

The Meridian

Newsletter of the Quad Cities Astronomical Society • April 2014

Meeting Notes

John Robbins, Secretary

April 21. Meeting called to order by Dale Hendricks at 6:35pm. The meeting was attended by 14 members and two guests. Members included: Cecil Ward, John Baker, Dana Taylor, Dale Hendricks, Karl Adlon, John Robbins, Brian Haysbrook, Robert Mitchell, Matt Neilssen, Jeff Struve, Sam Snow, Debbie Ven Horst-Snow, Bruce Brooker, Jim Rutenbeck and Mitch White. Guests included Peter Brueken and John Gwhin, both from Bettendorf High School.

Agenda

Treasurer's Report. The Society account balance was about \$2200 "in the kitty."

Upcoming QCAS Events:

April 28th, 8pm, QCAS Open House at the Jens-Wendt Observatory, Sherman Park.

May 2nd, 8pm, Riverdale School, Port Byron, An evening to highlight Mars. Karl Adlon is coordinator.

July 16 & 17, Scott County Library in Eldridge is hosting a summer skies program with the Star Lab. Dana Taylor is coordinator.

Facilities. Bruce demonstrated clock drive drift issues on the 16" by showing a time-lapse movie of the lunar eclipse. By noting a nearby star's path from frame to frame, the drift was evident. John B produced a layered image which shows this directly (see inside for image).

The JMI NGC-MAX computer on the 16" is reported by Bruce to be working.

John B reported some electrical issues and thrown breakers while operating the dome.

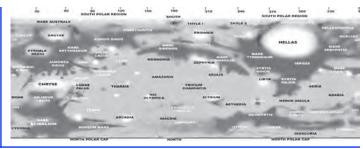
Presentations. Peter Brueken described the planetarium facility at Bettendorf High School. He also gave us a list of programs that the planetarium hosts over the course of a year, some public and many educational programs for local students. QCAS is welcome to learn about the facility and create their own programs - further coordination needed. BHS astonomical gear includes two 8" telescopes and an Edmund Astroscan. Primariliy used in the BHS football field.

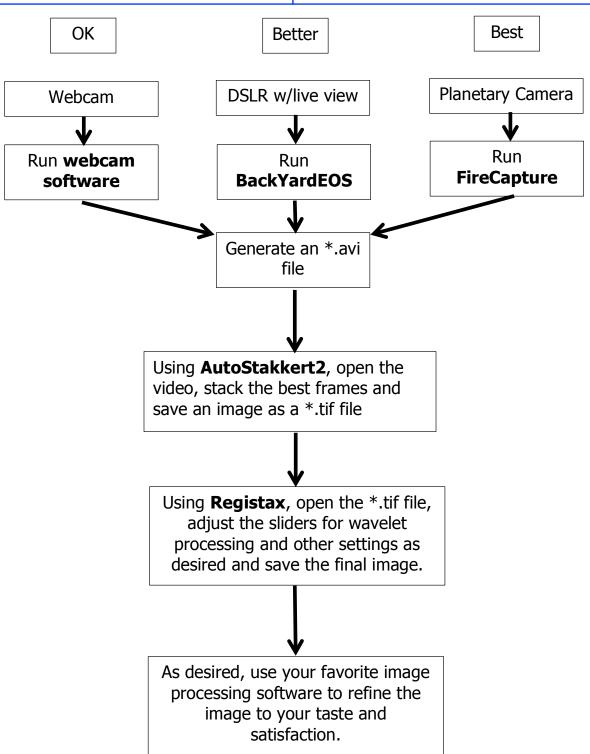
Dana Taylor showed photos he took of April 15th's lunar eclipse. He also showed video taken during the brush fire at Sherman Park on April 11th. The brush fire followed a controlled burn that had been thought to have been put out. If QCAS members hadn't been present to make 911 calls, the observatory could have been in serious jeopardy, or lost. Fortunately, with light winds, and with at least 15 emergency vehicles responding, disaster was averted. More photos, inside.

Karl Adlon gave a "live" demonstration of the use of software to process planetary astrophotographs. His flow chart is seen on the next page.

Other Business. Cecil Ward was interested in selling his Meade 2120 LX3 SC (10") with University 2" diagonal, 9x50 illuminated finder,

tripod, mount and drive. Cecil brought it to the meeting and proposed a \$600 price tag. Dana proposed that the club buy it as a larger transportable scope (seconded by Jeff). The QCAS purchase is contingent on QA test observations. [right: Mars map]





Karl Adlon provided his best recommendations for planetary astrophotography processing during his presentation at the April 20th QCAS meeting.

Lunar Eclipse - April 15, 2014

Photos by Club Members



This photo was taken by Dana Taylor at a moment near the middle of the eclipse. Taken through the 20", it is actually comprised of four photos stitched together.



This is a blended composite of a series of 79 photos of the eclipse that John Baker took over a 40 minute period. The interest in this photo is that it demonstrates drift in the mount/drive of the 16" telescope. Note the trail of the stars. If the mount were properly algned and the drive had been operating smoothly, the star should appear as a point. Slight motion of the Moon would be expected.



Stacked photo of eclipse by Karl Adlon.



Composite photo of eclipse sequence by Dana Taylor.

Brush Fire at Sherman Park • April 11, 2014

Photos taken by John Baker. Apparently a controlled burn got re-started and threatened QCAS facilities.



From this angle, the fire looks perilously close to the roll-off roof, 20" telescope building.

Here you can see some of the 15+ emergency vehicles that ultimately responded to the fire call.





Once water was thrown on the fires, smoke became quite an issue. Hopes for any observing that evening were pretty much dashed at this point.



One more eclipse photo. This one is not from a club member, but the brother of a member. Tom Robbins took this photo from his back yard in DeKalb, IL. Taken with a Canon 5D MkII, 600mm telephoto lens attached, along with 1.4x teleconverter. ISO800 exposure was 1.3 sec at f/6.3. Effective focal length was 840mm.



If you should ever see a star inside the crescent moon, be sure to take a photo of it!

QCAS Officers and Contacts:

President: Dale Hendricks Secretary: John Robbins Director: Dana Taylor Web Master: Dana Taylor Programming: Jim Rutenbeck Vice-president: Craig Cox Treasurer: John Baker Facilities: John Baker Outreach: Matt Nielssen

Celestial Calendar

April 25 18:16 Venus 4.4°S of Moon

25 22 Mercury at Superior Conjunction

28 06:36 Moon at Descending Node

29 01:04 Non-Central Annular Solar Eclipse

29 01:14 NEW MOON

May 01 10:51 Aldebaran 2.0°S of Moon

02 18 Mercury at Perihelion

04 09:02 Jupiter 5.5°N of Moon

05 01 Eta-Aquarid Meteor Shower

06 05:22 Moon at Apogee: 404319 km

06 22:15 FIRST QUARTER MOON

08 04:43 Regulus 5.2°N of Moon

10 13 Saturn at Opposition

II 08:32 Mars 3.0°N of Moon

12 07:47 Spica I.7°S of Moon

12 17:06 Moon at Ascending Node

14 07:41 Saturn 0.5°N of Moon: Occn.

14 14:16 FULL MOON

16 07 Venus at Aphelion

18 06:58 Moon at Perigee: 367099 km

21 07:59 LAST QUARTER MOON

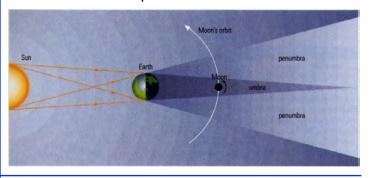
25 02 Mercury at Greatest Elong: 22.7°E

25 10:43 Venus 2.3°S of Moon

25 12:56 Moon at Descending Node

28 13:40 NEW MOON

All times are CDT. List from www.astropixels.com



Meetings: First Monday (workshop) at 6:30pm, and third Monday, (business), at 6:30pm, Bettendorf Library, 2950 Learning Campus Dr., off of 18th Street, Bettendorf.

Correspondence:

Please send to 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: John Robbins or Dale Hendricks.