

Harford County Astronomical Society



Monthly Newsletter

Volume 37 Issue 8 August 2011

Public Star Party

September 3, 2011

at 8:00pm

Tech School Parking Lot

General Meeting

September 8, 2011

at 7:00pm

Edgewood Hall Room 132

Please check our website for possible schedule updates and changes:

<http://www.harfordastro.org>



<http://astroleague.org/>



<http://nightsky.jpl.nasa.gov/>

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HCAS General Meeting

Minutes from July 14, 2011

The meeting was called to order at 7:12 pm by President Tom Rusek. We had a total of 20 members in attendance, including re-joining Past President Lucy Albert.

The minutes from the June meeting were going to be published in the Newsletter the next day, and were approved as written.

Treasurer's Report: Tim reports that we have \$5360.74 in the primary checking account. There are still some membership deposits to be made. Astronomy Magazine and Astronomy League payments needed to be paid yet, as is the 60 mm ED to be paid back to Tim. All accounts added together, there is a total of \$6300. We are up to a total of 53 members, up 4 from last month. Final notices of renewals have gone out.

Newsletter Issues: Newsletter is due to be emailed on 7/15. We have received notification from the Astronomical League that our Newsletter has placed sixth overall in the Newsletter competition. Kudos to Roy for a well-organized and interesting Newsletter.

Website Issues: Larry is looking at self-advertisement banners for items of interest such as the Transit of Venus, reopening of the Observatory or other coming events. It was decided to not open our website to outside advertisers at this time. We have received notification from the Astronomical League that our website has won First Place in the Website Competition. This is wonderful news! Hats off to Larry for maintaining a beautiful website.

Outreach: Past events – Our Open house on June 11 was held on the parking lot of the High School. We had 40 guests and 14 members in attendance. We did our best to get past the parking lot lights, and everyone had a good time – the weather was clear. Upcoming events – Mountain Christian Academy is scheduled for July 16. Our August Open House will have the theme “Vesta Fiesta”, as the Dawn Mission will have started orbiting asteroid Vesta that week. This event will be held at the HTHS Parking lot or Edgewood Hall in the event of bad weather. Eden Mill is scheduled for August 10, contact Mark Kregel. Susquehanna State Park is on Sept. 11, Rocks State Park is Sept. 16. Astronomy day is October 1, which is an all-day event.

Hopefully we will be able to use the classroom that is being built at the Observatory. October 8 is International Observe the Moon night. Perryville Elementary School is scheduled for November 9 (rain Nov. 10), and Tim is working on Parkville Middle School in November.

Observatory Operations: Construction is progressing. It is Mark and Gary's intention to see if they can finish the dome rotation project before the classroom construction is complete.

Night Sky Network: Colleen is taking over as the NSN Coordinator. The new Toolkit "Life in the Universe" has been put out for those clubs earning it. We were one of the test groups for this toolkit – special thanks to Tim B. for test driving this toolkit. There is a TelCon on July 28.

Listeners on the TelCon can win a Tours of the Night Sky booklet and a Cosmic Decoders Game. Lucy has brought us new materials from the Space Telescope Institute.

Jeremy talked about the re-opening of the Yahoo Email group, Facebook at Twitter. The owner of the Yahoo group is no longer available for contact through email, and Jeremy will contact them to have the owner removed so that we can control the group again. Group emails can be send to harfordastro@yahoo.com.

Lucy invited everyone to the Astronomical Society of the Pacific's Convention at the Treemont Hotel in Baltimore July 31 – August 3. Speakers will include Neil deGrasse Tyson and Pamela Gay. Pre-registration is recommended, but walk-ins are welcome.

The meeting was adjourned at 8:00pm, and there was a presentation by Roy about Observing and hiking in the Southwest.

Karen Carey, Secretary

Minutes of August 11, 2011

The meeting was called to order at 7:05pm by President Tom Rusek.

July's meeting minutes are to be published on 8/15 in the next newsletter, which will contain both July and August meeting notes.

Treasurer's Report: Tim was not in attendance, but Tom reported we have a total of \$6314.73 in all accounts. We are up to 55 paid members, but probably closer to 70 counting family members. Board of Directors: There will be a BoD meeting before the September General meeting at 6pm. Newsletter Issues: Roy reports that the newsletter is due out on Sunday August 15.

Website Issues: We will discuss further information regarding Facebook, Google+, Yahoo and Twitter when Jeremy is present in September. The Facebook group set up by Jeremy and moderated by Jeremy, Tim B. and Karen is going very well. We have 38 Followers from around the country and world already, after only 4 weeks. Larry and Roy suggest that we link only one (probably Facebook) on the main website.

Newsletter and Website Recognition: Tom read a letter from Carol Iorg from the Astronomical League congratulating the HCAS for their website and newsletter awards in the recent AL Contests. We will be featured in the September issue of the Reflector.

Outreach: Past events – the August Open House was completely rained out, but that didn't stop 12 members and 3 visitors come to the Edgewood Hall to listen to a presentation about the Dawn Mission to Vesta. Tim B. ran the NSN TelCon about the Dawn Mission to those in attendance. Eden Mill that was set up for August 10 has been rescheduled to September 30. Upcoming events - Susquehanna State Park is on Sept. 11, Rocks State Park is Sept. 16. Perryville Elementary School is scheduled for November 9 (rain Nov. 10), and Tim is working on Parkville Middle School in November. Astronomy day is October 1, which is an all-day event. Hopefully we will be able to use the classroom that is being built at the Observatory. October 8 is International Observe the Moon night. Discussion ensued about volunteers are needed for set-up and

dismantling of Astronomy Day. Grace will send out an email about this event, and it was suggested that if someone wants to make a display, they will be responsible for the display, beginning to end. Karen added that she can photocopy any materials that anyone might want. We will also combine the Astronomy Day with International Observe the Moon night.

Observatory Operations: Construction is progressing, however the September 1 due date may be a little aggressive. We will probably be able to return to the Observatory for October 1. At that time we will do the inventory, clean out the store room and get rid of items no longer needed or used.

Observing Reports: Roy reports that there have been 3 trips to Broad Creek, and the weather is steadily improving and nights are getting longer. It's time to make a trip to BC if you haven't! Larry relayed a story of his trip to Big Meadows off of Skyline drive. He did get some photos, but was frightened away by a black bear in the middle of his session! Larry also talked about a dark-sky observing site in northern Virginia, about 2 -1/2 hours away. He is following through on this and will report the results later.

Night Sky Network: There is a new TelCon on August 18 about International Observe the Moon night. There is a prize of a Lumicon filter and a moon globe for the group. The NSN is working on a new Toolkit. More news about this in the future.

The meeting was adjourned at 7:50pm. Larry did a brief presentation on how to observe very faint objects by using tracing paper to reverse the field of view.

Karen Carey, Secretary

Treasurer's Report

Current balance as of 8/4/2011:

Main checking account:	\$5112.24
Second Checking account:	\$ 324.08
PayPal Account	\$ 467.66
Total	\$5903.98

I have paid our Astronomical League bill based on 54 Members - \$280

I have paid our post office box rental for another year - \$96.00

Membership is now up to 55 individuals and families with one new membership in the last month.

Tim Kamel

New Members

Please welcome returning member, Jim Opie!

Outreach



Bob (center) receives plaque from sister club, Sternwarte Hoffheim in Germany.

Bob Kesler departs from Germany, Returns to HCAS

Last Thursday we had a small gathering at the Observatory in Germany and I had to say good by to my friends and fellow astronomy club members who have welcomed me into their club for the past three years. Departing is bitter sweet as Michele and I do look forward to returning home, but we have made good friends and saying good-by is not always easy. I asked Grace for some HCAS Patches which Colleen sent and I was able to give them to the German club members who I was associated with the closest. I was also able to have a plaque made acknowledging the friendship and partnership we have forged between the two clubs which I hope will last for many years. We have a plan to meet for the 2017 USA Solar Eclipse.

As I departed, Rainer presented me with a very nice and professional Photo Journal which I Hope to share at the club meeting in September. I also have a mirror image of the plaque which I hope to present to Tom at the September meeting as well. Maybe we can find a spot in the observatory for it.

All in all it has been a great tour here in Germany and I look forward to having the opportunity to talk to you all about it when I return. We had some interesting experiences touring and observing and if you are interested I would love to show some photos and share some of what we have been up done and possibly start planning a visit to Germany in the future.

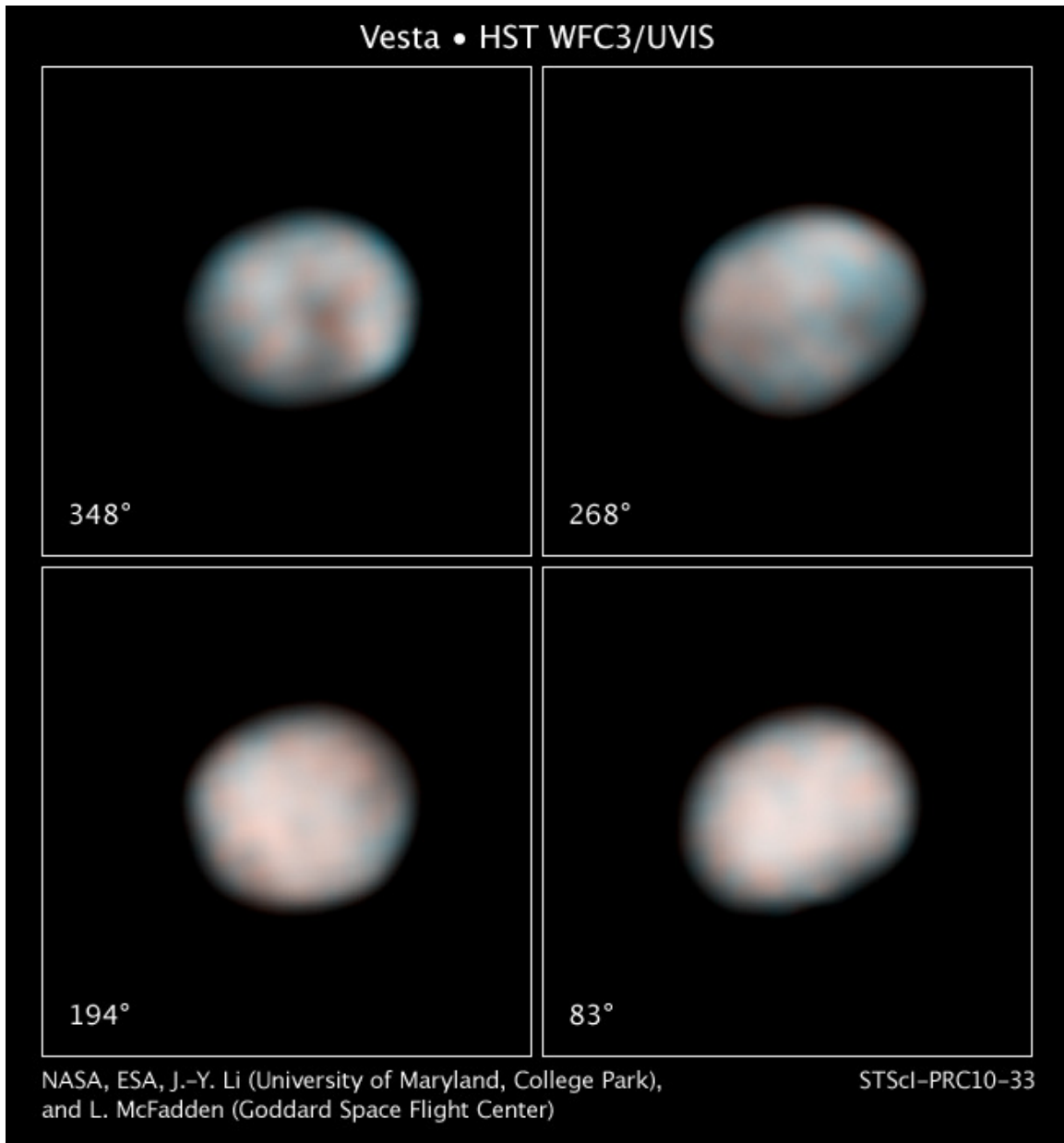
Regards,

Bob Kesler

Open House August 6, 2011

As we arrived for the August 6 open house black clouds were rolling in and intense rain quickly followed precluding any viewing for the night. Despite the rain we had a large club turn out including Tim Blanchard, Karen and Maggie Carey, Grace Wyatt, Roy Troxel, Paul Sokolowski, Beverly and Sarah Abremski, Bill and Arleen Meisinger, Tim Kamel and Gary George.

August 5 to August 7 was a nationwide celebration called Vesta Fiesta. Astronomy clubs across the country were encouraged to host events spotlighting the arrival of Dawn at Vesta after nearly 4 years of traveling. Dawn is the first spacecraft to orbit an object in the asteroid belt and will be moving on to Ceres after imaging Vesta. Because it was rained out, a recorded teleconference from the Night Sky Network archives was presented to our 3 visitors and the club members who attended the event. Tim Blanchard ran the computer for the teleconference and then did a follow up presentation displaying various photos taken of Vesta prior to Dawn's arrival compared them to a recent photo from Dawn. Year of the Solar System calendars, Vesta fact sheets and Amazing Space Bookmarks were available to visitors.



This first series of images of Vesta is from the Hubble Space Telescope. Taken in February 2010, these were taken in preparation for Dawn's arrival in July 2011. Until Dawn reached Vesta, these were the best images of the asteroid taken. From the images, some real surface features are discernible, but it is difficult what might be from changes in surface mineral composition or a shade-filled crater or other features.

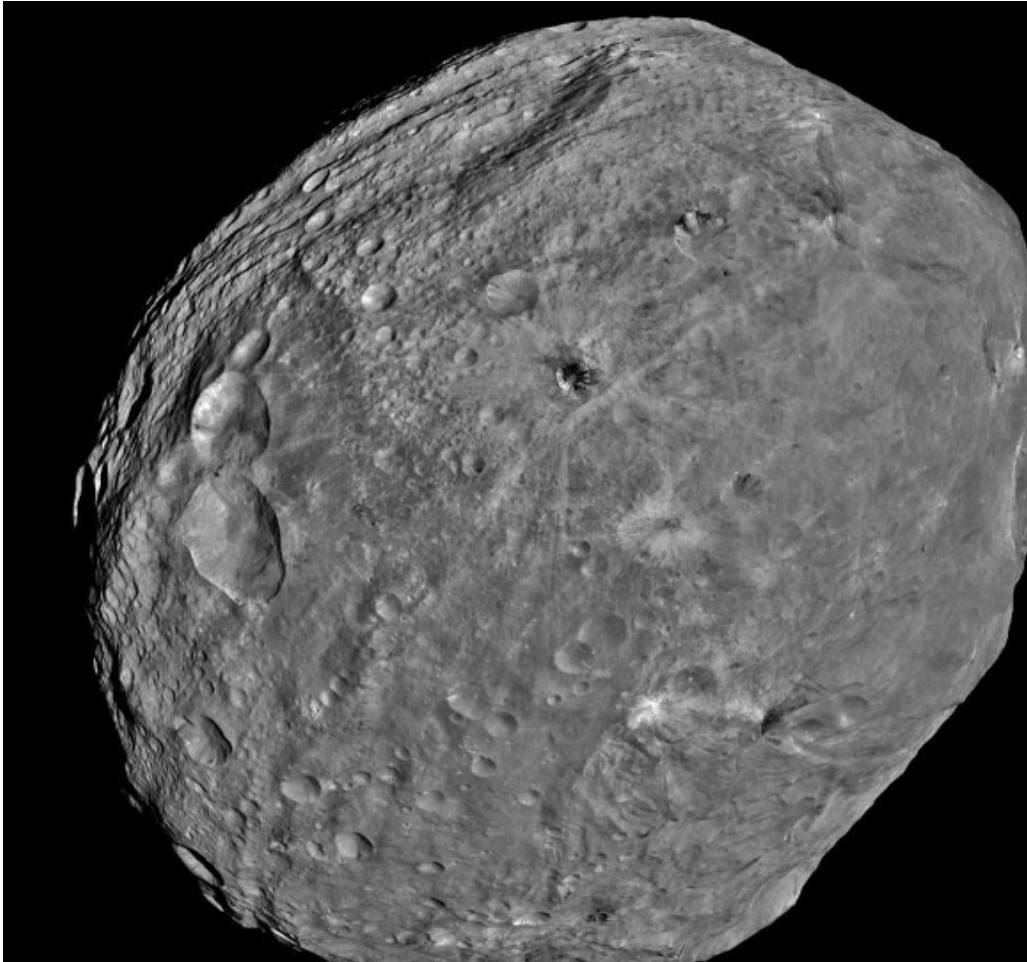


This is an image of Vesta taken by me (Tim Blanchard) in March 2010, about a month after the previous Hubble image. I was observing Vesta for my senior undergraduate project at GMU. It was obtained through the remote use of a 14" Schmidt-Cassegrain at the Hume Observatory in California. This gives a good juxtaposition of the difference between Hubble and good ground-based observing. We have a similar telescope located in our observatory. But you really can see some detail on Vesta, a potato-like shape that has some brighter and darker regions.



Third, we have an early image of Vesta from Dawn. Taken on June 14, 2011, about a month before Dawn begins entering orbit around Vesta.⁷Vesta is still blurry, but a lot more features

become clearer. Most noticeably, there is a large crater in the northern part and overall the asteroid appears lumpier than sized bodies in the outer solar system (like Mimas and Enceladus).



On July 24th, this first full-framed image of Vesta was released. Immediately, the clarity is obvious. Ridges, craters, and other surface features take on full form. This image is looking at almost exactly the same angle as the previous and you can notice the large northern crater. Also visible is a series of craters to left, nicknamed "Snowman". But from an astronomy point of view, the most exciting feature to me is the visible difference in age between the hemispheres. The southern hemisphere (towards the right) appears smoother and younger than the northern hemisphere which is aged and has more cratering. This seems to confirm the long standing idea that Vesta suffered a massive collision about one billion years ago. The entire southern hemisphere appears to be a massive crater. The peak on the far left of Vesta is the central crater peak, and the barely visible equatorial lines are the shockwaves that make up the edge of the crater.

The equatorial lines are a bit hard to see, but are obvious in watching this animation of Vesta rotating: http://en.wikipedia.org/wiki/File:Vesta_Rotation.gif

Dawn will enter full orbit of Vesta on August 11 and we look forward to learning much more about this asteroid over the next year before it takes off towards its next destination, Ceres.

- Tim Blanchard

Observation Reports
Broad Creek
Sunday, 7/17/2011

This one was a quick session at BC and a little different than usual. Forecast looked good, and Gary, Roy and I agreed to meet at BC. We did put out a note but no one else showed.

Our intent was to do some lunar observing, something that we do not normally do. However, I made a mistake about when the moon rises. It was to rise at 9:45 but I had thought it would be later, giving me some time to look at some objects in Sagittarius first. However, since it did not get really dark till about 9:30, there was not much hope of that.

I brought my 8" Criterion reflector and my LXD 75 mount. Binoviewers do not usually work on reflectors for the same reason that DSLRs don't, not enough "in" travel. I brought them anyway to try and see if they'd work.

I got set up and aligned, and started off with Saturn, which was coming to the end of its apparition this year but still high enough to give a decent view. I got it centered and put the Binoviewer in. No luck. I then tried it with my 2X Barlow and, to my surprise, got it focused. However, the combination of 20 mm eyepieces in the Binoviewer and Barlow gave the equivalent of 10 mm, or about 140 power, too much for viewing condition (or maybe too much for the matched eyepieces I was using, which came with the Binoviewer). So I switched to a 1.4X Barlow and was able to get that focused also. This was a lot more reasonable, giving about 100 power. I got a nice view of Saturn, Titan and two other moons that were visible with averted vision. I am still learning how to use the Binoviewer, which needs to have each eyepiece individually focused and also adjusted for separation of my two eyes. I was also able to see some faint orange bands on Saturn.

As it got darker, the sky to the south started coming in and Scorpius and Sagittarius were very prominent, showing how good the seeing was. However, as I continued to look at Saturn the moon rose and the sky at that point was washed out. No hope for any DSOs the rest of the night. So, we waited a bit for the moon to get high enough and then started looking at it with the Binoviewer. What an experience. At about 100 power, we were getting good close up views along the terminator that were nice and crisp.

Some of the features we looked at were Mare Crisium and craters Cleomedes, Burckhart, and Geminus below Mare Crisium and partly in shadow. Along the terminator, we saw Petavius, Stevinus and Snellius. Slightly noticeable near Petavius was the Paltzch Valley.

Lastly, we also checked out three of the craters that have rays – Tyco, Copernicus and Kepler, looking at the pattern of rays.

We packed up at about 11 PM, after a very enjoyable session looking at a target that we usually try to avoid.

Tim Kamel

Broad Creek
July 26, 2011
10:00pm to 12midnight

Bill Gelston and I set up our scopes while the dog trainers went through their exercises with the rescue dogs. The air was humid but gradually became drier as the night progressed. The seeing was below standard, but the transparency was good, so I concentrated on globular clusters, although I did observe a few galaxies and planetary nebulae.

The Virgo galaxy group is now low in the west, along with the Coma, Canes Venatici and Ursa Major galaxies. Saturn was just over the western tree line, too low for observing.

Nonetheless, I was able to view the M94 galaxy. Saw the core and the arms around it, quite clearly.

M106 – A wide, rectangular galaxy, behind a thin cloud layer. Small tight core.

M64 – Galaxy in Canes Venatici. I couldn't see the dark clouds that cause the "black eye" effect, but the galaxy appeared bright, with an even brighter small core.

M51 and its companion galaxy appeared hazy, due to thin clouds in the area.

By 11pm, the Summer sky was completely in view, with Cygnus and Lyra approaching the zenith, and Sagittarius and Scorpius displayed in the south.

I turned to planetary nebulae with NGC7027 and 7008 in Cygnus. However, it wasn't a good night for nebulae in general, so I began my hunt for globular clusters.

The M17 nebula appeared bright in my 12mm Nagler eyepiece (131x), but only when I used the UltraBlock narrowband filter. M17 (or "The Swan") is the second-brightest nebula in the sky, after M42 (Orion).

M6 and M7 are two bright open clusters in Scorpius. I could easily see them, although they were both close to the horizon and inside the notorious Bel Air light dome.

NGC6144 – A globular cluster near Antares, appearing very small.

NGC6572 – A planetary nebula in Ophiuchus.

M9 – A globular cluster in Ophiuchus, with some black spots in it.

M10 – A beautiful cluster, more visually appealing than others I've seen tonight. It has a fuzzy core and many single stars revolving around it. It looked a little like a fireworks explosion.

M11 - Very bright open cluster in Scutum, between Aquila and Sagittarius. There is a bright orange star, not part of the cluster, that stands out in front of it. Sometimes called the "Wild Duck Cluster."

M12 - Globular in Ophiuchus. (Looking at these clusters, one after another, is a little like watching a series of fireworks explosions.)

By 11pm, the Milky Way could be seen, beginning at Cassiopeia in the the northeast, up to Cygnus and down through Aquila and into Sagittarius. Pegasus was rising in the east.

M14 in Ophiuchus appeared a lot tighter and rounder than the globulars I had seen previously this evening. M14 is 33,300 light years away and appears in a region of the sky with a lot of black interstellar dust.

M62 - A small bright round globular in Ophiuchus (and the Bel Air light dome).

M107 – Another of many globulars in Ophiuchus, low in the sky, and (again) in Bel Air light dome.

NGC6572 - "Racquetball" planetary nebula in Ophiuchus.

M52 and M103 - Open clusters in Cassiopeia, and two of my favorites. However, these are best observed on chilly autumn nights, where the stars' different colors can be seen to advantage.

M75 - A small round globular in Capricornus, very distant from us, almost 60,000 light years away.

M30 – Another globular in Capricornus, low in the southern haze, but still displaying its "legs" : three streams of stars, extending outwards

M22 - Large and beautiful, with a glistening central core and many individual stars in orbit around it. It's too bad this object isn't higher in the sky.

M26 - Small open cluster in Scutum. Has some interesting designs (asterisms) made by the its stars.

By midnight, there was almost no humidity at all, but clouds began rolling over BC from the west. We decided it was time to pack up. There was, however, one last treat: A bright green bolide meteor streaked for a few seconds in the northeastern sky, between Cassiopeia and Cygnus.

- Roy Troxel

**Broad Creek
July 30/31, 2011
9:30pm to 12:30am**

I arrived at BC, just after sundown, while Paul Sokolowski was setting up his 15-inch dobson reflector. The evening got off to a good start, with seeing and transparency at about 4 out of 5, and with no clouds at all in the sky. The Milky Way was easily visible by 9:30pm.

My first plan for the night was to hunt for planetary nebulae. Here's what I found:

NGC6445 in Ophiuchus. It looks like the Ring Nebula (M57) when using the OIII filter.

NGC6369 in Ophiuchus. - Couldn't see it at first, but it popped right out of the sky, when I used the OIII filter and 12mm eyepiece.

NGC6572 - Another bright planetary nebula in Ophiuchus.

NGC6818 - PN in Sagittarius.

NGC6781 - PN in Aquila, with a ring shape, like M57.

NGC6905 - PN in Delphinus - Possible ring shape (in OIII filter)

NGC40 - PN in Cepheus; looks a little like the Eskimo nebula in Gemini. Used 12mm Nagler eyepiece (131x) with an UltraBlock narrowband filter .

Viewed M16 at 90x, using the 35mm Panoptic eyepiece and Powermate barlow lens, but couldn't see the Pillars of Creation with this combination.

Viewed M17, using same combination of eyepiece + Powermate. Also used a narrowband filter. Could see a lot of additional nebulosity to the right (west) of the "Swan" figure, as well as below it.

Viewed M8 and M20, again using the same eyepiece+barlow combo. Got an excellent view of the Trifid Nebula, with all three sections visible. Upper left (Northeast) section appeared the brightest.

I then began hunting for globular clusters, of which there are many in Sagittarius. Among the globulars I was able to observe were:

NGC6723 - Large globular in Sagittarius.

M22 - Appeared oval-shaped. If M22 were higher in the northern sky, it would outshine the Hercules Cluster, M13.

Aided by my ArgoNavis, I was able to locate a number of dim globulars in Sagittarius, some only a few degrees above the southern horizon. I used a 12mm Nagler eyepiece (131x) to view these clusters:

M54 - Appeared small, round and very tight; had some kind of halo around it.

M55 - Large GC.

M70 – Small, dim GC, but with a bright core and a halo. Arc of stars around its right (Eastern) side.

M75 - Small dot with a halo.

M69 - In size, it is somewhere between M54 and M55.

From Sagittarius, I moved to M71 in Sagitta ("The Arrow"). It is in a beautiful star field, and seen best with a wide-angle eyepiece; I used the 35mm Panoptic.

About this time, a green bolide meteor went across the sky for a few seconds, just south of Pegasus.

By 11pm, both Cepheus and Cassiopeia were available for viewing in the northeast sky. Here's what I saw there:

Trumpler 37- An open cluster in Cepheus. Used the 35mm EP. Not sure I saw the surrounding nebulosity (IC1396). This is about 3 degrees across. Parts of the surrounding sky seemed lighter than other parts, so possibly I saw some of the nebula.

NGC7235 - Another open cluster in Cepheus.

NGC188 - This open cluster in Cepheus is 7 to 9 billion years old, making it the oldest one in our galaxy.

Returned to the southern sky where I viewed IC4665, an open cluster in Ophiuchus, as well as NGC6590 and 6595, an open cluster and nebula combination in Sagittarius. There appears to be a long arm of 8 or 9 stars along the cluster's eastern side.

I closed the night's session with some very good views of the Veil Nebula in Cygnus. I used the 35mm EP with the UltraBlock filter on the Veil's three sections - NGC6992, 6995 and 6960,

Around 12:30am, I began packing up the equipment. The skies had remained clear and transparent most of the time, and there had been very little dew.

- Roy Troxel

Observation Report Sunday, 7/31/2011

Bummer! This was a complete wash-out.

I started looking at the weather on Friday the 29th, hoping for clear Sunday. The Clear Sky Chart did not extend into Sunday night but Saturday looked really good. Too bad I could not go then.

I checked again Saturday morning and the Sunday forecast had some clouds clearing by 7 PM and clear after that. Checked again Sunday morning and the clouds had gone away. There was a little blip later in the evening with 10% clouds, not too bad, so I thought I would go. By Noon Sunday, the forecast was for clear with good seeing and good transparency. I then checked Weather.com and that also had clear skies starting at 8 pm. So I put a note out and was joined by 5 other people. Besides me, there were Gary, Roy, Cathy, Bill and Tim B. Todd also had called saying that he would join us later. This was a pretty good showing, considering that it was a Sunday night.

So what happened? When we left our houses, it was clear. As we drove to BC, the clouds started rolling in. By the time we got to BC, it was 80% overcast and got worse. We set up equipment anyway, hoping for the best. We even had some holes in the clouds where we were able to see a couple of stars (Antares and Nunki, according to Bill's Sky Scout).

By 9:15, people started packing up. I held out till 9:30 and then packed it in. I got home after 10:30 and noted that it was starting to clear. By the time I unpacked everything and put it away, 11:00 PM, it was clear. Around midnight, it started raining.

Really weird night. As far as I can remember, this is the only time that this has happened to me where it was a total wash and I could see nothing.

Tim Kamel



The best times to observe at Broad Creek are between the last quarter and first quarter of the lunar cycle. The next period is :

August 23 to September 3, 2011

Try to keep some of these nights open on your schedule!

Because of the unpredictable weather conditions, we cannot set a specific date and time to observe. Sometimes the decision to go to BC is made within a few hours before sunset.

In any case, all club members will be notified by email.

For any questions, contact Roy Troxel at: rtroxel@comcast.net

Astrophotography

To see high-resolution versions of HCAS photographs, please visit our web site at:
<http://www.harfordastro.org>.

Ceres and Vesta in 2011

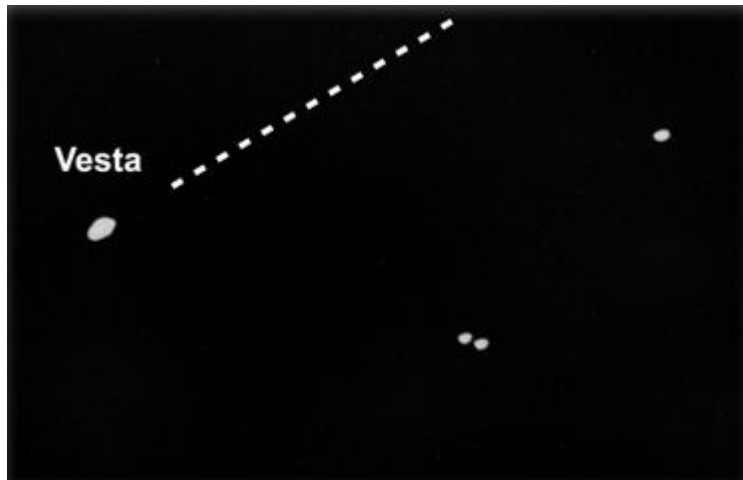
Grace has been getting many questions on how to spot and observe the asteroid Vesta as it is near opposition this month. Remember to view this area and then come back a couple days later to see what object moved in your field of view. Better yet, snap a 30 second image of the area then again two or three days later and see the movement of Vesta on your image.

Below are images of Vesta I took about 30 years ago; it's very easy to do. Try using a telephoto lens. There is a path chart for Vesta and Ceres at the end of this newsletter.

If you have any questions, call or email me.
Larry Hubble
lkhubble@verizon.net

Three photos of Vesta, c. 1980

by Larry Hubble





M17 - The Swan Nebula
by Larry Hubble

**Observation Report:
Shenandoah National Park
July, 2011**

A couple of weeks ago, I took my sons Ricky and Eric up to the Skyline Drive, in Virginia. It was a father and son weekend without Mom. We had never done this before. We did some hiking: Summit of Stony Man Mountain, Dark Hollow Falls, and we did one that almost killed me. It was one mile straight down the side of a mountain and back up. It was probably about a 2000 ft. vertical drop. I will never see that falls again!

Anyway, Ricky had never seen the Milky Way before so he was in for a treat. I decided to just take my 80mm refractor along with the CGEM mount to "Big Meadows" at about 4000 ft. We decided to set up in the meadow across from the camp grounds. At this elevation there is absolutely no moisture or humidity, and at 69 degrees, the "Milky Way" streamed across the sky. Ricky, "I have never seen the stars so bright". Ricky, "You mean that is all stars?" referring to the Milky Way. I answered "YEP!"

We looked at The Dumbbell. At about 15 power it was a perfectly round ball. Then the Swan Nebula, it looked like a black and white photo- vivid- I could not believe my eyes. We then took a look at the Trifid Nebula. You could see both the emission and the reflection parts of the nebula even in just the 80 mm. I wanted to shoot this, but Ricky really liked the Swan so I set up the Canon 50D on the Swan. It was getting late and Eric was getting tired. I did a rough polar alignment and was getting about one minute without streaking so I started imaging at about 50 seconds. I really didn't have the time to get really serious. I was just trying to have some fun with my boys. Well, fun we did have, in fact you may even call it exciting!

Just when I had gotten about twenty shots off, my son Eric says, "DAD! There is a BLACK BEAR!".

What! I looked up and we had a full-sized black bear walking right by us, about 30 feet away. Luckily he was not interested in us at all; he was on the way to the Big Meadows campground to look for food. As many times that I had been to Big Meadows when I was younger, I had forgotten about how active the bear were in that area around the meadow and campground.

I quickly put the kids in the car and started tearing down all my stuff, keeping an eye out for our friends. I have attached the interrupted image of M17, but not the bear. Using a flash at this time was not a good idea!

Larry Hubble
lkhubble@verizon.net

Miscellaneous

**See the last page of this newsletter for a sky chart for observing asteroids
Ceres and Vesta.**

This newsletter is the official publication of
Harford County Astronomical Society
P.O. Box 906,
Bel Air, MD 21014.

Items for the newsletter are due to the editor by the 13th of the month of publication.

Please send all contributions (electronic format is strongly encouraged) to:

Roy Troxel at:
rtroxel@comcast.net.

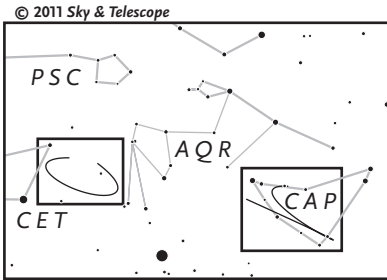
Address regular mail to:
HCAS Newsletter
c/o Roy Troxel
301 Tiree Court #403,
Abingdon, MD 21009

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And be sure to visit our Web Site:

<http://www.harfordastro.org>
Webmaster: Larry Hubble

Ceres and Vesta in 2011



The tick marks are for 0 hours Universal Time on the dates indicated. This moment falls on the evening of the previous date in the time zones of the Americas.

