April 2009

Regulus

RASC Kingston Centre

The International Space Station and Space Shuttle Discovery
Kevin Fetter snapped this great picture of ISS and STS-119 sailing across the northern sky shortly after 8 p.m. on March 25th. (28mm f/4, 6s, ISO 800)

From the Editor...

As usual, **Leo Enright** is out doing about as much observing as the rest of the Centre combined! Of course, being under the warm, clear skies of Florida for the winter doesn't hurt, but even without that advantage he is a most prolific observer.

Just to show that he is not the only one in the Centre who is out observing, this issue contains **observing reports** for the months of February and March from various members, gathered from the Centre's e-mail list. For those observers out there who are not on the e-mail list. please send a note on your observations to *Regulus*—they are always welcome!

(Now that we are caught up on observing reports, there should be room in the next issue for another *Blast from the Past* and *Astronomical Anecdote*. Stay tuned!)

The **Centre's e-mail list** allows members to chat via e-mail. Currently it has about 25 members subscribed to it (25% of our Centre), and it typically averages just a few messages per day, so it is not hard to keep up with.

If you are not currently subscribed, why not give it a try? The easiest way is to just drop a note to our illustrious President, Kevin Kell; his e-mail is kevin (at) starlightcascade (dot) ca★

In this issue:

Upcoming Meetings

(Good) Friday, April 10, 2009
7:30-9:30 p.m.

The Search for Dark Matter: A New Role for Sudbury Neutrino Observatory
Speaker: Dr. Wolfgang Rau, Queen's University

Friday, May 8, 2009
7:30-9:30 p.m.

Amateur Radio Astronomy
Speaker: Marcus Leach, Shirley's Bay

Meetings are held at Stirling Hall Theatre "A" on Bader Lane at Queen's University in Kingston, Ontario. Our meetings are co-sponsored by the Queen's Physics Department and include astronomy lectures open to the public.★

KAON Public Observing

Saturday, April 11 9:00-10:30 p.m.

Observing the Moon
Speaker: Fred Barrett

Saturday, May 9 9:00-10:30 p.m.

KAON (Kingston Astronomy Outreach Network) sessions are held at Queen's Observatory on the 4th floor of Ellis Hall.★

Other Events

April 4 or 5	**Solar Observing**
April 4	**Public Observing**
May 2	**Astronomy Day**

See kingston.rasc.ca for more information on these events.

The Tafelmusik Concert

Kim Hay

Last night we attented the Tafelmusik concert, and it was spectacular. I certainly hope that they will be recording this in the studio.

There were CD's available, but the hall was too packed to really take a look at them; they can be seen here:

http://www.tafelmusik.org/recording/index.htm

It certainly would be a great rememberance gift for IYA.

The 12 foot round screen, and comic relief with audience participation was great.

The concert was held at Grant Hall, Queen's U, and we had balcony tickets, very nice. A lot of images where from Alan Dyer.

We saw a couple of our members a the concert. If you are in a town where it might be playing, and you missed the Kingston concert, take the two hours to see the event. It is very wonderful music to observe by. And of course, for those who are versed in Astronomy it is extremely special, and means so much more.

A program and a booklet on how the event came to be was handed out. Excellent work by John Percy who planted the seed, a great gift for an educator. ★

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Regulus Needs You!

Items of interest from members—full articles, or even just a couple of paragraphs are always welcome. Deadlines for each issue are the last day of the month. Send items to:

walter2 (at) starlightccd (dot) com

or:

Walter MacDonald
PO Box 142
Winchester ON K0C 2K0

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February Observing Reports

Kingston Centre boasts many active observers. Of course, this is not surprising in an astronomical organization such as ours. However, much of this activity does not always get reported in Regulus. *In an attempt to remedy this situation, here is the first of a regular series of reports on what our members have been up to recently.*

Sat/Sun February 14/15
KAON Fireball

Kevin Kell reports: Out on the QUOD (Queen's University Observing Deck) at Ellis Hall, it was fairly cloudy and overcast. Venus could be seen naked eye and its phases in the Fitzgerald scope. At about 19:35 one of the guests on the deck exclaimed, "Wow Look at that!" I turned over to the west and saw a large, slow, bright meteor. My view showed it from just to the north and west of Venus heading straight down for about 5 degrees. Through the cloud and haze it did approach or surpass Venus in brightness. And since I missed at least 1-2 seconds of it...it must have been spectacular (the whole event). At this time Venus was 18° above the horizon at azimuth 261° and magnitude -4.6. Unfortunately our Allsky camera was not running as we left home in the daylight for the event and it can only be started up after twilight.

February 13th-16th
Four Nights in a Row!

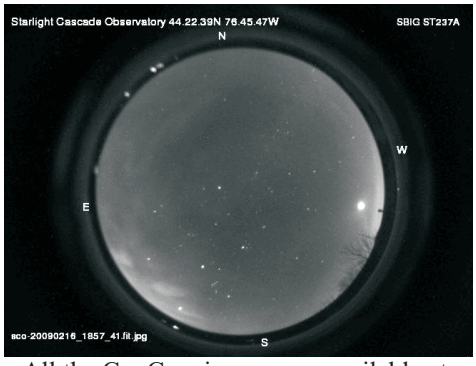
After all the cloudiness of the last few months, February featured four clear nights in a row starting on Friday the 13th...

As **Kevin Fetter** says, "Now that's the way it should be!" His report continues: I was off for 4 days, and it was clear all 4 of them. It has been a long time since that's happened for me, being off that many days and it was clear for them. Usually I am at work and it's clear, and when off it's cloudy. It was nice to be able to get some sat observing in. I did look at that comet [Lulin], but didn't get a good view because of moonlight. I ended the night by getting flashed by Skynet 4A [*is this legal?!*–Ed]. Yesterday night, I watched the Superbird A give a flash every 11 seconds, for a short time. Both are no longer used geo sats.

Kevin Kell continued to tweak his equipment: We bumped up the heating wattage inside the all-sky dome Monday from 6W to 18W and it appears that it worked! No visible crystal frost features on the dome at all, all night long, with a low temp of -15C, a camera temperature of approx -33C and a temp inside the platform but below the dome of -1C.

We are getting a little bit of wood platform singeing (how do you spell singe-ing? as in burning) from the 12W heater so I will have to put something between it and the wood next chance we get. A new link of info has come in from Gord Sarty's group, who have recently updated their page with more images and construction details:
http://homepage.usask.ca/~ges125/fireball/

Your editor is pleased to report that Winchester Observatory was at full power on these nights too. On night #1, in addition to 171 variable stars imaged, I did one 1-hour time series run on BZ Ursae Majoris. I had only been in bed a few minutes when **Merlin** announced that BZ UMa was in outburst. So I decided to go upstairs and run a pile of 30-second exposures for an hour or so. Checking the internet, I saw that nobody had reported the outburst so I fired off an e-mail to the CV outburst list. It's always a thrill to be the first to find and report an outburst!



All the ConCam images are available at:
http://www.starlightcascade.ca/concam/

Saturday (night #2) turned out to be a great night too! I fired up the observatory and then went skating for an hour and a half (some of it outside under the stars!). After I got back, I stopped the run and did 5 hours of time series observations on BZ UMa, which was about one magnitude brighter than Friday night. To finish the night I started a second run on cataclysmic variables (can't let any clear sky go to waste!). The final tally for the night was 49 variables, plus 266 time series observations of BZ UMa.

On nights #3 and #4, time series of BZ UMa continued along with imaging of other cataclysmic variable stars. What a great run! A complete light curve for BZ is shown on page 4 which nicely brackets the outburst maximum. Other than that, it is not a particularly interesting light curve since it shows no eclipses or superhumps.

Fri/Sat, February 20/21
Observe Chilled...

Kim Hay reports: There was some clearing overnight, giving us mostly clear skies with a NW wind and a temperature of -9C, though it felt warm. It was so nice to have a moonless sky too. I went out around 3:10 am to observe the comet which

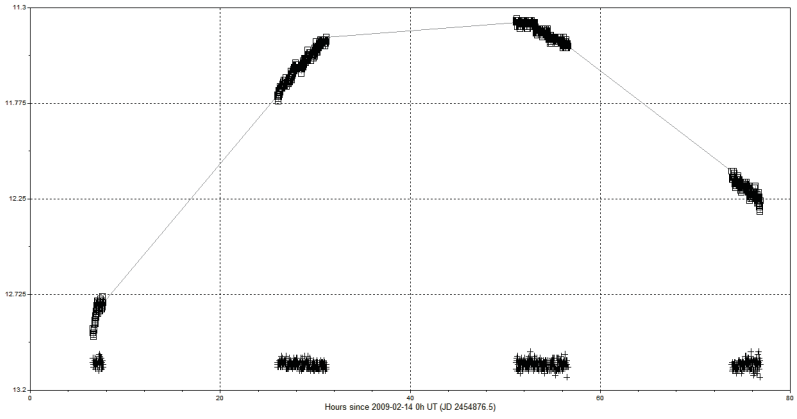
was placed very nicely in the SW. It had transited around 2:30 a.m. and was not too difficult to observe. It was just barely naked eye (averted vision helped). To me it appears to be bigger, at least in the shell around the coma. It also appears to have a shock bow of a tail pointing around it.

I saw a nice sporadic meteor coming from Leo. I had moved the scope outside (since I could not move the roof due to snow and ice build up) and looked at the comet with the 2x barlow and 2" 26mm eyepiece on the 8" Dob. I also used the 17x80 and the 10x50 binoculars. Next, I turned the scope to Saturn, which is always a nice sight, and one that will be quite visible at our March KAON session. The rings are getting thicker. It was nice to see some of the moons of Saturn—Mimas, Titan, and Iapetus. There were a few more moons, under the rings, and very close to the planet that I did not see, as they needed more magnification.

I took pictures trying to hold the camera to the eyepiece, but of course they did not turn out. I came in around 4:00 am, then started thinking about setting up my occultation camera to take pictures of Saturn and the comet on February 24. Saturn will also have 4 moons transiting the front of the planet, so it would be nice to capture that.

Later on, Kevin tells me he went out at 5:00 am...I will let him tell you his story...

And here it is! **Kevin Kell** reports: Two more intrepid astronomers were up this morning to catch a glimpse of Comet Lulin... Kim went out at 3 a.m. and I went out at 5 a.m. It was cold and windy and my eyes were constantly tearing up and fogging up my glasses...will have to get a Kendrick dew heater system for eyeglasses! I thought I had it spotted in 10x50 binocs and aimed the telescope there as well. Watched it for awhile while taking 15-sec exposures with the Canon A540 camera on a tripod, wide angle and then with some zooming in. Turns out I was still asleep enough that I was looking in the binocs and then later in the 20cm Starbuck scope...at M61. Drat! [*It is a very nice galaxy though!*–Ed.] The camera pictures on the tripod did capture a few dim images of Lulin...maybe with a little enhancement they might be better. Taking images through the eyepiece of the scope (which was aimed at M61) turned out nothing. Good thing I guess.



Light curve for BZ Ursae Majoris, showing the latest outburst which started on Friday the 13th. The data points across the bottom are for the 13th magnitude check star.

The file server locked up at 2 a.m. and the all-sky camera aborted its imaging run at that time...going to have to fix that @!$*(&$ computer and/or work out a new system for file management of the all-sky camera.

Mon/Tue, February 23/24
Lulin, Schmoolin (no foolin'!)

Hank Bartlett reports: Well I can't say I am impressed for all the hype there has been. Tonight was not as clear as I had hoped it would be either, then there was the fact that it has been so long since I ran my scope that I forgot how to set the tracking. Of course this is not summer and my batteries froze up quickly and died, dang, what a night.

Anyway, no more excuses, my best of the night is attached: it is ISO1600 / f2.8 / 15s and I have darkened it a little. I think I could detect the tail in the eyepiece but it was very dim. I hope some of you had better luck. (See the picture on page 5.)

Kevin Kell: This was it: closest approach—supposed to be at its brightest. Bah...still, it was nice. Last night around 20:15 it was 12° above the eastern horizon and I could only see it with averted vision in 10x50s. Some light cloud and haze were also in the area. -12C and a NW wind. Brrr. Many images were taken with the camera on a tripod...none of the afocal ones turned out at all. SQMeter reading was 20.84. Did see Rhea and Titan around Saturn as well as the rings. Very nice.

This morning back out at 04:15... -16C and still that wind...brrr. It was clearer, with less cloud and haze, and the SQMeter reading was a little darker at 20.95. Lulin was in the WSW at 30° above the horizon, within 3° of Saturn. I took more images of it in Leo, Corvus, Scorpius,

and the light dome of Kingston. Frostbite was setting in...so it was time to go inside.

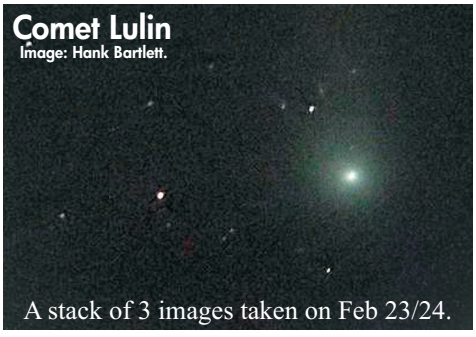
All in all much dimmer than I was expecting. It would be nice to get something brighter. What was the name of the exploding outburst comet after Comet MacNaught ... last year? My memory fails. [*Comet Holmes*–Ed.] I think I have one usable image of Comet Halley in Corvus, a couple of Hale Bopp, a few of Hyakutake, a few of MacNaught and a few of the exploder. Not enough by a long shot.

I am still logging in a paper hardcover book; still looking for some electronic alternative that is able to be searched and indexed. [*If you have any suggestions in this regard, please send them to* Regulus–Ed.]

Kim Hay: With a note from another list, there was reference to a sunspot reported in the upper North quadrant, in my scope 30° west of centre. At 12:25 it was still there, and is reported to be seen in Hα as well. It is not numbered yet, but it is from cycle 24.

Fri/Sat February 27/28
Lulin in the Lion

Kim Hay: Though the blinds were closed, Vega was shining brightly. I went out at 4:10 am (9:10 UT) to see Lulin. Temperature was -21C with very bitter, gusty N/NW winds. I couldn't get into the observtory due to ice from the rain earlier in the day, and the subsequent flash freeze, so the binoculars (17x50's) would have to suffice.



A stack of 3 images taken on Feb 23/24.

Lulin was situated about 2° NW of Regulus. The tail was pointed in the opposite direction, and the front tail appeared to be a small tip. Lulin has travelled over 25° in just four days. We saw it on the 24th (its closest approach) when it was near Saturn, and now it is at Regulus, very nice indeed. It is in a hyperbolic orbit, which means it won't be back in our lifetime, so if you have not seen it, go out now, because it is starting to leave and go back to the vast cold space...

Norm Welbanks: I've wanted to see Lulin too, but getting up early and the recent uncooperative weather have made this not an easy thing to do. I just checked at *Sky & Telescope* and they have a chart which shows that it is possible to see Lulin during the late evening after 9:00pm. No need to get out of a warm bed.

I don't know about anyone else but I intend to at least make the effort tonight with my trusty 7x50's. The weather will be cold for sure but I think the effort is worth it! Every comet is different and this one is no exception. From the pictures I've seen it looks more like a sword flying across the sky and I can't wait to see if that shows up visually.

Sat/Sun February 28/March 1
Ending the Month

Kevin Kell: It was a long and exhausting Saturday but we went outside nonetheless for a short time Saturday night. We spotted comet Lulin within 5° of Regulus easily in binoculars. Then we put the 20cm scope on it and took a look with 2" eyepieces... a 40mm Erfle (30x) and a 26mm (46x). The visible tail had switched directions since before closest approach (see spaceweather.com for the whys) and it was dimmer than before as well. All attempts at handheld camera to the eyepieces [*the afocal method*–Ed.] for ½s, 1s and 2s exposures totally failed. It was cold at -13C and even though the weather station said it was calm, I can tell you that there was wind moving... hmmm...maybe the sensor froze up in that sudden freeze Friday...will have to take a look.

We also tried some more Canon A540 images from a tripod... several 15s exposures of Leo and Orion, and then after experimenting indoors to find the settings, tried the CHDK software and actually got the exposures up to 64s—boy does that make a difference. Much better even though we started to get star trails at high magnifications. The software was still doing autodark frame of 64s as well and it gets cold outside waiting for 2 minutes at a time before moving on to the next one.

The all-sky camera is doing very well: the server is stable and accepting the images from the all-sky workstation, the heaters are working well, and no frost since they were installed. Last night showed the moon and Venus together for an hour or so and just a few aircraft flying by. I messed up on the number of images to take and it stopped around 04:22 instead of 06:00. I am still looking for a replacement camera & lens system with an auto-iris so it can work throughout the daytime as well.

Hank Bartlett: What a change in 4 nights. I took a few images but the tracking was off some. Tonight was clearer than the 24th but the comet is much dimmer than it was. As for the COLD it was about the same. Hope the rest of you had good luck.

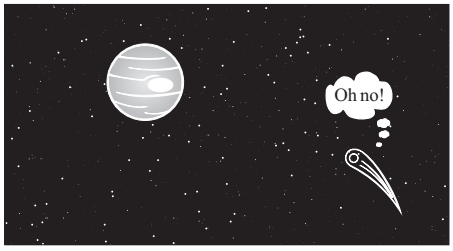
...February Observing

Susan Gagnon: It was indeed a nice night to be out under the stars. Yes, it was a bit cool but I am already dreading the bugs! I think that I am missing only one Messier after last night—M83. I was out early and came in to warm up, make tea etc., finishing up around 00:45. I also took advantage of being so close to warm, dry binoculars to switch out the foggy ones!

I had a great time using the big dob on Orion, Gemini, and Virgo...plus M109 which has eluded me for some time. With the increase in scope size, a good sky, Phecda (γ Uma) very near the zenith, and a well memorized star field from years of searching, I was stunned by how faint it was in the big scope in my location. I would be curious to see how good the sky would have to be for me to see this with my little scope. M91 (now that I have seen it) is also something that I feel will always be beyond my scope at my location regardless of the sky quality.

Several NGC and Levy objects were also bagged. Twice while setting up after a break or change of eyepiece, I landed on a) a distinctive cluster and b) a galaxy that I do not recall logging, all by chance. Not as common an experience with the little scope.

Finally, Comet Lulin was sighted, and Saturn with several moons was very nice too.★



15 Years Ago: Comet Shoemaker-Levy 9 plunges towards its date with destiny at Jupiter.

March Observing Reports

Mon/Tue March 2/3
Lulin Past its Prime?

Kevin Kell: Outside for no more than 20 minutes this evening after 19:00 in the -12C with a good stiff wind from the north... killer, that. I spotted Comet Lulin in 10x50 binocs fairly quickly, about three fields of view up from Regulus (about 20°).

We put the 20cm scope on it and again found pretty quickly and easily but it is still fading.

Tue/Wed March 3/4:
The X Files

Kevin Kell: It was still cold out but I went out for a quick 30 minutes this evening and spotted Comet Lulin near M44 (the Beehive Cluster) about 1½ binocular fields of view down and to the left of it. I took some more 64s exposures with the Canon camera of the Big Dipper, and tried another of Orion and the moon only to see cloud coming in.

Then I thought about the moon and how nice it would be to get some images of it tonight...but let's try out the refractor instead. Overall I found that the 1¼" eyepieces on the 90mm Meade were a lot easier to hold the camera up to the eyepiece and snap off images. I was using a 25mm Plossl (~36x I think), 1/1000s exposures and the camera on continuous motor drive as it were...

Starting with wide angle and then zooming in to 4x on the camera optics and changing the exposure up to 1/125s, we had 100 images before you could shake a stick...good thing too: clouds came in and it was cold and Rick Mercer was about to come on the TV.

Then the cool thing happened... reviewing the images inside and noticed a neat feature lit up on the moon...in the shape of an X. Cool! It looks like the Lunar X feature that was imaged without even hunting for it (see the *RASC Journal,* April 2007)!

Kevin Fetter: my new coworker and I observed a pass of the ISS and an Iridium flare.

Walter MacDonald: I was out last night to look at Comet Lulin and Saturn visually with my C8 in the Merry-Go-Round Observatory (MGRO). I was surprised to see a whole bunch of cloud floating around, but fortunately it did not stop my CCD run in the dome. The cloud in Cancer was thin enough that I was able to see Lulin in the 6x30mm finder and the scope. It is a nice comet visually. Seeing Saturn with its rings almost edge on took me back to the way it looked in 1981!

In the dome, 106 variable stars were imaged—mostly cataclysmics, but

also some Miras in Andromeda at the start of the run, and in Hercules and Lyra at the end of the run.)

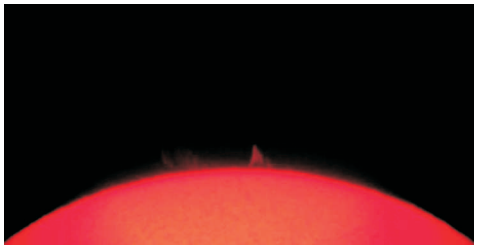
Kevin Kell: I was up and out this morning to catch an overhead pass of the International Space Station (ISS) at 05:51 this morning...it was cold but there was no wind...four minutes later...cold! Oh yeah...I was still in pajamas! **Kevin Fetter** reported seeing this same pass, and even got a taxi driver to watch with him! **Susan Gagnon** also reports on this: I saw this pass by chance while I was pouring my coffee looking NW; I thought that it was much brighter than predicted at the time. It is so cool that it is so bright and so slow. I poured the coffee, walked to the other side of the house, looked out and saw it continuing to the SE. [*This is further evidence that* when *it comes to observing, Susan has really been pouring it on lately, and drinking it all in, despite the daily grind. It is probably safe to say that she had a double-glazed look in her eyes at these windows of opportunity. Later she was heard to remark, "Bean there, seen that."*–Ed.]

Kevin Kell continues: In regards to imaging the Lunar X, this just goes to show that if you get out enough and take images for their own sake, sometimes good things happen!

Wed/Thu, March 4/5
A Star Blows Up Real Good

Walter MacDonald reports: Tonight I caught KV Andromedae in outburst. The AAVSO Quick Look page and CVNet website don't show any notice of this, so I sent out an e-mail announcement on the CVNet outburst list.
In the dome, 101 variable stars were imaged, again mostly cataclysmics, but with Miras in Lyra and Cygnus at the end of the run. The Miras are clustered in the Milky Way in great numbers, so it is a challenge to try to get them all when they are so low in the sky at dawn—in fact, it takes several sessions to do so.

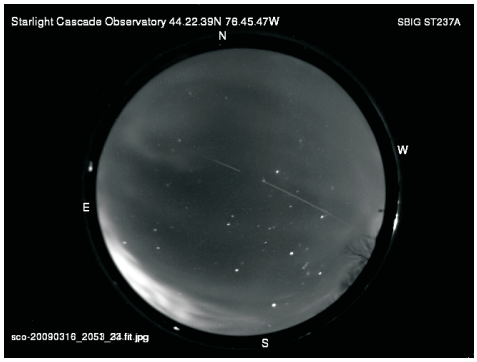
(Each year, any stars that are not circumpolar have an "annual gap" when they are closest to the sun in the sky. In an effort to minimize this gap, it is important to go after them when they are low in the west after sunset or low in the east before sunrise, despite their low altitudes.)



Some of the short-lived solar activity on March 13th. Hα image by Hank Bartlett.

Mon/Tue March 16/17
ISS in the Sky through the Fisheye

Kevin Kell reports: the ISS went as near overhead as we could tell, outside watching with heads tipped back as far as they go. It was surprising to see it disappear so quickly into the earth's shadow: by the time it hit the Big Dipper, we couldn't pick it out anymore. The estimated magnitude listed on the *Heavens Above* website was -2.3.



The March 16th ISS pass, imaged from Yarker. This is a stack of two 120s images; the gap in the trail is caused by the time required to read out the camera.

Fri/Sat March 20/21

Hank Bartlett reports: Well, you all got to me, I just came in. Saturn looked pretty good, haven't seen it edge on like that for a long while of course. I only managed to get one poor image as I am way out of practice. I was just going to watch the ISS sunrise and they switched to a control room camera, DANG!

Kevin Kell: We went outside after BSG.. about 23:05 EDT...it was cold! There was a north wind and relatively high humidity (lots of heavy frost this morning). Saturn was nice...started at about 30x in the dobsonian and she was nice and crisp and very, very small. Rings were very evident as were two moons (Titan and Rhea) over on one side close in.

I changed 2" eyepieces over to about 60x. Still very nice but no new features. Then I added the 2x barlow to give about 120x. This is where we have to get a tracking scope working on it because it was in and out of the field of view in too short a time to actually get your eyeball in the sweet spot and just really, really look at Saturn.

Kim saw some meteors and a lot of aircraft...too bad the *CCDSoft* all-sky camera software barfed around 1 a.m. ...it was a great night.

Hank Bartlett: I have downloaded the software but as of yet have not figured our how to use it, to have it just for the battery meter is worth it. It was about -8C when I came in at 00:30. The only Saturn image that turned out was through frost, duh, I wondered why is was so dim. I really got to get my act in gear and hook up the dew zapper. It is quite interesting how much smaller and dimmer Saturn looks with out the rings showing more.

March Observing Reports...

A 64s exposure using the canon C*hkdk* software. Image by Kevin Kell.

Susan Gagnon: It was cool but I did not feel it until 00:30 and then all-of-a-sudden I could not get into the house fast enough. The highlight of my night was seeing NGC 2371/2372. Both! I think... I still have to check the DSS photo for confirmation.

My little graphic circle tool that I showed everyone at *Fall'N'Stars* last year was pressed into service as I have had to resort to some sketching to record the scene to research to see if in fact I was on target.

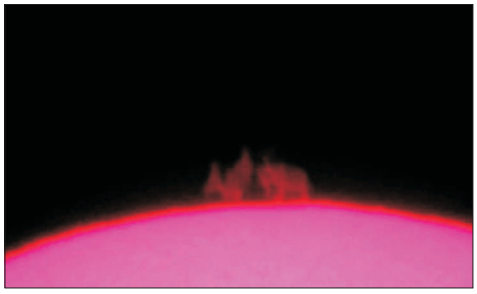
Another cool thing was being able to use some higher magnification on a nebula. I was using the Clown Nebula (NGC 2392) as a landmark for a star hop and thought, hey that might benefit from a closer look—it was very nice.

A couple of days later, Susan has reconsidered her sighting of both components of 2371/2372: I guess that I will need to do this with a larger scope, or darker skies, or both. It should be easy as the star hop is well memorized! The trick is to remember the list of stuff when the opportunity arises. *Which just goes to show that you can never have too much aperture!*

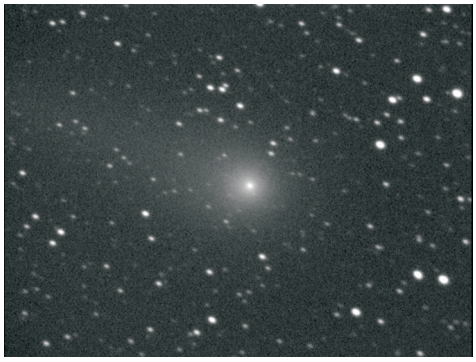
Sun/Mon March 22/23

Susan Gagnon: The Clear Sky Clock was excellent for cloud cover and transparency but very bad for seeing. I went out and had a nice session. I was not looking at planets so I guess that made the difference for me. I seemed to be able to entertain myself, even dragging Baby out of the corner to peak around a corner that the Dob was unable to manage.

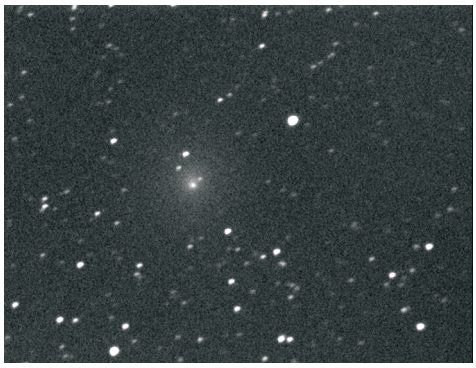
Clear nights for March finished with a string of three: March 22/23, 23/24, and 24/25. Luckily, it was just clear enough on the evening of 25/26 to see the ISS and shuttle go by! ★



Solar prominences on 2009 March 27. Hα image by Hank Bartlett. Susan G. thinks the right prominence looks like an elephant!



Comet Lulin on 2009 March 25 at ~00:28 UT. Exposure 7x30s through a Johnson V filter. Image by Walter MacDonald.



Comet Cardinal on 2009 March 25 at ~00:37 UT. Exposure 11x30s through a Johnson V filter. Image: Walter MacDonald.

Buzzard Coulee Meteorite Fall Recovery

The University of Calgary invites interested RASC members to participate in the upcoming meteorite recovery effort near Lone Rock, Saskatchewan. This is a once-in-a-lifetime opportunity to contribute to mapping the strewn field of what we expect will be Canada's largest recorded meteorite fall. While any recovered meteorites will remain the property of the landowner or the University of Calgary, search volunteers may suggest institutions for potential donations.

Logistical details for search volunteers will be communicated as they become available. Unfortunately there will probably be no funding available to cover volunteers' expenses. A rustic camping option may be available in the strewn field, and we are exploring getting one of the nearby commercial campgrounds opened early.

When: Beginning April/09 (weather-depending), ending May/June/09. **Needed:** Volunteers to search the strewn field (will be organized in search teams of ~6).

If several people from your Centre are interested, please choose just one to be the "coordinator" for contact. As details for the search are developed, people on the list will be e-mailed.

To be added to our volunteer e-mail list, please contact Lynne Maillet at maillet (at) ucalgary (dot) ca

Come Join Our Team!
Make a contribution to scientific research and be part of a historical event! ★

National Council Report: March 28th

Susan Gagnon

First I would like to thank Kim and Kevin for hosting my renewed acquaintance with National Council. It was surprisingly painless. The teleconference is really the way to go. We had some wine at lunch sitting in the sun and did a bit of solar observing while we waited for the Toronto group to get back on the air, and the travel expense was perfect! As usual there were many reports presented.

New Travel Policy: not a lot of changes except increases to better reflect the price of hotels and gas. 2008 Financial Statements and a 2009 **Budget** were presented.

The **Awards Committee** Report:

Chilton Prize
- Brian Battersby (Prince George)

Simon Newcomb Prize
- James Edgar (Regina)

Service Awards
- Clinton Shannon (Halifax)
- Robert Duff (London)
- Kim Hay (Kingston)
- Richard Huziak (Saskatoon)
- Walter MacDonald (Kingston)
- Al Seaman (Ottawa)
- Patrice Scattolin (Montreal)
- Alan Whitman (Okanagan)

Congratulations to all!

The **Education Committee** is busy with IYA-related activities, school visits and public sessions, promotion of *Mary Lou's New Telescope*, contribution of an Astronomy Day chair, and work on the Canada-Wide Science Fair.

The **Executive Committee** Report is a comprehensive list of all things that occupy the council and sometimes affect our lives at the Centre level, so I recommend that if you choose to go to the members site and read one report, this would be a good one.

GA update for the SSSP looks very good. A different kind of GA, this will be possibly the best of all worlds: great food, tours, talks, and observing. The attendance looks very good, and is expected to reach 300. Try to arrive rested!

Membership and Promotion Opportunities for growth: *The RASC in the Wake of IYA 2009* was the title of a paper presented by the committee and is worth reading.

Observing Committee: List of Certificates approved:

ETU
- Mark A. Croom (unattached)

Messier
- Keith Johnston (Calgary)

NGC
- Steve Meister (unattached)
- Charles Banville (Victoria)
- Mark Croom (unattached)

Lunar
- Ken Backer (Missassauga)

The Society's total for Deep Sky Challenge remains six.

The **Property Committee** of course was concerned with the sale of the Dupont Street property. The reports from this committee will look very different from now on! With any luck, there will be less time spent by volunteers painting, plumbing, etc. The new landlords of the rental property have a history of being very fair with tenants.

Publications Committee: Sales continue to drop on all items for sale but there is still money being made for the Society. There may be some changes to the *Handbook* as its increasing weight may be problematic postage-wise. The numbers for the paper option of the *Journal* are steady and the *e-Bulletin* is appreciated and enjoyed.

Life Membership wind down: There was a recommendation presented to the Executive to consider to deal with the Life Member issue. The proposal includes elimination of this membership category, downloading the maintenance to the centre level, and all of the paper and financial details that go with that—a fair bit of housekeeping—but it should be possible to settle this matter in one year.★

IYA Report

Kim Hay

Well there has been a whirlwind of activity over the last few weeks! There was the **Globe at Night** project, which had you look at Orion and see how many stars you could count to estimate the limiting magnitude of your sky. This event ran from March 16–28th. Make sure to register any observations you made at http://www.globe.gov/GaN/, and keep visiting to see the differences in the past years' readings compared to 2009.

There was also **Earth Hour** on March 28 from 8:30–9:30 p.m. local time. This movement started in Sydney, Australia in 2006, and is a World Wildlife Fund project to raise awareness of climate change. It has been reported that there was a 6% drop of power usage across Ontario (~1000 megawatts) from the general usage of 15,000+ megawatts normally used. There was a 13% drop in Toronto, up from 9% last year. For more information on Earth Hour around the world, go to www.theweathernetwork.com to see

Continues on page 10...

Service Award Citation for Kim Hay

Many of us, no most of us, join clubs, associations, or societies for what they can give us or where they can take us. Few of us join to give as Kim Hay has to RASC National, RASC Kingston Centre, and her fellow members. Joining any association for benefit is what they are there for, to guide, teach, and enrich the interests of its members. Kim however is one of those individuals in life that join to give first and receive later.

Since 1989 through two decades of membership, Kim has been a constant volunteer, served on numerous committees, and held many executive positions at both the Kingston Centre and National level. It only took Kim two years after joining the RASC to become an executive, holding positions of Secretary, Treasurer, National Council Rep., President, and Treasurer 2008-2010. In 1997, when Kingston Centre hosted the General Assembly, Kim was the never-tiring Treasurer and Registrar for the event (with the aid of "Barbarian") that helped make it such a success. Apart from all of these positions Kim has volunteered for every public event and instructional/education course that the Kingston Centre has had in the past 20 years.

Kim's involvement at the National level makes one wonder how she had the time for most of her Centre work. Serving on eight committees since 1994, Kim has contributed greatly not just to this Society, but the hobby and interest of Astronomy as a whole. Her National level service is as follows: Membership & Promotion Committee 1994-2002 (Chair 1998-2001), Computer Use Committee 1998-2001, National Secretary 1999-2005, National Executive Committee 1999-2005, Light Pollution Abatement Committee 2001-2002 and 2006-2008, Education Committee 2005, 2007-2008 (Chair 2007-2008), Library Committee 2007, Historical Committee 2007, Board Pilot Committee 2007 and Executive Advisory Committee (2008-2009).

An avid and infectious solar observer, Kim has published her first contribution to the 2009 *Observer's Handbook*. Kim is dedicated to sketching and tracking solar phenomenon (soon to be expanding into H-alpha), never taking the shortcut of digital imaging for her statistical work. She has been the ALPO Solar Coordinator since 2005 and serves as Computing Section Co-ordinator since 2004. Other outside interests include membership in the American Association of Variable Star Observers (AAVSO) and being a Committee member (Canada level) for the International Year of Astronomy (2007-2009).

Her most recent contributions in 2008 to members across Canada were the creation of the RASC Astrosketchers web page and e-mail discussion group[1] and her work on the web presentation of *Canada and the Stars*[2]. She deserves all the credit for bringing together the RASC's astronomical sketching community, and putting its resources on the Web.

The last point to mention is the over 100 hours of time committed to preparing for the International Year of Astronomy in 2008 alone, not counting participating in all of the events that will happen in 2009.

The Awards Committee and the Board of the RASC Kingston Centre wholly endorse Kim Hay's nomination for the RASC Service award based on the documentation put forward here.★

...IYA Report

a news clip.

Upcoming events in the celebration of the IYA are listed below. If you feel you can come and help out for a bit that would be great! Handing out Star Finders, Astro cards, Sidewalk Astronomers booklets, or just chatting and manning a telescope is a great way to enjoy astronomy and share it with others. If you're interested, please let me know at kingston (at) rasc (dot) ca

April 4 1:00-4:00 p.m.
Celebrating 100 Hours of Astronomy with a solar observing session (weather permitting) at Confederation Basin in Flora MacDonald Park.

April 4 9:00-10:30 p.m.
Night-time observing session at Queen's Observatory

April 11 9:00-10:30 p.m.
KAON session at Queen's Observatory. Speaker: Fred Barrett on Lunar Observing

May 2 9:00 a.m. - 3:00 p.m.
Astronomy Day at Springer Market Square

May 9 9:00-10:30 pm
KAON session at Queen's Observatory

June 5 6:00 p.m. - midnight
Relay for Life (Cancer Society) at RMC Parade Grounds

June 13 9:00-10:30 pm
KAON session at Queen's Observatory★

Web Links

1 http://www.rasc.ca/discussion/astroketchers
2 http://www.rasc.ca/education/iya/csc.shtml

Service Award Citation for Walter MacDonald

2009, most notably The International Year of Astronomy, will also mark the 30th year of Walter MacDonald's involvement with the RASC. Walter was an active member of the Toronto Centre from 1979 till 1987, and from 1987 to the present he has been energetically involved with the Kingston Centre. In a local sense it is undeniable that Toronto's loss is Kingston's gain, yet wherever Walter has been, the nature of his many ongoing contributions to the Society has benefited the RASC as a whole, and through the RASC, astronomy at large.

During his term as National Librarian (1994-1997), Walter created and distributed one of the first e-versions of the National Library's holdings of monographs and journals. It is in the spirit of that early effort to enhance access to RASC resources through electronic means, profiting members and non-members alike, that Walter has undertaken an immensely more significant enterprise. He has digitized the *National Newsletter* (1970-1990), and the early print incarnation of *The Bulletin* from 1991 to 1996, as well as the Annual Reports for 1966-1977 (when they were issued under separate cover), and provided links to the URLs of the earlier Annual Reports (1914-1960s) in The SAO/NASA Astrophysics Data System (ADS). This has been a massive undertaking, and Walter conceived, implemented, and completed it virtually single-handedly, and in record time. It is as if one man did a whole committee's worth of work, competently, congenially, and on-time. There are reports, reviews, and observations of real value in the *Newsletter* and early *Bulletin* which fully justify the effort spent on their digitization. The full significance of Walter's achievement in this project lies elsewhere, however; he has made readily available several key resources for the history of organized amateur astronomy in Canada, for charting the course of Canadian amateur science, for chronicling the changing relationship between amateur and professional astronomers, for gauging the reaction (or non-reaction) of Canadian amateurs to trends in the discipline, and for comparing our national astronomical culture with others. For this achievement alone he merits nomination for the Service Award.

More should, and can be said about Walter's work at the Centre level. While a member of the Toronto Centre, he served as Assistant Editor of *'Scope*, the Centre's newsletter, as well as Chair of the Observational Activities Committee. As a member of the Kingston Centre, he was their representative on national council (1992-1994), centre president (1994-1995), a member of their observatory committee, and centre webmaster. Prior to holding that last position he digitized nearly two decades of *Regulus*, the Kingston Centre's newsletter. In recognition of his contributions he received the A.V. Douglas Award for 2007, the Kingston Centre's most prestigious service award.

For Walter, as for many of us, whatever his other astronomical interests, observing is vitally important. His first projects were centred on DSOs, and by extension, astrophotography, first on film, then with CCD technology (1998-). He was the first Kingston Centre member to complete the RASC Finest NGC Certificate in 1995. Walter's love of observing has led him to complement his RASC membership with membership in other reputable astronomical societies: the AAVSO (since 1981), The Planetary Society (since 1983), the North York Astronomical Society (NYAA), and the Durham Region Astronomical Society (DRAS). For the AAVSO he has logged nearly 24,000 observations (some visual, but the majority with CCD). Walter has endeavoured to increase collaboration between the RASC and the AAVSO, notably through mentoring novice RASC variable-star observers. He has been involved with the Kingston Centre's Robotic Telescope project since its inception in the fall of 2006, providing both technical assistance and major hardware. He also successfully designed and installed his own observatory structure as an integral part of his home (Winchester Observatory). His interest in variable stars has led him to participate in the Puckett Supernova Search Team, work for which he received the Ken Chilton Prize for 2008, along with several RASC colleagues.

Walter approaches all of his astronomical projects with good humour, high motivation, and hard work. He has been generous in helping others with equipment, advice, and programmes. It speaks volumes that when the RASC Archivist suggested Walter be nominated for the Service Award, members of the RASC History Committee endorsed the nomination, as did the Kingston Centre's Awards Committee.★

Meeting Report: Friday, March 13th

Kevin Kell

After about 10 minutes of announcements of upcoming events, Susan Gagnon introduced our guest speaker.

Frank Roy from **Elektra Observatories** then presented the concept of the *One Meter Initiative*, a state of the art telescope south of Denbigh (northeast of Bon Echo Park). They are looking for US $2M to get it up and running. There will be an economic steering committee meeting in Sharbot Lake on Friday April 17th at 1 p.m.; we are hoping one or two Kingston Centre members will attend and report back on this. Frank distributed many handouts and a DVD.

Approximately 25 members and guests attended, including some Belleville Centre members. It was good to see them again! An enjoyable 10-minute break followed by door prizes. Thanks to Kevin Fetter for donating two items.

Observing reports were given by Ken Kingdon, Susan Gagnon, Kim Hay, and Kevin Kell. We remotely fired up the Starlight Cascade all-sky camera and watched the first few exposures build up.

The meeting adjourned at 9:15 p.m. to Wendy's on Princess Street for a caffeine fix for the drive home.

At this point, an improptu **Fall'N'Stars** 2009 organizational meeting was held from 9:15-9:30 p.m. with members from Belleville Centre. Finally the evening was concluded with a Kingston Centre **board of directors** meeting from 9:30-10:15 p.m.★

KAON Report: Saturday, March 14th

Kevin Kell

It was finally a clear and not too cold night for the KAON (*Kingston Astronomy Outreach Network*) Public Observing Sessions at the Queen's University Ellis Hall Observatory.

Our guest speaker was **Terry Bridges** (Queens), who talked about the *100 Hours of Astronomy* project and the planet Saturn. He spoke for for 20 minutes, finishing at 8:00 p.m.

The deck opened at 7:30pm with the Kingston Centre's 20cm Fitzgerald Dobsonian Telescope run by **Kim Hay** and **Fred Barrett** and the Queen's 3.5" Questar (FL=1300mm, giving 50x magnification with the 24mm eyepiece) by **Kevin Kell**.

There were guests there early again, as always. We started by viewing **Venus** in the west as it was still pretty bright.. sunset being only at 7:10 p.m. **Saturn** popped out of the haze around 7:45 and we switched over to that for most of the rest of the night. Saturn was gorgeous...the rings were gorgeous. The Questar optics are something else. We believe the Saturnian moon Titan was in the field of view as well at mag 8.2 and about 5 planetary diameters out.

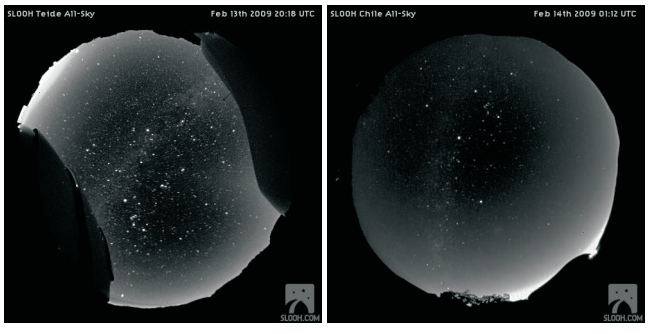
A few other targets of opportunity were the **Pleiades**, **M42** (the Orion Nebula), the **Hyades**, and an unsuccessful attempt to spot Comet Lulin (C/2007 C3) west of the Castor-Procyon line.

Both deck telescopes and the 16" dome telescope and all of the operators were running at full capacity for well over 90 minutes. It finally started to slow down just after 9:10 p.m., petered out around 9:15, and we shut down at 9:30.

Over 133 guests attended—the best attendance in some time. There were lots of questions, lots of little kids, and lots of IYA *Starfinders* and *Astrocards* handed out. I believe we ran out of star charts and *What's Up* handouts.

Several Kingston centre members dropped in for viewing as well. Another highlight of the evening was sighting two UFO's: Unidentified Flapping Objects—undersides of ducks lit up by light pollution!

I arrived home with a sore dry throat from talking for two hours non-stop outside in the low humidity. I hope you had fun—we sure did!★



Odds & Ends

Left: All sky views taken from the SLOOH.COM observatory sites in the Canary Islands (northern hemisphere) and Chile (southern hemi-sphere). The sky at the site in Chile is noticeably brighter.

Right: Great works of literature we never saw.