February 2010

Regulus

RASC Kingston Centre

NGC 1999: YOU WOULD THINK an object that looks this cool would have a name, but it doesn't. What name would you give it? (Contest! Send in your entries!) It is a bit of a challenge to see visually, but it is only a degree south of the Great Orion Nebula so why not give it a try? There is still time this season! (If you do see it, then you can party like it's NGC 1999...)

The bright nebula is lit up by the variable star V380 Orionis (just to the left of center, and complete with diffraction spikes, in the Hubble image). The dark nebula is a Bok Globule, a place where stars are born.

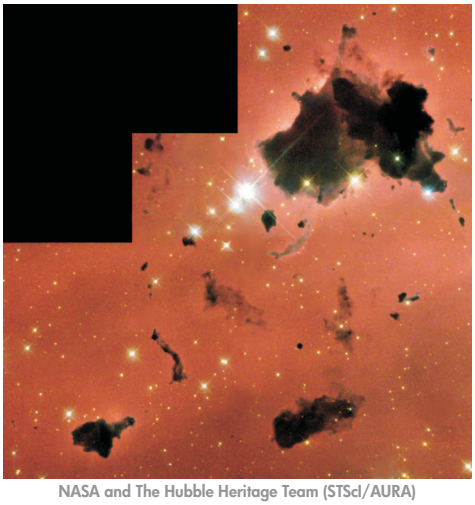
NGC 1999 has been featured on APOD on 2000/03/02 (Hubble image) and 2006/01/30 (Robert Gendler wide-field). For another wide-field image and a description of the neighbourhood, see:

noao.edu/outreach/latest/ngc1999about.html

Another winter object, the Rosette Nebula (image, far right), has many prominent Bok Globules. As it happens, IC2944 also has globules, but these are known as Thackeray's Globules after the astronomer who discovered them in 1950. HST has imaged some of these too. Is there anywhere that scope hasn't been pointed yet?★

Image Credit: NASA and The Hubble Heritage Team (STScI)
hubblesite.org/gallery/album/entire/pr2000010a

Above: IC2944 imaged by slooh.com from Chile. The bright star at top is λ Centauri. Thackeray's Globules in IC2944 are shown in the Hubble image below.



NASA and The Hubble Heritage Team (STScI/AURA)

Upcoming Meetings

Tuesday, February 9, 2010

Public Lecture 7:30 p.m.
Planets in Chaos
Dr. Martin Duncan. An Excellence in Research Public Lecture, at Ellis Hall Auditorium.

Friday, February 12, 2010

Regular Meeting 7:30-9:30 p.m.
The Antikythira Mechanism
Dr. Daryn Lehoux, Queen's University Department of Classics

Friday, March 12, 2010

Members' Night 7:30-9:30 p.m.

Friday, April 9, 2010

Regular Meeting 7:30-9:30 p.m.

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.★

KAON Public Observing

Saturday, March 13 7:30 p.m.

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

More info at kingston.rasc.ca

The Rosette Nebula: slooh.com

In this issue:

Winchester Observatory 2009

2009 WAS NOT A HUGE YEAR at Winchester Observatory when compared to the previous few years. Much of the 2009's activity has been recounted in monthly observing reports in *Regulus* over the last year. Variable stars continue to dominate the activities, but bright comets are also imaged as they present themselves. There seems to be a trend towards fewer clear nights over the last few years, as shown in the table below. (This seems to be true in many places.) Despite this, the average number of variable stars imaged per night has increased as the number of stars followed has been expanded. The observatory was operational for approximately 400 hours of imaging with over 32000 exposures taken. Thank goodness for automation!

The supernova search continued with the Puckett Team, but at a much reduced pace: only 4837 galaxy images were scanned. No new supernovae were discovered. The hunt continues.

Hopefully 2010 will see a break in the trend towards fewer clear nights, with maybe a supernova or two thrown in! ★

YEAR	NIGHTS	STARS	AVG
2005	106	5205	49
2006	96	4476	47
2007	84	5232	62
2008	57	5174	91
2009	48	6189	129

RASC-KC Board of Directors

President:	Susan Gagnon
Vice President:	*vacant*
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Awards:	Kevin Kell
Banquet:	*vacant*
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Equipment Loan:	Kevin Kell
Fall 'N' Stars:	*vacant*
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Relay for Life:	*vacant*
Responsible Lighting:	*vacant*
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:

walter2 (at) starlightccd (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.

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kingston@rasc.ca

Infoline:
(Discontinued)

Website:
kingston.rasc.ca

Astronomical Items for Sale

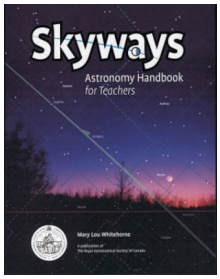
Kevin Kell, Treasurer

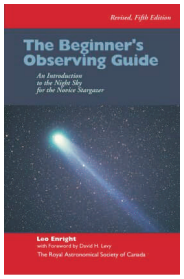
RASC-KINGSTON CENTRE CARRIES some retail inventory that members may be interested in. A new order form in PDF has been uploaded to the website at:

kingston.rasc.ca/orderform.pdf

with a little more information about some of the products than this simple list.

The preference is for purchasers to pick up items in person at Centre meetings since shipping charges are becoming exorbitant.





Price	Item	Qty Available
$30	Madoc Rock coaster sets	10
$15	RASC Travel Mugs	3
$1	Planispheres	5
$20	BOGs 5th print	21
$10	Gilligan hat	1
$20	Skyways English	3
$20	Skyways French	3
$10	Williamson Lunar Booklets	5
$25	RASCKC Slideset #1	1
$25	RASCKC Slideset #2	3
$10	RASCKC Exploring their Universe	1
	RASCKC Baader film	*roll*
$0.30	per square inch	
$3	misc new RASC stickers	
$12	misc cloth RASC crest	
	misc old (blue&white) RASC—stickers: free with purchase	

Note: There are no Calendars, Observer's Handbooks, or Galileoscopes currently in stock. ★

News & Reports

Comet 1910a Centennial

January marked the 100th anniversary of Comet 1910a which preceded Comet Halley by a few months and put on a noteworthy display as noted in Leslie Peltier's *Starlight Nights*. Indeed, many people who saw this comet thought it was Comet Halley. John Bortle's retrospective at the *Sky & Telescope* website is recommended reading:

skyandtelescope.com/news/home/81334422.html

T Scorpii Recovered

Nova Scorpii 1860 flared up in (or at least in the direction of) the globular cluster M80, its 7th magnitude brightness rivalling the entire cluster. Now, 150 years later, a group of astronomers believes they have positively identified this long-lost nova. You can read their paper at

http://arxiv.org/abs/1001.1161

Continues on page 8...

RASC·Kingston Centre

Donations to the Centre in 2009

Kevin Kell, Treasurer

WE WOULD LIKE TO PUBLICALLY THANK those individuals who donated to the RASC Kingston Centre during our last fiscal year (2008 Oct. 1–2009 Sep. 30): **John Hurley** (Sharbot Lake, ON), **Kim Hay** (Yarker, ON), **Kevin Kell** (Yarker, ON). All donations over $20 have received a Canada Revenue Agency tax receipt and cover letter. These donations amounted to $250.

In November 2009 we received donations from: **Kim Hay** (Yarker, ON) and **Ruth Hicks** (Kingston, ON).

In December 2009 we lost one of our members, Norm Welbanks, who passed away and had requested donations in his name to the RASC-KC. Our thanks go to everyone listed at right.

Donations to date (Since October 1st, 2009) amount to $1283.

All of the donations are earmarked for our Observatory Fund, which will someday allow us to build our own Centre Observatory and house our Library and Equipment. ★

Susan Gagnon	Amherstview ON
Annabelle Twiddy	Yarker ON
Anne Jennings	Kingston ON
Anthony & Debra Blakeway	Scarborough ON
Deborah and Owen Storey	Yarker ON
Diana Fayle	Lyndhurst ON
Helen & Elburn New	Kemptville ON
Henry & Dianne Bartlett	Newburgh ON
Janice Mcavoy	Yarker ON
John and Joan Boor	Belleville ON
Joyce Shaw	Kingston ON
Katherine & Marvin Switzer	Newburgh ON
Kevin Kell & Kim Hay	Yarker ON
Margaret Watts	Picton ON
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Sandra & Edward Mahoney	Kingston ON
Suzanne & Doug Angle	Sydenham ON
Thomas & Marion St. Denis	Yarker ON
Val Smillie	Kingston ON
Valery O'Connor	Souris PEI
Don & Heidi Tucker	Coquitlam BC
Patricia Kerford	Uxbridge ON

Meeting Report: 2010 January 8

Susan Gagnon

THE MEETING OPENED with a few introductions, including the presentation of our new treasurer, Kevin Kell. Kevin has come out of retirement to take on the job and it is greatly appreciated. The next evening's KAON activities were announced and there was a request for one more volunteer to operate a scope on the deck as there was a chance of clear skies. A reminder of the February meeting with our guest speaker, **Daryn Lehoux**, Professor of Classics, Queen's University, topic: The Antikithera Mechanism. There is no Kingston Centre commitment to assist with the February KAON. Kevin will be sending quite a few thank you cards to people who chose to remember **Norm Welbanks** through a donation to the Centre. There has been a fair bit of dialogue between the Center and **Denis Grey** at National with respect to the new e-membership options soon to be available on the National site. Personal profiles are accessible by members for update and I will be contacting Denis to see if the info can be updated by the local exec for members who are not interested in dealing with the National site.

I began our Members' Night presentations with a slide show of the removal of my maple stump that had served as a support for my ETX. It was a bit crowded in the observatory with a larger dob and the tree had to go. The floor was constructed with future stump removal in mind so the process went quite smoothly with the assistance of my husband and a chainsaw. It is quite roomy now. Doug Angle's daughter **Heather** brought home a sample of astronomy related questions that were on a Laurentian science exam for a class on science for non scientists and **Doug** quizzed us for a few minutes. **Fred Barrett** showed us his latest astrophotography efforts that involved lots of computer time stacking images. There were 6 to 10 exposures per picture and the detail was striking. Fred made several comments with respect to it being a first effort but it is obvious that his patience with the process is paying

Continues on page 8...

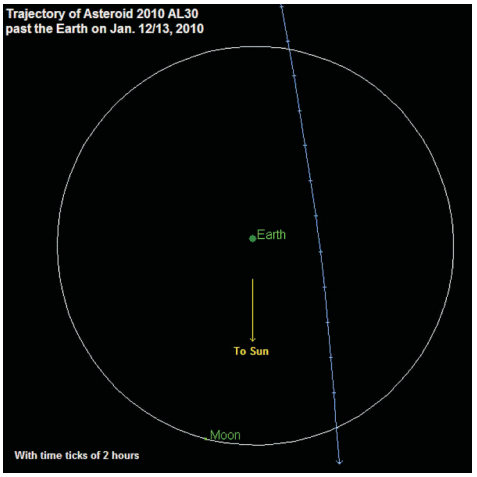
A Close Encounter with Asteroid 2010 AL30

D.C. Agle, JPL

JANUARY 12, 2010: ASTEROID 2010 AL30, discovered by the LINEAR survey of MIT's Lincoln Laboratories on Jan. 10, will make a close approach to the Earth's surface to within 76,000 miles on Jan. 13 at 12:46 pm Greenwich time (7:46 am EST, 4:46 am PST). Because its orbital period is nearly identical to the Earth's one year period, some have suggested it may be a manmade rocket stage in orbit about the sun. However, this object's orbit reaches the orbit of Venus at its closest point to the sun and nearly out to the orbit of Mars at its furthest point, crossing the Earth's orbit at a very steep angle. This makes it very unlikely that 2010 AL30 is a rocket stage. Furthermore, trajectory extrapolations show that this object cannot be associated with any recent launch and it has not made any close approaches to the Earth since well before the Space Age began.

2010 Al30 as imaged by slooh.com on 13 Jan 10 03:15:07 UTC from the Canary Islands. Tri-colour imaging really doesn't work with such rapidly moving objects!

It seems more likely that this is a near-Earth asteroid about 10-15 meters in size, one of approximately 2 million such objects in near-Earth space. One would expect a near-Earth asteroid of this size to pass within the moon's distance about once every week on average. The asteroid does not pose a risk, in fact, stony asteroids under 25 meters in diameter would be expected to burn up in our atmosphere, causing little or no ground damage.★



Orbital diagram depicts the trajectory of asteroid 2010 AL30 during its flyby of Earth in the early morning hours of Jan. 13. *Image credit*: NASA/JPL.

Web Link: This story is from http://www.jpl.nasa.gov/news/news.cfm?release=2010-011&icid=%27MostViewHome%27

Observing Reports: January 2010

Various Members

January 6-8

Susan Gagnon *kicked off the observing for 2010*: I did get out the other day to see that lovely grouping of spots! It was not clear or steady enough to sketch but I enjoyed it nonetheless.

Hank Bartlett *replies*: I have not observed since Solstice on Dec. 21 and that is crazy. Life gets in the way as much as clouds these days.

Susan: This was a chance observation for me as I had been out to put a cozy on the observatory outrigger that is the hardest to clean off due to being snugged into a spruce. Then I noticed this bright thing in the sky.

This summer I took a cheap plastic tarp and cut a couple of strips off of the edges, then I added a couple of new grommets on the cut edge gave me a place to tie in bungy cords. So the result was two 8'x3' tarps.

I only put one on as most precip has been fluffy but I am ready for freezing rain. The real test is how easy is it to get them off in the dark.

Oh yeah, none of this matters unless we get a clear night.

Kevin Fetter: Darn right. It's been a week since I had a clear sky. I am thinking of getting a solar filter for my 4-inch scope.

I renewed my membership, so you have to put up with me for another year.

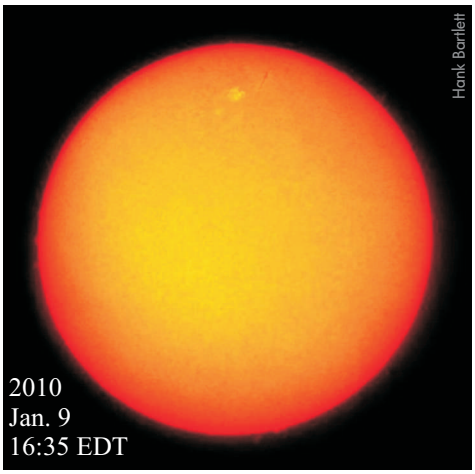
Kim Hay: If you can Kevin, get two filters: one Mylar, and the other 1000 Oaks. Gives a great contrast with both. If you only get the 1000 Oaks, then get a 58 green filter, as this will give the mylar blue effect with the 1000 Oaks.

Cycle 24 is starting to stir.

January 9

Susan: I was having a look to day and things are really busy on the surface. A very complex little knot of spots with lots of faculae close by and in other isolated areas showing faculae. I think we are off to the races now!

Hank: It looks kinda like this ...



The first clear night of 2010 prompted this message from **Susan**: I know it has been a long time. Maybe you have forgotten. Please consider going outside tonight and looking up. You may see stars, remember them? They are suns but a long way off. If this is too scary for you to face alone, if the concept seems too bizzare, come to the KAON session at Queen's observatory tonight and experience it with the comfort of knowing you are not alone.

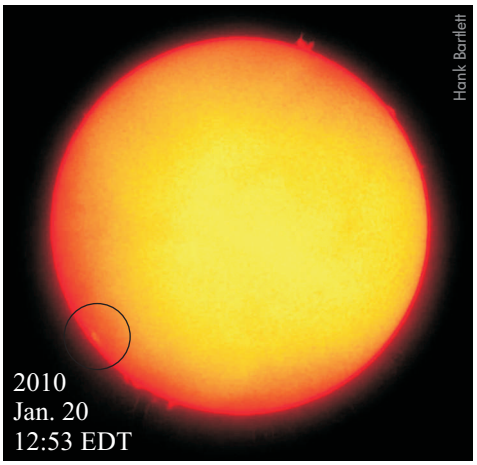
Hank: I also meant to write that this is the first imaging I have done since Dec. 21. It has been a long boring sun lately, that is unless of course it was cloudy. I know I sound bitter, oh well can't control it. Have a good KAON, it is Canal Bash here in the Hollow tonight: chili & hot dogs and a BIG BONFIRE!

January 20

Hank: Hey it came back, seeing is bad but at least it is clear. SS1039 is back (circled at lower left) and obviously active. The two long marks lower and below are lens flare or something. The prominences in this image are pushed past their delicacy in order to heighten 1039's contrast. It is really a nice Sun today.

January 21

Ken Kingdon: Today at 1:15pm EDT (6:15 UT) I used my 82mm refractor at 60x (with Baader film) to observe the same Sunspot Group that Hank imaged yesterday when it was just becoming visible right on the limb. It has since rotated a nice distance away from the Sun's celestial-east limb, allowing a lot more detail to be seen, despite today's relatively poor seeing. One word: WOW!



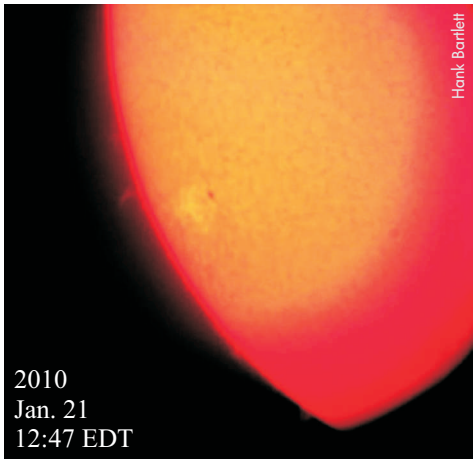
It is the best sunspot that I have personally observed since Jan. 2007. There is a large, black, obvious spot with umbra and penumbra, and trailing that, an equilateral triangle of smaller spots, plus a few pores...all surrounded by enormously widespread white plage, easily visible especially on following side (closer to the celestial-east limb). Since this group is located near the solar equator, Earth-directed eruptions may become prominent, giving aurora. The last time I saw aurora was Sep. 10, 2005 (my backyard). Also, from a much darker site at Sharbot lake, **Leo Enright** reported to me that the last time he saw aurorae was also in late 2005. Four years since the last aurora...that is a LONG wait indeed. But after I see aurorae a few times, I hope it does not interrupt deep-sky observing for a prolonged period!

I believe that this Sunspot Group is now named #1041, and that it is the reincarnation of old SS #1039. I also saw a smaller Sunspot Group on Jan. 9th (#1040, the former old #1035),

but it was on the NE limb, and was an entirely different group. Nevertheless, solar activity finally seems to be increasing.

Highly recommended to have a look at the Sun, and also watch for aurorae from dark-sky locations. With all the clouds lately, you may not get many chances!

Hank *replies*: Here is a today image...



Mark Kaye: I have an IR/UV blocking filter. I wonder if that would help with the image sharpness in your case. We should give it a try sometime.

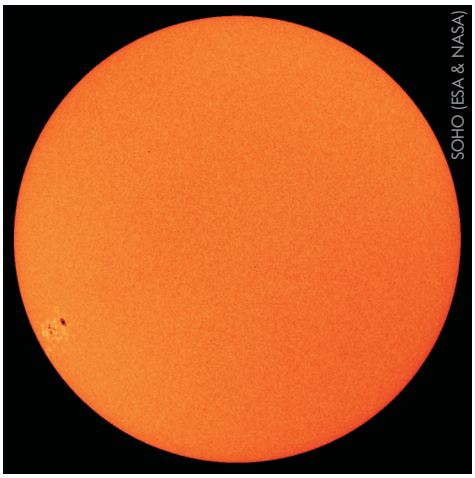
Hank *continues*: I should mention that H-alpha does not show sunspots in the same way as white light, less spot, more active region. Also it was much sharper to the eye but standard point and shoot digital will not come to sharp focus in H-alpha no matter what you do.

I did some Internet research last year about imaging in H-alpha and the sites I found agreed that it just does not come to focus with eyepiece imaging. I do not have an SLR and attachment so I have never tried prime focus. I have thought about buying a Toucam or something like that. I remember reading a comment by one of the major European imagers, something like "You go to all the processing and stacking and all the time and trouble and then some kid with a Toucam puts an image up that is almost identical."

My problem is I am a simple guy, I need to be able to put a camera in the focuser, set an exposure, and hit enter to shoot. I can stand doing some processing afterwards but not a lot of figuring just to shoot the image. Today for instance I shot 127 images at lunch to get "10"—this is because especially at slower shutter speeds there is a big difference in atmospheric effect between each. Has anyone out there in RASC-KC worked with web or Toucams? I guess I just need to spend some $$$.

Apart from focus, bloom is a problem around the coronal area: this does not show to the eye at all if the sky is CLEAR, but shoot the image and it is there. One of the problems also according to what I read is the camera shoots in RGB but the image is all black or pink, no other hues or colours. I tried coloured eyepiece filters but I never tried a nebula or UV filter.

Ken: Shortly after I posted, **SOHO** updated with a new image (below) which looks much like what I saw with my small scope. Saving some over the years, they become good records [see links below].



Web Links

Latest SOHO MDI Image (updated twice daily)
http://umbra.nascom.nasa.gov/images/latest_mdi_igram.gif

The Very Latest SOHO Images
http://sohowww.nascom.nasa.gov/data/realtime-images.html

Thu/Fri, January 21/22

Walter MacDonald: Finally a clear sky! I just happened to catch the last of the ISS pass (descending in the SE) as I left my aunt's house. Once back at home I fired up the dome and had a nice 12-hour imaging session (and even some SLOOHing too). The waxing crescent moon was surprisingly high in the sky already at dusk. Totals for the night were 203 variable stars and two comets. In the comet department, *Siding Spring* in Boötes and *Wild* in Virgo are putting on decent shows, though they are both listed by ECU at 10th magnitude (see images on next page).

At dawn I was looking through the dome and saw a very bright object moving up and across from the NW. It was fairly slow and then seemed to stop moving—very strange behaviour for ISS. Then I realized that I was actually observing Mars and that it was the motion of the steam plume from the Parmalat plant two blocks north of me that made it seem like Mars was moving! Looking across the street, the neighbour's cars were white—'twas a cold and frosty night for sure.

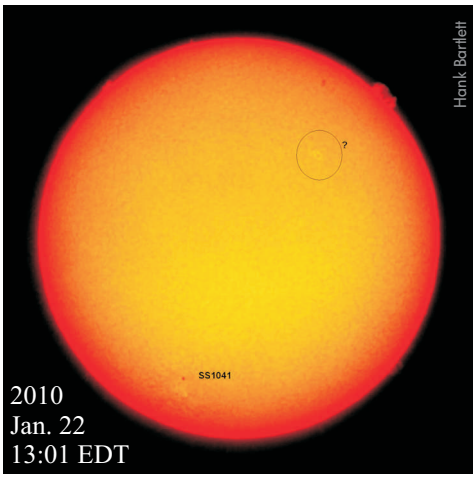
January 22

Hank: It looks like something may be brewing in the NW, at the eyepiece this appears to be a possible sunspot (see image next page).

Kevin K: phhtt...here I am stuck inside with a north facing window, completely not believing in this thing called "sun" or "sol" that y'all keep going on about!

We did see MARS last night and this morning but only at 1x for a short time.

We do plan on going out tonight as the Clear Sky Clock says *Very Good* all evening and *Excellent* after 1 a.m. The only



green calendar day (RASC 2010 Calendar) this month is Friday January 29th. Mars is at opposition. It certainly is brilliant, especially in the red part of the spectrum.

Our starlightcascade.ca/concam page shows Mars to be the brightest object in the night sky, but remember the CCD camera is sensitive more towards the red. [*It certainly looks plenty bright to the naked eye this month!–Ed.*]

Ken: Today at 3:30 p.m. EST when I observed with a Baader light-light filter, SS1041 had moved out of the limb-darkened zone of yesterday, and was now on the brighter part of the disc. Thus the bright white plage of yesterday was harder to see against today's brighter background, but still obvious at 60x. Also, each of the spots in the equilateral triangle has grown significantly in 24 hrs. (compare images).

Also, in just the past 24 hrs, another sunspot group has rapidly developed, in the celestial northwest sector. Today it is, as yet, unnamed. It has a "backwards question-mark" shape, and can be seen in the attached image from SOHO. Tomorrow it will be at the NW limb-darkened zone, and 2 days from now will be disappearing over the solar NW limb.

It was a good day to observe the Sun. Things are happening, finally.

Right: Dual comets at dawn (V filtered).

Fri/Sat, January 22/23

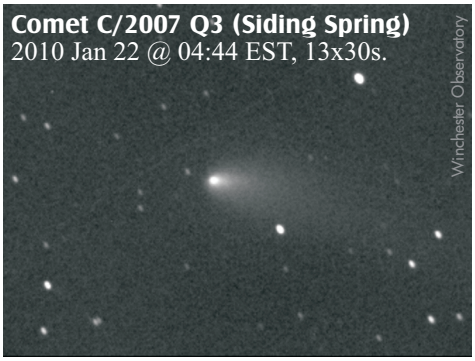
Ken: On Friday, Jan. 22, I took my 12.5-inch Newtonian scope outside for 3 hrs. It was quite clear (LTM 12.4 mag), calm, and a comfortable –9C. Since Mars is almost at opposition, and most days lately had been busy, I wanted to observe something of its 2010 apparition before the next winter weather arrived.

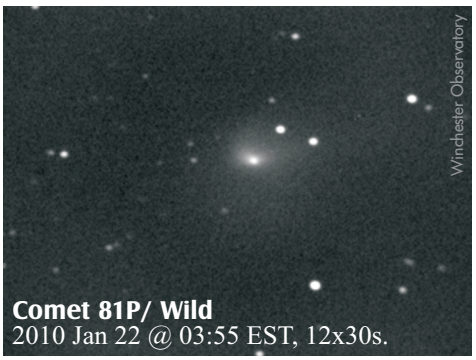
Initially the primary mirror was too warm from excessive prolonged indoor storage... the views of Mars were like mush, until the primary cooled. Then at 3:45 a.m. ET, views were very sharp and I returned to Mars. At 380x, Mars showed the "prime" zone very well, despite only being 14-arcsec max. diameter this apparition (25-arcsec in 2003, quite a difference!). Besides the bright white North Polar cap, plus the bluish so-called "melt zone," and the orange springtime deserts, by 3:45 a.m. the best dark continents on Mars had slowly hoved into view...prominent Syrtis Major with Cimmerium and Tyrrhenum. Currently, morning is the best time to see these features, but other features are visible during evenings. Truly worth the morning effort, if you can! With perfect collimation, and a pristine mirror, and a 380x eyepiece, that view was awesome in moments of superb seeing...ah, a close match to the attached image that I somehow "captured" for your viewing pleasure (not shown here).

As we move through this Mars apparition, observers need the time-of-day view of Mars to identify its features, so go to the *Sky & Telescope* magazine website, click on the "Mars Profiler."

During the night, I also looked at M3 (sweet), M42, M45, M44, etc. and roamed through Virgo Galaxy Cluster, a.k.a. "The Realm of the Nebulae." I admired Saturn with its rings still almost edge-on, after a full year. Comet 81P *Wild* got beat by city light pollution. However, I did manage to observe Comet 2007 Q3 *Siding Spring*, high in Boötes. It was a distinct mag-10 blob, which even from a city cannot be missed on a good night because it is at the brightest part of its passage since its 2007 discovery. Way back on March 20, 2009 I went after this Comet from a really dark-sky site on a night when an incredible seven comets were approaching perihelion. I bagged a personal best of four comets that night, missed two that simply got too low in the west while I searched for others, and was foiled by obscuring trees that blocked Comet 2007 Q3 *Siding Spring* way down in the southern constellation Columba (altitude 8°). I knew that I would get a second chance as it would brighten in late Fall 2009, but cloudy skies then hindered my effort. Finally after 10 months of waiting, I bagged this comet from light-polluted city skies. If you live rurally, remember to get a look during the next couple months before this comet dims.

Not only was the winter weather good for solar on Friday, it was also a great day for deep-sky observing.





...January Observing

...continued from page 7

Use 'em, or lose'em!

Walter: A second clear night! The Live Session page was running once again. Another 12 hour imaging run started by trying to clean out some more Miras in the evening sky and I managed to get a dozen or so down around 25-30° altitude in Cygnus. 127 variables were imaged tonight, including almost three dozen SDSS variables. As on most nights, a number of cataclysmic variables were noted to be in outburst, but nothing overly stupendous. DW Cancrii, which I caught at maximum light during an outburst a few years ago, is now lurking at 15th magnitude. I follow this star as much as possible, though it could be many years before it has another superoutburst.

Kevin K: We actually did get out last night from about 20:00-21:00 to do some observing. The observatory roof actually opened up without much problem!

Jupiter was already down in behind the house, Mars was up nicely in the east although still in a little muck. I set up the tripod and did a bunch of digital camera images of Mars and Leo in the hopes of trying some image stacking later on.

No aurora but one heck of a lot of aircraft going by.

Thu/Fri January 28/29

Kevin F: That's so nice to see, instead of clouds. At around 1:18 UTC (Jan 29) a retired geo sat called Arabsat 1 was flashing brightly, with. over 1 minute between flashes of magnitude 7 or brighter.

Sat/Sun January 30/31

Kevin F: A video, of that nice flaring geo sat called Intelsat 1R (mag. ~8): kfetter.com/satvideo/other/Jan30flare.wmv The fainter geo sat nearby is Intelsat 705. I was using my low light video camera with my 4" Celestron refractor for this view.★

KAON Report: Jan. 9

Susan Gagnon

IT WAS A VERY BREEZY, COOL EVENING on the observing deck. 37 visitors came by to hear a talk in the warm room, take a tour of the dome and have a look through a telescope or binoculars on the deck. I used the Queen's Questar and enjoyed using such a high end piece of equipment. I had to get some tips from James on the finder and the built-in barlow and dew shield. There were stars visible which was a huge improvement from the last few sessions, but the transparency kept us from showing anything but the brightest objects like Mars, Orion and the Pleiades. **James** and **Cedric** were on hand for Queen's and the Centre was represented by **Steve**, **Doug** and I. March is our next KAON and we will be responsible for the warm room presentation.★

...Meeting Report

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off and he is gaining great experience building mosaics. Fred was successful in proving to himself that seeing was a more critical issue than transparency. In the interest of determining how good is your sky for photography, Fred says to zoom out. Are the stars round? If they are misshapen then the guiding will not be best. It seems so obvious and so easy to remember when presented clearly.

During and after a quick break there were some brief discussions about what people may like to see as part of future meetings. I will try to organize useful and interesting meetings for the centre but more input is appreciated. We are still missing a VP should anyone be interested.★

...News & Reports

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U Scorpii Finally Explodes!

U Scorpii is one of a handful of known recurrent novae (stars that go nova more than once) and has a history of exploding every 10 years, at least since 1900. **Brad Schaefer** predicted it would blow up again on 2009.3±1 year. On the morning of January 28th (28.4385 UT to be exact!) Florida-based AAVSO member **Barbara Harris** picked it up already at its peak brightness of 8th magnitude—just one day earlier U was still at 18th magnitude. Although the rise to maximum was missed, the entire eruption could have been missed altogether if U had done its thing while in conjunction with the Sun. For further reading see: skyandtelescope.com/news/83025892.html See also the universetoday.com article for January 28th: "Long Anticipated Eruption of U Scorpii Has Begun."

R CrB's Remarkable Minimum

R CrB, the prototype for its class, is a star that fades typically from 6th to 13th magnitude for a fortnight or so every few years. What's been unusual recently is that it faded to 15th magnitude two years ago and has not yet recovered. Stay tuned!

First Exoplanet Spectrum

According to an ESO press release: By studying a triple planetary system that resembles a scaled-up version of our own Sun's family of planets, astronomers have been able to obtain the first direct spectrum—the "chemical fingerprint"—of a planet orbiting a distant star, thus bringing new insights into the planet's formation and composition. The result represents a milestone in the search for life elsewhere in the Universe.

eso.org/public/news/eso1002/

School Talk: January 13

Member **Doug Angle** reports that he finally gave a talk to 220 kids at Odessa Public School, giving out two bundles of Star Finders which were received with enthusiasm. (The original date in December turned out to be a snow day.) ★