eclipse at least once in their lives. (Photo by Alvin Lavoie)

2017 Eclipse TRIP TO Aurora, NE
By Mike Ombrello

Hi All,

I finished going through my images from the 2017 Total Solar Eclipse.

A group of 5 of us went to Aurora, Nebraska to witness the 2017 Total Solar Eclipse. There were two objectives. Our first objective was to capture the eclipse on video (with narration by Dr. Robert Mitchell from St. Ambrose University) and send a live feed utilizing youtube. The Putnam Museum was going to project the video feed on their big screen. The second objective, which was mine, was to utilize an automated program to capture all the phases of the eclipse, utilizing my DSLR.

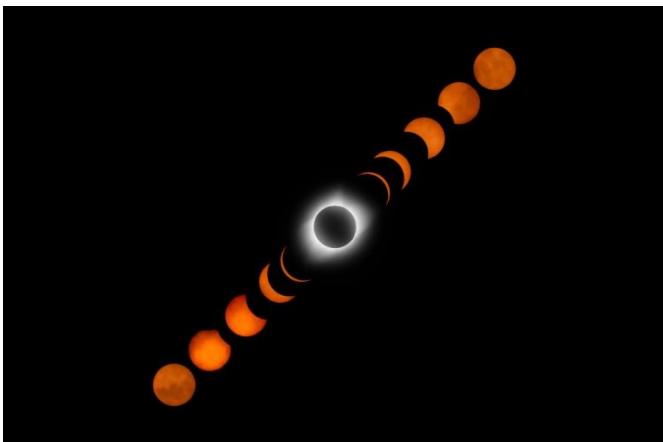
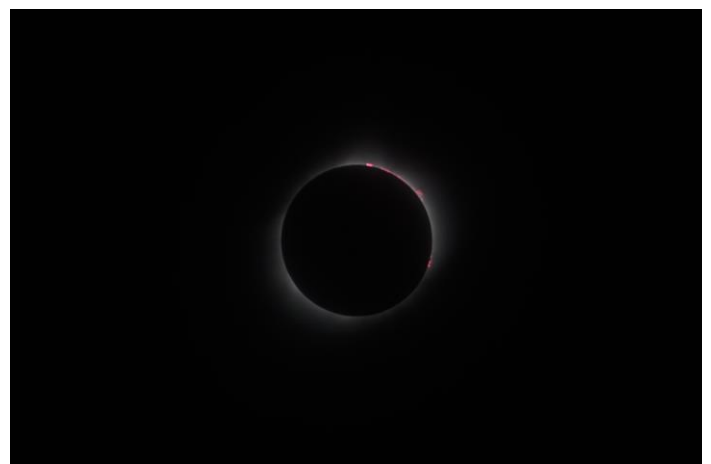
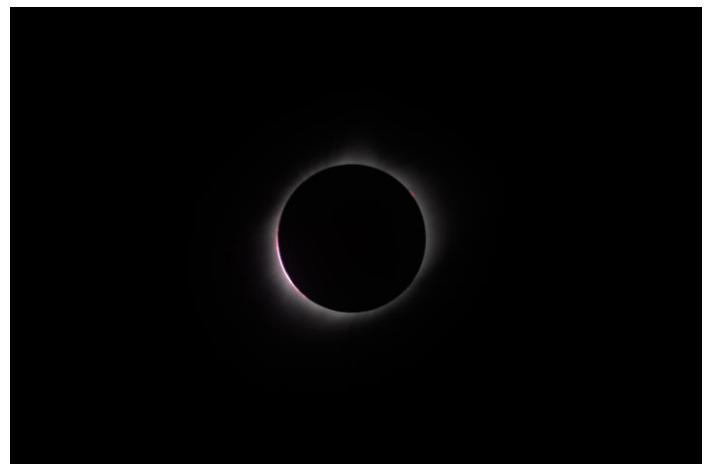
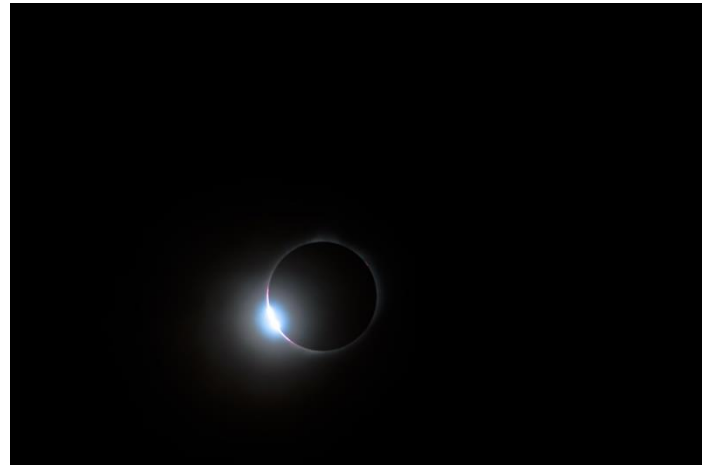
Both the video and the DSLR cameras were mounted on Jeff Struve's EQ mount (which was polar aligned Sunday night). We were ready to go early Monday morning.

Around 10:00 am (about an hour and a half before the partial eclipse phase was to begin), we were starting a final test. Everything went down hill from here. We found that the dedicated power and broadband resources we had been promised were being shared by the University of Minnesota (tracking weather balloons during the eclipse) and a local TV station. Around this time, the video began experiencing a lag of around 90 seconds. Shortly thereafter, the connect to the video camera was lost and couldn't be re-established. This prevented live-streaming the eclipse.

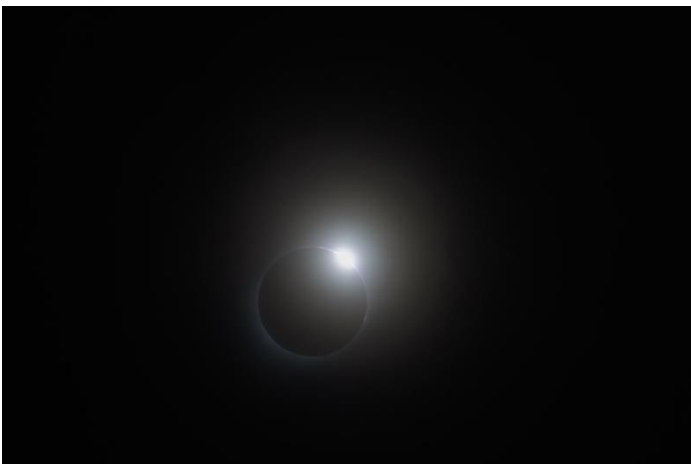
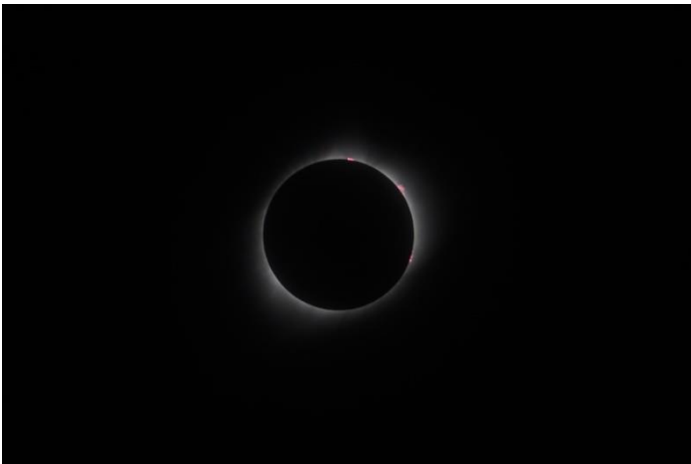
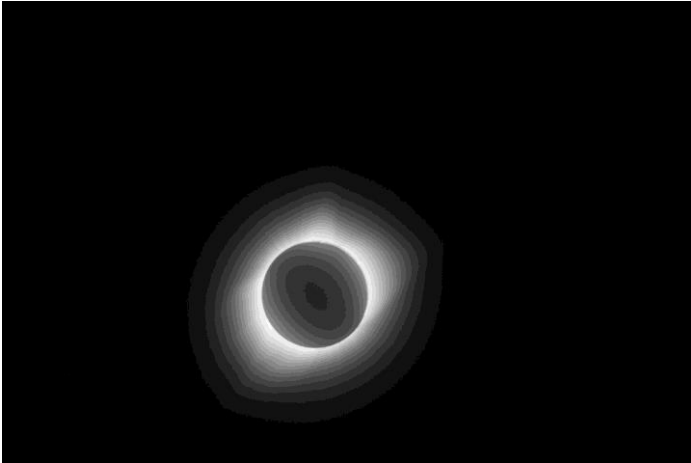
Additionally, my software was not able to see the DSLR - connection error. I eventually managed to establish a connection, but the software was not able to make the camera setting changes programmed and the sequence progressed through the eclipse. Unfortunately, I was not aware of this until the eclipse had completed. So the DSLR managed to take the correct number of images, but all of them were at a specific exposure (the camera never changed to take the long or short exposures). This prevented my capturing Bailey's Beads, the chromosphere, prominences and middle/outer corona.

Additionally, as the time of the eclipse approached, the clouds began moving in. A majority of the partial eclipse images (before second contact) were lost do to cloud cover. We were fortunate in the fact that the clouds did clear by time of totality and we witnessed an unbelievable show. The camera did capture a limited number of images of totality, as well as a fair amount of the post 3rd contact partial eclipse images.

I am sending the images that I was able to capture, as well as the mosaic of the eclipse.



QCAS Broadcast from Aurora, NE Info:



Aurora, NE Solar Eclipse Broadcast and Imaging Rig

As you may or may not have heard, we ran into a lot of difficulties just before broadcast time... Mike and I spent a lot of time trying to diagnose the issue, and I sent out a few emails to address the situation, the emails were sent to Dan, our host in Aurora, MallinCam, and The physics prof at The University of Minnesota... one of the descriptive emails has the following info:

Hi guys....

First off... in NO way am I blaming my Xtreme... but I need your help.... here's the story....

For months and thru dozens of test YouTube broadcasting runs, I worked with my eclipse rig... the Xtreme and a DSLR mounted on a Celestron AVX mount... also a separately mounted Rev II that was used for on location narration, interviews, and to capture the crowd and ambient responses... software used was MiloSlick for the MallinCam, Xsplit for broadcasting, PowerPoint for the slide presentation... never a hitch in any if the testing runs...

Many months before the trip was made, arrangements at the site for a private electrical circuit to run the gear... and a private 50M wireless access point for internet was made... sounds perfect as we were broadcasting back to a sold out IMAX at the Davenport Putnam Museum... plus a handful of libraries, schools, universities, colleges, museums, observatories, not to mention friends and family if the crew... and folks at work, for me, could be in the thousands...

The five of us went to Aurora, NE for the event... set up the afternoon before... did a Polar align with PoleMaster that night... did a good but unneeded 2 star alignment and a perfect dry run using my YouTube channel Jeff Struve Live Stream... the next morning at about 9AM, another run thru... no problems!

At 10AM on eclipse day...1 hour before show time, we were scheduled to broadcast a test run to the Museum on Dr. Robert Mitchell's St Ambrose University Astronomy YouTube Channel... PROBLEMS

Now instead of a short time lag between the gear and the YouTube broadcast, we have 80 seconds of delay... The Putnam is reporting that previously legible PowerPoint slides were blurry and lagging... and 16 min 16 seconds into this test broadcast, MiloSlick loses connection to the Xtreme and will not connect back up...

In 12th hour trouble shooting, I'm making the determination that the TV station that showed up unexpectedly to all is now using my private Wi-Fi...and previously unknown to us, MN State university is also using this private Wi-Fi for their weather balloon tracking... 4 satellite dishes... probably explains the network lag and blurry PowerPoint...

I am then finding that all were plugged into my power line as well... The TV camera and their rig... the satellite dishes had power strips strapped to their mounting with a lot of things plugged in... I am thinking that maybe all that power drain created low voltage and/or amperage problems... may have caused a surge of dirty power, and zapped my Xtreme... subsequently plugging the Xtreme into my 105 Amp Hr marine battery via a pure sine wave inverter did not correct the problem.. I fear the damage was done...

Subsequent attempts at powering down the Xtreme, waiting a while, then powering it back up caused it to connect up for seconds... then blue screen again...the lights on the camera would stay on... I had been running the cooler at level 8 and had the fans on... the Xtreme never felt hot... never above ambient... coincidentally, at the same time, the programming of the DSLR also failed to run the programmed time lapse photos... also previously tested out flawlessly... so I am sure that the issues were due to some sort of external influence in power and Wi-Fi bandwidth...

I need to send the Xtreme to you for repair... probably upgrade to the Xterminator... and your findings on the problem... I know you need to physically see the camera... but can you give me a guess as to what happened?

Here is a link to the 8/21 10 AM test broadcast where 16:16 in the problem with the Xtreme first occurs... I think somebody kicked on their gear at this time causing the issue...

<https://youtu.be/fENPiixtv9Y>

The Show:

<https://www.youtube.com/watch?v=YI-sBoJvKiM>

01:12:53 – 01:14:23

01:38:44 – 01:40:21

Dr. Robert Mitchell's link:

http://www.youtube.com/channel/UCntLNG_Of_ESAwH-GW2Busg



George Bailey takes a shot w/his iPhone and NightCap Pro

Pre-Trip 'Good-Luck Breakfasts'



Don... The pessimist!



Typical Nebraska clouds.....



One of the wedding cakes for after the Eclipse Wedding



Set Up and ready for dry run!



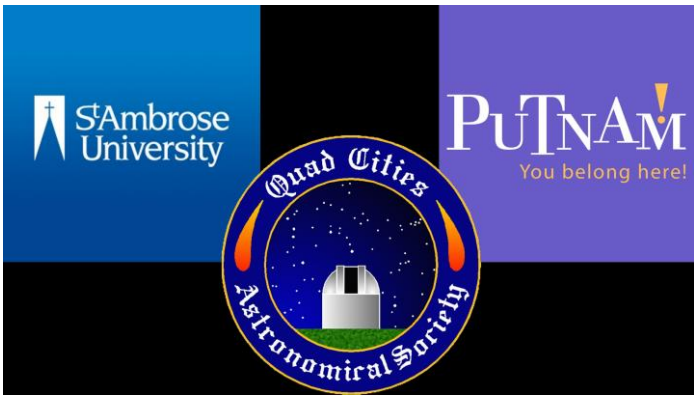
Breakfast in York, NE on the way home...



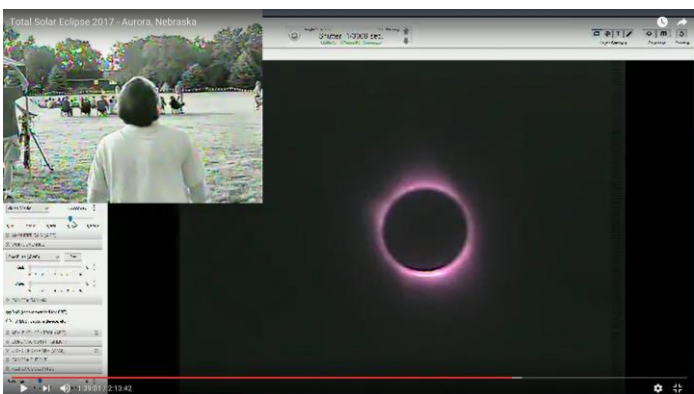
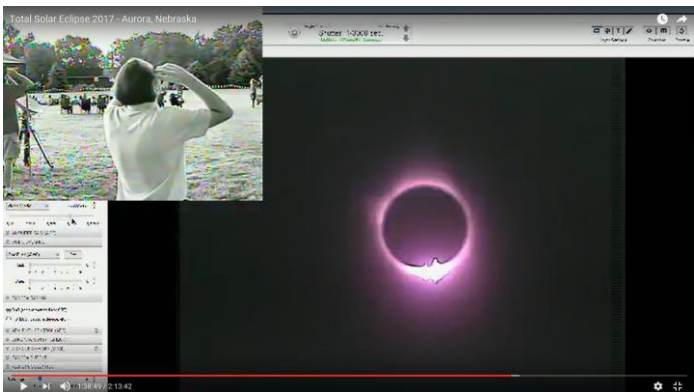
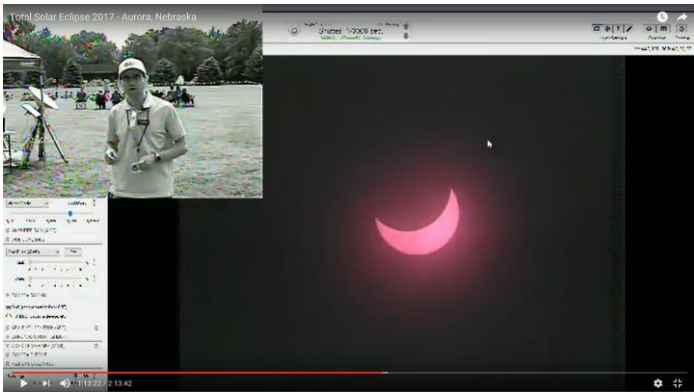
Almost Totality!



Locals chatting about the eclipse with us....



Visit to
The Strategic Air Command & Aerospace Museum
in Ashland, NE



U of MN Satellite Dishes

For Sale – Wanted

For Sale:



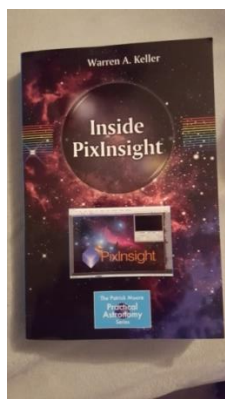
Orion Apex 127mm \$225.00



Meade ETX90 with Tripod \$400.00

The previous 4 listings are owned by a friend that lives in Princeton, IA who is liquidating the items from an estate. Craig and I went out and gave the items a once over and came to the pricing mentioned here:

There are miscellaneous accessories as applicable for each item... You can contact Jeff or email the owner directly at PoppyLuvMama@Yahoo.com



– New 2nd Addn “Inside PixInsight” by Warren Keller. \$30.00 – 1 left!
Contact Jeff Struve at PwrHsePro@aol.com

Various 1.00" OD and 1.25" OD tubing from previous telescopes or for telescopes I decided not to build:

- 1.25" OD
Five, 72" long, 0.035" wall thickness, never used, (current new price: \$18.49), \$8 each
- One, 50" long, 0.035" wall thickness, painted blue, \$6
- 1.25" OD - from a mid-80s Sky Designs scope
Eight, approx 1/16" wall, painted black, ends flattened, bolt at one end and hole at other, approx 44.75" center-to-center, \$7 each
- 1" OD
Eight, approx 1/16" wall, painted black, one end flattened, bolt at flattened end and hole at other, approx 53" center-to-center, \$6 each
- Five, approx 38" long, unpainted, \$5 each
- One, approx 34.75" long, \$4
- One, approx 32.75" long, \$4

Contact Karl Adlon at KMJA79@yahoo.com

Editor's Note:

Please help improve the substance of our newsletter by submitting articles and pictures for publication. Variety is the spice of life... be spicy!

Types of articles that would really be interesting could include What's In the Sky This Month, equipment reviews, experiences you've had in astronomy, sketches you've drawn, trips you've taken to observatories or star parties, a high level overview of your favorite astronomer, movie, book or article reviews, list astronomy gear that you want to buy or sell, and of course pictures you've taken and how they were done...

If each member submitted 1 article per year we could have an incredibly varied and interesting newsletter... that is my challenge to you!

Also... Drop an email, text, or make a phone call or two... members want to get together outside of normal club events to discuss and work on our hobby!

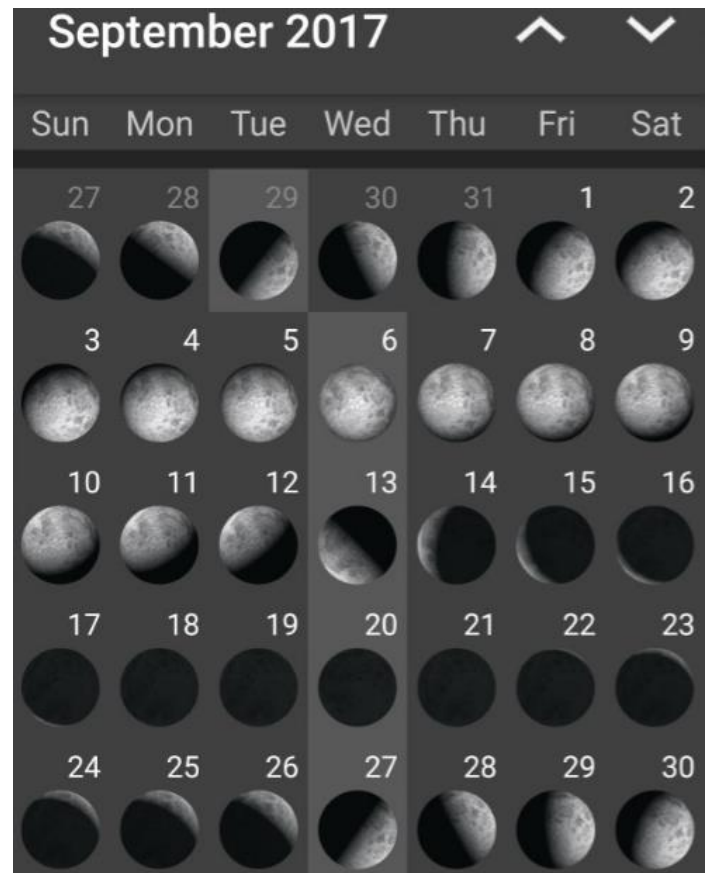
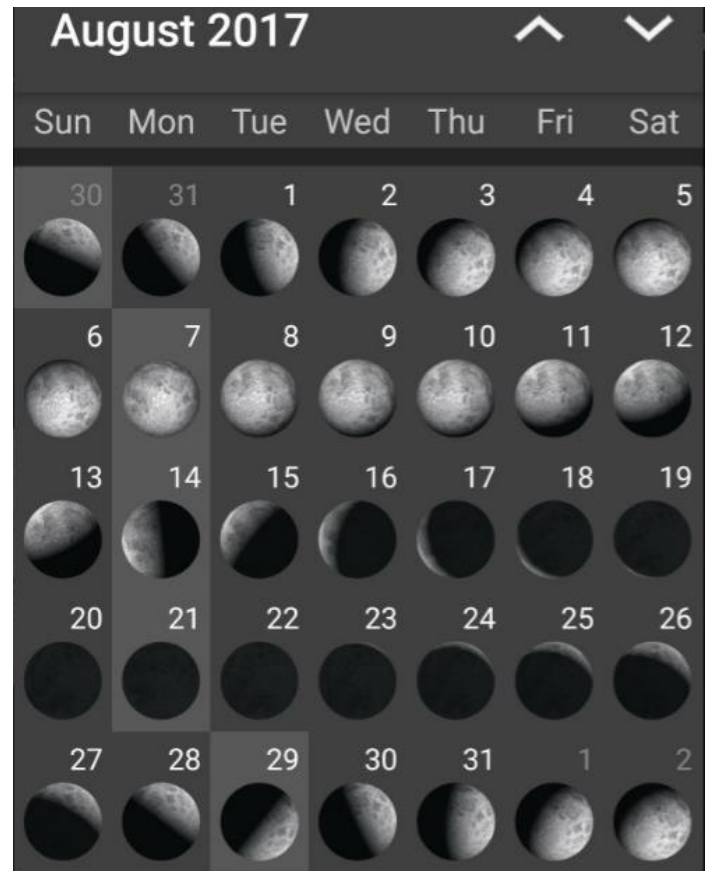
Jeff

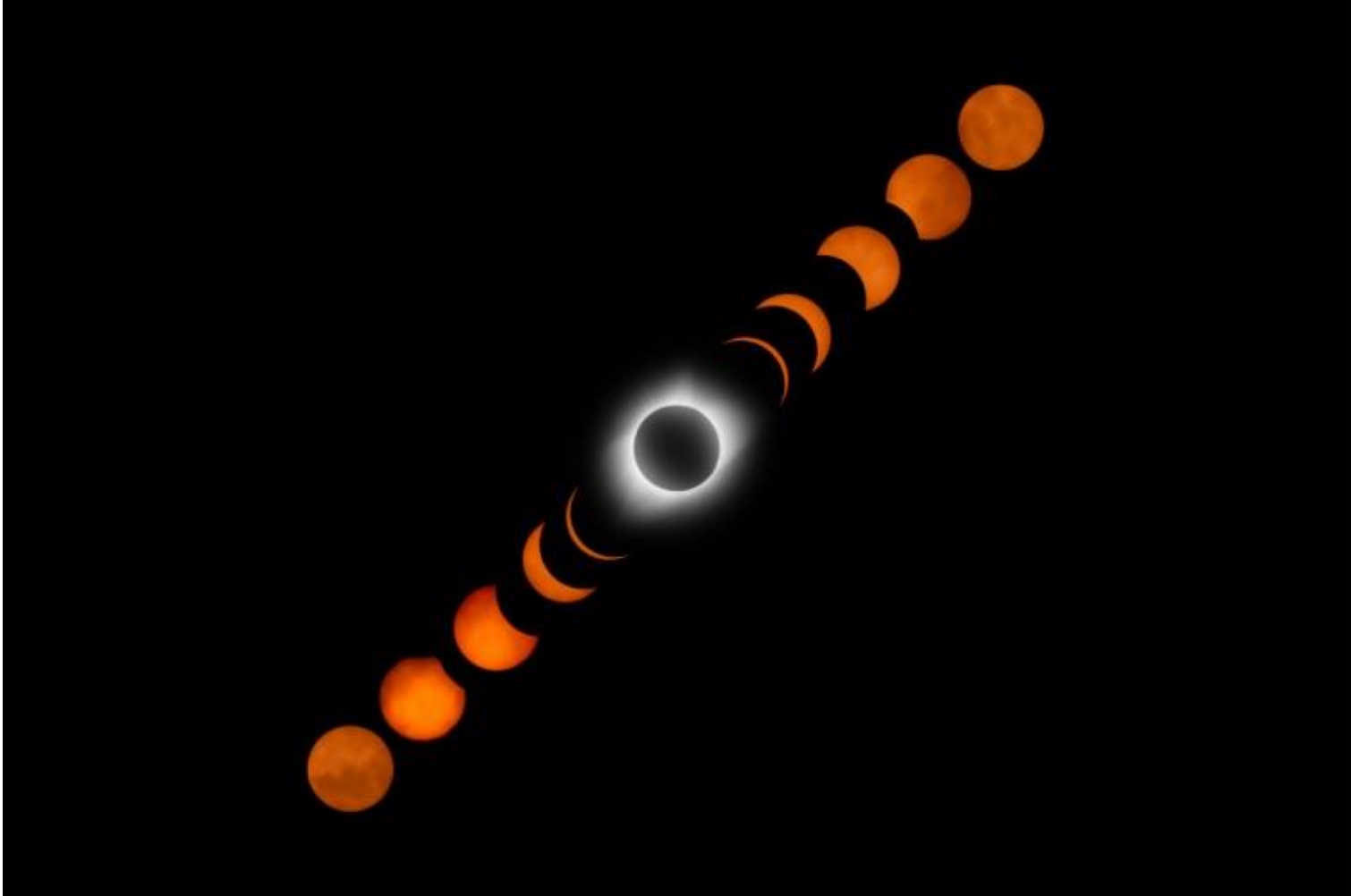
PS... A special thank you to Paul Levesque and Mike Ombrello for their contributions to this newsletter!!



2017 Calendar of Events

01/16/17 – Society Meeting
 01/28/17 – Open House at the Jens-Wendt Observatory
 02/18/17 – Menke Observatory Scouts Tour
 02/20/17 – Society Meeting
 02/25/17 – Open House at the Jens-Wendt Observatory
 03/18/17 – Open House at the Jens-Wendt Observatory
 03/20/17 – Society Meeting
 03/24-25/17 – Messier Marathon at Menke Observatory
 04/01/17 – Hawkeyes in Space Field Trip
 04/17/17 – Society Meeting
 04/21/17 – Assist PAC at the Putnam Museum
 04/29/17 – Astronomy Day
 04/29/17 – Open House at the Jens-Wendt Observatory
 05/13/17 – Menke Observatory Public Open House
 05/15/17 – Society Meeting
 05/27/17 – Open House at the Jens-Wendt Observatory
 06/03/17 – Menke Observatory Public Open House
 06/19/17 – Society Meeting
 06/24/17 – Open House at the Jens-Wendt Observatory
 07/15/17 – Menke Observatory Public Open House
 07/17/17 – Society Meeting
 07/29/17 – Open House at the Jens-Wendt Observatory
 08/12/17 – SAU/QCAS Perseid Meteor Shower Party
 08/21/17 – Solar Eclipse
 08/21/17 – Society Meeting CANCELLED
 08/26/17 – Open House at the Jens-Wendt Observatory
 09/18/17 – Society Meeting at SAU!
 09/22-24/17 – Eastern Iowa Star Party
 09/30/17 – Open House at the Jens-Wendt Observatory
 10/16/17 – Society Meeting
 10/28/17 – Open House at the Jens-Wendt Observatory
 11/18/17 – Open House at the Jens-Wendt Observatory?
 11/20/17 – Society Meeting – Annual Dinner
 12/16/17 – Open House at the Jens-Wendt Observatory?
 12/18/17 – Society Meeting





QCAS Correspondence:

Please contact the society at: P.O. Box 3706, Davenport, IA, 52808.

Members are welcome and encouraged to submit articles for The Meridian. Submit any and all interesting items (via e-mail) to: PwrHsePro@aol.com and/or MitchellRobertC@sau.edu

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