April 2010

Regulus

RASC Kingston Centre

Farewell, Orion!

As another winter season was winding down, **Kevin Kell** took this 64-second exposure with his digital camera and one of the Kingston Centre's old Mark I barn door trackers. These manually-operated trackers appear to be a great match to today's powerful digital cameras. Read more at starlightcascade.ca

An Invitation to the April 9th KC Meeting

THE FIRST PORTION of the April meeting agenda will be devoted to the March National Council meeting and the outcome of discussions there. It has been some time since we have spent any time or energy considering our role as part of the National Society. Why is that? What can we do to make ourselves feel less isolated from the mother ship? What do we want from National or our Centre? Why do you remain a member of RASC? Together we will tackle these ideas and our hopes for the future of the Centre.

Please bring your questions and criticisms along to the meeting. I want to be a responsive president but I need feedback. I will note your comments and get them into *Regulus* for the wider membership. If you cannot attend but would like to make a comment, send it to me and I will read it at the meeting, presenting in your name.

After the break we will concentrate on member presentations whatever they may be. Please limit yourself to 15 minutes, and send your name and topic along to me as soon as possible. One slot is already filled! I look forward to a large crowd! ★

—Susan Gagnon

Upcoming Meetings

Friday, April 9, 2010
Members' Night 7:30-9:30 p.m.

Friday, May 14, 2010
Regular Meeting 7:30-9:30 p.m.

Friday, June 11, 2010
Regular Meeting 7:30-9:30 p.m.
🗣 *Randy Attwood, President, RASC Mississauga Centre*
The Apollo 11 Landing—and How It Nearly Failed

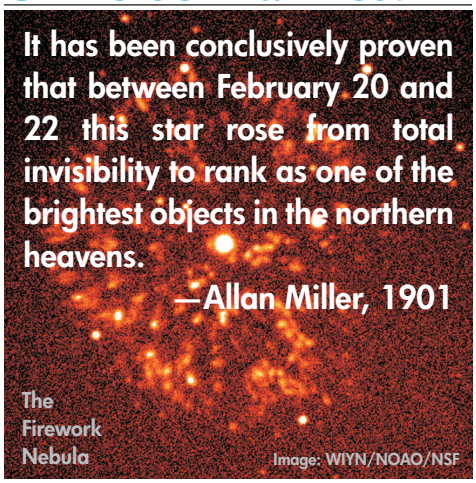
Meetings are held at 7:30 p.m. at Stirling Hall Theatre "A" on Bader Lane at Queen's University in Kingston, Ontario. Our meetings are co-sponsored by the Queen's Physics Department and include astronomy lectures open to the public. ★

Astronomy Day

Saturday, April 24 7:30 p.m.. ★

More info at kingston.rasc.ca

GK Persei Dazzles!

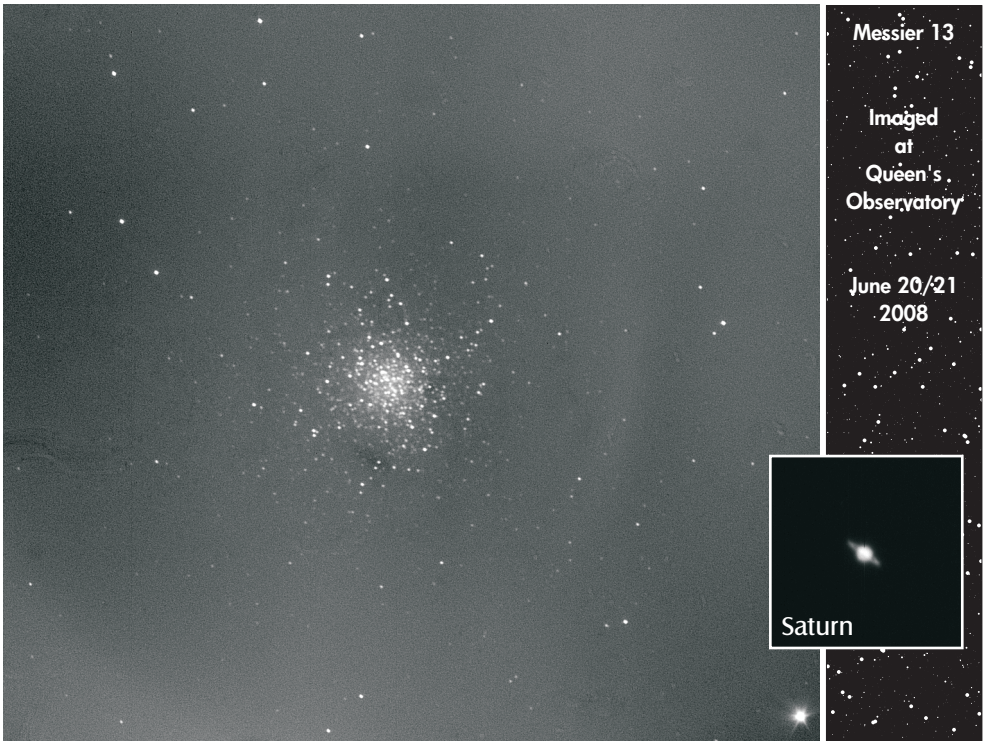


A month ago GK Persei rose from 13th magnitude to 11th, the lastest chapter in its restless history since going nova (mag 0.2) in 1901. Read about Nova Persei 1901 on page 3, then get out there and observe it! (Just don't expect to see the nebula!)

Pseudocolour image: 120x120 arcsec, 4-minutes on the WIYN 3.5m scope: noao.edu/image_gallery/html/im0008.html

In this issue:

Image from the CCD Workshop, June 2008



BETTER LATE THAN NEVER, RIGHT? Your editor stumbled across the CCD image files that had been taken during the Centre's CCD Workshop a couple of years ago, and decided to take a stab at processing them.

Saturn, M104, M101, M13, and M57 were imaged, but there was not really enough accumulated exposure time on most of the objects, and not enough focal length on Saturn (see inset).

A lack of dark and flat frames made processing much more difficult than it needed to be. A synthetic flat frame was built ("faked?"), which helped a bit, but there was still a background gradient that could not be entirely removed. This may have been due to stray light entering the telescope during the exposure. A quick pass of digital development processing (DDP) and unsharp masking were also applied. This M13 image is a sum of 10, 20, 40, and 60 second images.★

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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:

walter2 (at) starlightccd (dot) com

or:

Walter MacDonald
PO Box 142
Winchester ON K0C 2K0

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KC Charitable Status

Kevin Kell, Treasurer

The Royal Astronomical Society of Canada became registered as Charitable on 2006 September 19th. Since that time we have been eligible to receive donations and issue tax receipts for them.

Our T3010 Return can be found at cra-arc.gc.ca/charities/ (search for "royal astronomical kingston").

Our Canada Revenue Agency disbursement numbers for the last three years are:

- 2009 disbursement excess: $1,712
- 2008 disbursement excess: $2,107
- 2007 disbursement excess: $8,087

From cra-arc.gc.ca/tx/chrts/glssry-eng.html

The disbursement quota is the minimum amount a registered charity has to spend on charitable activities or on gifts to qualified donees to keep its registered status. In general, it is an expenditure test based on tax-receipted gifts and amounts received from other registered charities in the previous fiscal period. The value of enduring property spent in the fiscal period or transferred to qualified donees as well as certain properties must also be considered.

The purpose of the disbursement quota is to ensure that registered charities actively use their tax-assisted donations to help others according to their charitable purposes.

Basically, we are more than fulfilling the requirements for spending on education and support of schools and education.

Congratulations and thanks to those participating in those activities (e.g. Astronomy Day, International Year of Astronomy, Kingston Astronomy Outreach Network, Cancer Society Relay for Life, March of Dimes The Sky is the Limit Festival, and more!) this past year.

For more information about donations, see our web page at:

kingston.rasc.ca/donations.php

Blast from the Past: Nova Persei 1901

Allan Miller

On February 22, 1901, at 23h, 15m, I perceived in the northwestern sky a first-magnitude star which I at once remarked as an unfamiliar object. In color and brightness it greatly resembled Capella, but it was too near the horizon to be mistaken for that star, which at the time had a considerably greater altitude. The yellow color and the brightness of the strange object impressed me with the idea that it must be a nova, but I did not act on the impulse which I confess I experienced, that I should telegraph to Harvard Observatory; nor did I make any observation that night beyond noting approximately the place of the star in the sky: Indeed telescopic observation would have been impossible, as it went below the range of my equatorial fifteen minutes after I first perceived it. To settle its place I employed a celestial globe, old, faded, and encumbered with the constellation figures; it served, however, to show me that α and β Persei were the nearest lucid stars to the object of my inquiry. Early the following day a careful examination of star-charts perfectly satisfied me that a bright nova had become visible: I therefore fully expected the press announcement of its discovery which was published in the evening papers of Saturday, February 23, 1901. I figured out at the time that my first view of the star occurred about seventeen hours subsequent to its discovery by Dr. Anderson...

...So wonderful a phenomenon as the appearance of a new star may well rivet the attention of even the most thoughtless. Yet marvelous as is such an event, it cannot be regarded exactly as rare. I, myself, during the past sixteen years, have observed no less than three such objects, and had I begun earlier to devote time and thought to astronomy, I might have seen at least as many during the preceding fourteen years, though indeed none approaching in grandeur the wonderful object regarding which I have had the honor of addressing you to-night. But since there have been so many Novae we may confidently expect the appearance of more. Let us then set a watch upon the skies, that the next celestial stranger may not rise to the first rank before it is discovered by a Toronto observer. To be successful our vigil must be a labor of love, instigated by no vain and ostentatious desire of ranking as original discoverers, but undertaken as a pleasure and as a duty too, because each hour in the career of an object such as Nova Persei is rich in those lessons which we as men of science desire to learn, pregnant with wonders, full to overflowing with those deep things of Nature which are mysterious to us only because we are lacking in patience to study them and ability to decipher the messages which amid the darkness and stillness of the night she telegraphs to the starwatcher on flying ether waves from the shores of the infinite, or writes in 'patines of bright gold' within the vaulted dome of her vast temple.★

These two excerpts come from Mr. Miller's extensive report on this nova in the *Transactions* of the Toronto Astronomical Society for 1901 (pp. 106–118). In this volume is also a report and three pictures of the nebula discovered to be surrounding this nova (pp. 133–143).

For Your Compendium of Esoteric Facts

Walter MacDonald

READERS OF *REGULUS* all know of the RASC of course, but did you know that there is another closely related trans-national Canadian astronomical society? (No, we're not talking about CASCA, although that is a perfectly valid—though arguably not esoteric—answer to the question just posed!) It is the RASD: the Royal Astronomical Society of Daves. The RASD is "dedicated to advancing the astronomical persuits of those whose given name is Dave or David (although we prefer Dave)." Current membership is only 25, and the entrance requirements are higher than they were a few years ago. Although its members are spread across the North American continent, the organization's barycentre is in London, Ontario: one third of the RASD is made up of RASC London Centre members. Other than the London Centre, only half a dozen RASC Centres are represented in RASD. Our Honourary President David Levy is also a member though (a.k.a. Dave X), so one could say that the Kingston and Montreal centres also have an RASD connection.★

Meeting Report: March 12

Susan Gagnon

WE BEGAN THE MEETING with the usual introductions and a listing of upcoming events. March was a Kingston Centre participation month for **KAON**; weather was not expected to be good but we were responsible for the talk in the warm room, *A Star of a Different Colour*.

March 27 will be a **National Council meeting** and Brian will attend by Internet from England. The hiring of an executive officer for National was discussed as was the proposed fee hike to cover it. The Kingston executive supports seeking financial direction for managing the Society's assets but not the hiring of a new executive officer to manage the day to day operations of the Society, and we do not support a fee increase at this time.

April 9 and 10 are days for the Kingston, Frontenac, Lennox and Addington **Science Fair**, and your president will be there to judge for the astronomy prize donated by the Centre and present the award at the awards ceremony late Saturday afternoon.

April 24 is **Astronomy Day** and as yet there are no firm plans.

At this point we got to the **workshop** portion of the meeting. With the use of a 4-inch reflector we experimented with a simple collimation device. This was not that successful in the room as there did not seem to be enough light to make the crosshairs crisp enough for good alignment. The laser device however was great, which means that you could check your collimation after set up at a remote site regardless of the light level. Many people came down to the front of the room to have a look.

I also brought my small Maksutov on a wedge to talk about how I did a pseudo polar alignment using a southern star in transit rather than Polaris to orient my scope on a permanent wedge in the observatory. The 4-inch reflector was on an equatorial mount and it was time to demo polar alignment. I apologize for the con job that I did in stating that I would demo this. I had a scope that I did not know, and I had never polar aligned a scope before. I did know that there would be plenty of people in the audience who knew what it was all about and I in the end there were plenty of discussion and tips.

This was an interesting experiment in audience participation and I think well worthwhile. Feedback would be appreciated on this and ideas for any other demo type presentations for the future.

After the break, where tickets were sold for maple syrup and 50/50, we had some members' presentations. Kevin had some movies that he put together from their all-sky-cam showing the lunar eclipse, Mars' path across the sky, and a fireball. These photos are improving as time goes on with the addition of things like noise control.

Kevin and **Doug** ran a couple of astronomy quizzes for us to have a go at and that was fun. Leslie had a chance to take some detailed pictures of Orion this winter and **Fred** showed us his latest efforts in the M31 mosaic, the result of many hours of stitching and stacking. The most exciting photo was Mars. Fred's 900 frames were pared down to ~800 and stacked to produce an amazing picture with terrific detail. I think that some of our members should consider working up photos for the RASC calendar.

We then adjourned to Wendy's.★

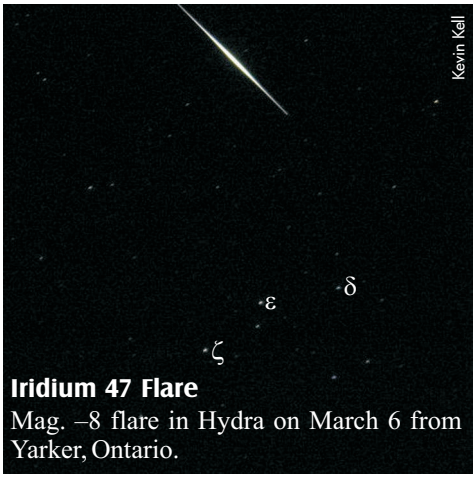
KC president Susan Gagnon speaks about telescopes (her Maksutov at left and a 4" reflector at right) at the March 12th meeting.

The debt to our ancestors for the observations they made to our benefit, we can only repay by doing the same for our descendants.

-Ejnar Hertzsprung

Observing Reports: March 2010

Various Members



Iridium 47 Flare
Mag. –8 flare in Hydra on March 6 from Yarker, Ontario.

Sat/Sun, March 6/7

Kevin Fetter: It was nice to have a clear sky, and watch the geosats flare up. I spotted Intelsat 705 and 709 easily, and then spotted TDRS 9, a satellite used by NASA. A while after I spotted it, it got faint, so it had been flared up when I first saw it.

Walter MacDonald: Wow, this is night #3, though it will be the last according to the CSC. If the weather forecast pans out we may even get a few more clear nights this week. While the dome was pumping CCD, I went out to the *Merry-Go-Round Observatory* (MGRO) and did some visual observing with my C8. I took a peek at M42 (always nice) and then starhopped down to NGC 1999. I could see nebulosity but was not able to detect the dark component. Of course I was looking through some tree branches at the time so conditions were not ideal. If we get a clear night this week I'll roll out the big gun and see what 17.5" of aperture will do for me.

I looked at M35 and its close neighbour NGC2158, a couple of variables in Canis Minor (S and U), R and RY Leonis, NGC 2903, and the Spindle Galaxy (NGC 3115) way down south—the sky was a bit bright down there but it was still easily visible. Of course I looked at Mars, and Saturn (with its barely-open rings) too. It was a nice relaxing couple of hours: no hurry, no worries! The transparency was average but it was not too cold out and there was no wind which made for a pleasant evening.

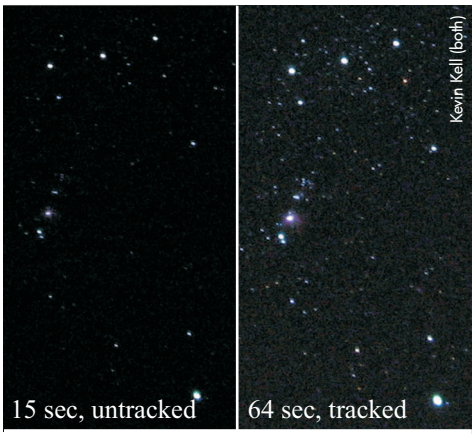
While looking at R Leonis, I observed a satellite pass through the field at 20:48. So now I just need to see two more to catch up to Kevin... On Thursday night an airplane passed through one of my CCD images—it was pretty spectacular. Fortunately it was in the corner, so I think that frame is still usable for photometry.

Although I am now two (and soon to be three) nights behind in photometry, I see from my "quick look" file (generated by a quick and dirty automatic photometry routine I wrote) for Thursday night that the following cataclysmic variables are in outburst: V402, AR, IW, and KV And, CZ Ori, AW Gem, RZ LMi, ER UMa, TW Vir, GO Com, and VW CrB. It's an exciting galaxy out there!

Back on February 11/12 I caught V1113 Cyg in outburst. That was kind of neat because being in Cygnus it is just rising at dawn so it is not well observed thus far in 2010 (only three obs besides mine). At (V) magnitude 16.16, I'm not sure if it was going up or down in brightness at the time. We need more clear nights! Oh well, at least I caught part of the outburst—otherwise it would have been missed altogether.

Kevin Kell: It has been wonderful... this clear sky stuff of the last few days. I can only echo Walter's comments...it was great! We've put a bunch of images and text up on starlightcascade.ca about: a brilliant sun dog on March 3rd, a magnitude –3.3 pass of the ISS on March 5th, a magnitude –8 Iridium flare on March 6th, some experiments with the old (1999) Type 1 Barn Door Tracker and a digital camera *vis à vis* reducing star trails while imaging Orion.

Kevin F: Allowing for error in the reported time, I have Cosmos 382 passing by it [R Leonis].



Walter: Thanks for the ID! Yes, actually I made my estimate of R Leo at 20:48 and was watching the satellite before that. I probably should have done a brightness estimate on the satellite too! It crossed the field at a nice leisurely pace (one degree FOV) and was fun to watch. I didn't notice any variation in its brightness as it passed through.

Kevin K: How about this: On Saturday March 6th, 2010, after the –8 iridium flare from Iridium 47 at 19:22:35 we observed a satellite(?) passing overhead north to south, that flared 3 times, about 10–15 seconds apart. The first flare was not directly observed—we were looking mostly horizontal and it lit up the sky we looked up and saw the 2nd flash...at least a mag. –10 or brighter! We waited another 10–15 seconds and saw the 3rd flash...a little dimmer. Then nothing for about 20 seconds until a dim steady body appeared, mag 3 or 4, and was in sight for another 20 seconds or so. The approximate time was 19:48 ET ±5 minutes. Maybe this was a defunct Iridium randomly tumbling and we got right on the perfect track?

Kevin F: Iridium 69 passed after the Iridium 47 flare, and Iridium 69 is not stable in attitude, so it is flashing—looks like it put on a nice show for you tonight.

Kevin K *further reports that the all-sky camera does not appear to have caught the –10 Iridium flare nor a low north (33°) ISS pass (mag –1.9) on March 6/7.*

Sun/Mon, March 7/8

Walter: The sky was still clear at sunset so I fired up the dome and then headed out to the backyard for another visual session. Tonight I observed R and S Gem, M44, U Cnc, M67, and R and S LMi (actually S was not visible so it must be near minimum). Some cloud started coming in from the north around 22:30 so the CCD run may have to be stopped soon (although it appears from the satellite loop that there may be a 1-hour sucker hole behind the current bit of cloud that is floating by—we'll see in the next half hour or so). This is pretty much what the Clear Sky Chart is predicting for tonight.

I see **John Bortle** is reporting tonight that **GK Persei** (Nova Persei 1901) has brightened significantly to magnitude 12.4. GK has a history of doing this every few years and I have observed it visually on a number of occasions in the past. I keep meaning to add it to my CCD list; perhaps this will spur me on to finally do that!

Mon, March 8

Hank Bartlett: Wow, I took this image at 1:55 EST what a great Sun, it looks as though it may be stirring for something big! The image does not do justice to the eye view, there was change in real time (10 minutes) which does not happen often. Too bad works gets in the way, DANG!

Tue, March 9

We've been able to see Venus the last two evenings in a row, very low in the west about 15–30 minutes after sunset. I couldn't make out any details with 10x50 binoculars so I hauled out the spotting scope we got at the 2009 GA and tried it. Even at 48× I could not make out a crescent phase at all. The air was very turbulent as Venus was just over our treeline and within 10 or 15 degrees of the horizon.

Hank: Venus is still 97%; it is a long way from crescent; quarter does not happen until August.

Kevin K: Of course! It is just emerging from conjunction with the sun and would be either fully illuminated (far side) or next to nothing (near side).

So which is it? Your 97% is illuminated? That would put it on the far side. Where's a planetarium program when you need one?

Mark Kaye: If Venus is in the evening sky and getting higher each night, then it is coming out of superior conjunction from behind the Sun. If it is getting lower each evening, then it is coming towards us between us and the Sun. The reverse is true for the morning sky. If it is getting higher each morning, then it is coming out of inferior conjunction on the Earth side of the Sun.

Wed/Thu, March 10/11

Walter: Last night (night #6) I saw Venus while opening the dome. Just after midnight the computer woke me up. Turns out there was a USB lockup. So I resolved that and went back to bed. The imaging run proceeded through to dawn without further incident. 130 variable stars were imaged.

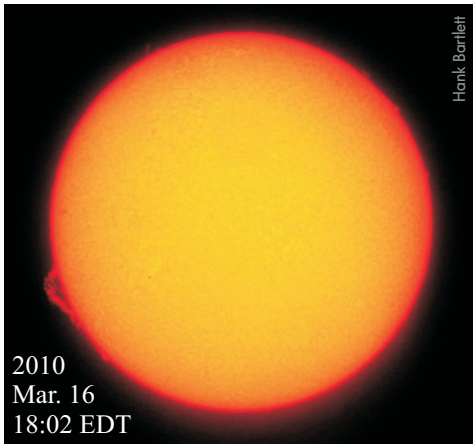
Tonight the sky conditions are holding on sufficiently to do a CCD CV run tonight! So, night #7 is underway. I love it! The Live Session page is now running at waltermacdonald.no-ip.info/wo/wo-session.htm (note the new URL—my FTP kludge stopped working, so the page is now hosted directly from the observatory computer and is limited to 10 simultaneous viewers).

I see Dave Lane's Observatory is twittering tonight.

Tuesday, March 16

Conrad Muis *reported a resurgence of solar activity.*

Hank: This was a great prominence and lasted at least until sunset so I was able to get some clear shots then



rather than the cloudy ones at lunch. It would just be nice to get the rest of the haze out of the bridging and make it darker. Things are getting better!

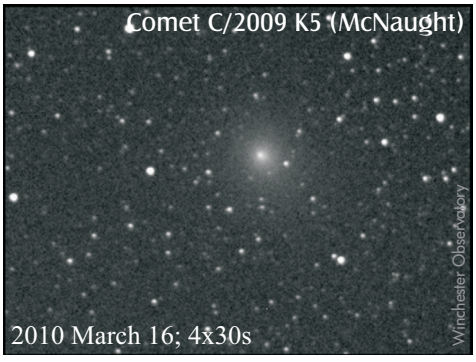
Walter: I just love it when the weather cooperates! After imaging seven nights in a row last week, I went to Oshawa on Thursday and arrived back in Winchester at dusk Monday—without missing any clear nights!

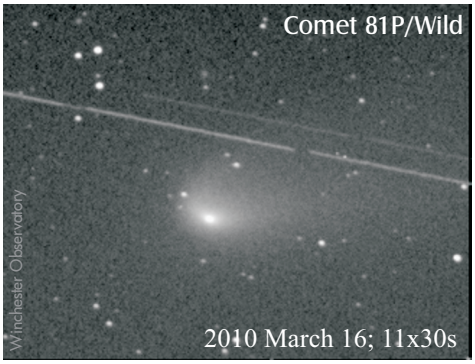
Last night's session was a bit frustrating, yet still very successful. After waiting for cloud to clear, the session started shortly after 22:00 EDT (love the late start time!). Of course the scope was lost and it took me 20 minutes to get it pointed (I actually had to look VISUALLY through the finderscope!). Just as I was ready to start the run, a video error occurred that rebooted XP with extreme prejudice. D'OH! Hopefully that was just a one-time glitch (the computer is almost 7 years old). Several minutes later I finally got the

run underway. As it turns out however, I forgot to plug in the speaker at the attic end so I didn't hear the alert when the scope got lost shortly after midnight (don't ask me why!). Fortunately I had drank a couple glasses of water before bedtime, so I was up at 02:00 and discovered the problem. The scope was lost again, and I was able to restart the session after another gander through the finder. I must say I was quite struck by the very good sky transparency during the "wee" hours (see, there is an upside to drinking water before bedtime!) visit to the dome. I decided to spend a few minutes watching the run in action, and it was a good thing I did. The scope pointing seemed less than optimal and I had to abort and restart the plan three more times.

Finally the scope ran without incident until shortly after 6 a.m. I got the scope "unlost" again (this time using Altair) and since there was only a couple minutes of imaging time left, I grabbed a few quick frames of **Comet C/2009 K5 (McNaught)** which I thought was surprisingly bright for magnitude 10.5. I also tried to image C/2009 O2 (Catalina) at mag. 9.3 but it was too low in the eastern treeline and the sky had become too bright. Oh well, you can't get them all.

Another good thing about being up is that it gave me the opportunity to also add **Comet 81P/Wild** to the list of targets for the night. At the diminutive magnitude of 9.4 it is still





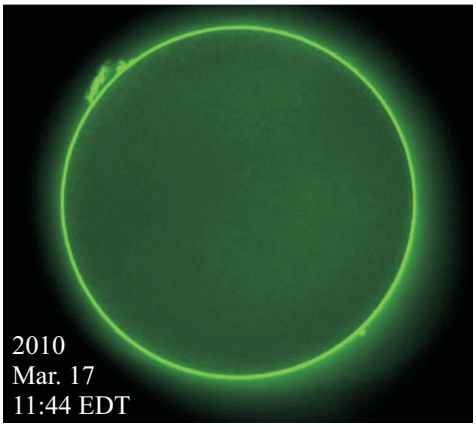
looking quite spectacular in the CCD frames, which was a pleasant surprise! (I must try to get this honey bunny on slooh!) In keeping with the gremlins experienced this night, three #*(&&@! geosats passed by while I was imaging it. I'm afraid I may have to put geosats in the same nuisance category as aurorae! Still, an animation of the 14x30s frames taken starting at 03:19:29 EDT is pretty neat. The first satellite starts by at 03:22, the second at 03:24, and the third at 03:25 (to the nearest 30 seconds anyways). I'm sure Kevin F can tell us which satellites they are. Maybe we can shoot 'em off—shoot to KILL! ☺

At least the scope parked properly at the final shutdown, so hopefully the gremlins have finished with me for a while. Nights like this seem to happen once in a while, but thankfully not too often! Unfortunately tonight's Clear Sky Chart is not looking good so I may not get much. You really have to grab the clear skies when they happen give their short supply over the last while. Oh well, there's always slooh.com...

Kevin F *replies, identifying the satellites in the Comet Wild images*:
3:22 = AMC-6 (26580)
3:24 = DIRECTV 1R (25937)
3:25 = NIMIQ 5 (35873)
You leave my geosats alone Walter!

Wed, March 17

Hank: Wow that prominence is still bursting out; I just took this image at



lunch today! [Hank was thoughtful enough to give the image a suitable St. Patrick's day tint.–*Ed*.]

Walter: Clouds put an end to tonight's session at midnight, but 53 stars were imaged in 3 hours 40 minutes, so it was not a bad evening. An outburst of UV Geminorum was noted tonight, as was one of V391 Lyrae last night.

Wed/Thu, March 24/25

Walter: Another full night run tonight in the dome. 101 CVs were imaged tonight. CZ Orionis was seen in outburst (up from 17th to 13th mag in the last week or so). The most notable observation tonight was that of **GK Persei** at mag 11½! This is a couple of magnitudes brighter than its usual state these days, and it makes GK a good visual target in the evening sky, even with a six or eight-inch scope from the city. Give it a try! How many former novae have YOU observed?

Fri/Sat, March 26/27

Hank: Today (Friday) was without doubt the WORST solar H-alpha solar observing I have ever experienced. The air was so bad! I have seen unstable sky before but this was ridiculous. I could not even reach decent optical focus never mind any range of photographic focus. Usually the image is still and

occasionally unstable, today it was totally the opposite. [This is what happens when we are invaded by arctic air.–*Ed*.] I need to get the white light scope up and running to see just how good this SS really is; if you have not seen the ISS passing it go to spaceweather.com and check it out!

Kevin F: Today, I thought I would have some fun: I set up my stuff, aimed at the moon (to use it as an alignment object), then went to Sirius. At 23:10 UT I can so easily see it, in a daytime sky. It will be fun now to watch the other stars appear as the sky gets darker.

Mark: Sirius is easy. You can see it without the telescope during the day if conditions are right and you know exactly where to look. Now that you have found Sirius, try for some of the other stars in the Observer's Handbook's *Table of Brightest Stars*. You should be able to find any of them.

Walter: Wow, night #11 for March! That makes it the best month since February 2008. It was rather moony, but I loaded up a 131-star plan (mostly CVs but with a few LPVs thrown in), being careful to remove any stars within 20° of the moon. I am pleased to report that it ran flawlessly from start to finish.

Paul Markov (Toronto Centre): I did some daytime star observing about one month ago to determine the faintest stars I could see.

Sunset was at 5:55. At 5:45 pm (with the Sun at 1.5 deg above the horizon) Aldebaran was easily visible in the 9x60 finder (but I could not see it with the unaided eye).

With the 10-inch scope at 80x, a mag. 3.5 star was easy to see, a mag. 6.0 star was visible without too much trouble, and a mag. 7.5 star was pretty much at the edge of visibility. I also tried a mag. 7.9 star but I could not see it.

I did not expect to be able to see a mag. 7.5 star while the sun was still above the horizon!

Mark: The best position in the sky for a star to be visible to the naked eye is when it is roughly 90 degrees from the Sun. There is some sort of polarization band in that position, at least, that is what I remember it being explained as.

The way I spotted Sirius in the daytime was in the morning, following it out of twilight into the daytime. That meant I knew where to look and was able to pick horizon landmarks to help me keep tracking it.

The faintest stars I have looked for were 5.5 magnitude with our 127mm refractor. I have never tried anything fainter, but now you have me keen to see just how far down I can go.

Your editor *adds*: I have observed daytime stars easily down to mag 3½ with my 10" LX-200. Now you both have ME keen to see what the limits are too! In fact, this would be a fun project for all of the visual observers in our Centre. So pick a blue sky day sometime and give it a try—then report your results in *Regulus*!

Mark: I likewise have spotted Saturn during the day, but that was due to very fortunate circumstances. I was on my way to COP in the evening and it was cloudy towards the Rockies, but only due south of me, there was a hole in the clouds so it was really very dark. It was just before sunset, but the Sun was not visible. Saturn was easy in the hole in the clouds. Jupiter is easy to spot if you know where to look, as long as it is far from the Sun.

Vega is another star that I have seen in the day, but I was using optical aids to find it first. The beauty of a Tel Rad or Rigel finder is that they act like finders for any scope or binoculars that look through them. I could look through the finder with one eye of a pair of binoculars and locate Vega with the Rigel finder and then use that visual information to find Vega without amplification. The Sun was low on the horizon and Vega was straight overhead at the time. Unlike Sirius, it was impossible to just find it with horizon clues. Once I lost sight of it, I could never find it again without going through the process of using the optical aids. I wonder if I can still do this as over the last two years, my eyesight has gone from perfect to less than so. This getting old crap is for the birds...★

News & Reports

More D'oh!

Another erratum has come to light: on page 7 of the February issue of *Regulus*, the captions on the two comet images have been transposed. So it is actually Comet Wild on the right and Siding Spring on the left. Now that there are two errata for this issue, **your editor** has changed his mind and decided to correct the online PDF file after all! So, you can keep your "collector's edition" or download a new, corrected version from the website.

IYA2009: Year 2

The IYA continues almost unabated, and the IYA website continues to list new initiatives. There are a multitude of public outreach programs going on in 2010 and some of these could be adopted for local use in the Kingston area. Read more at:

iya2009.org/news/updates/list

365 Days of Astronomy

Speaking of IYA, the daily podcast is still going strong at:

365daysofastronomy.org

GK Persei (Again!)

A great reference page on the history of this star and what makes it tick is available on the AAVSO website (GK was their variable star of the month for November 2000):

aavso.org/vstar/vsots/1100.shtml★