

Hi Everyone,

Here is a brief outline of what we had planned to cover in the cancelled Dec 6 meeting. Please make sure to read the last part as that gives the final few events at the Fox Observatory -the Geminid Meteors and a final dark-moon viewing night. By the way if you joins us for those, be aware that there is a significant amount of snow on the ground. The lane to the observatory is not passable. I hope the main parking lot will be plowed out by then, but be prepared for snow up to the gunwales! You do have your snow tires on I hope!

One other item: **please check your email late Dec 12 or before noon on Dec 13 and Dec 16**, as that is the time I will be sending out any cancellations due to inclement weather. I also usually post these notices on our website and Facebook page.

Our agenda included the following items and I will go through them giving you the main points:

- 1. Welcome -John**
- 2. Phil Visser: Lost at Sea followed by Q&A
Break**
- 3. Preview of 2018 Astro Events**
- 4.. Final Announcements/Adjournment
-next meeting March 7, 2018 at Venue TBA**

1. Welcome

This is the last meeting of 2017, and normally we would have had a recap of 2017 and a preview of 2018. This time we had a speaker for the first half of the meeting -Phil Visser, a navigation professor at the Georgian College Marine Training Centre.

Before Phil's presentation on astro-navigation, I was going to mention that I have copied all the image and video files of the Aug 21 solar eclipse onto USB sticks and there are a dozen available. You can borrow them (or purchase outright for \$7.50) so you can transfer the files onto your own system. There are over 9 GB of images and videos and included are the Eclipse Special pdfs, and a QT copy of our Sep 2 Eclipse Recap meeting among other stuff. Any BAS members can borrow these, they are not just for those who went on the trip.

I was also going to mention that we will no longer be meeting at the Art Gallery in 2018. Exec has talked about a few possible venues for 2018, and we continue to explore those. We will let you know as soon as we can. Hopefully the new location will be free, (or low-cost) and located centrally in the Bruce-Grey area.

2. Phil Visser was going to present a video on astro-navigation called "Lost at Sea" to be followed by Q&A. Phil came with me on the eclipse trip and we had a great chance to get acquainted. Turns out we have a lot in common. We will try to book Phil for a talk at a meeting sometime in 2018.

There is a YouTube copy of the program (originally from NOVA) available -it is not the high resolution of the CD but still interesting. Click here: <https://www.youtube.com/watch?v=CswL-f19D-Y>

3. Astronomy Preview for 2018

Detailed previews of astronomy events for 2018 are available on sites like:

<http://www.astropixels.com/ephemeris/astrocal/astrocal2018est.html>

or from

<http://www.seasky.org/astronomy/astronomy-calendar-2018.html>

Our website will have an edited list of the astropixels listing soon. It is the one I use augmented by info from the RASC Observer's Handbook for 2018. Note that this listing will include no BAS meeting or viewing dates, but just the astronomy events of 2018.

Interesting Astronomical Events for 2018:

(Spoiler alert: NO good eclipses of either sort in 2018 -but wait until 2019!

Jan 31 (Wed): Total Lunar Eclipse -Moon sets (7:44 am) just before start of totality locally. Best in central and western N.America. We will try to observe from the Friends of Sauble Beach Lookout at 6th St and Lakeshore Blvd starting at 6 am. The first visible contact of umbra is around 6:48 am but the Moon sets an hour later with only 3/4 of Moon covered. The site given below has an animation specifically for Owen Sound (but you can set it for your own location): <https://www.timeanddate.com/eclipse/in/canada/owen-sound>

Mar 3 (Sat): Venus 1° from Mercury -evening sky in W. just after sunset, separation just over 1° from Mar 2 to 4

Mar 18 (Sun): Crescent Moon, Venus, Mercury 8° of separation -Moon and two planets along 8° line in western sky after sunset -Crescent Moon and Venus always pretty!

Apr 2 (Mon): Mars 1.3° from Saturn -in Sagittarius at 3 am, Mars less than half a degree from M22

Apr 24 (Tue): Venus 3.5° from Pleiades -in western evening sky 9 pm

May 13 (Sun): Mercury 2.4° from Moon -Uranus even closer (2°). Mercury is bright at magnitude -0.1 -an early morning event in the east.

Jun 27 (Wed): Saturn at opposition (mag. 0.0) -in Sagittarius 3° from M22, FM 1.3° away Jun 28.

Jul 27 (Fri): Mars opposition -in Capricornus, mag -2.8, bright and large (24" across) but not high -does not get more than 20° above horizon. Summer 2018 is a good time for Mars watching -it is closer than usual and Saturn is nearby too.

Aug 12 (Sun): Perseid Meteors -90/h Moon only 4%, peak at 9 pm EDT. An all-night Sunday night meteor watch (Sat night too)! This will be a very good shower to observe. Note that it lasts for a week or more either side of Aug 12.

Sep 1 to 14: Comet 21/P Giacobini-Zinner may be bright in Auriga during this moon-free part of Sep. More info in the Jan SGN.

Sep 7 (Fri): Neptune at Opposition (mag. 7.8), Mars and Uranus on either side 45° away. Diameter 2.4 arc-seconds

Oct 23 (Tue): Uranus at Opposition (mag. 5.7) Diameter 3.7 arc-seconds

Nov 15 (Thu): Mars 1.0°N of Moon: Occultation elsewhere but a miss by >1° locally. Moon FQ, Mars at -0.3 magnitude.

Dec 1 to 14: Comet 46/P Wirtanen may be bright in Taurus during this moon-free part of Dec. Look also in first two weeks of Jan and Feb. More info in the Jan SGN.

Dec 8 (Sat): Saturn 4°N of crescent Moon Moon is 1.5 days old, setting in west after sunset.

Dec 14 (Fri): Geminid Meteors (120/h) 7 am peak Fri am. Moon not quite FQ and sets before Gemini rises. Friday night viewing at Fox Observatory

4. Final Announcements: All viewing events are, of course, **WEATHER-PERMITTING:**

- **Geminids viewing at Fox Dec 13 @dark:** We have arranged with the OEC staff to access the Fox Observatory during this weekday night. Please park in the regular lot near the Learning Centre and proceed (walk) to the observatory for viewing.

-**More viewing at Fox Dec 16 (new Moon)** Our scheduled viewing night during dark of the Moon.

-**Jan 31 Lunar Eclipse viewing Sauble Beach** at the 6th St. Washroom (6 am)

And FINALLY, from BAS exec, we wish you and yours a Happy Holiday!