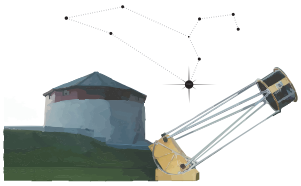
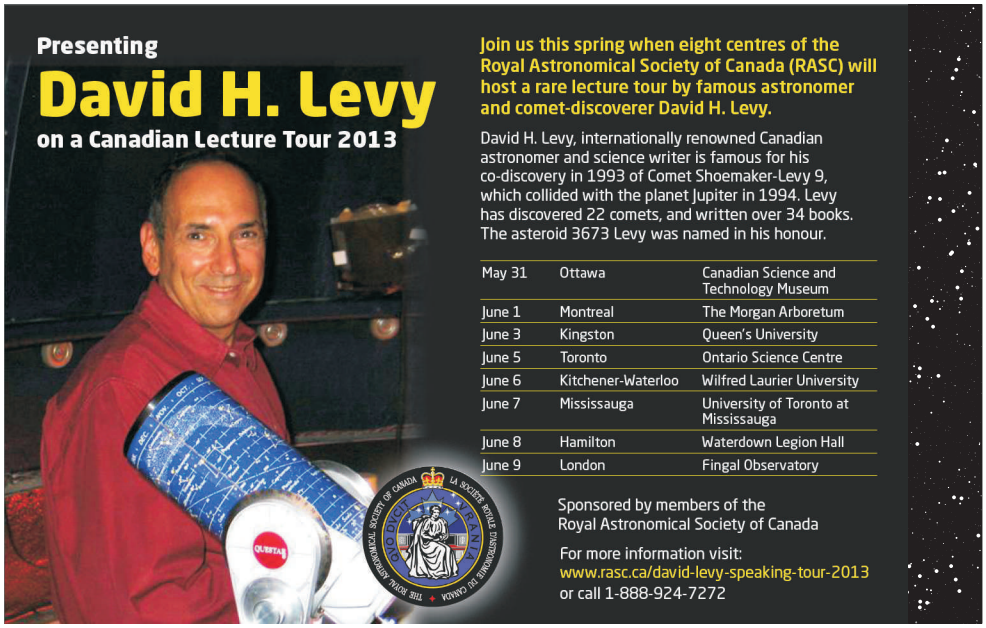
Regulus

May 2013

RASC Kingston Centre





Upcoming Meetings

Saturday, May 11 **9 p.m.**
~~KAON Observing Session~~ **Cancelled**

~~**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 *@ Ellis Auditorium*
David H. Levy
Visual Comet Searching: A Requiem?

Saturday, June 8 **9 p.m.**
KAON Observing Session

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. ★

In this issue:

Shed News

Kevin Kell

THE RASC-KC has purchased a shed to store a lot of our worldly goods in and for the time being we'll assemble it at our home until such time as it moves on to another location.

The shed is a 10'x8' wood model and arrived Monday (May 13th) in kit form, all packaged up.

We have not yet set a day/date/time to hold a centre "shed-raising" event and BBQ but it will be sometime this month. News to follow.

Once that is complete and items have been repackaged, indexed and stored inside, we can turn our attention to the Torus mount project. Our hope is to get some images out, and some design ideas completed this month with the mount-mounting event before the end of June. ★

Girl Guides

Susan Gagnon

APRIL 19TH was a cool and stormy night in Harrowsmith, but that did not dampen the enthusiasm for Astronomy in the home of a Harrowsmith Girl Guide leader on that Friday night. There were nine guides and 3 leaders in attendance.

The list of items to be covered for the Astronomy badge is very basic and we covered all but the observing issues. I left them with some charts and the IYA star wheels to use on a clear night. I did cover stars and the role of women "calculators" responsible for much of what we understand about stars, planets, comets; thanks to **Hank Bartlett** and **Terry Dickinson** for recent photos of the PANSTARRS comet, meteors and meteorites, galaxies including the Milky Way, and star charts and Polaris. I had my small scope and showed them how it worked. I also had a meteorite pendent that was a big hit when passed around. It was a great night. The girls were really sweet and attentive and they gave me a box of cookies! ★

Reports and Other Items

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

KC Website Update

Kevin Kell reports that the Centre's website is now running on *Fedora 17*. Looks like these folks are competing with *Thunderbird* to see how many new versions per year they can issue!

New on RASC.CA

Some of the audio tapes recently found in the archives at national office are now on rasc.ca—look up the past GAs at rasc.ca/ga/history for 1960, 1968, and 1983), and stay tuned for more!

Other Items

A portable washroom is now available on site at the L&A County Dark Sky Viewing Area...Meade Instruments Corp. has been taken over by the Chinese (Jinghua Optics & Electronics Co., Ltd). ★

Torus Scope Move

Hank Bartlett & Susan Gagnon

Hank: This afternoon I had the opportunity to spend some quality time with astronomy friends both old and new. I miss the "good old days" when participation was at a peak and we dedicated ourselves to the sharing, teaching and learning of astronomy. We haven't changed as much as time and access to information has. We are not obsolete but in today's internet world people seem to be content with armchair astronomy and education. Maybe we have let it happen as we too have become saturated also with the information age and have come to believe hands on is not as important as it once was. I am rambling again; the point I actually set out to make is that it was a very good day and the company and conversation were very much enjoyed. Also, a big thank you to **Kim** & **Kevin** for their dedication to the centre, their hard work, and the willingness to allow so much center equipment to not only occupy their land but their lives as well. All of you there today and all others involved in this project are truly the back bone of this centre. BTW, no this is not Hank Bacardi talking!

Susan: Thanks to everyone who got out to the event yesterday. Not everyone can make it to everything so if you couldn't, there will be other opportunities—to name two: the building of the storage shed, and the positioning of the scope on the pier. We are hoping that **Bernie** from Queen's will assist **Brian** in co-ordinating the bits for the reassembly as they were the ones who took it apart and removed it from the dome. I still don't know how that happened.

I cannot say that many hands make 'light' work applies to yesterday but they did make things 'possible' and I thought it went smoothly and quickly; there was much more time spent socializing afterwards I think. I really like the Tardis observatory, sooooo cute!

I also would like to thank Kim and Kevin for the real estate commitment. Living in a small house I know how quickly space can get eaten up if you do not take a hard line on what comes in. This stuff has accumulated very gradually and I think that when we get the shed and pack it all in, even K&K will be surprised at how much there is.

Also thanks to Kim and Kevin for the cold drinks and snacks.

This all brings the need for land and a permanent home for equipment into perspective. We have a lot of scopes that should be enjoyed. ★

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:	*vacant*

Committee Chairs/Coordinators

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

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

The Fine Print:
Members of the Kingston Centre receive *Regulus* as a benefit of membership. Non-commercial **advertisements** are free to members of the Centre. Paid commercial advertising is also welcome and should be in electronic format.

RASC Kingston Centre
c/o 151 Nicholson Crescent
Amherstview ON K7N 1W9

E-mail:
kingston@rasc.ca

Website:
kingston.rasc.ca

Observing Reports: April—May

Various Members

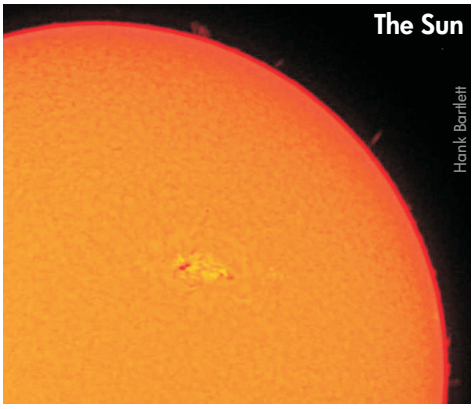
Sat/Sun, April 20/21

Rose-Marie: I went to the stargazing talk at Little Cat last night put on by **Walt Sepic**. It is unfortunate that the cold cloudy weather discouraged people from giving a good turnout, there were only about 18 that showed up, of which were children ranging in age from about 10 to 14. Good to see families encouraging their kids. It was a basic talk, the speaker has many years of outdoor education experience so he quickly geared the talk to the audience, had good interaction with the kids, kept it lively and interesting. He has an eight inch Skywatcher Dobsonian, when the talk ended the sky had cleared and we all moved out onto the lawn, staff at the Center turned off the outdoor lights. Targets of view were Jupiter and the Moon, the smallish group made the lineup shorter and everyone had a chance to look through the telescope. I was considering taking my big binoculars and tripod, but every time I come prepared conditions are not favourable. Sure enough, not having them, the sky cleared nicely. I had a chance to talk with parents and kids in between viewing, pointed out some constellations, showed the kids the plastic planisphere (and did refrain from calling it a spinny!), and showed them the red plastic taped over my flashlight and why it was on there. The Speaker had talked about space missions, the rovers on Mars, and the ISS. At one point when I was looking up I noticed a bright light coming overhead, and immediately asked him, "Hey, is that the ISS?" So we had that little highlight. It was cold and there was a breeze blowing chill into us, so the outdoor session didn't last long, everyone was glad to jump into their cars and head home to warmth.

When I got home I was too tired to continue observing, had been up early, and had spent the morning with field naturalists doing some trail cleanup at their property north of Sydenham. Lovely scenery but we had walked the trails with snow and ice pellets coming down round our ears occasionally. Someone needs to inform Mother Nature that it's springtime.

It was the BigWetNose that woke me up at 3:30 a.m. to go outside, and so began another session of staring at the sky. The moon was near setting, it was a lovely red/orange, and I was hoping for a pillar, but none appeared. I saw a couple of small/medium meteors overhead, and thought maybe I can catch a couple Lyrids, so out came the camera and tripod. I set it on auto and strolled around with the binoculars, looked for Panstarrs but didn't see it, it must be fading out. I don't think I caught any meteors with the camera but will download later today to check over the images. Took my chilled self back to bed around 5:00 a.m., making a note to put on better boots and wool socks if I make out there again tomorrow morning. I plan to get out around moonset and set up for the peak of the Lyrids. Plans. I'm good at making plans.

Hank: This was at 10:53 a.m. EDT and it looks promising but it will rotate off fast...



Kim: I was able to get out for white light when we got home later in the afternoon, and it was certainly growing.

We did get a couple of large SID events from Radiojove today. There had been warnings of M class flares but it was 10%, and they had underestimated this.

Sun/Mon, April 21/22

Rose-Marie: "It's the Great Pumpkin, Charlie Brown!" What a piddle-fart showing. Got myself out of my nice warm nest and dragged camera gear out to the field out back after the Moon had set and stood there in the cold staring up at the sky. Nada. Couple of tiny little *pffffts* and that was about it. When it got too bright, which happens early these days, I packed it in and headed back to my bed.

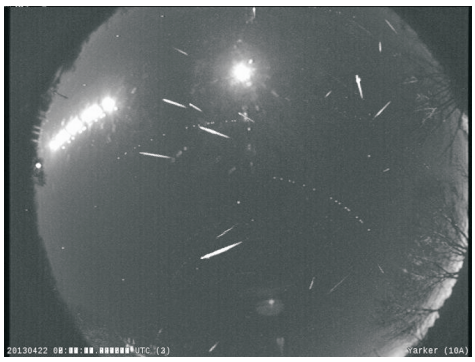
Anyone else see anything? I didn't bother getting out before 4:00 a.m., figured the moon was just too bright. With my luck **Kevin** will now regale me with tales of fireballs having streaked across the allsky camera all night.

Come on sunspot 1726...that big you're bound to do something worthy of an aurora.

Rick: I second your sentiments. You and I followed almost exactly the same process and timing (I was a just a touch earlier getting out and probably a little later quitting (I never know when to give up on a bad job.) I saw 6 satellites, 6 Lyrids, and 2 (or 3, I can't remember and haven't transcribed my notes yet) non-shower meteors. I set my camera to take a whole series of 1 minute exposures but for some reason I have not yet diagnosed, it took one and then stopped. Wouldn't have caught anything anyway—every shower meteor I saw was well west of the radiant.

Kevin K: Not really, maybe 19 images throughout the night from Allsky2, and one set of headlights. Only one or two brighter meteors; most were pretty piddly. This is the

nights summary of all captured objects:



TUESDAY, APRIL 23

Hank: I thought there was something cooking here at 2 p.m. but nothing seems to have happened. There was a bright spot where the filament grew out of but it didn't show in the image. It was a very active sky and hard to get focus:

Kevin K: ...yet another day of plentiful radio events from the Sun—short-lived, on the order of a few minutes each. Looking at one particular hour, there were events at 15:08UT, 15:13, 15:18, 15:44, and 16:04. You can see the last 48 hours worth of 1-hour graphs here: starlightcascade.ca/radiojove/last48.htm (*a snapshot from this page appears below*).

Hank: I assume this was from the active region in the 14:19 image. Unfortunately I had to go out, I would like to have stayed home and observed the areas were small but I would have liked to have imaged them through their peak. The dimmer of the two regions was where the new filament comes out of the spot. I don't know why it didn't show brighter in my image except maybe for the size of it, it was actually brighter in intensity than the larger one.

Kevin K: The weather is getting nicer and I notice we are spending more time outside and it is wonderful!

I've been conversing with Mike Wirths (of Baja) and he has recommended an astrophoto stacking and processing program called autostakkert (autostakkert.com) for non-stellar objects *(i.e.* planetary ones). To date I have nothing but good to speak of it. My previous favourite, deepskystacker, failed miserably at anything not stellar pinpoint sized.

I did an imaging run of the Moon last evening with the Sun still up, and another on saturday and results are slowing being processed (not the program.. it is pretty fast...no the slow part is me).

In other news the digital radio has been fixed and the FMMeteor detection system is back online again, now at 91.10 MHz as the previous frequency (94.80 MHz) now seems to have a loud relatively local station on it.

The last system that is still down is SID1. It failed when the new computer went in and no signals were being received by the software. I have ordered another brand of serial-usb adapter and we will see if that clears the bottleneck in the data stream from the serial port COM1: SID1 to the computer.

Hank: I don't know how or where you find the time and energy to keep up with it all but you are doing great. I barely get out to observe anymore and you are using so many different media. Maybe it is the kid factor. Maybe I should try the stacker with solar images, is it easy to understand?

Kevin K: Yes it is. It likes, and is designed for, video (AVI is the format I've been processing). Your DSLR does video—try a few 10s and 30s vids to start.

SAT/SUN, APRIL 27/28

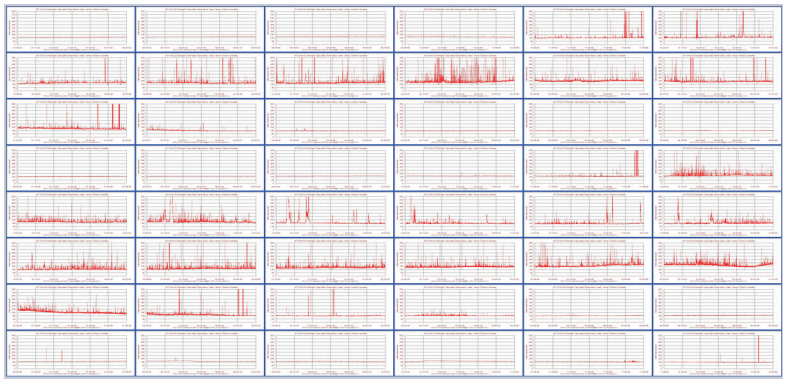
Kim: I missed seeing the sun yesterday (I was out of town), but we came home and did go out and observe Jupiter and Saturn for about an hour, till the neighbour's teenager, turned on the back light, got something, went back in, and left the light on; that pretty well destroyed the night vision. It was a nice night out though.

WED/THU, MAY 1/2

Kevin K: Last night showed maybe a little aurora due north around midnight for maybe 20 minutes.

SAT/SUN, MAY 4/5

Kim: We did go out and did not see one meteor, but at 10:00 p.m. Aquarius was not up yet. It would have been nice to see some stragglers, but all we saw was just three satellites.

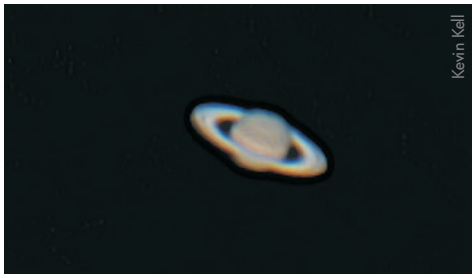


Data at: Wed Apr 24 09:08:01 EDT 2013. The RadioJove Radio telescope is an automated, 20.1 MHz radio telescope located near Yarker, Ontario Canada. This page contains the last 48 images of data from the RadioJove Radio Telescope System and the Skypipe data v2.4.1 collection software.

Kevin K: After the big Torus move (a big, big thank you to all who assisted!) we did some observing saturday night looking for meteors and imaging Saturn.

Of the 20 odd imaging runs on Saturn, then processed using the autostakkert software I've talked about recently, this one using only the best 60% of the frames came out the best. I'm still using mostly automatic settings and letting the software choose its own registration points. Processing each of the 20 odd runs took about 2 minutes each.

The Cassini Division shows along with some surface cloud features of Saturn itself. This is with the 20cm LX200 GPS running at f/10 and the 1.3 megapixel webcam. Saturn itself was 19" wide, 44" with the rings. It was between 22:00 and 23:00 and roughly 30° off the horizon.



TUESDAY, MAY 7

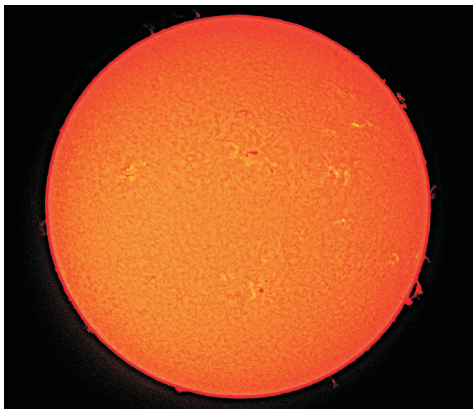
Mark K: At ~21:27, I saw a bright fireball low on the horizon heading towards where the Sun just set. Anyone see it or capture it on a fireball cam?

Kevin K: 'Fraid not. Allsky1 doesn't clear up from the daylight until about 21:39 local last night. Allsky2 caught what looks like a plane at 21:23 near the zenith; the horizon still is lit up in the west. There were a few other events, but nothing that looked like a fireball.

The Human Eyeball Mark 1 still works best in many instances.

FRIDAY, MAY 17

Hank: The attached image is 1748 at 7 a.m. EDT today, 1748 is at upper left and doesn't look like much compared to others. Not showing in the image there was a small very bright spot in it that may have been a remnant of the 08:58 UT M3 solar flare.



Natural Resources Canada reported: Fri 17 May 9:43 EDT A magnitude 5.2 earthquake occurred 18 km NE of Shawville, QC, felt in the Ottawa-Gatineau area and out to Montreal, Toronto and Waterloo. The earthquake was followed by a magnitude 4.1 aftershock at 9:53 EDT.

This quake (and its sequel) was felt by a number of RASC members throughout much of Ontario. **Your editor** felt the first for about a minute and the second for about 20s.

Kevin K: I thought it was the F18s and P3 Aurora flying by for RMC convocation.

Mark K: At 09:43, I got a text from Lyndsay, so I heard and felt that vibration, but did not sense any earth motion for either event. I always miss them. I suppose that is actually a good thing...

Rose-Marie: Rats, never noticed a thing here. Good thing it didn't happen over the weekend, would be a dire tragedy if someone's beer bottle tipped over.

Hank: In Newburgh the postal boxes rattled for at least 30 sec but I didn't feel any tremor in the floor. I actually thought someone was in the lobby shaking them at first but then realized the cause. Few customers seemed to have even noticed it here.

FRI/SAT, MAY 17/18

Rose-Marie: I managed to haul my bleary-eyed self outside during the wee dark hours (hauling green birch logs, paddling down a lake to open beaver dams on top of other little run around errands during daylight hours does not leave one's middle aged self much energy to prowl about during the night) to see if there were any auroras brewing. The aurora oval looked promising, I was up at 1:30 but didn't see anything, so reset the alarm for 45 minutes later to check again. Took the camera and stood on the dock, even if I couldn't see colours figured I may as well try a couple of night shots. While I was out there I could see a slight brightening through "the gap" in the trees over the house to the north, there was just a wee bit of aurora that didn't last long. This is about as bright as it got.

Hank: This may not be much, but it is aurora as we see it in the burg during a peak solar wind speed of 454 km/s. 800 ISO, 30s, f/3.5, at 23:29EDT.★