



A.S.E.M. Newsletter

November 2013



PHOTO BY BILL RUNGE
M20 AKA TRIFID NEBULA IN SAGITTARIUS
EMISSION AND REFLECTION NEBULA

NOVEM

Roman: Novem, the ninth month (from and including March)

NOVEMBER CALL OUT AND COMET ALERT!

The call out is for Amy White for organizing, soliciting the membership and ordering T-shirts, Polo shirts and ball caps with club designations. Now we can be in proper uniform while under the stars and at meetings. And the shade feels so much better under the visor of my new ASEM ball cap.

Well, I've been putting out comet bulletins off and on all year and things are finally culminating, such as they can with comet predictions. Our late autumnal morning skies should present a nice mix of visual, binocular and telescopic comets starting this month. Please see Jim Twellman's wonderful write-up in this newsletter.

NOVEMBER CALENDARS

Social

November 7 - 7pm Beginner Meeting @ Weldon Springs Interpretive Center, 7295 HWY 94 South, St. Charles, MO 63304

November 9 – 6pm Monthly Pot Luck & 7pm General Meeting, at Weldon Springs.

November 19 – 7pm DigitalSIG. Astrophoto group meeting Weldon Spring, 7295 Highway 94 South, St. Charles, MO 63304.

November 27 - 7PM DIY-ATMSIG For the telescope maker to display his wares or those who wish to see what folks have been doing in their workshops. Weldon Spring, 7295 Highway 94 South, St. Charles, MO 63304

November 8, 15, 22, 29 – 5:30ish pm start times Broemmelsiek Park Public Viewing, weather permitting.

Astronomical

November 1 – Venus at greatest elongation. Venus presents a brilliant beacon in the western sky immediately after sunset. Those headed home to St. Charles county may require visors/sunglasses while headed home :->).

November 3 – New Moon on a Sunday. Look for a young moon/Venus combo in the western sky the first week of the month..

November 18 – Mercury at greatest elongation west from sun, morning sky.

Jupiter – Rising before midnight now Jupiter is high and bright in morning sky before sunrise.

NOVEMBER COMET CLUSTER!

It is nice to have several comets brighter than mag 9 to choose from! My only regret is that they are all in the morning sky. Time to set the coffee maker early and get out for some morning observing!

As I've noted before, my location West of the St Louis light dome is not an advantage when viewing faint morning comets in the East. Of course, it is also hard to set the alarm and get up so early, and to arrive home and then have to unload the scope before going to work.

Comets are often "seen" photographically first, and visually for those with really dark skies. Here in suburbia, I like to have them brighter than mag 10, and some confirmation of visual observations by others. Those are often seen in the CloudyNights.com "Solar System" forum, as well as other online forums. Those visual reports were detailing good visual observations around mid-October already. Late October features the Moon in the AM sky.

The moon will very soon be vacating the morning skies, and here are my "plans" for a near-term (first half of November) morning comet effort:

1) C/2013 R1 (Lovejoy) is first. It will rise the earliest and be a good warm-up. It should be a mag 7 fuzzball, and attainable with binos in fairly dark skies. Expect a wide, 12' coma. Location on Nov 1 is half-way between Procyon and the Beehive (M44). Perihelion is Dec 22 but it will probably be brightest in late Nov and early Dec in the Northern evening sky when it is more proximate to Earth. It might reach naked-eye visibility then.

2) C/2012 S1 (ISON) is next. It is located quite a bit below Leo's hindquarters (Zosma and Chertan/Chort), way down by Sigma Leonis. It should show a fuzzball plus a dim tail in a fairly dark sky (might need to be in Danville or Whiteside to see tail though). Probably a coma about 6' in size and only around mag 8 now, but will brighten a lot over the month by perihelion on Nov 28. Quite possibly also a bino object. I am hopeful that ISON brightens enough to be visible in binos with the moon present in late November, and will be naked-eye visible during at least SOME of its' time within 2 weeks either side of perihelion. If it survives its' very close pass with our Sun (within one solar diameter), I think it should have a big tail, when seen from a dark site.

3) 2P/Encke (the 2nd periodic comet discovered) should be a pretty nice comet too. Extend a line Eastward from Zosma thru Denebola 1x into Virgo, just below and to the right of Vindemiatrix. Encke is almost as bright as it will ever get at mag 7 and a 5' coma. It will be at perihelion on Nov 21. Pretty low, but probably a bino object. I expect a fuzzball with perhaps a small fan-tail from a dark site. Need to get this one soon as it is getting low in the East fast.

4) C/2012 X1 (Linear) has 'exploded' (ala Comet 17/P Holmes) from around mag 15 and is now around mag 8. It will be about half-way between Arcturus and Beta Coma Bernices, in a string of stars in the area. It will probably lack a bright center (pseudo-nucleus), and just be a dim, tenuous, roundish-blob with a 3'-4' coma. This is pretty darned low in the North-Eastern sky, but is likely to stay this bright or slightly brighter as it becomes more of an evening object for late November. Whiteside skies really favor this one, but Whiteside is probably the best location for all of the above. It might be tough for either binos or from suburbia.

In late November I hope to view comet 154P/Brewington. It is only mag 10-11 and should be in Southern Pegasus then (now in Aquarius). It will take dark skies and a telescope for sure. Perihelion is Dec 12, and it is now and will continue to be an evening object.

I'm hoping to get several of these from 'home' (either my back yard or from a park a mile away) with binos. If I can't get them from home then I will likely travel to Whiteside whenever the morning sky is clear and my work schedule can allow for it. Sometimes it helps to see them in a telescope first, other times binos are better finders for starters. Comets really need to be sketched (or photographed), with a description of the comet as well as the observing tools. Sketching the FOV usually only takes me about one minute for binos, and probably 2 minutes in a telescope at higher power. Using high magnification allows you to see and sketch movement within an hour or two. Otherwise, movement can be shown by two sketches on different days.

Speaking of tools, these are references that may prove useful to other comet hunters:

<http://cometchasing.skyhound.com/>

<http://www.aerith.net/comet/future-n.html>

As ISON rounds the Sun, I will be observing on-line via SOHO's LASCO C3 camera. Pay attention to the online bulletin-boards and forums as it gets closer to perihelion, as it may flare unexpectedly. A whole lot of hype surrounds ISON, but projections that I believe show that it will only be brighter than mag 4 during the 10 days centering on perihelion when it will be too close to the Sun to observe well. It won't last long, so hopefully our weather will cooperate and allow us some good views before it either burns up or just goes away. There is a good chance that ISON will not survive the close pass to the Sun, so observe it before perihelion to make sure.

Feel free to contact me with questions or your observations of these comets!

Jim Twellman

DIY-ATM GROUP SUBMITTED BY JIM CURRY

Well, the eyepiece shootout never developed but the regular group did have a get-together at Jim Curry's house.

After a tour of the workshop, where we looked at his efforts on his lathe to make turnings to adapt a AstroPhysics focuser to the a 4.5" tube, we retreated to the man cave for some telescope work.

Carl Turek brought a collimation tool and we put it to practice with 4 of Jim's scopes. The first, a Vixen 140 NA, dead nuts on collimation. Thank goodness seeing as there is no adjustment short of sending back to Japan.

Next up was a homebuilt/machined 4" refractor. It was barely out of collimation. You're looking thru the device down the tube with the lens cap on. If the OTA is out of collimation two circles demonstraing some degree of misalignment. These two shadows were about 85% aligned. That would not show up under a star test. Next was a 75mm Unitron refractor. These two donuts showed a figure 8 shape from misalignment. I haven't noticed an issue when star testing but will pay close attention next time I'm out under the stars.

Last scope we checked was a 10" Cave reflector. We weren't successful with that testing because of the lighting in the room.

Carl Turek brought in an artificial star made from an eyepiece, section of pvc pipe and a light source with a pinhole. You would use this artificial star for doing a "star" test inside your home. Carl uses it where he can set up at least 30' away from the source. He also brought his design for a dew heater segment that allows add on

sections for increased wattage and increased length. No more expensive dew strips from the various suppliers when you can make your own for a couple of dollars.

Grant Martin gave us an update on his finished his Chevy van updates. With an interior lighting system to make a Los Vegas brothel green with envy, he has an array of LED lighting to suit any mood including all red for astro work. To power this and his astronomy gear he's removed the passenger seat and installed a bank of deep cycle batteries which should carry him for many sessions. To keep the batteries charged Grant has installed a solar panel on the roof which tilts up to face the sun when the truck is parked. In addition, the van is equipped with a full length bunk with scope storage underneath and a porta kitchen for roll out chef service. The van had its first shake down cruise in early October for a several night journey to star parties far and wide under darker than STL skies.

OCTOBER DIGITAL SIG MEETING NOTES SUBMITTED BY DAN CROWSON

The theme of October's Digital SIG meeting was using CCD Commander (<http://ccdcommander.com/>) for automated imaging. Gregg Ruppel gave a presentation on how he uses this \$99 accessory to automate his imaging sessions.

The next Digital SIG meeting will be Tuesday, November 19th, 2013 at 7 PM at the Weldon Spring Interpretive Center. The main topic will be archiving and displaying your images. We'll discuss the best ways to save your data and various websites that can be used for display. Please check out the ASEM Digital SIG Yahoo Group (link below) for updates.

Building on what we've learned over the last few months, November will give us another opportunity to put things into practice. The nights are getting longer. An imaging party will take place at the Danville Department of Conservation site on Friday, November 1st and/or Saturday, November 2nd. I'll probably head up other days around the new moon if the skies are clear. This is a good time to see some dark skies, get help and spend time with others doing the same. We'd really like to see some new people come out. Visit the Yahoo Group for more up to date information including weather backup plans (link below).

The latest news can always be found in the [ASEM Digital SIG Yahoo Group](#).

LATE BREAKING ASTRONOMICAL NEWS BY JIM TWELLMAN 11-3-13

I had decided to go to bed last night and rise early to drive to Danville. Looking at the various weather websites, I determined it best to get there after the dew finished falling. As I neared the Conservation Area, I noted some foggy patches, and began to experience some fear. I arrived around 3:30AM to find Dan and Bill there still. The sky looked great. All stars of the Little Dipper were held with direct vision. I could see a star just barely above the Southern horizon naked-eye.

First up was Comet Lovejoy. High in the sky near the Beehive, it was found easily in my 10x50's and 25x100's. I chose to draw it in my scope ("hold it right there") and again noted its' greenish appearance. The tail was very subtle, noticed only by moving the scope North and South past it.

Second was Comet ISON. My sky maps for this comet ended October 31. After a few glances and seeing nothing, I decided to wait for it to get higher.

I swung the scope towards the Flame nebula. NOW we're talking! Nicely filled out. Not the best I've ever seen it, but close. Took some time to do a quick look at B33 and IC434 again. Nice to see the 'Nag.

Next was Comet Encke. It was not observed despite a good try. At first I could not figure out why it might have been tough. After 15 minutes, I moved on.

Next was X1-Linear. This was a scratch! More on that later.

Okay, I then noticed a problem. It was now after 5AM and I thought dawn was beginning, but it had not. The Zodiacal Light was VERY bright, outshining the Milky Way easily. It rose from the StL light pollution up thru Regulus and beyond. That brightens the sky background a bit.

Dew suddenly became a problem. Eyepieces went into pockets, and viewfinders were wiped. Decided to pull out a nice warm 9MM and go for ISON once more. With a short effort, I found iISON at 203x, just about 1 degree below Sigma Leonis. I managed to draw it just before twilight broke. The added magnification helped to counter the Zodiacal Light. ISON is not nearly as bright as Lovejoy (by 1-2 mags), and it quite a bit (3x ?) smaller too.

Jim T.

Hunters drove in, and dawn approached, and we packed it up.

CLUB CONTACTS

Membership

Membership issues can be addressed through our executive director Stacey Thater (pronounced "totter") at these addresses:

Email: stthater@stchas.edu

Snail mail:

Alliance for Astronomy (ASEM)

PO Box 141

New Melle MO 63365

Committees

Comments, questions, suggestions and money (just kidding) may be sent to the following addresses:

program@asemonline.org

Use this address to communicate with the program committee. If you have something to present at a meeting or wish to contribute and let someone else perform, send it here. Questions and/or suggestions about programming etc. Remember, they are here to help you. This is a user friendly society and we like to see members get up and share.

equipment@asemonline.org

This address is used to find out about ASEM loaner equipment. If you find something amiss at BPark by all means report it here. If you are curious about borrowing an item, put in a request via this address.

hospitality@asemonline.org

Got a main dish you'd like to bring to the potluck? We sure could use it AND you will be reimbursed for your expenses.

newsletter@asemonline.org

Primary contact for the newsletter. Got an article or notice you'd like to see published? Send it here and be famous!

Outreach@asemonline.org

Special requests for groups at Broemmelsiek Park including:

- Notice of large party (more than groups of twenty)
- Request for specific requirements needed (school assignment, merit badge requirements, etc.)
- Requests for Star Party / Telescope event at another location

steve.boerner@asemonline.org

Web page and all other communications not covered above

ENTERTAINMENT

Late breaking news and member adventures (or shenanigans as the case may be) can usually be found at STLAstronomy in yahoo groups. If you aren't a member, you should join. Go to

<http://tech.groups.yahoo.com/group/STLAstronomy/>

and click "Join"

Think Clear, dark skies



The holidays are coming.
*Do you want to buy
a telescope?*

The Astronomical Society of Eastern Missouri can help! You are invited to attend a free presentation titled

How to Choose a Telescope

When? 7pm, Thursday, November 7th
and again at 7pm, Thursday, December 5th

Where? Weldon Springs Interpretive Center
7295 Highway 94 South, St. Charles, MO 63304

Visit www.asemonline.org or email
admin@asemonline.org for more information.

