

CONSTELLATION *addendum . . .*

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Scott Petersen, editor © BMAA 2015

A night of viewing at Arcadia University: Two perspectives

- by Gary Sprague

Kim Small teaches an astronomy class at Arcadia University, and she asked if someone from BMAA could conduct a 'lab' for her class. This 'lab' consisted of taking her students to the roof of Boyer Hall of Science on the Arcadia campus. We have as many as 5 Celestron CPC1100 SCT telescopes which have been cleaned and generally tested by a BMAA group. Unfortunately, we have not put these scopes to the test with a night of observing. This was going to be the acid test; sink or swim.

From our perspective (Gary Sprague and Ed Radomski), the trial of the Arcadia scopes was not without some degree of frustration. We had 3 mostly working scopes; we managed to align them although the controller for one scope locked up when selecting solar system objects. The biggest problem was poor quality of images. In spite of our efforts to clean the optics something is still amiss. Image quality was not up to par for these scopes. Ed ascribed it to SCT's generally but I am certain image quality should be much better. Bernie was consulted after the event and he believed some secondary mirror collimation should fix the image problems.

On the other hand, from the perspective of the students, most were perfectly happy to watch an ISS flyover and take cell phone pictures of a poorly focused lunar image. On the positive side, we forget how impressive even poor quality images can be for first-time viewers. Kim's class seemed genuinely interested in operation of the scopes and we managed to provide views of the moon (not so good), double stars (also not so good), Uranus (not so hot) and the Andromeda Galaxy (actually not so bad). As a bonus, all the students have cell phone images as a reminder of their session.

These are comments from 3 of the students.

“Going up on the roof of Boyer and using the telescopes yesterday was truly incredible. I had never gotten to look through a telescope before, so the experience was novel and exciting. Seeing the International Space Station, before it disappeared into Earth’s shadow, was a very interesting experience. I didn’t realize just how close to the earth it was flying. I was amazed at how defined the moon looked through the telescope. I learned that the telescopes have computer-like systems inside of them and that they have a GPS that helps them to navigate the night sky. To be completely honest, I did not really see Uranus very well, but I was able to see the two different colored stars (blue and yellow). I thought the coolest part of last night’s observation session was getting to see the Andromeda Galaxy. It’s one thing to see photos of other galaxies and to learn about them, but it was truly amazing to be able to see it myself, even if it did only look like a smudge. Overall, I thought the experience was incredible and made me want to use telescopes again!”

“Overall I thought this lab was really informational and fun. I have never looked at the sky through a telescope before and during the lab I was able to see a few different things which I thought were awesome. One of the things I learned is that the light we see coming from the Andromeda galaxy is over 2 million years old. I also learned that some telescopes, like the three we had on the roof, have a GPS. Once they lock onto a location they track it throughout the sky. For example, we had one

telescope facing the moon and if we had stayed up there longer we would have seen it move throughout the night to track the moon. Another thing I learned was that the Space Station does not have any lights on the outside so when we see it the light comes from the station reflecting sunlight. I was fascinated by all of this and really enjoyed the observing lab.”

“I really liked being able to look through the telescopes on top of the building. It was amazing to see things in space up close through the telescopes, you can see so much more detail with it than you can just be looking up at the sky. I learned a few things while I was up on the roof. I learned that each one of the telescopes cost about \$3,000, according to what the people from the astronomy group told me. I also learned that when looking at Uranus, the light that left Uranus, left 3 hours before we saw it, which was amazing to hear. I also learned that the Andromeda Galaxy is 2 million years old. I learned so much while looking through the telescope and hope that we will be able to do it again, maybe where its darker so we can see more stars.”

Even though Ed and I were disappointed with the performance of the scopes, it’s nice to hear our disappointment was not mirrored by the students.

– *BMAA president Gary Sprague provided this article [-ed]*

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Website AstroPhotos

Hello Everyone: I am helping John Neyer with the photos section of the new BMAA website. I have volunteered for collecting photos from the authors for further uploading them to the photo galleries. If you like to submit your pics, please send them to my email address (Igor.1812@yahoo.com) along with the description of the image. Please, keep in mind that your artwork will appear on the home page of our website for public view and anyone on our planet and beyond will be able to see it. We are one of the few clubs which have such a strong astrophotography contingent and the website should reflect that. We do not want our gallery to look like an archive of unnamed images, and we do want it to be interesting and informative. So take a few minutes to write a caption for your photo which may contain whatever you feel might be interesting for a viewer, for example, the name and brief description of the object, interesting facts about it, information of how the image was taken, equipment used, etc. There is no limit on the number of characters in captions but, unfortunately, the text of the captions can not be split into paragraphs, therefore write your caption with this limitation in mind. So far, I have found a way to add special characters and extra spaces in the body of a caption to separate blocks of text (see the caption for the image of Cave Nebula in my album as an example). I will be happy to apply same trick to your captions if you wish. The good news is that John has fixed the memory problem. We don't have to re-size images any more unless they are abnormally huge files. Yet, I advise the authors to optimize the size of their images for best appearance. For example, images taken with DSLRs rarely look good at native resolution and would benefit from 50% reduction. There are currently quite a few images in the galleries which do not have any description, not even a name of the object. Most of them were transferred from the old website as they were. Authors, please, review your galleries and email me missing captions for the images you want to keep. Let me know if you want to remove some images from this section of the website.

If you have any questions, do not hesitate to contact me.

- *Igor Peshenko*

- *BMAA member Igor Peshenko provides Observing Notes [-ed]*

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BucksMont Astronomical Association, Inc

General Meeting Minutes, November 2015

The November 2015 BMAA meeting was held on Wednesday November 4, 2015 at the Upper Dublin Lutheran Church. 27 members and guests were in attendance.

President Gary Sprague led off the meeting at 7:30p with an overview of Club activities in October and upcoming events for the remainder of 2015. The keynote Club event in October was a well-attended Star Watch at Pickering Field in Newtown that featured an ISS Fly over.

Upcoming events for the remainder of 2015 and January 2016 include:

- November 20: Presentations for Kathleen's scout group on Fri night Nov. 20th at 6:30p at Simmons elementary school; using the donated scope with help from a HH senior that evening.
- December 2: Telescope donation to Jarrett Nature Center and BMAA Flea Market
- January 2016: Astronomy 101 presentations for Wesley Enhanced Living residents.
- January: Prepare 2016 BMAA public and member star watch dates.

Bernie Kosher presented a report from the Election Committee and solicited nominations for the 2016 slate of officers.

The feature of the November meeting was the presentation and discussion of member astrophotography images. BMAA is becoming known for the quality of member astro photographs. Igor, Steve, Howard and Terry shared some amazing images.

The next meeting will be on Wednesday December 2 and will feature the presentation of a 6-inch Dobson telescope to the Jarrett Nature Center; election of officers for 2016, and a Flea Market.

The meeting concluded at 9:00p.

Respectfully submitted,
John Urbanchuk, secretary

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BMAA Registration Form

- Renewal
- New Member

Name _____

Address _____

Telephone

Home _____

Cell _____

E-Mail _____

Dues are **\$30.00** for an individual or **\$40.00** for a family membership (more than one person at same address).

Make check payable to **BMAA and send to:**

BMAA
c/o Ed Radomski
36 Far View Rd.
Chalfont, PA 18914

If you would prefer to register and pay using **PayPal** do not use this form. On the [PayPal](https://www.paypal.com) website send your payment to treas@bma2.org . Send it as a “purchase of goods” so that I receive your address. In the email section make the subject “Dues”, include your telephone number and your preferred email address in the message area.

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Editor's Note

The CONSTELLATION is your BMAA club newsletter and its success depends solely on your input. Please submit articles to me at: constellation@bma2.org. I am trying to maintain a quarterly publication cycle, on or about the Solstices and Equinoxes with supplements as required. Thanks.

– *Scott Petersen, editor*