November 2024

Skyletter

RASC Kingston Centre

Sat/Sun, October 21/22

Rose–Marie: Kevin, Have you checked the AllSky camera yet? There were postings on the S. Frontenac facebook list and another list about a big meteor in the north around 7:00 p.m.

I was stuck in a tedious Zoom meeting for 2 hours; I was going to look for the comet. By the time we were done there was haze to the south and I was too tired. At least there were moths; it was so warm I turned the moth lights on and got about 5 species.

Kevin: Last night's AllSky1/AuroraCam1 video is just being processed and should be uploaded around 09:00 EDT. You can see it at starlightcascade.ca/allsky1/ It started up at 18:45 EDT. I checked image by image. There is something interesting at 19:01:23 lasting 3 frames of about 1–2 sec exposures in the NW...moving left to right. I'll see if I can transfer and post those still a little later. And then the condensation starts up again, after being clear last night. Arrgg.

AllSky2 is designed for fireballs and may not pick up what most people may call a bright meteor. It is available now at:

starlightcascade.ca/allsky2/tonight/

Not sure why, but there are abnormal bright images at: 22:36:40 UTC and 22:39:44 UTC. Sunset was just before this so perhaps it is just the bright sunset sky.

Then nothing for hours. Next detection is 01:04 UTC and it looks like an airplane.

The best meteor of the night looks like 05:36:52 UTC.

Sat/Sun, October 26/27

Rose–Marie: We had such nice clear skies so I took the camera down to the dock for one last hurrah on Comet Tushi. It has indeed faded considerably. But I did find it with the camera and got a few shots. You can just make it out in the upper right section of this photo.

Kevin: Mars is now high enough to be out of the goop and is starting to show some nice detail.

This is the best 5% of 15k frames exposed at 1ms each using an ROI of 1200×1200 and a FireCapture cutout of 800×800.

The northern polar cap is seen with the planet showing 9 arc seconds of diameter. Some darker areas north of the equator and lighter areas south. Using *Sky & Telescope*'s maps previewer, I could not actually match any features.

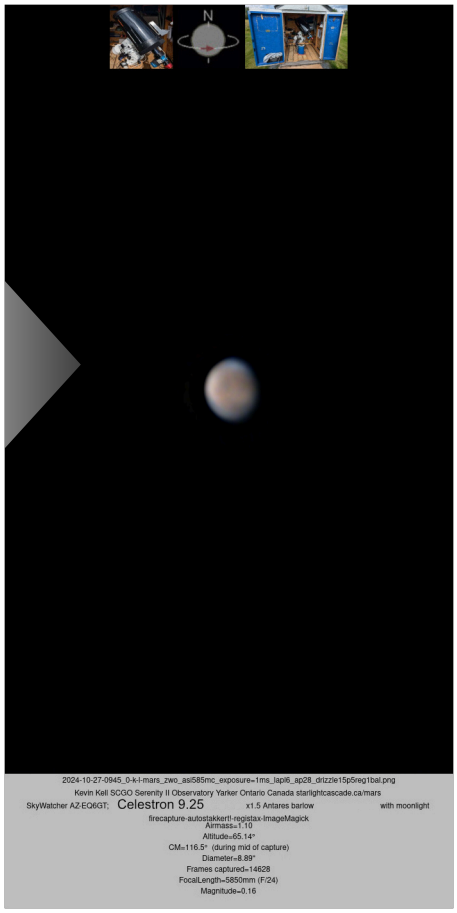
Mars altitude was 65° high.

October 28th: Comet ATLAS (C/2024 S1) did not survive its perihelion passage.

Mon/Tue, October 28/29

Kevin: Went outside Monday morning around 05:00 to do another imaging run of Jupiter and Mars... Only this thing called earth–traversing–in–its–orbit meant that Jupiter was no longer <180° azimuth (*i.e.* south)...it was more than 180°. The previous weekend I had moved cables around, wrapped them up in velcro, *etc*...cable management at its basic.

Only... Since I have been going to the planets in the east for months it never occurred to be that the mount may slew west instead—and all of those cables!



Well, you can see where this is going. The cables got caught up in the mount when it moved to the east instead, and before I could abort...things did not go well. The mount jammed up and "slipped."

So I parked the mount at "home" or what I hoped was "home," cycled the power, and started all over again. 20 minutes later, even with the finderscope and camera running, I could not find Jupiter. Wow! This is messed up!

So tonight [*Oct.30*] will be: Telrad repair (dew heater) and re-mounting, shim installation on the finderscope and camera, and a new 2–star align ('cause 3–star aligns have never worked out well) on the Sky–Watcher 6 mount.

Rose–Marie: You're stealing my act! This is exactly what would happen to me if I had one of those electronic telescope contraptions. But...since I don't have one...the gremlins target someone else. Sorry 'bout that!

Wed/Thu, October 30/31

Kevin: After a very long time, and a bad incident with a cable jamming the scope, we are operational again!

1. A newly repaired heater in the Telrad finder was installed.
2. The mount was roughly reset to home polar north, started up and a 2–star align was done with Sirius and Mirfak.
3. The telrad was aligned with the primary OTA and camera, the finder was shimmed (and is better but not centered perfectly yet.)
4. Jupiter! Found it in the finder and did a little grid search to find Jupiter. Found it and did the first imaging run in ages.

Overall the image is much softer than normal. This may be due to the high cloud that was out this morning. Io is to the lower right and looks out of focus a bit as well. I had zoomed in a lot to Io to do the initial focusing…guess it was not very good.

The Great Red Spot is just appearing on the left limb. Overall this was the best 5% of 15k frames, using a 1.5× Barlow, AutoStakkert! and RegiStax.

Cable management needs more work, focusing needs more work, and the testing of some software to do a little more processing (contrast enhancement, colour saturation, and sharpening) needs to be done as well.

John: I think there was some very high level smoke last night that would make focus impossible to get right.

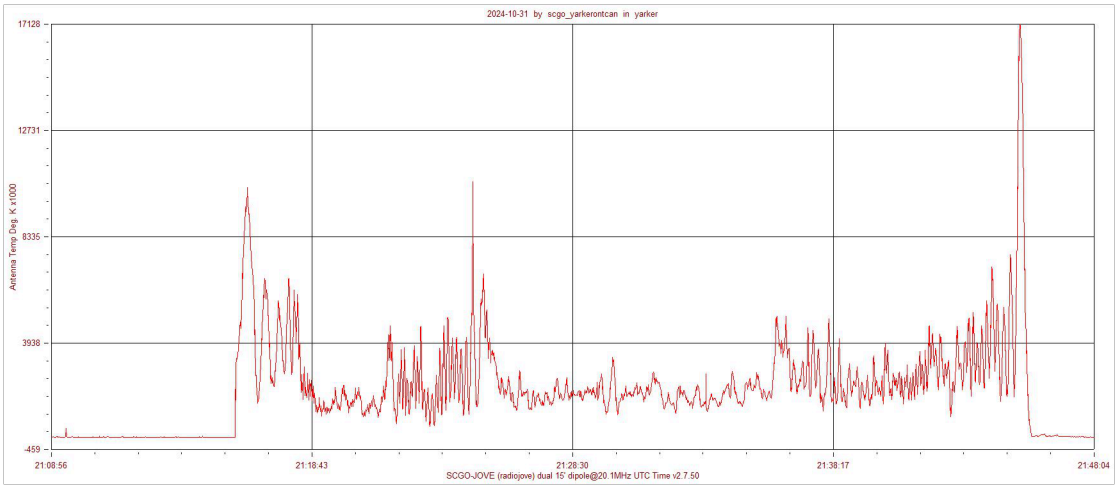
Rose–Marie: BigWetNose had me out at 5:00 a.m., it was clear but a wee bit hazy.

Mark D: Your Jupiter looks great, but crooked.

Kevin: I try to match the framing by rotating the camera to match what would be naked eye orientation. Also add a marker annotated onto the image itself.

Thursday, October 31
Solar Flare

Kevin: This is the capture by the SCGO RadioJove radio telescope yesterday, an X2 class flare (from AR3878). I'm not sure why we picked it up at all as at 21:00 UTC (1700 EDT) the Sun was still up, but it was out of the beam.



Celestron Dew Ring for SCTs

Mark D (Feb 15): Anybody having or thinking of purchasing the ring may want to consider the following comments. I have had one of these on my 9.25 for a couple of years now. I noticed when new that the power wire and the thermistor wire insulation were both somewhat pulled away at the base where they enter the heating element. They are also placed so that they have a very abrupt 90 degree turn which creates a noticeable stress point. Hence my power wire last night finally gave away. Waiting to here back from Celestron regarding a replacement. Not sure I can fix something like this but will try if it ends up not being replaced. Poor design. So if you have one you may want to check yours.

Kevin (Oct 28): Greetings Mark D! This was almost a year ago and since we did not have any Celestron equipment with this class of accessory. I did not pay close attention. *Now* that we do have a Celestron C9.25 and are currently using a velcro wrap around the outside heater, I was looking at getting the inside mounted one for over $100. But I recalled your posts...and now am wondering...how did this resolve? I see the last post on the subject back on Feb 19 but no mentioned of results.

The velcro wrap is not ideal...it moves, it prevents the cap from going on as well as making it difficult to put on a dew shield (which has to come off as the roll observatory does not have enough clearance if the shield stayed on).

MarK: I have had very good luck with my dew ring. It has always kept my corrector dew free and even has removed dew from a surface that was dew covered when I forgot to plug it in. Just be sure to strain relief the connection. If Mark D still has his broken one, I might be able to fix it.

Susan: I find the dew ring very effective. Only once have I seen any sign of dew starting and I have never put a few shield on with it.

I did find that the hard cap was pressing on the wires when I tried to put it on so I stopped using it in short order and leave it all connected all the time.

Mark D had a lovely shower cap that I have seen him use and I am shopping for one of those. For now I have just been using a drape which covers the whole scope and mount. I like to have that anyway since every once in a while, a critter will perch in the rafters and poop.

Kevin: OK...a good investment, ditch the hard cap, find a shower cap someplace instead...

I've looked for these things you call shower caps...no luck...where is the shower cap store?

Susan: Wal–Mart was suggested but I have not looked there yet.

Rose–Marie: I got a package of *el cheapo* ones at the dollar store. At the height of moth season I had all kinds of insects landing on my head, on hot humid busy nights I'd pull on one of those caps to prevent having bugs crawling through my hair. They're a step or two above the quality of the complimentary ones you get in hotel rooms.

Are there any bed and bath shops left in Kingston? Maybe someplace like Home Sense or Giant Tiger?

Mark D: Kevin, I was able to repair the older dew ring with liquid electrical tape and it has been working well. Celestron did send me a brand new dew ring but I have kept the old one on as it is still working.

If you get a new dew ring you will need some kind of controller. Susan has the Celestron one; she says it works well but it is expensive. I bought a controller on Amazon for $15, not as good but it does work. You don't want to use just the dew ring without any controller; it will make the stars go funky with too much heat.

Malcolm: I use a Pegasus Power Box. I like it a lot, but it's not the least expensive option. It has four 12V power ports, a USB 3 hub, and two dew heater ports.

The software monitors the dewpoint and controls the power level to the dew heater as needed. You don't have to worry about overheating your corrector plate.

One big problem is if you set the dew heater level manually, you can cause your corrector plate to overheat and your images will look wonky, like you have pinched optics.

I only run one power cable and the USB cable up to the PPB. It's great for cable management. From there, I power the mount, the camera, the flat panel, plus the dew heaters all from the one device. It's small and I mounted it on the dovetail.

Susan: The Celestron power unit for the heater ring will power a second device. Yes the Pegasus equipment is very nice indeed and so much variety. I chose the Celestron because it was a middle of the road option that would self regulate.

Aside from a dew heater I made a million years ago for my 15×70 binocs I have very little experience with this stuff. The on/off switch on that one was a corded remote salvaged from our original BetaMax.

I still have a printed out instruction sheet for the style Mark K makes but have not tried it.★

Friday, November 1

Kevin (09:02): This is the 54th imaging session of 2024 in the Serenity Observatory at SCGO. This morning's three imaging runs of Jupiter occurred in nice warm 15C weather but with a wicked wind of 7 km/h gusting to 20km/h. Seeing was poor, transparency was poor.

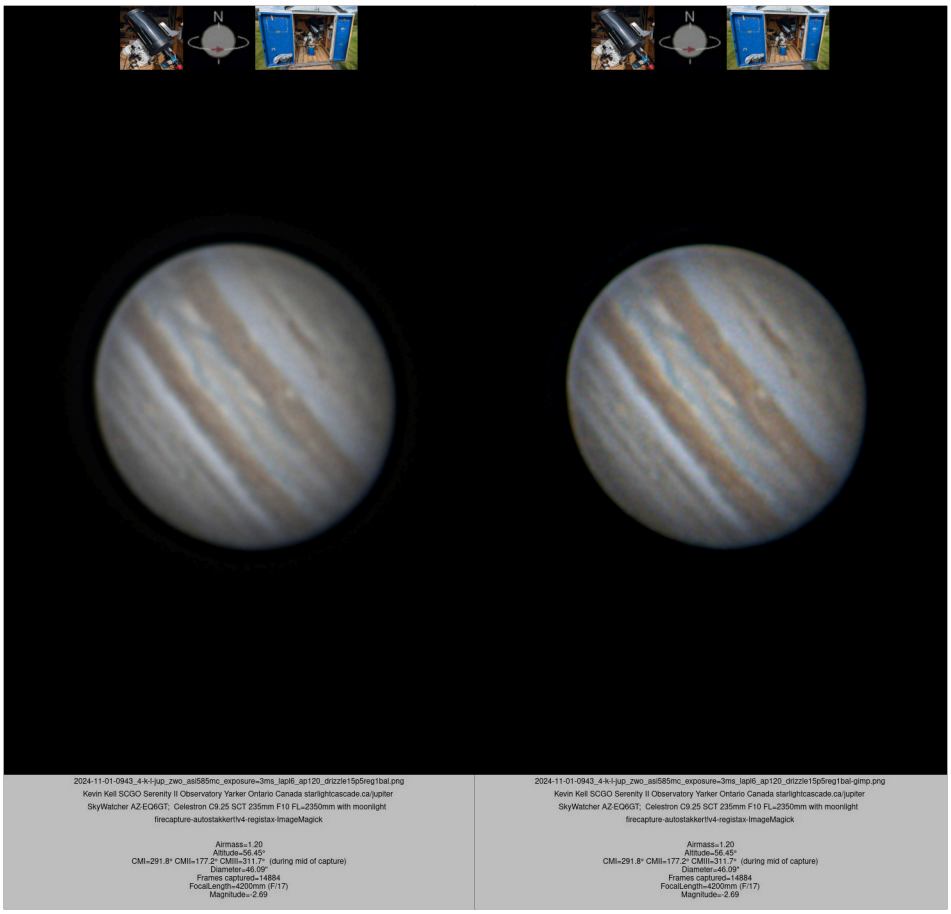
It was supposed to be over 50% cloud but we got lucky with a clear hole in the clouds for an hour or so.

Today is also the first foray into more advanced image processing. So far we acquire a video file of thousands of ms exposure frames, open that in AutoStakkert!4 which sorts them by quality and aligns and stacks them. We generally go with the best 5% or 10% of 15k frames. Then we take that output and put it into RegiStax for wavelet processing and RGB colour balance. We get a much sharper image out of that process.

Today I downloaded Gimp 2.10.38 (a free image processing program similar to Photoshop) (gimp.org/downloads/) and brought the images (PNG format) in one by one and applied some very basic operations on them:

1. Colours, levels, black drop, applied to the background and then to the faint processing artifacts of a light ring around the planet. It disappears.
2. Colours, saturation, scale up to 1.5×.
3. Filters, enhance, unsharp mask, scale up to 1×.
4. Export as PNG.

The left image is the "regular" AutoStakkert and RegiStax output. The right image is the GIMP enhanced version. I can certainly see a difference in the two and consider the GIMP enhanced one a value–added image. However there is so much more to learn now!



Kim: I would say that GIMP wins. I must try it with my solar images, though GIMP has a learning curve.

Sat/Sun, November 2/3

Mark D (21:57): Here is a quick pic of the Pinwheel Galaxy (M33) from tonight. 8–second exposures for a total of 12½ mins. Celestron 9.25, ZWO 294 colour camera, uncooled.

Susan (23:44): Lovely! Cool out there tonight.

Kevin (09:20): Wow, a cold, cold night! It was –5C and a bit more at various times.

Earlier in the day I did a

firmware upgrade of the Sky–Watcher SynScan hand controller... jumped up three versions and the upgrade process went well. Always a dicey decision...bad firmware updates have been known to brick items.

This is the best 10% of 10k frames of 20ms exposures with Saturn very near the meridian.

The dew strap around the corrector and the dew shield worked well: there was no fogging or condensation of frost on the glass all night. (I packed it in around 1 a.m.—more on that in the next note about Jupiter and the Ganymede shadow transit.)

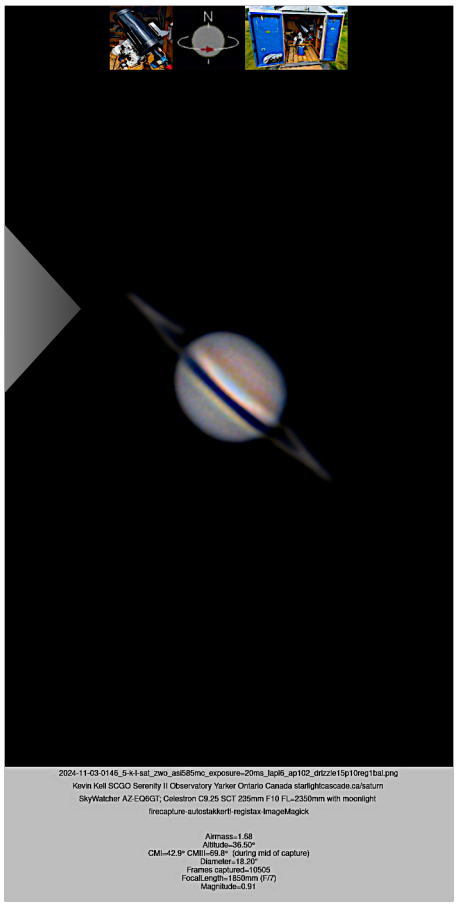
This processed image was taken around 21:46 EDT. The altitude was fairly low at 36° but I did not really see any atmospheric dispersion effects. The rings are getting dimmer and harder to make out. The moon Titan was well out of frame last night as well..

Processed with AutoStakkert!, RegiStax and GIMP.

Rick: Saturn's rings will be perfectly edge–on in late March—will we be able to see them at all? Well, no, because Saturn will only be 10° from the Sun. Rats. Interestingly, because of the relative tilts of Saturn's and Earth's orbits we will see the rings almost disappear again in Dec 2025 before the rings begin to really open up. If orbits line up just right the rings actually can disappear three times as we go through Saturn's ring plane. You can set up Stellarium to show a video of the whole process which is quite interesting.

Mark D: Great shots Steve. You were certainly busy.

Kevin: One of the best events of this apparition, a shadow transit of Ganymede from 20241103 02:39 UTC ending at 04:35, or 126 minutes. I completed 34 imaging runs of 180 seconds each with a 30 second delay between each to let



the computer finish the download of the last image.

The single image below is from the middle of the event, and Jupiter has risen another 15° since the start. Ganymede has made an appearance on the lower left, moving left to right. No GRS.

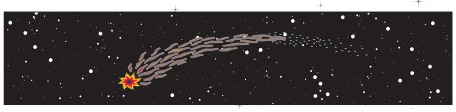
So, how much time? About 3 hours setup to teardown time for imaging, about 6 hours of AutoStakkert!, 340GB across 34 files (batch). Best 5% of 15k frames of 3ms each, about 30 minutes of RegiStax doing wavelet processing one by one, about 2 hours of GIMP processing, 34 files one by one. About 5 minutes for annotation (batch) with ImageMagick.

GIMP can do batch-macro-scripting but that is another learning curve. Most of the time I do not have 34 files to process, only 5 to 10 or so. Much better suited to manually processing. No dark frames…haven't figured that part out yet.

Rick: Nice image, I like the big brown barge and associated wrinkles south of it.

You should have no need for dark frames—3ms exposures doesn't give enough time for any dark current to collect. Bias frames might be worth doing however—they often have some fixed pattern that might be worth trying to remove. Shoot a few dozen bias frames (zero exposure) and stack them (no alignment) and see what the result looks like—is there a visible pattern?

Kevin: Good point! I keep forgetting short exposures do not need dark frames. I am thinking that in general it should be part of the process so that it does not get forgotten as I transition to deep sky imagery.

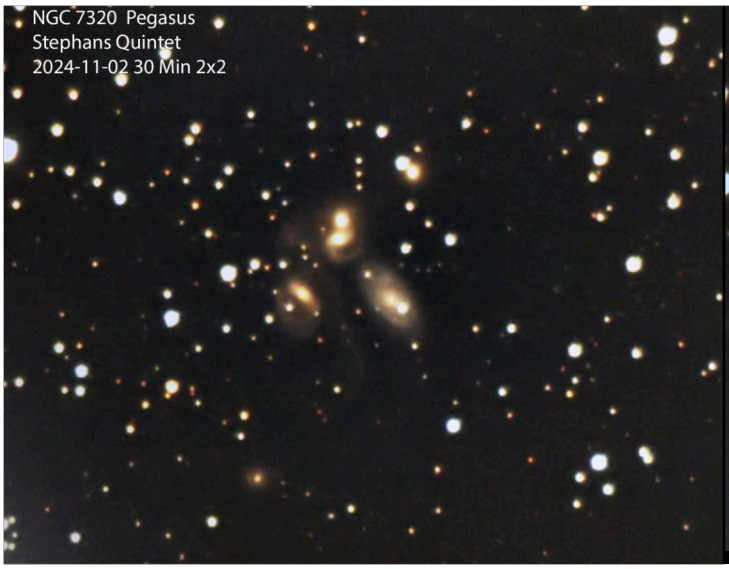


Stephen: I had a superb night last night. It was crisp and clear all night. All my gear worked flawlessly. I imaged sixteen galaxies and one nebula. I haven't had time to process them all. These are my best eight images.

More News from the Astrophotography Sec.

...Experiments in guiding with the 8″ Celestron equipped with the…Unitron astrocamera model 220 and 3¼″ X 4¼″ HP4 sheet film (Ilford) ASA 400 showed that it is entirely feasible on a good night to attain nearly the 15th magnitude in only a 10 minute exposure at F/10! This, in the middle of one of the world's larger cities is truly amazing!

—*Skyward*, December 1973



Wednesday, November 6

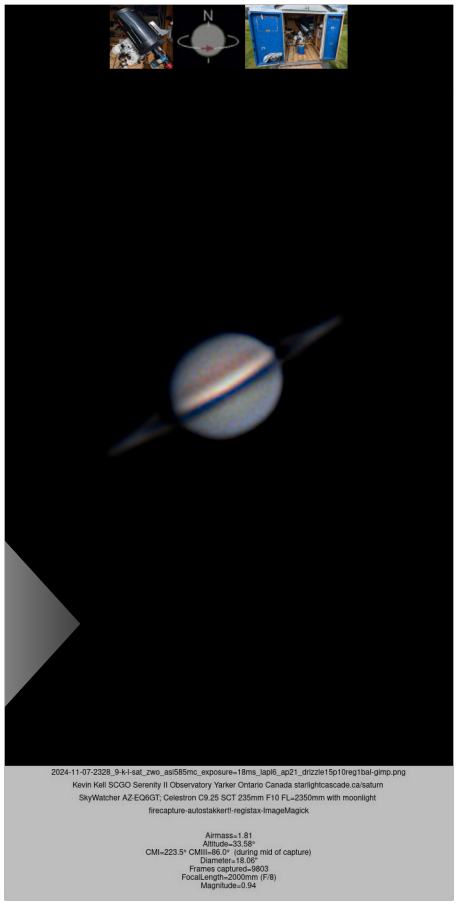
Rose–Marie (12:01): Space-weather reports strong flaring. Dare I hope?
Malcolm (12:07): Dare to dream!
Kim (16:02): AR3883 fired off four M class flares and one X2.3 flare; it is in the Earth–facing zone, so one can dream. It's very strong magnetically.

Thu/Fri, November 7/8

Kevin: I was out in the evening imaging Saturn. This is the best image of the best 10% of 10k frames exposed at 18ms. Saturn was only 35° in altitude, seeing was poor, transparency was poor, and the was a crescent Moon nearby in the sky.

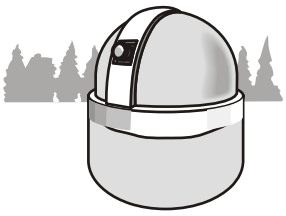
Saturn's diameter is ~18 arcsec. I can't make out any belts or bands in the southern hemisphere and see only 3 regions in the north. Saturn's shadow shows on the rings on the left side of the planet and the rings are dim.

So, I was having to manually adjust the tracking about every two runs of 180 seconds as Saturn moved from one side of the FOV to the other (in an 800×800 cutout box, in a 1200×1200 region of interest).



Mark D: I was out last night also mostly looking at Saturn; the seeing was awful, at least that is what I found.
Walter: I imaged with the NYAA remote scope, with some help from Malcolm. Got T CrB, the comet, and the Iris. (We also imaged on the 2nd and got the Helix and IC63.)

Member **Graeme Hay** has just published this youtube video: youtube.com/watch?v=BEb2UyrHwfM
"In this video, I'm checking out the ZWO SeeStar S30, the new, compact affordable smart telescope from ZWO, which has been a hot topic for astrophotographers. With its $350 price tag, the S30 is currently one of the most affordable smart telescopes out there, but is it worth it? I'll go over the specs, features, and how it compares to its bigger sibling, the ZWO SeeStar S50 (priced at $500). Whether you're just getting into stargazing or looking to upgrade, this breakdown should help you decide if the S30 is the right fit or if the S50's extra features are worth the investment."★



Teflon Bearings

Kevin: We had a 20cm Dob whose altitude movement is sticking. My understanding was that teflon bearings, as they wore, exposed more teflon and that this should not be an issue. But perhaps this is wrong. Perhaps teflon is just a coating over a substrate and when it wears away it is gone? Or perhaps the surface is just accumulated dirt and can be cleaned...or do the bearings need replacement? Any recommended source for replacement?

MarK: Teflon could be purchased in the form of sliders for curling shoes among other places. It is a very good bearing surface. The great thing about it was that it was treated on the back side so that it could be glued with a contact cement. (Just how do you stick down a non–stick material?) It is not just a coating (except on frying pans). Polytetrafluoroethylene is the chemical name. It may be hard to come by as it is a fluorine compound and they are being banned left, right and crazy. I may have some kicking around here from my telescope making days. The whole industry is in a tizzy, things like Goretex and ski wax are being banned. (Do not get Linda started on this.) If you can find HDPE (high density polyethylene) it is a good substitute. You may be able to find blocks of it and it can be cut, drilled, countersunk and screwed into place.

Mike H: Teflon bearings should be made of virgin Teflon! There is a weight rating as well of 15 lbs per square inch. So a 30 lb telescope with 4 points of contact would need 0.5 square inches per bearing. Roughing up a bearing surface will make it stick more.
Most plastics dealers will have virgin Teflon. I might have a wee bit too!

Rose–Marie: Ski wax? I guess I had better hoard my supply carefully. Did they come up with anything to replace it?

MarK: Yes, there are new fluorine free waxes. It is not such an issue yet in North America, but in Europe, it is a whole other matter. Just ask Ragnhild Mowinckel. Fluorine in your wax, DSQ. The Canadian government is in the process of creating new regulations and it is likely that fluorine–based materials will be banned. Hoard your Goretex, too bad if you need a heart valve...

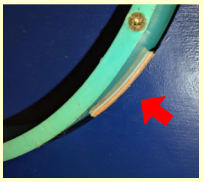
Kevin: These furniture sliders for carpet and hard-wood floors are what I typically have used on

various ATM and even observatory roll–off roofs (HiCycle2 Adhesive Furniture Glides, Self–Stick PTFE Furniture Sliders Pads, Floor Protectors (square–30mm, 8), $10 on Amazon). Also, these 1″ nail–on furniture sliders (24–pack Furnigear Heavy Duty PTFE Chair Sliders Glides Wooden Furniture Movers, $14 on Amazon). I think we still have some kicking around someplace...

MarK: Those are great for azimuth tables. I use them on my dob and used them on my Brown scope. Not so great for altitude unless you cut them up.

Kevin: Why not great for altitude unless you cut them up?

MarK: The azimuth table is a large flat surface. The three slider pads stick well to that surface as it is flat, a good surface for a large flat pad to adhere to. In all of the Dobs that I have made, the altitude bearing is relatively thin and curved. You can see that it would be messy and difficult to mount the sliders on the surface of the altitude bearing.

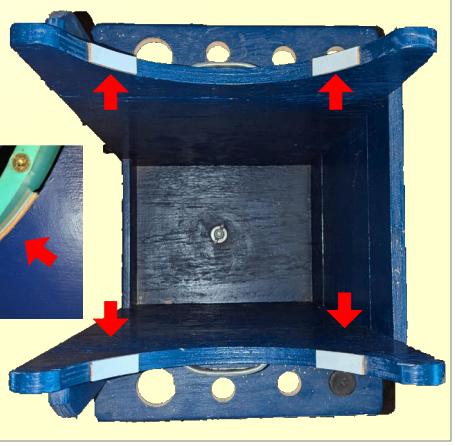


Kevin: Thanks for showing the images. We've used the small squares, replacing the longer thinner strips. The surface area of contact is slightly reduced as it is not curved but over time will wear into a curve, providing slightly more surface area of contact. They seem to be working well. Sometimes too well. The Centre's Barney Dob moves too easily and I think it uses the small squares. Maybe if we double them up on each side? That might increase the friction enough to make it better.

In any event this is for our 20cm Skywatcher Dob and it is sticky—the opposite problem of the Barney Dob.

Rick: For my 20cm Dob I replaced the altitude bearing teflon with the felt pads for under furniture legs and they work well. Very smooth, very low stiction, and a little more friction than Teflon; they curve nicely to fit and the pressure sensitive adhesive holds nicely. If you move the altitude bearing surfaces further up the curve of the altitude bearing it will make the movement stiffer (the component of force perpendicular to the bearing surface increases.) On both my Dobs the balance changes so much going from the 30mm 2″ hand grenade eyepiece to the much smaller 1.25″ eyepieces that it's a real pain.

I once ordered Teflon pads from an astronomy retailer for my 12.5″. They were thick enough to drill and countersink for screws.★



Fri/Sat, November 8/9

Kevin (19:19): We are seeing bright red aurora in the north at 19:11 EST.
Rose–Marie (21:07): It must have been short–lived; went out with the camera...nada.
Kevin: You can see last night's video here, for the rest of today:
starlightcascade.ca/allsky1/allsky.mp4
It comes and goes...

- on 19:12, off 20:00
- on 23:10, off 00:22
- on 02:15, off 04:00

with mild lights in the NW the rest of the time.
Stan: I loved seeing the sky change over time. And seeing the aurora come and go every couple of hours was really a neat treat. Thank you for sharing.

Sun/Mon, November 10/11

Rick: Kevin's sharing of his planet images drove me to look at culmination times of Saturn, Jupiter, and Mars, thinking that I really should try shooting them sometime during their apparitions this fall/winter. And with the first quarter Moon available last night I decided that was the time to try.

I plugged the QHY5III178 colour camera into the Boltwood scope and connected it to the computer, started SharpCap and ... no camera! Turns out I have no QHY drivers installed. What the..? I certainly used to have them (I've used the camera before on this scope) and have not updated/reinstalled the OS so I don't know where they went. Anyway I wasn't going to mess with downloading and installing new drivers at that point so gave up and am doing the installation this afternoon and will try again for the planets in a night or two.

While looking at Mars in Stellarium I noticed that tomorrow morning it first exceeds 10" diameter which I believe is considered the time to really start imaging—that usable detail becomes available. In spite of Kevin already having done that.
Kevin: Always good to read that another astronomer has joined the planetary ranks. Yes, opposition time is coming. I have just ordered the C925 corrector plate dew heater that fits on the inside. That combined with *Susan's Shower Cap* will allow the dew shield to be used on a more regular basis, adding another layer of insurance against frost, condensation and heat distortion (I should be able to go lower on the heat setting).

Thu/Fri, November 14/15

MarK (06:30): The view from the front window has been changed by the felling of the cottonwood. We now have a much clearer view to the west. This morning, there was a glow in the window. It was really neat. First there was the glow and then there was an image of the Moon, a reflection of the Moon that was higher in the sky. Slowly the real Moon moved into view with the reflection still keeping pace ahead. It has never been visible like this before the whole time we have lived here. It is now about to set. I guess that means the summer Sun is going to do the same thing.
Rose–Marie: You're going to find that at certain times in the Moon's cycle you won't need to turn on a light to go to the bathroom. You will also find that in the heat of summer you're going to want some heavier curtains.

It is on Full Moon nights when you can see the lawns and lake.

Thursday, November 21

Rick: Malcolm, the camera setup from which you were showing images last night [*at the Centre's weekly online social meeting*] is the Rokinon 135/2.0 lens on a full frame camera? Those constellation mosaics are so great—it's actually quite fun to pan about those kind of images—almost like roaming about the sky with a telescope but without all the discomforts of cold, bugs, crouching down to look through finders...

The RC Cass image too was truly amazing. I love the perfection of the stars—perfectly round, perfectly smooth edges, and a perfect profile fading into the background. I almost like the stars better than the nebula.
Malcolm: Yes indeed, the Rokinon 135mm f/2.0. I have now put together three of these systems and there is some variance in quality but it seems manageable.

The first kit I put together for my setup in Chile has been very good. The key is to find the best f/stop and it is somewhere around

Malcolm: The software is called What's In My Image and runs on any platform as a standalone application. Originally, it was written as a plugin for PixInsight. Mind boggling capability.

Frank has been writing free scripts for years, and has just released his pièce de résistance. Watch the whole video to fully experience what the capabilities are. Science applications, annotations, it has more than I can ever describe.
youtube.com/watch?v=Ad0JWEUOmuc

f/4 but it seems to vary plus or minus one 'click' on each lens.

For the New Mexico kit, it wasn't apparent to me here when I tested it, but there is considerable tilt in the images. I can't blame the lens or the camera, as I don't know which is the culprit. It could just be this specific combination. I realized that was what was happening during auto focus. The top right corner comes into focus first as the focuser racks in, then the bottom left corner. Watching the HFR values in SGP you can see this clearly. But at the end of the day, the FOV is so wide it isn't noticeable and deconvolution helps. Fortunately, the RC Astro Pixinsight (paid) plugin Blur-Xterminator fixes all that in post processing.

I hope when the project is complete to have a set of constellation images from the north and southern hemisphere on one webpage. The dimensions of the full resolution mosaics are something like 16,000 pixels square. For the web, I reduced them to 10,000 pixels just to make them load faster.

There are going to be a couple of tricky mosaics to pull off. Two that come to mind immediately are Draco and Pisces. But I do have a plan for them.

WRT the RC, I'm mulling over how to get it to a remote location. I'm not sure yet if it's affordable but I sure wish I had this instrument ready when I shipped the Edge HD. I would have preferred the RC.

Malcolm: Oh, I missed the most important question. Doh. The camera is a ZWO ASI 2600MC DUO: one shot colour, APS–C, ASI 220 guide chip above the main sensor. But the lens *is a full frame lens*.

We are going with the APS-C because the stars in the corners will deteriorate and it probably would have been cropped anyway. Probably not noticeable in terrestrial pics.

Sun/Mon, November 24/25

Susan (22:49): Found the seeing less than perfect I assume for photos, but visually very good for me. Caught a third Jupiter band, unusual for me.

No grand design tonight. Lots of play value with nebula and light pollution filters. It has been a while since those babies were out of storage.

Did a bit of measuring to see what I need to block more light. Does not seem to be a big job. Coyote sounds keeping me company.

Stephen (23:03): I'm having a merry time doing galaxies. Jupiter's Red Spot transits at 1:27. I'm considering trying to image that if the seeing improves. Moonrise is 1:34. I'll have to see what I can do after that. I don't want to waste good clear sky.

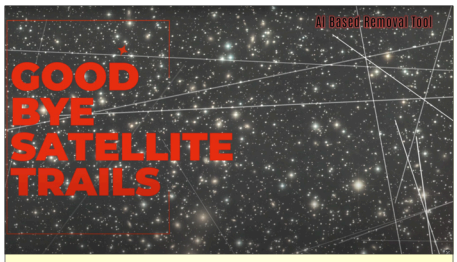
Malcolm (23:09): I made another tweak in the Ritchey–Chretien setup. I switched from CMOS back to CCD. What madness is this? Well, the CCD has 9µ pixels which are more well suited to the long focal length than the 3.76µ pixels in the ASI camera.

So far, so good. Incredibly sharp focus. And the KAF 16803 chip still produces great images.

Tue/Wed, November 26/27
Morning Skies

Kim (10:12): It was cool at +1C but a brisk SW breeze. Clear, and looked at T CrB with binos, still quiet. It's in the morning sky as Rick stated, pretty high as well, just a different orientation.

Also caught the re–emergence of Spica and the Moon at 6:46 a.m.



Malcolm: Now there is a new piece of software out there called Cosmic Clarity. IT REMOVES SATELLITE TRAILS AS YOUR DATA COMES DOWN FROM THE CAMERA! LIVE, ON THE FLY. The benefit is that when you calibrate your data, it has a head start improving your results.
Many a time, a trail just won't calibrate out, and you have to discard those frames.
Not any more.

youtube.com/watch?v=Ad0JWEUOmuc

Pretty cool.

The Sun is busy with groups in the southern hemisphere; just waiting for it to rise a bit and clear the walls of the observatory.

Good day so far!

Rose–Marie (10:44): I noticed the skies were clear at 2:00 a.m. when BigWetNose dragged me outside, but say, a brisk cold breeze. Woke up at 4:00 a.m. with "digestive discomforts," sat in the chair by the window for a bit admiring Sirius/Canis Major and thought that I need to get the camera set up some night/morning when I'm feeling better to get shots of that. I get a much better view of it here than I did in Glenburnie.

By the looks of the forecast for the next week, clear nights will be rare. You'll hear me using the un-ladylike language when those two big sunspots decide to throw out a CME and I'll have to miss out on sparklies.★