Regulus

The Newsletter of the Royal Astronomical Society of Canada – Kingston Centre — 2007 November

Coming up…

RASC-KC Meetings

Stirling Hall Theatre A, Baader Lane, Queen's University Kingston, Ontario.

Friday 9 November 7:30-10pm

(This is the Annual General Meeting and will be held in Theatre "D" of Stirling Hall)

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Regular Meeting:
Friday 14 December 7:30-10pm

Meetings are co-sponsored by Queen's Physics and include astronomy lectures open to the public.

KAON Public Observing:

Queen's Observatory Ellis Hall, 4th floor from 7:30 pm to 9:30 pm

Saturday 10 November 7:30-9:30pm
Saturday 08 December 7:30-9:30pm

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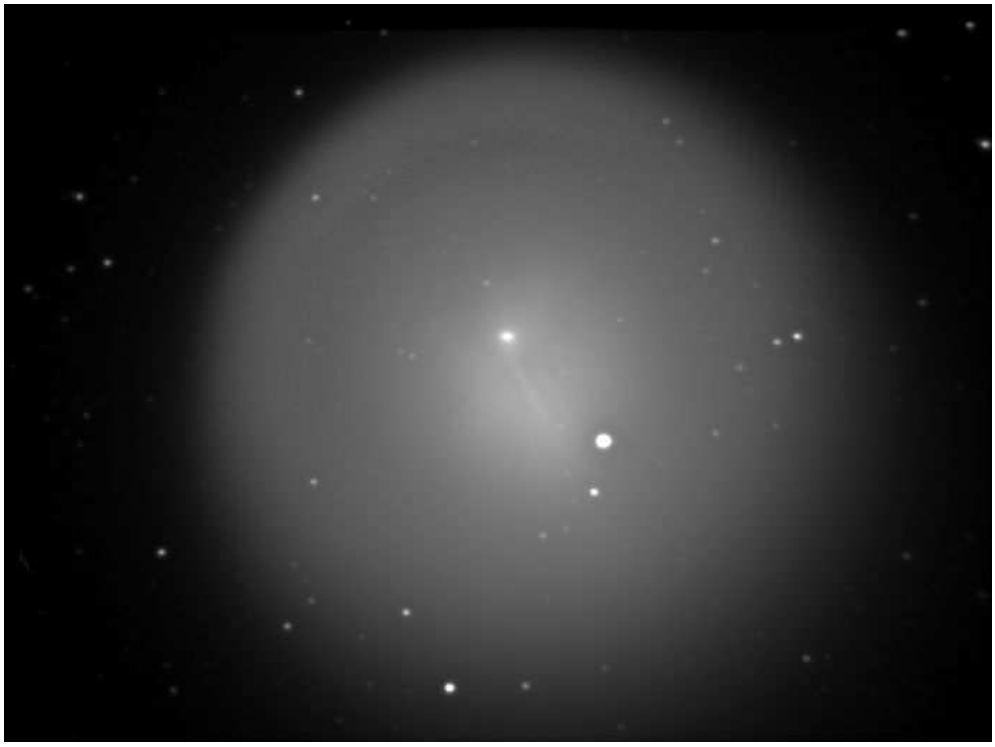

Comet Holmes

Here is an image of Comet Holmes on the evening of November 1, 2007—it is now filling my CCD chip! http://www.starlightccd.com/temp/17p-31x30s-20071101.jpg

I'm going to try getting some flat frames so I can improve the images a little more. Hopefully I can get the images re-posted on proper web pages. What an amazing comet! (see page 8) —Walter MacDonald II [MDW]

POSSIBLE HOLLEFORD CRATER TOUR

November 2007 marks the 50th anniversary of the beginning of the Diamond Drilling Program at Holleford Crater -- the fourth, final, and conclusive stage in the verification of the site as a true Meteorite Impact Site. If enough people are interested in joining a guided tour of the site, I shall make arrangements for it at 1:00 p.m. on Sunday November 25th, 2007. To confirm your place on the tour, contact me at 613-279-2577 or tcorbor@frontenac.net .— Leo Enright

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President's Tidbits by Kim Hay

Indulge me for a little, with the length of this column, but as I write my last President's Tidbits, I sit and reflect on the good, the bad and the sad of this last year and in fact the last three years I have served as your President.

The good…

The Centre has become incorporated and we are a federal charitable entity. These two items alone came from hard work and dedication of the past and present executive. We achieved these milestones to pave the way for the future, so that the RASC Kingston Centre could own or lease land. We could have a place for members to socialize and come together, and do what astronomers do…observe. And if we are lucky enough, build an observatory, a warm room and yes one of the very first things onsite will be a bathroom.

We don't have the land or buildings yet, but some of our members have donated supplies, and our new Observatory Committee has been hard at work coming up with guidelines, and plans to help all of us to get moving in this direction, the next big goal of the centre.

We have had outreach programs with the Queen's Observatory for over three years now called KAON (Kingston Astronomy Outreach Network). This alone has been our largest outreach platform ever, despite our very successful Astronomy Days and other venues.

Thank you Kevin Kell for pulling the KAON sessions together, and now we have a new KAON Coordinator, Susan Gagnon, who has been a very active volunteer in past centre events and KAON nights. Susan has already taken the role head on with some great ideas and is working with Terry Bridges, Queen's Observatory Coordinator, to produce a top-notch program.

Our Astronomy Days, events at Little Cataraqui Conservation Area, the schools, Guides and Scouts, also help us fulfil our mandate of promoting astronomy.

We have had great speakers, a wonderful newsletter, Regulus , which has six paper and 6 web versions, that is a great accomplishment in an age, when everyone is so busy. We have award winners, and a great banquet. Our ATM group is working on a new mirror. Responsible Lighting is in the news, and our committee has worked behind the scenes. The Fall 'N' Stars Star party with RASC Belleville and Peterborough Astronomical Association was a great success. We have the Robo Dome project being worked on with hardware donations from Centre members. Our other committees are not so active, and well that leads to the next part.

The bad……

We are falling short of volunteers! A centre will only function if its members want things to happen, and if there are members willing to help out. As you can see, we lost some of our key activities this year. We have no Members Observing, no What's Up in the Sky, no Relay for Life, no Sky is the Limit and most of all NO VOLUNTEERS. Our volunteer base is dwindling, and those who are doing activities at the Executive and Committee level are getting burned out and tired. People, we need your help!

If you have a particular area that you're interested in, then come help us, you don't have to be chair of committee, but help on a committee to bring some fresh ideas and plans to the group. Our Centre will only grow and thrive if we have ideas to do this.

The Sad…….

Though it is the circle of life, we sometimes lose friends and family way too soon, way before their time. This year we lost Arlyne Gillespie, a volunteer, a teacher, a Vice President and a great friend. We have also lost members due to aging, unable to read or observe anymore, and some members we have lost to moving away, and some have had the great fortune to start over and begin again.

This is all part of our RASC Kingston family, and that is what we are. We may meet once a month, chat on an email list, or see each other on the street, have disagreements, but we are still family.

Do I sound sappy? Well maybe, but I believe in this Centre; if I didn't I wouldn't be a member. I am proud of this Centre, and I know we have great people in our Centre to make things happen, to get things done, to make our dreams and goals a reality.

This is my challenge to you the members: come help the Centre be active and alive! Come and be part of the Centre that achieves the dream of having a place of our own, to come together, observe, talk, socialize and have a great time.

It's you that makes it work…without you we dwindle and fade away……..

I have enjoyed being President, seen dreams fulfilled, seen good times and bad times. Even had some observing time, but I'll sign off now…till later, clear skies!

RASC-KC Monthly Meeting, October 12, 2007, by Joseph Benderavage

In "Klimt's Kiss and the Corona Borealis," guest speaker Dr. Ross Kilpatrick surmised the identities of a kissing couple clothed in shimmering golden garments, in a painting done by Gustav Klimt, an Austrian painter in his prime 100 years ago. Because of the iconic appearance of vine leaves in this painting, he asserted that the male figure was the Greek god Dionysus, kissing Ariadne, a mortal woman. It is a picture of their wedding.

Klimt was an avant-garde maverick of his time, and his compositions are sometimes puzzling. But he was also an amateur astronomer, and this helps tie added meaning to the picture under analysis.

According to legend, after Dionysus married Ariadne, he took the wedding crown she wore and tossed it skyward, whereupon it became the constellation Corona Borealis. In the painting, the arrangement of Stephanotis floribunda flowers in her crown matches the actual configuration of stars in constellation Corona Borealis, except for one star that is concealed by Ariadne's hair.

To support his thesis, Dr. Kilpatrick displayed images of Klimt's works, and forged a connection between the painter's subject matter and the world of antiquity, particularly Classical Greek culture.

It was a lush presentation, primarily images of late 19th and early 20th Century paintings, sculptures, and monocolour works by Gustav Klimt. There were salient but short references to astronomical entities, especially Corona Borealis. The open cluster Pleiades also gained mention, as did one more special star.

Klimt worked on this painting and finished it in 1907. He exhibited "The Kiss" in Vienna the following year, and it created an immediate sensation.

In a brief postscript concerning contemporary events, the speaker noted that three years before that exhibition, on 9 May 1905, an article appeared in a New York newspaper concerning a star in the Corona Borealis that had been variably visible from magnitude 10 to magnitude 6 for the years 1903 to 1905. Toward the end of 1905, it almost disappeared for one and a half months; then it reappeared.

The star is known today as R Coronae Borealis. In the painting under discussion, this star is not visible. It is a prototypical variable star that *diminishes* in luminosity during outburst, and even today these outbursts remain, like the created character of Dionysus, unpredictable and capable of resurrection. Dr. Kilpatrick's presentation was warmly received.

Announcements followed: member Paul Winkler was moving to British Columbia; and Observer's Calendars, planispheres, and tickets for the Dinner Banquet were still on sale.

Observation reports mentioned that Uranus and Neptune were in retrograde loops, and that there was a beautiful double star system in Draco. Other worthy objects of observation were eclipsing binary stars in Cepheus, Tweedledum and Tweedledee. NGC 1647 and NGC 1746, binocular clusters in Taurus, were considered worthy of a glance. The Great World Star Count was brought up. The Sun was deemed inactive in September; and Mars, Venus, and Jupiter were low in the western horizon.

A possible field trip to Holleford Crater was considered. Comet Loneos was cited. Books were discussed, including *Deception Point,* by Dan Brown, about scientists investigating a fossil-bearing meteorite discovered off the coast of Ellesmere Island in the Arctic.

Call...

Walter is back from living among the dead/corrupt (politicians that is) and seems to have imaged a couple of asteroids. Way to go!
I am curious however..
The java linked nasa jpl resource
http://130.15.144.99/rasc/Observing/rasckcasteroids.php
of 3269 Virbert Douglas lists an absolute magnitude of 12.7

Is that not our visual observing magnitude as well?
I didn't think that stellar absolute magnitude because:
In stellar and galactic astronomy, the standard distance is 10 parsecs. a tiny asteroid at that distance is not detectable or observable :)

Aha! wkipedia comes to the rescue:
http://en.wikipedia.org/wiki/Absolute_magnitude

For planets, comets and asteroids a different definition of absolute magnitude is used which is more meaningful for nonstellar objects.

In this case, the absolute magnitude is defined as the apparent magnitude that the object would have if it were one astronomical unit (au) from both the Sun and the Earth and at a phase angle of zero degrees. This is a physical impossibility, as it requires the observing telescope to be at the centre of the Sun, but it is convenient for purposes of calculation.

So the listed absolute of 12.7 turns into an apparent magnitude of what... 18? 20?
The formula is complex

$$m = H + 2.5 \log_{10}(\frac{d_{BS}^2 d_{BO}^2}{p(\chi) d_0^4})$$

—Kevin Kell

...and Response

Or you could just click on the object in ECU. :)

ECU also gives the earth and solar distances as well as solar elongation, phase angle, and rate of motion (arcsec/min @ PA, deg/day, RA motion, and dec motion).
I built an ECU orb file that contains just the Kingston-related asteroids. (Necessary since ECU only loads the first 1000 objects, and these asteroids of interest all have numbers greater than 1000...) You can download it from here: http://www.starlightccd.com/temp/rasc-kc2.orb (It was created in ECU5 but I think it might work in ECU4 as well.) Just save it to your computer and then use the "load orbits" option on the Orbits menu to use the orb file.

Ensab, at mag 21.4 is near 109 Vir and currently too close to conjunction to image. I'll definitely have to take out the V filter to get this baby! The others are all within easy reach with a CCD however:
* Martinduncan, mag 17.9 (down in western Cap, has to be done right at the start of the night)
* Queen's, mag 16.7 (near opposition)
* Vibert-Douglas, mag 17.3
* Levy, mag 16.5
* Covington, mag 17.7

The last three are nicely placed in the morning sky these days. —Walter MacDonald II [MDW]

Equipment Loan Program Suggestions,

2007 October 12, by Kevin Kell

It's another fiscal year and we are looking for suggestions from you, the members, about any new items you would like to see in the equipment loan program. You can see what we have now by looking at: http://130.15.144.99/rasc/equipment.php

We have a small budget so it will not be any large items like a Coronado Solarmax 70, however nice that might be. Send your suggestions into kingston@rasc.ca and we'll see what we can do about them.

Kevin Kell, RASC-Kingston Centre Treasurer
2007: Fall'N'Stars Chair, Loan Program Coordinator, OAFTN Coordinator, Observatory Chair

Public Education Outreach, by Hank Bartlett

Hank/RASC-KC did the annual Centreville Public School outreach today. There was a half-hour of observing including daytime Venus (C4.5") and H-alpha Solar with the SolarMax 40. The observing was followed by a half-hour of classroom Questions & Answers, and by meteorites. There were 22 grade five and grade six students, and one teacher. The standard RASC-KC star map, ISS pass, and a 17P/Holmes Comet map/information sheet were provided to the teacher for copying and handing out.
—Hank

Gleanings From Regulus of 30 and 25 Years Ago
by Leo Enright

In November of 1977, thirty years ago, our newsletter was published only once. As both Centre president and newsletter editor/writer at that time, I appreciated the relatively light work that month—compared to the previous month with its two newsletters and one supplement. Of course, as mentioned last month, in 1977, our newsletter was called just **"The Newsletter of the RASC - Kingston Centre and Queen's University Astronomy Club".**

On first examining the November 1977 issue, one realizes that it was a month with even more than the usual quota of cloudy nights in the Kingston area. Before mailing out that 4-page issue (which arrived with a first-class postage stamp costing ten cents) our member Doug Baker had contributed a little art work in the form of a drawing of the official seal of the Society shrouded in a heavy cloud under the word 'OVERCAST'. As would be expected, therefore, observing reports were skimpy. However, I had an article about an unusual display of the Aurora that I had seen on the night of October 29th. In that issue I also published a number of the letters that came in response to the famous "Mosquito Contest", the one in which the entrants were asked to complete the sentence "The last time I was out observing the mosquitos were so bad that ... ..." Fascinating it is to reread the lengths of hyperbole that local amateur astronomers could devise in order to illustrate the annoyance given by some small insects It was, however, a topical item, and it had even been reported in the most recent issue of Sky and Telescope magazine which had carried a photograph of me, the telescope, and cans of insect repellent.

In November 1977, we had two Centre meetings, both with enormously interesting talks by well-known Canadian professional astronomers. On November 8th, Dr. Alan Bridle of Queen's spoke on "The VLA". The Very Large Array of Radio Telescopes in Socorro, New Mexico, to which he had made a major contribution, was the state-of-the-art radio facility for professional astronomers at that time and for a long time thereafter. On November 22nd, Dr. Alan Batten, RASC President and eminent astrophysicist from the Dominion Astrophysical Observatory, talked about "Close Binary Systems". For a small Centre we were able to have some great speakers, even in those early days.

Twenty-five years ago, in November 1982, our Centre's newsletter had a combined October-November issue. Some of its articles were reviewed in my column of last month. One item that I did not mention was one that, in fact, I had been including in **Regulus** for many months, and one that was quoted occasionally in the **National Newsletter**. It was called "For Your Compendium Of Esoteric Facts". I reported in each of these short columns on some little-known fact relating to astronomy. In that November 1982 issue I gave information about two November meteor showers that have, on occasion, become huge meteor storms, in fact, "the greatest storms of meteors ever recorded." I quote further: "These showers are the Andromedids which currently peak about Nov. 14th and the Leonids which peak about Nov. 17th. ... Meteor storms have been known to occur near or after the time of perihelion passage of the comet with which they are associated. The Andromedids, associated with Comet Biela whose period is 6.6 years, produced so many meteors on Dec. 6, 1798 that they were described as stars which "flew like snow". The shower of Nov. 27, 1885 produced a storm of meteors estimated at 13,000 per hour. ... The Leonids, associated with Comet Tempel-Tuttle whose period is 33.17 years, has produced even more spectacular numbers of meteors . In 1883 the storm produced about 14,000 per hour, and on the night of Nov. 16-17, 1966 on the west coast of North America, the number of meteors in the shower was estimated at 150,000 per hour, with numbers at times during the night reaching an almost unbelievable 140 per second or over 500,000 per hour It is little wonder that the Leonids on such occasions have been described as "like snowflakes". [Something we might remind ourselves of each year in November: This month is an anniversary of some enormous storms from the Leonids.]

In November 1982, our two Centre meetings were on the 12th and the 26th. At the first one member Terry Hicks spoke on the topic: "A Review Of The Book: *Practical Astronomy With Your Calculator*". The second one was our Centre's Annual Meeting with annual reports from the president, secretary, and treasurer.

Reviewing the newsletters of 30 and 25 years ago has provided an opportunity to reminisce on the vitality of a small but vital group of amateur astronomers very actively engaged in observing and sharing the night sky.

KAON October 2007

Last night, October 13, was KAON night and the clearing of the sky was nothing short of miraculous.

We began at 7:30 and did not pack up until 9:30. We were a bit cold as the wind was brisk. When is a scope not a scope...when it is a sail!

We had 49 guests and with one scope (the Fitz) we had a good look at Alberio, M27, M57, M8, M11, Jupiter, M31 and M32.

The light pollution was extreme with all of the construction lighting, but I guess that it would not be good to have kids tumbling into some of the massive pits that have been created.

With that light level, pointing a scope becomes quite a challenge but we fit in enough variety to give each person at least 2 things to see. And with the lower turnout you could take time to really have a good chat with many of them. The green laser is great for these events.

There was also time to chase the ISS with a telescope.

The talk inside was Cosmic Jet Engines, presented by Dr. Dick Henriksen.

The bulletin board was updated with some new material and thanks to Hank we had sky maps and an information page as usual to hand out.

Queen's folk involved included Terry, James, Judith and a young woman whose name I do not know.

RASC volunteers were Kevin Kell, David Maguire, Steve Hart, Brian Hunter, and Susan Gagnon. Regular attendees who were away due to sickness were greatly missed.

Paul Winkler came by to say goodbye before he leaves for Vancouver, which should make us think twice before we complain about the weather. Good luck to him.

Susan Gagnon

Observing 15 October 2007, S.Gagnon

Well, there was a bit of fabulous sky this morning from 3:30 to 4:20 A.M. Then the clouds started acting up. I persevered until Venus showed up at 5:00 A.M. and I found that M35 was visible to the naked eye through holes in the clouds. I fear that this is the only way I shall observe this week, grabbing an hour or a half-hour at a time.

—Susan

Observations on Observing Preparation, by Susan Gagnon

There was to be some clearing overnight tonight, October 19. I keep my observing garb in a little stack near the door so that I do not make too much commotion but apparently I need more practice in this area. (A simple but useful tip: if half asleep do not try to put your socks on standing up.)

I am not one to take a lot of food to the observatory (do not want to drop a lot of crumbs as an invitation), but I find that in the morning I would like *some* little snack. Really good hot chocolate does the trick but its preparation is time consuming. I have made ready some oatmeal bars for the next opportunity.

It is nice to be so perfectly dark adapted. I have always appreciated this when I have parked in a lounge chair, had a quick nap then opened my eyes to a much better sky. If you can take the social outcast label, and I think at times that this is a hobby requirement, stargazing is often worthwhile.

Observations of 22 October 2007, by Susan Gagnon

I made it out for a fabulous 90 minute observing session this am.(minus the time to slip into the kitchen to get a coffee refill). From 4:50 to 6:25 A.M. I saw 23 meteors of which at least 5 were questionable Orionids.

It was a wonderful morning,, so warm and so clear, three planets and some of the brightest Messiers. Who ever arranged it... may we always start Mondays like this? You can't miss when you have already had a great day and you haven't even got to work yet!

—Susan

Observations of 16 October 2007, by Kim Hay

I was out this morning (5:00-5:45 am) and saw two sporadic meteors, two *Orionid* meteors, and one satellite at 5:24 am going up Orion's sword South to zenith, then it faded once it went past the three belt stars.

Venus, Saturn and Regulus:

x Regulus

X Saturn

X Venus

(It certainly has changed since Saturday A.M.; Venus is now sinking.)

Mars is high in the sky, and I have been plotting its movement.

I observed *Rho Cass,* the variable star, and I will be looking into doing more morning variables.

Well, that's it for now. It will be sunny today, so I can catch some solar observation. Question of the day: will there be a spot?

—Kim

Observing 4 November 2007, by Kim Hay

I (as in me) was observing on Friday and Saturday, and oh yes, Sunday A.M., since the biological clock went off at normal 4:00 am, which in reality was 3:00 am, so it was quite an experience., and a nap around 6:00 am was in store.

I did manage to observe Mars, Saturn, Venus, Orion Nebula, Pleiades, and the moon on sat am, which was <1 degree from Regulus. I did have a friend in Florida who did manage to observe the occultation; yes, I am envious. Of course I made my usual Algol and Rho Cass observations, though more morning variables are going to be researched to observe.

I did view and sketch Comet Holmes. At no time, was anyone else with me, except the local huskies and coyotes howling in the moonlight.

If you have not got out in the morning to see how low Venus is, it has moved quite rapidly away from Saturn. Also tomorrow am the moon should be close to Venus, so if it is clear, go out and look to the east, it will be quite the sight.

Kim

PS. most of the work was done in the am/pm, while I attended the Food Down the Road Summit, which was fantastic. There was some clean up work done today as well, but alas, at 7:30 it is cloudy out.

GEO Satellite Sightings, by Kevin Fetter

I had to wait two weeks for a clear sky to occur on a night I was off work. Last night, like I do on most nights, I attached the video camera to the end of the telescope, and aligned the mount.

I then let my telescope track a certain area of sky, and played “Spot the GEO satellites passing by.” I observed a lot of them, some bright and others faint.

I observed a nice flashing from a no-longer-used Glonass satellite. Glonass is the Russian GPS system. The flashing Glonass satellite was Cosmos 2288 (23205). It was flashing approximately every 20 seconds. Last time I observed it was November 2006.

I also observed a flashing GEO satellite called SYMPHONIE 2 (08132). It seems to like to flash in Orion. I will have to see how it behaves.

So nice to be inside and keep warm, thanks to being able to control the telescope from inside the house.

Orion Again in October, by Kevin Fetter

On October 30, Satcom C1 (20945) was currently flashing near the Orion nebula. It did the same the other night, when I found out it was flashing nicely, while playing back the captured video.

Flash from last night:
http://www.kfetter.com/satvideo/flashing-geosat/20945.wmv
It gives a flash every 148 seconds.

Click on this for orbital data on it:
http://www.heavens-above.com/orbitdisplay.asp?Session=kebgcaidebfppgkkmdkhnkgm&satid=20945

Comets Old & New, by Walter MacDonald

Comet Holmes is nicely non-stellar to the naked eye now and still quite bright! Plus we've had a reasonable supply of clear nights. I went out around 00:30 (after I had finished some late supernova scans) and looked at Comet Holmes visually with my C8. In the eyepiece the combination of size and brightness is impressive, and it was neat to see stars shining through it. It is starting to remind me a little bit of Comet IRAS-Araki-Alcock in 1983-- almost 25 years ago now! (You can see a picture of this comet at http://www.starlightccd.com/walter/picturebook/comets/iaa.htm)

Speaking of 25 years ago, this past August was the 25th anniversary of another nice (telescopic) Comet: Comet Austin. (As Leo mentioned in Regulus recently.) This comet was low in the NW at dusk, at a time when the sunsets were quite vividly coloured thanks to the March/April eruptions of the El Chichon volcano in Mexico. My picture of Comet Austin is at http://www.starlightccd.com/walter/picturebook/comets/1982g.htm My how the years pile on, but the Astronomy just keeps getting better!

A Tale of a New Comet Ageing, by Kevin Kell

We were out this morning (Nov 2) and visually it is bigger and more interesting in detail features. Photographically I find the surface brightness is dimming and it is getting more difficult to get an image with a handheld digital. Cold! -6.8degC.

For Your Information, by Kevin Kell

We received one 2008 Observers Handbook in the mail Monday and the other one on Wednesday. They look very nice, better each year with better looking layout, more imagery, etc. David Levy's Observing List is now in the book as well with help from Leo Enright. Ken Kingdon is also mentioned for corrections and suggestions. Congrats guys!

Comet Holmes 03 nov. 2007;by Norm Wel-banks.

Attached is a 30 second shot through a 130mm (5 inch) Apo refractor using a Canon 20d DSLR.

A Tail of a Comet Holmes, by Ken Kingdon

On the nights of Oct.25th and Oct.28, using my 12.5-inch f/4.8 reflector at 120x (ep FOV 42') with a Swan Band Comet Filter, I clearly saw a tenuous ion tail that had grown from 8' to 60' in a week.

The tail first appeared just one day after the outburst, but without this Comet Filter, the ion tail was invisible when the Moon was present, despite my really working at seeing it. Adding a Comet Filter reduced the bright Moon's effect.

The Swan Band Comet Filter also made a diaphanous outer spherical halo appear much brighter, and really helped when the bright Moon washed a lot of contrast out.

Many astrophotos by excellent imagers have generally not revealed the tail to date. The first indication of the 8' ion-tail that I saw on Oct.25 matched Bill Weir's fine sketch made with a 25-inch scope. His sketch (see website below) shows the tail's direction, but my observation with a Comet Filter extended that tail somewhat longer. THANKS for a really good sketching effort, Bill.

http://rascvic.zenfolio.com/p566114947/?photo=h35DA0833#903481395

My view of the tail using the Comet Filter improved greatly on Oct.28th, despite a bright Moon being present. On Nov.01 I eagerly awaited my first observation without a bright Moon present. This time, I could see and measure a 63' tail WITHOUT using the Comet Filter. I used an ep of 50x and FOV of 72'. Adding the Comet Filter simply made observing both the tail and the diaphanous outer spherical halo easier and more enjoyable.

All my observations were made from my backyard in the suburbs of Kingston. By now, a tail should be visible under good-quality rural skies using at least moderate aperture. To see the tail, note that half of the bright coma has a "hard edge" and the other half has a "soft edge". Look in the direction of the "soft edge" to see the tail diffusing outward for at least 63' generally South-East. It does not fan much wider, and the lower edge is brighter than the upper edge (Newtonian view), while between the edges the glow is tenuous due to less contrast. Having the bright coma just out of the FOV helps.

I advise that, if you have imaging equipment, please attempt long-exposure images of the tail. Clear skies... use 'em, or lose 'em. —Ken Kingdon

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OAFTN Instructor: Doug Angle, Brian Hunter
Observing: N/A
Publicity: Peter McMahon
Relay for Life: N/A
Responsible Lighting: Kim Hay
Sky Is the Limit: N/A

The Royal Astronomical Society of Canada—Kingston Centre

Newsletter Submission Info:

I can take most common formats, although I prefer plain text. Pictures should be sent as image files in attachments separate from the articles. Please avoid the use of capitals, asterisks etc for formatting, as I use the publishing software's formats for this kind of emphasis.
E-mail: lbenderavage (at) sympatico (dot) ca

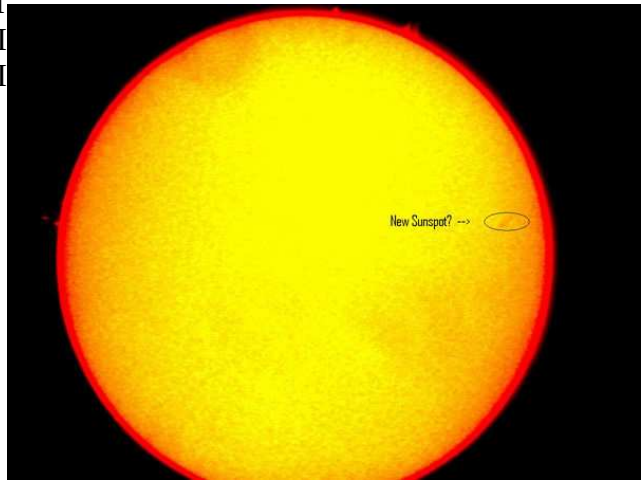
2007 Publication Deadlines

For the month	**(Deadline)**
December 2007	(November 25)
January 2008	(December 21)

Subscriptions: Members of the Kingston Centre receive Regulus as a benefit of membership. Advertisements are free to members of the Centre. Commercial advertising is $20/quarter, $40/half page, $100/ full page and should be in electronic format. Contributions are more than welcome. Submitted material may be edited for brevity or clarity.

SolObs 31/10/2007 6:36:59 PM **SOLAR DATA** For the month ***OCTOBER 2007*** from: HAYKI (Kim Hay)
The results are on the low side, as October has not been a month that has cooperated in the clear skies department. However, since October includes CR2061 and CR2062, I have shown the whole month. Except for the one spot/group on Oct 1, it's been a zero month in the sunspot department.
Instrument: SCT **Method:** Direct **Filter:** 1000 Oaks Type II **Aperture:** 100 **EP:** 26 mm plossl

Day	*see*	*UT*	*g*	*s*	*W*	*ng*	*sg*	*ns*	*ss*	*Obs.*	*Remarks*
01	POOR	1620	1	1	11	1	0	1	0	HAYKI	
04	E	1640	0	0	0	0	0	0	0	HAYKI	
11	FAIR	1617	0	0	0	0	0	0	0	HAYKI	
16	E	1611	0	0	0	0	0	0	0	HAYKI	
17	FAIR	1640	0	0	0	0	0	0	0	HAYKI	
22	E	1629	0	0	0	0	0	0	0	HAYKI	
29	POOR	1643	0	0	0	0	0	0	0	HAYKI	
31	POOR	1634	0	0	0	0	0	0	0	HAYKI	



A POSSIBLE SUNSPOT? By Hank Bartlett

The attached image is way over processed to show the area I could see in the Coronado. The last time I saw something like this I was going to post it and didn't and sure enough it was a new sunspot. The dark area stands out a little more visually. This is a corrected image so it is western limb. It has been a long dry spell so I hope it does blossom into a spot. The top and left prominences are huge and filamented, I will post it in my album.

A POSSIBLE ANSWER, by Kim Hay

It would be nice to see a sunspot, most of October , except for Oct 1 when there was a small spot. This could be classified as a pore, only time will tell, and if we get some clear weather again, please go out and check.

Kingston Cosmic & Events Calendar, **November & December 2007,** by Kim Hay

Date & Time Events

November 1- Thursday Last Quarter moon 17:18
November 4- Sunday Daylight Saving Time ends 2 a.m..
November 5- Monday Crescent moon 3° to the right of Venus 6:00 a.m.
Monday: South Taurid Meteor peak 5:00 p.m.
November 5-Monday-OAFTN Course, 6:30-8:30 pm, Isabel Turner Library, Gardiners Road, Kingston, Ont.
November 8- Thursday Zodiacal light visible in E before morning twilight for next two weeks.
Thursday, Mercury at greatest elongation W(19°) *best morning view in 2007*
November 9- Friday Annual General Meeting Stirling Hall Theatre ** "D" ** note room change 7:30-10:00pm.
Member's night to follow Annual Meeting
November 9- Friday New Moon 18:03
November 10-Saturday ***KAON*** Observing Session- Ellis Hall Queen's Observatory 7:30-9:30 p.m. For more info visit http://130.15.144.99/rasc/Observing/kaon.php Spkr. Dr. Martin Duncan - New Solar System.
November 11- Sunday- Remembrance Day
November 12- Monday- North Taurid Meteor peak 4:00 p.m.
November 12- Monday-OAFTN Course 6:30-8:30 pm Isabel Turner Library, Gardiners Road, Kingston, Ont.
November 16- Friday- RASC KC Awards Banquet 5:30 -10:00 see Diane Torney for tickets ($30.00 each) Read more about the Banquet at http://130.15.144.99/rasc/banquet.htm
November 17- Saturday- Leonid Meteor peak 11:00 p.m.
November 17- Saturday- First Quarter moon 17:32
November 24- Saturday- Full Moon 9:30
November 27- Tuesday- Moon 1.4°N of Mars 12 a.m.

>**PLANETS** for November: *Mercury* very low in the ESE in morning twilight all month- best near mid month; *Venus* in ESE at dawn; *Mars* rises in East near 7:30 pm; *Jupiter* very low in the SW after evening twilight; *Saturn* rises in ENE near 12:30 am, high in SE at dawn.

December 1- Saturday- Last Quarter moon 7:44; Moon 2.5° to right of Saturn 3:00 am
December 9- Sunday- New Moon 12:40
December 14-Friday Regular Meeting Stirling Hall Theatre "A" 7:30 pm-10:00 pm. Topic= Member's night
-Friday- Geminid Meteor peak 12:00 pm
December 15-Saturday ***KAON*** Observing Session- Ellis Hall Queen's Observatory ** 7:30-9:30 p.m. For more info visit http://130.15.144.99/rasc/Observing/kaon.php -Speaker Kevin Kell: Summer on Mars
December 17- Monday First Quarter Moon 5:17
December 21- Friday Moon occults the Pleiades *best in NE of N.America 4:00 pm*
December 22- Saturday Winter Solstice 1:08 am; Ursid Meteor peak 8:00 pm
December 23- Sunday Jupiter in conjunction with the sun , Moon occults Mars 9:00 pm in extreme NW of N.America
December 24- Monday- Mars at opposition
December 25- Tuesday Christmas Day
December 27- Thursday Moon 0.9°S of Regulus 11:00 pm
December 31- Last Quarter Moon 2:51

>**PLANETS** for December: *Venus* very low in the SE at dawn; *Mars* rises in the NE in evening twilight, in West at dawn; *Saturn* rises in ENE near 10:30 pm.

Remember to purchase your 2008 RASC calendar, it's a bargain for $15.00, and it will keep you up to date on all things Astronomical. For more detailed information look in your RASC 2008 Observers Handbook. Available from our Treasurer or http://www.store.rasc.ca/