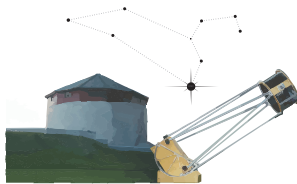


Regulus

April 2013

RASC Kingston Centre



Upcoming Meetings

Fri/Sat, April 12/13

Observing at How Lake
Note: This replaces our Monday meeting.

Saturday, April 13 9 p.m.
KAON Observing Session

Saturday, May 11 9 p.m.
KAON Observing Session

Monday, May 20 7 p.m.

Tuesday, May 21
Member's Night—*new date & place*
New location:
MacIntosh Corry Hall, Room B201

Monday, June 3 8 p.m.
Special Meeting—*location TBA*
David H. Levy
Visual Comet Searching: A Requiem?

Monday, June 17 7 p.m.
Member's Night
New location:
MacIntosh Corry Hall, Room B201

Meetings are held in Room 324 at Ellis Hall on University Avenue at Queen's University in Kingston, Ontario. KAON (Kingston Astronomy Outreach Network) sessions are held at Queen's Observatory on the 4th floor of Ellis Hall. ★

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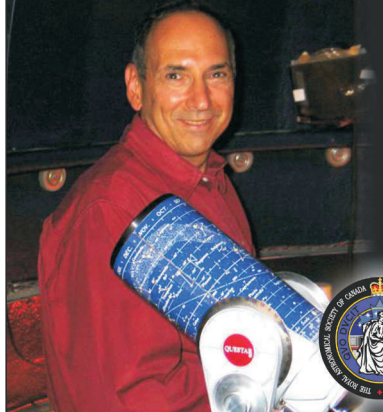
The Andromeda Galaxy & Comet C/2011 L4 (PANSTARRS)

Rick Wagner captured this vista on the evening of April 3/4.

Presenting

David H. Levy

on a Canadian Lecture Tour 2013



Join us this spring when eight centres of the Royal Astronomical Society of Canada (RASC) will host a rare lecture tour by famous astronomer and comet-discoverer David H. Levy.

David H. Levy, internationally renowned Canadian astronomer and science writer is famous for his co-discovery in 1993 of Comet Shoemaker-Levy 9, which collided with the planet Jupiter in 1994. Levy has discovered 22 comets, and written over 34 books. The asteroid 3673 Levy was named in his honour.

May 31	Ottawa	Canadian Science and Technology Museum
June 1	Montreal	The Morgan Arboretum
June 3	Kingston	Queen's University
June 5	Toronto	Ontario Science Centre
June 6	Kitchener-Waterloo	Wilfrid Laurier University
June 7	Mississauga	University of Toronto at Mississauga
June 8	Hamilton	Waterdown Legion Hall
June 9	London	Fingal Observatory

Sponsored by members of the Royal Astronomical Society of Canada

For more information visit:
www.rasc.ca/david-levy-speaking-tour-2013
or call 1-888-924-7272

Reports and Other Items

KAON REPORT: APRIL 13

Our Centre President reports:

As usual on a very cloudy Saturday night there were about 90 people at the Open House!

Joel Roediger's talk "Is Our Galaxy Hiding a Ticking Time Bomb?" was great. Joel is finishing up his Ph.D at Queen's by September, and October 1st begins a postdoc programme at USC at Santa Cruz.

Nathalie ran tours of the dome

after the talk but it remained cloudy and the deck was closed.

KAON UPDATE

The May KAON has been cancelled due to renovations. In the meantime you can still visit the the Queen's Observatory blog:

queensobservatory.tumblr.com

From Kingston Centre, the RASC, and Beyond...

NEW ON RASC.CA

Newly-digitized correspondence from the 1800s is at rasc.ca/1800s, improved solar eclipse pages are at rasc.ca/solar-eclipses, and a new interface for exploring past GAs is at rasc.ca/ga/history. ★

It's coming, and after 20 years it's still ridiculous...



Annual Reports Eric Briggs

I SEE THAT THE American Association of Variable Star Observers (AAVSO) report for 2011-2012 is out, and there are many points of interest for Canadian astronomers inside. Click to find out more, I won't go into many details. But the statistics inside say that during the previous reporting period, the AAVSO database took 19,145 observations from 47 Canadians. During the most recent reporting period, 37 Canadians submitted 21,132 observations. This makes Canada roughly comparable to California or Florida, although those states appear to have even fewer observers reporting many more estimates. Arguably they need to get out more in the daytime and enjoy the other half of their favourable climate. This document is very detailed and can be compared and contrasted to our own RASC extended annual report due out later this year. Congrats to everyone who participated.

WEB LINKS

AAVSO Annual Reports:

aavso.org/annual-report

RASC Annual Reports:

rasc.ca/governance/annualreports ★

RASC-KC Board of Directors

President:	Susan Gagnon
Vice President:	Kim Hay
Secretary:	Kim Hay
Treasurer:	Kevin Kell
Librarian:	David Maguire
Editor:	Walter MacDonald
National Council Rep:	<i>vacant</i>

Committee Chairs/Coordinators

Equipment Loan:	Kevin Kell
KAON:	Susan Gagnon
Webmaster:	Walter MacDonald

KC Web Server Kevin Kell

THE WEB SERVER THAT HOSTS THE kingston.rasc.ca website underwent an operating system upgrade that went horribly awry on Monday, January 21st. Two days later, after many attempts to repair/restore/ recover, a new 250GB hard drive was put in and a new installation of Linux Fedora 17 installed. The data files were restored and the site went live again on Wednesday, January 23rd around 15:00. It has been stable ever since and only missing one feature that we know of: the complex-to-manage and underutilized image gallery program. I don't think this is recoverable so we will be looking for an alternative system for members to self-upload Astronomy images for public display.

The computer itself remains a vintage 2007 Intel Core Duo @ 2.0 GHz, with 2GB RAM and two SATA hard drives: 250GB and 500GB. The former holds the operating system, web server, and web contents while the latter is for daily incremental backups. The current version of kingston.rasc.ca holds 9.6GB of content. ★

Since the mid-1990s, Kevin has been our server guy who finds, installs, and maintains the hardware that keeps the Centre's little piece of cyberspace going.

Regulus Needs You!

ITEMS OF INTEREST FROM MEMBERS—full articles, or even just a couple of paragraphs are always welcome. Items are gratefully accepted on each and every day of the year! Send items to:

walter.macdonald2 (at)
gmail (dot) com

or:

Walter MacDonald
PO Box 142
Winchester ON K0C 2K0

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Meeting Reports: March 18 & April 12

Kevin Kell & Susan Gagnon

MARCH 18 REGULAR MEETING

The webinar using Cisco Webex went very well. **Tom Field** from the Seattle area presented a great talk on spectroscopy to the twelve audience members. It was a threatening snow storm, so many folks stayed safely at home.

From a technical perspective the video went quite well and only the occasional audio glitch kicked in. It turns out I made a mistake in not turning off a CPU-intensive process running in the background (darn SETI@HOME!). I suspect it would have been even better if that was turned off earlier. As always at the beginning of a meeting, things are rushed and forgotten.

You can access the 37-minute recording online via the members only page kingston.rasc.ca/Secure/ or directly via this link:

anymeeting.com/rascck/ED55DE81834A

We also took a few minutes to “upgrade” the bulletin board on the 4th floor near the observatory. It now includes two images from the calendar, six months of RASC *Observer's Calendar* pages, a sample starfinder (assembled!), and a few other minor changes. We forgot to label in BIG RED INK the upcoming meetings and open houses on the calendar, but we can do that at the next opportunity. I also forgot to take a picture for a before-and-after comparison, but we wanted to get home ahead of the weather. It was a slow, blizzard-like drive home.

APRIL 12: ELBOW LAKE SESSION

Just ahead of the appointed date, our President issued the following report: I am very disappointed that I will have to cancel the Elbow Lake event.

I have contacted Queen's about

the cancellation and will be calling the others who were going to pay for a cabin tonight by phone. I suspect that there would not have been many drop-ins.

Many a fun evening has been had when observing conditions are less than optimal...however...the road into the cabins is long and tree-lined, the cabin area is heavily forested. While I do not expect the snow to be too deep for travel, the potential for freezing rain makes me think that it would be unwise to make such an effort for so little return. Cell phone signals fall off fairly quickly once you leave the main roads and there is only a ‘story’ that someone got a signal from the dock once. If anyone gets stuck anywhere along the way they are really stuck.

I will keep trying to set up more observing opportunities for the group in the future.

Forgive my foolish optimism. ★

Science Fair Report: March 26

Bruce Elliott

I HAD A GREAT TIME at the Science Fair this evening. There were five projects that I reviewed. The top Astronomy project was on black holes by **Robin Pianosi** (Erenstown Secondary School). She is a grade 11 student and has been interested in Astronomy since she was a child. She had a very sophisticated knowledge of the universe and black holes in particular. She had read lay summaries of Steven Hawking and Einstein views on relativity, and derived models of curvature and singularity that one could grasp—including marbles and pliable sponge surfaces to illustrate her points. I was totally impressed. Her summary (see below) was very well written and inviting to both lay and experienced persons.

Other projects were on light pollution, and harnessing the sun's energy effectively.

I gave out several copies of the star map as well as the pamphlet on telescopes and constellations. Robin will be checking our web site and may come out for one of our meetings.

Thanks for the opportunity to judge these very interesting projects.

SPACE AND TIME WARP: ULTIMATE ABYSS

The purpose of this project is to simplify black holes to the point where they are almost understandable. It is a study project, a compilation of sources to make a complicated principle as simple and coherent as possible, while learning about some of the most prominent forces in the universe. It is out of interest, pure fascination, really, that this project was borne, and its purpose is only to explain, and

possibly demonstrate. The goal is to gain a thorough enough understanding of black holes so as to be able to explain them to anyone. It is important for people to be educated about the forces of nature, as they are what govern everything in our universe. Understanding one part of it allows you to move further in your understanding of the question: why? That is what makes us human, is it not? Our unending curiosity, always trying to figure things out. Black holes may or may not be the key to time travel (although they are lethal to approach, they may end in a ‘white hole’ which shoots out any absorbed matter in a different space and time) but wouldn't it be cool to know, either way? Should we find that time travel really is possible, just not for humans quite yet, I would be delighted to be the vessel that delivers that news to anyone who is willing to listen. ★

COMPUTER UPGRADE

On Sunday, March 17th (happy drinking green beer to excess day!), we retired the 6-year-old Radioroom computer with a newer faster model. This system runs software to log data from:

- ▶ SID1 (Sudden Ionospheric Disturbance) from a 40khz system with a long wire antenna using Spectracyber software,
- ▶ SID2 from a 24khz system receiving signals from station NAA in Cutler Maine with a directional loop antenna,
- ▶ SCGO Weather Station Weather Underground station IONTARIO51.

The old computer was running Windows NT2000 as its hardware refused to accept Windows XP or Vista or 7 (no drivers). It was an Intel Atom CPU @1.6Ghz with 1gb RAM. The new system is an AMD 64 X2 athlon 4200+ @ 2.2GHz with 2Gb and Windows 7 64 bit—a considerable improvement.

SID1, SID2 are both running but automated data handling scripts need more work to be operational again. The old Weather Station will be retired after 6 years (as its software FreeWx does not run well under Windows 7) and the new weather station, a Davis Vantage Vue with Weatherlink v6 software was installed and is up and running.

We hope to add onto this collection the old FM Meteor system with Radio Skypipe collecting data. The old computer would bog down and lock up when we tried to run this much all at once.

More news to follow...

AN ACCURATE TIMEPIECE

Astronomers watch the mostly static skies. Once in awhile, something moves. Sometimes things move fast,

very fast. At those times it is very useful to know what time it is. Exactly what time it is. In the past we used to get a shortwave radio and listen for the audio time signal from WWV at 5 or 10 MHz. We could never pick up CHU, the Canadian equivalent.

In any event, we were preparing for an occultation recently and realized the need for exact time. The best we had was a shortwave radio (that didn't work), a second shortwave radio (that we couldn't find), and my wristwatch, which synced to the so called "atomic clock" radio signal at 60 khz. Better called "Radio Clock" sync.

A wristwatch is often hard to see in the dark when working other equipment, so we went on a hunt for a



larger desktop clock. This is what we found on amazon.ca:

- ▶ Sets itself automatically to the time signal from the US atomic clock at Fort Collins, Colo,
- ▶ Automatically adjusts for Daylight Savings Time and standard time,
- ▶ Built-in solar cell and rechargeable battery,
- ▶ Large easy to read liquid crystal display time, month, date, day and indoor temperature,
- ▶ Digital seconds counter.

For about \$25 we now have a good primary source of time. We will be testing it in the future to see how much it drifts when not able to sync daily with the atomic clock, but for now, we'll take it as our best source.

We also now have two working

shortwave radios that can pick up the WWV audio signal as well. We should be good for the next event.

The longest dimension is less than 15cm (6"), the battery inside should keep it running for up to 8 years and the solar cell on top is an assist. It also comes with an alarm and a light/snooze button. Try as we might, we could not find any red LED displays. ★

Astronomical Anecdote

Mark Kaye

IN THE EARLY EIGHTIES, we lived in downtown Toronto (Bloor and Spadina). I had a 20cm SCT and with it, went through the entire Messier list, with the exception of M33. I was not a club member in those days, so I did not have access to the support of fellow amateurs.

I could not understand why I could not find M33 because it was listed as magnitude 6.7, one of the brightest objects in the list. It was not until we moved to rural Kingston area that I was able to find it, then to my surprise, it was an easy object sometimes visible without a telescope. I knew the way to M33 easily from trying to find it in the city, it just is not visible due to the brightness of the sky.

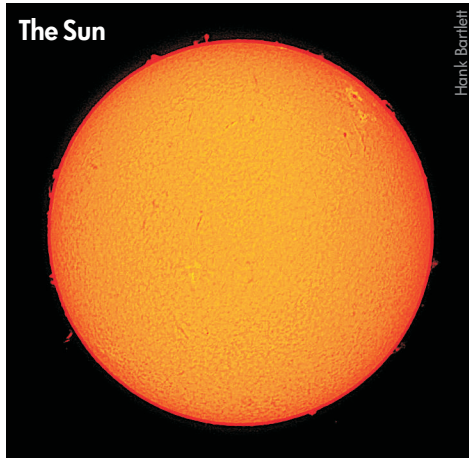
Sadly, light pollution is following us to the rural skies. It has been a long time since I have been able to see M33 without a scope at our once dark site. ★

The day will yet come when posterity will be amazed that we remained ignorant of things that will to them seem so plain... Men will some day be able to demonstrate in what regions comets have their paths, why their course is so far moved from the other stars, what is their size and constitution. Let us be satisfied with what we have discovered, and leave a little truth for our descendants to find out.

—Lucius Annaeus Seneca

WEDNESDAY, MARCH 20

Hank: Feeling better, got some solar in today. Things are winding down as the chain of sunspots rotates out of view but see here there is an active region in the lower left quarter of this image and some filaments.



FRI/SAT, MARCH 29/30

Rose-Marie: Around 21:30 the dog had to go out, and I thought I could see light in the sky over the hedge of cedar trees, but couldn't be sure because my neighbour's stupid outside light was on. Went out to the end of the driveway, still hard to tell because of stupid car headlights. I got out the camera and took a couple quick shots, could see that yes, there was green in the sky. Anyone else see anything?

Kevin K: Yes there was a little bit of aurora last night. We first picked it up around 21:10 EDT and the last indication around 22:45...then the Moon obliterated the image. This display was a little higher off the horizon than the last one and a few more big surges as well. Still it didn't seem to get more than 10 or 15° up.

Mark K: It was not visible to the unaided eye from here last night, at least it did not jump out and hit us over the head. Lyndsay and I were on the front deck observing the comet and many other things and did not see

it. Sometimes the camera is more able to see aurora than the eye.

Rose-Marie: When I took the dog out at around 9:30 p.m. there was a pretty good green glow above that cedar hedge, that's what caught my eye, but it only lasted a few minutes. Then there was a band of clouds to the west after sundown, blocking my comet. Clear everywhere else... grrr...

Kevin K: Missed the aurora but was doing another imaging run with the Centre's 20cm LX-200, after tweaking and changing a few things here and there. I attempted to use Stellarium v0.12 on the netbook as a controller and that did not work at all; have to read through more Stellarium notes to find out how to make it go. In the end, reverted back to Handy-Avi as both an imaging program and a telescope controller.

The pier has come off level in the winter freeze and I am designing some corrective supports for it once the thaw hits. Cable management is still an issue. Time to surf the net again for images of other setups and what they do with the cables.

The LX-200 hand controller, now over 10 years old, has very poor button response. Maybe time to crack it open and spray some contact cleaner on the contacts.

The new dew shield is working well. The corrector plate heater still needs more sticky velcro to keep it in place.

Walter: It was such a great night—no wind, and above freezing so it was nice not to have it ruined by aurora.

I found The Comet in binocs at 20:30, observing from the dome slit. Then I lowered my horizon limits and pointed the scope at it! Wow, does it ever have a wide tail. The nuclear regions were saturated with 20s exposures.

I was enjoying observing visually with the C8 so much I didn't get back in until an hour after moonrise.

Unfortunately the scope in the dome got lost (due to bright sky) while scraping the western horizon and parked itself (I should have realized that is why the dome was pointing due south) so I lost an hour of imaging time. Oh well, I only need an hour or so this evening to finish off the Miras I missed. At dawn the plan ran right through to the end (all Lyra done!) and finished almost half an hour before the end of the night. 178 variables were imaged.

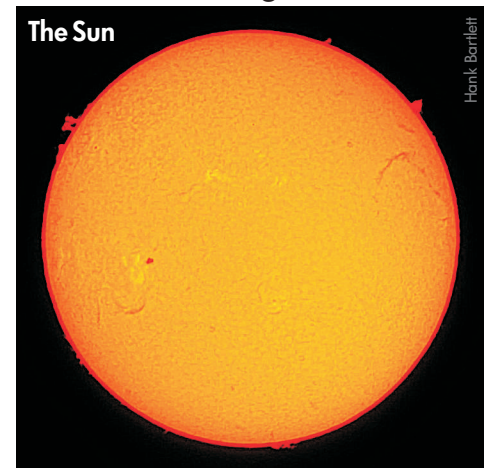
I tried to find The Comet in binocs at dawn this morning but I think it was behind a pine tree.



C/2011 L4 (PANSTARRS) @ 20:46 EDT. 1x30s, 6x20s, 1x10s, V filtered. ~8° altitude.

WED/THU, APRIL 3/4

Hank: Love that huge SS1711!



Walter: It was a clear, cold, night last night. The evening's stiff breeze died down after a while and it was actually clear all night. I set up a plan for imaging a bunch of cataclysmic variables (113 actually) and fired it

up. Later I went to bed and after a good night's sleep woke up at 05:20 and saw that the plan was on the 2nd last star! Perfect timing, or what? (Sometimes it works out that way!) With nautical twilight starting at 05:30 I had enough time to image The Comet briefly before the sky got too bright. [The Comet](#) is higher at dawn than in the evening now. With 10s exposures the core is not saturated:



Rick Wagner: Doh! Wish I'd known yesterday about the dawn view of the comet—I would have been up this morning to shoot it. I got a not-bad image yesterday evening (see front cover) from the waterfront at Portland. I'll have to find a good location for shooting the dawn sky—my low horizon to the E is limited to about azimuth 90°.

THU/FRI, APRIL 4/5

Hank: Keep your fingers crossed, this morning there is a brightened activity all around SS1710 and the long snaking filament from SS1711 may snap.

Rose-Marie: I managed to haul myself out there tonight, and did what I could with a thin coating of clouds over my comet and Andromeda. Canon Rebel XT, 50mm lens, f/1.8, ISO 1600, 12s, 21:11 EDT.

Rick: Nice shot Rose-Marie. Did you manage to see it too? The evening before I was only just suspecting it naked eye but it was easy in bins and my 80mm scope.



Rose-Marie: I didn't see it naked eye but I did find it with the binoculars, the bit of haze wasn't helping. By the time it got "true dark" the comet was under a band of clouds.

Mark Coady: There was too much cloud on the horizon for seeing it from my place north of Peterborough. I did get my binoculars and spotting scope out and spent some time with [Jupiter](#) and [M42](#). It was the first time I could do any observing this year because the shed that holds all my stuff was frozen solid since December with a thick, impenetrable, sheet of ice.

FRI/SAT, APRIL 5/6

Rose-Marie: Right. The sky cleared here about the time the comet had set. Guess I'll have to try to set my alarm and see if I can drag myself out early in the morning to have a look.

Kevin K: Arrgg...when was the last time I got up and out at 4 a.m.? It was a killer. And -10C to boot. We went out for the [occultation](#) but stayed for [Saturn](#), [Scorpius](#), [Sagittarius](#), and [Comet PANSTARRS](#).

I couldn't be positive that I had the correct star field for the occultation of asteroid [240 Vanadis](#) and the 12th magnitude star 2UCAC 27674670.

Cons: The shortwave radio didn't work. I changed batteries, and still nothing. I will troubleshoot later today. I couldn't find the backup shortwave radio. The backup audio recorder did not work. The LX200 did not start up: something about the hand controller being somewhere in the house after being taken apart and cleaned but not hooked back into the telescope again. The neighbours left an outdoor light on again. My plans to build a visual barrier fence advanced a few more notches on the priority scale. 20cm scopes are heavy at 4 a.m.! 25 cm scopes are even heavier!

Pros: the "atomic wristwatch" synched time overnight so we had an accurate time source. The video camera with audio and a date/timestamp did work, so we started it recording and put the atomic watch time on the audio track. Later on the playback the camera was 23 seconds fast so we took that out of the recorded times for "real time" events.

[Saturn](#) was gorgeous in the southwest, and about 26° up over top of the house with the lights on. We had humped the scopes over to the lee of the greenhouse. Left them there too. Summer is coming! [Sagittarius](#) is still rising higher in the SE.

[Comet PANSTARRS!](#) Much better than last month. In 15x70 binocs easily found and large fan tail and pretty! M31, not so much. I had a heck of a time finding it in the low horizon. By this time the [Moon](#) had come up and lit up the 15–25° of the sky.

Rose-Marie: At least you got up. I had the alarm set for 4:30 a.m., and I vaguely remember reaching over and turning it off. I immediately fell back asleep. Some mornings it just ain't happening.

Kim: Well Rosemarie, you will be pleased to know there was no aurora. However, I did observe the occultation.

Walter: Doh! I forgot all about that asteroidal occultation. I've always wanted to see one too.

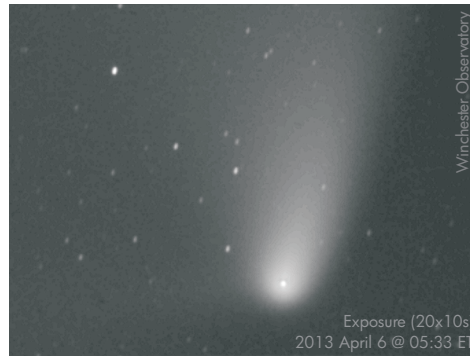
Sagittarius was spectacular, and made me wish I was out in the country with a low horizon and no neighbours' lights. The neighbour directly behind me (with the above-ground pool) has a new backyard light that runs 24/7. I mean, he's not even ever out there at this time of year, at least not at night! And I have the lights from the public school and Macs/Subway and passing traffic on the main drag that I am directly exposed to now since the neighbouring building burned down. Like you, I am going to have to build some fence extensions and a couple of tarp walls for outside visual sessions.

Scopes are a pain to lug around at any time. I've become a big fan of having them outside in a shelter and ready to go at a moment's notice—and with zero setup and pack-up time. My C8 is in the Merry-Go-Round, but I still have two other scopes that need shelters—I sense a couple more spring projects in the air!

The Comet was great in 7x50 binocs this morning (and much better than M31), and much higher than in the evening. It was just to the left of the pine trees, so the azimuth worked out particularly well. I imaged it at the beginning of nautical twilight and could see the sky background brightening with each 10s image. I should have imaged The Comet a little earlier, but the variable star run was about 20 minutes short of finishing and I wanted to get as many vars as possible. Anyways the comet image looks pretty much the same as my last two.

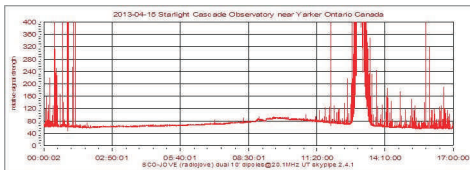
My **variable star** run was stopped by clouds several times and I had to dump some Miras along the way as a result, but I still managed to image 177 of them. Not bad for a night I wasn't sure was going to be usable

outside of a couple of hours at dawn! Looks like it may be our only sky for the next week (again).



MONDAY, APRIL 15

Kevin K: Another little 40-minute long blip from the Radiojove system (yes, we know...named for Jupiter yet mainly picking up solar stuff!). I will have to reset the y-axis scale to see the whole thing, but it was a significant radio event.



TUE/WED, APRIL 16/17

Walter: It was a clear night, except for a half hour or so around 23:00. I imaged 181 **variables** (almost all Miras). Astronomical twilight at dawn was a productive time as I imaged **The Comet** and four Miras in Andromeda (they were too low at dusk).



WED/THU, APRIL 17/18

On the RASCals list this morning, Dave (XVII) Chapman, "Certified RASC lunatic" issued "a note to fellow lunatics:"

It looks to be clear in the Maritimes tonight, and I reckon the **Lunar X** will "peak" at about 9:15 p.m. ADT (00:15 UT April 18), although it is worth observing for several hours before to see it emerge. Good hunting!

Mark K: Well, it is cloudy, but thin enough that the **Moon** is visible, as is the X. Sure jumps out.

Rick: Even with the thin cloud the Lunar X is looking spectacular right now—very easy! Reminds me of some sort of moth antennae. Thanks for bringing it to our attention Kevin.

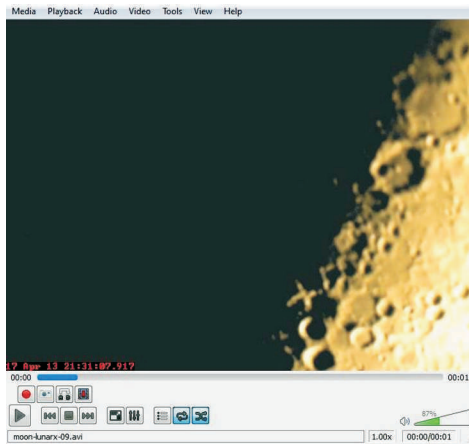
Rose-Marie: Yes, thank you for reminding us of this once-per-lunar-cycle event. It has prompted me to yank the old sheet off my telescope (*cough* *cough* *dust cloud*), do the duckwalk getting it outdoors, and peering through the pickle-jar eyepiece to admire the sight of the craters. Got so ambitious (once I could see through my right eye again) that I rattled some memory cells trying to figure out how to attach the camera, found me a rare bit of patience to get it working, and took some photos. One Moon-with-X-feature attached:



Kevin K: Actually it is not always a lunar cycle event: I haven't read up on it but it seems to be tied to libration effects as well.

We got home after 21:30 local and did manage to observe for 30 minutes or so. This is a screen

capture of one frame of one of the videos:



We had no remote telescope control and did not get the focus as good as it should have been, but it is there.

Mark K: It is actually a twice per lunar cycle event, but the other one happens about 14 days from now when most people are asleep and it happens in reverse, instead of an X becoming visible from blackness, the X appears out of light and then disappears.

What makes this event “rare” is that it is only about an hour or so long that the X is visible and that happens at a different place above the Earth each time. So while it was visible for us in the east of North America, by the time the Moon was in good viewing time for B.C. the event was over.

This method [sweeping] of viewing the heavens seems to throw them into a new kind of light. They are now seen to resemble a luxuriant garden, which contains the greatest variety of productions in different flourishing beds; and one advantage we may at least reap from it is, that we can, as it were, extend the range of our experience to an immense duration. For is it not almost the same thing whether we live successively to witness the germination, blooming, foliage, fecundity, fading, withering, and corruption of a plant, or whether a vast number of specimens selected from every stage through which the plant passes in the course of its existence be brought at once to our view?
—William Herschel, 1789

SAT/SUN, APRIL 20/21

Kevin K: I had a good observing session. I waited until another scary episode of Dr. Who ended at 21:00 and headed outside...about -4C at the time with a little bit of a wind. I had watched a “winter in Yellowstone” show just before Dr Who and was hearing wolves calling in the distance as a result.

The LX200GPS pier had some leveling work done earlier in the day and I think it has paid off. Starting up the control/imaging computer from completely off helped the serial-USB adapter as well. For about 90 minutes I imagined the terminator of the Moon, from south to north. After the first few runs, I added a cardboard aperture filter I made a few weeks back, forgetting surface details on Jupiter.. and it worked very well! Focusing was as good as could be expected on a moving air night. All in all tracking was not too bad at all.. much better than in the past.

Society-Wide Elections for the RASC

HELLO RASC MEMBERS,
I’m writing to let you know about an exciting opportunity to get involved at the heart of the RASC’s new governance structure.

The National Society will be conducting an election this spring for up to three members of the Board Transition Committee. Members elected by the Society to this committee will be appointed to the new RASC National Board of Directors for a one-year term beginning on July 1, 2013, provided that the Society’s new bylaws are approved at the General Assembly in Thunder Bay. These three directors will work alongside the members of the National Executive on this board for a year.

Starting in 2014, the RASC is due to complete the transition to its new

I then did a couple of runs against Saturn, about $20\text{--}25^\circ$ off the horizon. They too worked out nicely. With the f/6.3 focal reducer in, Saturn is a very tiny object spreading across not a lot of pixels. So afterwards I tried to add in a 2.5x barlow into the system, refocused using an eyepiece and centered it. Putting the camera back in...could not find Saturn at all. Tracking and pointing still need some work.

In other news, only five meteors were captured on Allsky2 overnight. Allsky1 gets washed out by the moon pretty much.

Walter: It cleared sometime after 22:30 (when I went to bed), but I was up and out for the moonless period from 03:39–04:15. The transparency was excellent here in Winchester with the Milky Way clearly visible in Sagittarius. The wind had finally calmed down and the temperature was a relatively balmy -2C —I think spring has finally arrived, and is here to stay this time! ★

board structure when all members of the 2014–15 board will be elected by the members of the Society.

If you are interested in helping the Society out at the National level, or know of someone who could, please check out this posting in the Members’ area of the National website: rasc.ca/elections

Nominations are now open until May 31st, and the election itself will take place in June 2013 and conclude on June 30th. Every member of the RASC will have a vote in our first-ever election of this kind.

If you are interested in finding out more about this opportunity feel free to touch base with me off-list, and stay tuned for updates on the process as it unfolds. ★

—Chris Gainor, Chair,
RASC Nominating Committee