



Presidential Ramblings

by Dale Hendricks, May 3, 2016

We are now into May and are experiencing our usual “unclear” skies. After a rather “damp” Open House last Saturday, we have hopes for clearing skies and more “normal” viewing as we move more into May. “Normal” would be half overcast with brief glimpses of stars and perhaps the moon. I just walked from next door and met a neighbor, John, and his dog Tucker – John stated how beautiful the sky was – it was thin but completely overcast. This indicated to me that “beautiful” is a subjective observation and term.

I had new sod laid in about half my yard late last fall and I have had to water it just once – rain came often and was perfectly timed. My rain gauge now has nearly 3” in it and the sod looks better than the established yard. Having said that, it is now time for clear skies, low humidity and several of our group heading out to Sherman Park to – clean the 20” mirror after the lady bugs walked and pooped all over it. We looked at the mirror during our Open House Observatory Field Day activities and the mirror could use some attention but will wait until we have a presentation from the rep from OMI.

Our next regularly scheduled QCAS meeting is May 16th then the Mars viewing at Credit Island 11 June. To this point, we should have a small delegation coordinate an on-site meeting with a rep from Davenport Parks and Recreation to ensure that the presentation room layout, the audio visuals and grounds for telescope set up are all acceptable. I hope that one of these mornings I’ll be able to walk outside around 5:00 or 5:30 to see how much more visible Mars is and the steady creep to a nearly perfect viewing position next to Antares and Scorpius in June - should be quite the show.

We also need to stay aware of the last Saturday of the month Open Houses and keep this information in front of our membership to ensure we have two or three members at the Sherman Park site to welcome the visitors or to just observe, look at and shoot the heavens.

I hope to see several of you, as well as our officers at the Board of Directors meeting 11 May.

Clear Skies –
 Dale

Next Meeting

Our next meeting, Monday, May 16, will feature a presentation by James Mulherin of Optical Mechanics, Inc. (OMI)



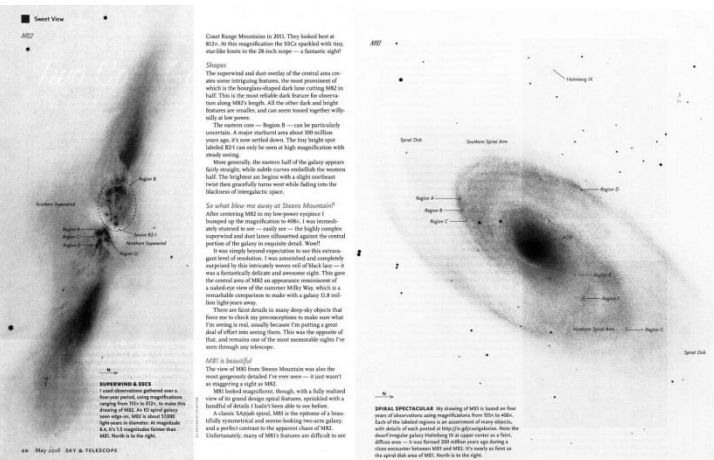
As I’m sure you are aware, they refigured our 20” mirror and are located in Iowa City, a short drive away.

From their website: “OMI develops and produces high-precision optics and optical-mechanical assemblies for the science, aerospace and defense markets. We create products through internal research and development projects using our core technologies in optics, telescopes, gimbals, collimators, optical coatings, and precision machining.”

I’m sure this will be a very informative presentation for everyone interested in telescopes and optics. And I think that’s all of us!

Observers’ Corner

The May issue of Sky & Telescope has an article on page 18 that I highly recommend reading. It recounts Howard Banich’s observations of galaxies M81 and M82 with his 28 inch scope on a night of exceptional seeing, including sketches. Here are 2 pages to whet your appetite!



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Calendar of Opportunities

Note: **QCAS Monthly Meetings** are at the Bettendorf Public Library @ 6:30 PM

Observatory Open Houses are at Sherman Park, Dixon (Calimus), IA

Other **QCAS Events** as noted

Wednesday, May 11
QCAS Board Meeting
–at Dale’s House

Monday, May 16
QCAS Monthly Meeting –
Presentation by OMI

Saturday, May 28
QCAS Observatory Open House

Saturday, June 4
SAU Star Party @ Menke Observatory

June 3, 4 & 5
Bootleg Star Party,
Green River
Conservation Area

Saturday, June 11
Mars Observing Event at Credit Island

Saturday, June 18
PAC Niabi Zoo Star Party

Saturday, June 25
QCAS Observatory Open House

June 23, 24 & 25
Quad Cities Air Show

Mars and Its Rival

How convenient for Mars and its rival, Antares, to be so close together in the sky right now. This affords the opportunity to compare colors and brightness. Which is redder? Does Antares twinkle while Mars does not? Is it the same story using binoculars? How about a telescope?

From Wikipedia: Antares, the proper name of this star, derives from the Ancient Greek Ἀντάρης, meaning "equal to-Ares" ("equal to-Mars"), due to the similarity of its reddish hue to the appearance of the planet Mars. The comparison of Antares with Mars may have originated with early Mesopotamian astronomers. However, some scholars have speculated that the star may have been named after Antar, or Antarah ibn Shaddad, the Arab warrior-hero celebrated in the pre-Islamic poems Mu'allaqat.

Yesterday morning, while it was still dark, I looked out the window to see Mars, Antares and the other stars of Scorpio and Saturn. Pretty!

Then I focused on Mars and Antares alone. I was surprised how much brighter and redder Mars was over Antares. Looking up their magnitudes (-1.58 and 1.05) I shouldn't have been surprised by the brightness difference. I suspect that Mars being so much brighter makes is visually redder also.

Have a look and let me know what you think!



Spirit views its destination toward the hills nicknamed the "Columbia Hills," on the right.

June Night Skies

June 3- DAWN: The very thin crescent Moon hangs about 2° below Mercury as seen from North America; binoculars may help you spot them barely above the eastern horizon 20 or 30 minutes before sunrise. Mercury is a modest magnitude +0.6.

June 2-3- ALL NIGHT: Saturn reaches opposition tonight. This month the Ringed Planet, well-lit by the Sun, shines throughout the night in Ophiuchus.

June 9- EVENING: Look about 7° above and left of the waxing crescent Moon to find Regulus, the brightest star in Leo.

June 10- EVENING: The Moon rests about halfway between Regulus and the distinctly brighter Jupiter.

June 11- EVENING: The Moon, approaching first quarter, forms a triangle with Jupiter and much dimmer Sigma (σ) Leonis.

June 14- EVENING: First-magnitude Spica shines less than 5° below the waxing gibbous Moon.

June 17-18- All NIGHT: The Moon, Saturn, and Mars make a wide, flat triangle, with the longest side stretching about 18° to connect the two planets.

June 18-19- ALL NIGHT: The Moon and Saturn are 3° to 5° apart tonight. After dusk, look below and right of the pair to spot Antares, the supergiant at the heart of Scorpius.

June 20- THE LONGEST DAY of the year in the Northern Hemisphere. Summer begins at the solstice, 5:34 p.m. EDT.

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: Karl Adlon, Secretary.

QCAS Officers and Contacts:

Officers

President: Dale Hendricks
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Director: Dana Taylor

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April Meeting Notes

Attendees: Dr. Robert Mitchell, Karl Adlon, Bruce Brooker, Matt Neilssen, Craig Cox, Ken Boquist, Jeff Struve, Mitch White, Mike Ombrello and Dale Hendricks.

Business Portion of Meeting

The meeting of April 18th began with a restatement of 2 items: that there would be only the one meeting each month (the Regular Meeting) and that the business portion of the meeting would be limited to 30 minutes; the remainder of the time allocated for astronomy-related subjects.

Karl Adlon was elected Secretary to fill the vacant position.

Prior to the meeting, John Baker, Treasurer, reported that the club's treasury balance was \$2190.08 but the \$80 was due for the PO Box fee.

Jeff Struve presented information in the Eastern Iowa Star Party (EISP), which will begin the afternoon of Sept. 2 and end the morning of Sept. 4. Daytime events are being planned.

Brice Brooker noted that at the observatory 1) there is a sign on one pull handle reminding to unplug the lights and fan (near the door) before rolling the roof off, 2) there is a sign-out sheet on the block house door if you borrow equipment, 3) the white plugs in the 20" focusers were missing, which allowed bugs to get inside and dirty up the newly coated 20" mirror, which now needs to be cleaned!! and 4) a change: all breakers should now be left ON when closing the observatory.

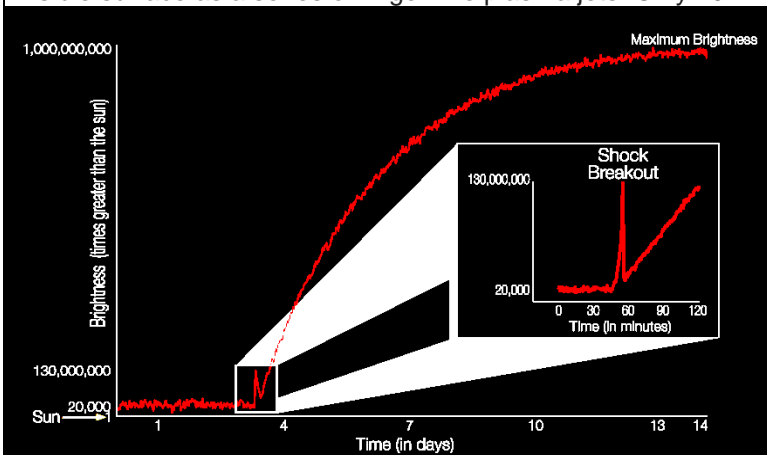
Presentation Portion of Meeting

Presentations began at 7 PM and consisted of the following.

Kepler Shock Breakout

Dr. Robert Mitchell the detection by the Kepler Space Telescope of a supernova's "shock breakout".

The brilliant flash of an exploding star's shockwave—what astronomers call the "shock breakout" -- is illustrated above. When the star's internal furnace can no longer sustain nuclear fusion its core collapses under the force of gravity. A shockwave from the implosion rushes outward through the star's layers. The shockwave initially breaks through the star's visible surface as a series of finger-like plasma jets. Only 20



minute later the full fury of the shockwave reaches the surface and the doomed star blasts apart as a supernova explosion.

For more info, see

<http://www.nasa.gov/feature/ames/Kepler/caught-for-the-first-time-the-early-flash-of-an-exploding-star>

April Meeting Notes (cont'd)

Mercury Transit

Dr. Mitchell gave a presentation on the May 9 transit and the latest thinking on the "black drop" phenomenon and its possible relationship to Limb darkening.

Unfortunately, it was pretty cloudy in the Quad Cities, though Matt Neilssen did manage to get this image during a short break in the clouds:



That's Mercury at about 4 o'clock half way between center and rim. **Congratulations to Matt!**

2017 Total Solar Eclipse

Dr. Mitchell also discussed his planning for the August 21, 2017 eclipse and his work and problems in trying to be ready to video broadcast the event back to SAU.

We will be interested to see what develops in the next 15 months and whether any knowledgeable members on this subject may be able to assist.

2016 Mars Opposition - Getting Ready

Karl Adlon gave a short presentation that centered on reasons why it's now a good time to get ready to view Mars. Two reasons are 1) to practice for 2018, when Mars will be even closer and 2) to be ready for our Credit Island event which will be on June 11.

Next Meeting

Next Meeting is May 16th, 6:30 PM at the Bettendorf Library.