

POLARIS



Royal Astronomical Society of Canada
London Centre Newsletter
November 2010

There's an app for that... Bill Gardner

At the beginning of September, we cancelled our phone landline and have switched over to purely cellular service. Not surprisingly, we decided to go with the “cool” gadget, the iPhone 4. Well, there have been plenty of hours spent, or wasted depending on your point of view, finding and playing with all of the apps that are available to smart phone users. I have as yet, not paid a single cent for any of the apps that can be found on my phone as there is usually a free version to be found if you look long enough. Here is a list of some of the apps I have found of interest for astronomical purposes.

iCSC

Clear Sky Charts on your phone. Upon opening this app, it returns to display the current chart for the last CSC you were looking at, but you can bookmark all the CSCs you want for quick access to them. Holding the iPhone vertically does not give enough display room for the complete chart forcing you to scroll back and forth, but wait, turn the iPhone on its side and a double tap and the display adjusts now fits perfectly on the screen. Thanks Attila!

APOD

There are several apps that can be found that display the current Astronomy Photo of the Day, including one from the people who bring the photo to you everyday. This app gives you the full resolution image from the net, along with access to the full text description of the image. Located in the bottom corners of the screen are arrows which allow the user to navigate forward and backward the APOD archive.

SOHO Viewer

Brought to you by ESA and NASA is the SOHO viewer. This little app goes out onto the internet and downloads the current eight images of the sun taken at a variety of wavelengths by the SOHO observatory. You can view all of them simultaneously, or as will be the normal case, one at a time. The fun comes with the how you can quickly switch between the various images with a simple flick of your finger across the screen. This allows for quick comparisons

of the sun's appearance at the various wavelengths as all of the images are scaled the same.

Acceleration

This is a fun little app which takes advantage of the iPhone's ability to determine its angular position relative to the ground. It displays the amount of acceleration that your iPhone is currently experience in each of the three spatial directions relative to the phone's front and sides.

Accelerations are displayed in terms of the number of “g's” the device is currently experiencing for x, y and z, but also as a combined vector.

Moon Globe

Moon Globe gives the user not only a current view of the moon based on imagery from the Clementine mission. For the observer, this is an extremely useful app as you can flip the view of the moon top to bottom and left to right to match your telescope's view. You can label all of the locations of all the spacecraft that have landed/crashed into the moon, label the terrain or leave the view blank.

The app also has the ability to either identify any particular lunar feature as well as giving you a little history behind the name and a link for more information on Wikipedia, or the app will locate any a particular lunar feature.

There is also Mars Globe available.

GPS Astro

GPS Astro is one of the multitude of apps that are available that give you a graphical image of the current phase of the moon along with rise and set times of both the sun and moon as well as the beginning and end of civil, nautical and astronomical twilight. GPS Astro has the ability to access the iPhone's GPS to set its location for your current location. If you are trying to plan your observation time, it also gives you the ability to go forward or backward by the day.

Stellarium

The last app that I actually spent a fair amount of time trying to find, because I was not willing to pay for any apps,

(Continued on page 3)



Moon Phases



November 13 2010



November 21 2010



November 28 2010



December 5 2010

Research of Danish astronomer's remains completed

PRAGUE – Scientists have concluded taking samples of the remains of Danish astronomer Tycho Brahe that they hope could help them shed light on his sudden death more than 400 years ago.

On Monday, an international team opened his tomb in the Church of Our Lady Before Tyn near Prague's Old Town Square, where Brahe has been buried since 1601 to lifted a tin box like a child's coffin in which Brahe's remains were placed after the only previous exhumation, in 1901. Jens Vellev, a professor of medieval archaeology at Aarhus University, Denmark said Thursday the scientists got more than they hoped for.

"Yes, more than that, for sure, it was fantastic," Vellev told the Associated Press. "Everything was better than expected." The scientists are scheduled to present their initial findings on Friday and full results next year.

London Centre Executive

President

Dave McCarter

email: dmccarter (at) sympatico.ca

Vice-President and Newsletter Editor

Patrick Whelan

email: patusratus (at) sympatico.ca

Treasurer and Sky & Telescope Coordinator

Bill Gardner

email: gardner.w (at) rogers.com

Secretary and Webmaster

Rick Saunders

email: ozzzy1 (at) gmail.com

National Representative

Craig Levine

email: craigslevine (at) gmail.com

Observer's Chair

Peter Raine

pete_raine (at) sympatico.ca

Honorary President and past National President

Peter Jedicke

email: PJedicke (at) fanshawec.ca

Past President

John Rousom

email: jdr (at) netscape.ca

Tri-County Public Star Party Coordinator, Librarian and Hume Cronyn Coordinator

Robert Duff

519-439-7504

email: rduff (at) sympatico.ca

ATM Chair

Mike Hanes

email: subareau (at) gmail.com

Find the Polaris newsletters on the internet at: www.patusratus.ca/Polaris

LONDON RASC MONTHLY MEETINGS

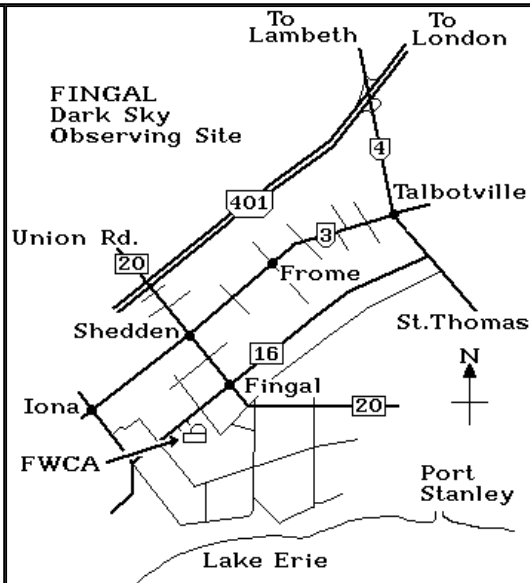
The London RASC group meets at Fanshawe College in London Ontario, September through July on the third Friday of the month at 19:00. We meet in room B1073.

Everyone interested in astronomy is invited to attend and enjoy our guest speaker, member activity and observing reports, announcements of new discoveries and upcoming events, telescopes and telescope accessories show and tell, and other fun activities. Have a look at our future and past activities on our website to see what we are doing.

Parking is free on Friday evenings, and there is plenty of room in the east parking lot off Oxford St. and parking spaces on the south side of B building. Enter the college by B building doors near Oxford Street, just west of the bus stop. College signs at key hallway locations will help you find us.

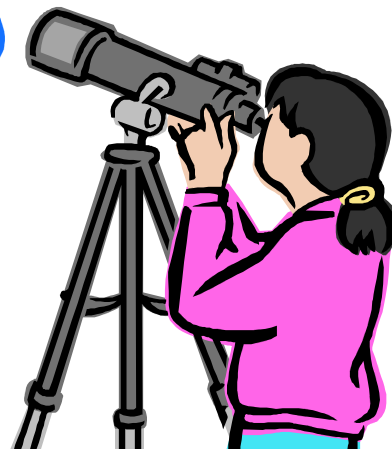
The London RASC webpage can be found at: www.rasc.ca/London

Our dark sky observing site is at the **Fingal Wildlife Management Area**.



Sky Events for late November and early December 2010

Nov 21 Mercury 1.7 S of Mars
 Nov 21 Moon 1.3 S of Pleiades (M45)
 Nov 24 Moon 0.8 S of M35
 Nov 29 Juno 0.5 N of Moon
 Dec 01 Mercury greatest elongation East
 Dec 01 Mercury 1.3 S of Lagoon (M8)
 Dec 04 Venus greatest illuminated extent
 Dec 06 Mars 0.5 S of Moon
 Dec 07 Mercury 1.8 S of Moon
 Dec 14 Geminid meteors peak



Mercury in the western evening sky
Mars is low in the western early evening sky
Venus reappears in the eastern morning twilight
Jupiter well placed in the evening sky
Saturn low in the pre-dawn sky
Uranus well placed in the evening sky
Neptune is well placed in the sky

R.A.S.C. London Centre Library Books of the Month November 2010 By Robert Duff

As always, these “Books of the Month” are available for loan to members, to be returned at the following monthly meeting. The books for November 2010 are as follows:

The Backyard Astronomer's Guide, by Terence Dickinson & Alan Dyer. Revised Edition. 2002.

Burnham's Celestial Handbook: an Observer's Guide to the Universe Beyond the Solar System, by Robert Burnham. Revised and Enlarged Edition. c1978. Volume Two, Chamaeleon—Orion.

Looking Up: a History of the Royal Astronomical Society of Canada, by R. Peter Broughton. c1994.

For a complete listing of our library collection please see our RASC London Centre Library Web page at: http://www.astro.uwo.ca/~rasc/newrasc_library.html

If there is a particular book or video you wish to borrow, please feel free to contact me by telephone at (519) 439-7504 or by e-mail at rduff@sympatico.ca

I wish to thank John Kulczycki for donating some small paperback beginning astronomy and children's books to the Exploring the Stars program at our RASC London Centre monthly meeting, Friday, October 15th. I gave these books to graduate student Alexander DeSouza at the Cronyn Observatory, Tuesday, October 19th, and they will be distributed to children at future Exploring the Stars events.

(Continued from page 1)

was a planetarium program. This was when I got a pleasant surprise. One of my favourite planetarium programs for my computer has recently been ported over to the iPhone. All of the familiar features of Stellarium are present in the app, including zooming in/out, labels and identifying the object you click on, with the added feature I was looking for, point the phone at a section of the sky and the display corrects for your pointing. This is a handy feature for finding objects such as the planets or perhaps a constellation you have not seen before.

There is one app that I am disappointed is not given as a

free app. Sky and Telescope has an app that gives its users the information from “This Week's Sky at a Glance” section of the webpage along with a few additional features, such as star maps that are generated using the iPhone's GPS for the user's current position. Personally, I think that since most users of this app probably already pay for the magazine and the fact that most of the information is being pulled from a free website, that this was a bit of a disappointment, since the app expires at the end of 2011. But at the end of the day \$0.99 is not that much to shell out if you want this particular app.



Star Nights & Other Events

By Robert Duff

Slide Presentation, Coldstream Public Library, October 20th, 2010

Wednesday, October 20th, Dave McCarter gave a slide presentation on asteroids and meteorites before a group of 25 visitors at Coldstream Public Library, Ilderton. Charlie Barbara was there with a display of his extensive meteorite collection. Cloudy skies ruled out observing with telescopes.

Star Night, London Regional Children's Museum, October 22nd, 2010

Dave McCarter, with his 25.4cm Dobsonian and 80mm refractor; Matt Neima, with his Celestron C-8 Schmidt-Cassegrain; Mike Roffey, with his 80mm Sky-Watcher refractor, Phil Marusaik, with his 127mm Sky-Watcher Maksutov; Ryan Fraser, with his 60mm Bushnell refractor; and Bob Duff, with his 20.3cm Dobsonian; set up their telescopes in the playground of the London Regional Children's Museum (6:30—8:30 p.m) and showed about 100 children and their parents Jupiter, the full Moon and some deep-sky objects. Harold Tutt also arrived later but did not need to set up a telescope. Clear skies made for good viewing although a searchlight swept the sky from the downtown area.

Exploring the Stars, Cronyn Observatory, October 13th—November 10th, 2010

By Robert Duff

I assisted at these events bringing the RASC London Centre's photographic display and setting it up and laying out some of our brochures.

Exploring the Stars, Big Sisters of London, October 13th, 2010

Clouds and light rain showers ruled out observing on this first Fall evening of Exploring the Stars at the Cronyn Observatory, Wednesday, October 13th, 6:30 p.m. Graduate student Robin Wing made the digital slide presentation, "Our Messy Solar System," before 7 members of the Big Sisters of London, including adults and young people.

We gave them a tour of the dome and I described the telescope to the group at Robin's request. I also explained the clocks showing standard and sidereal time. Rain ruled out opening the dome.

Exploring the Stars, Jean Vanier Elementary School, October 14th, 2010

Clear sky, haze and clouds greeted 47 students, teachers and parents (25 children and 22 adults) from Jean Vanier Elementary School at the Cronyn Observatory for Exploring the Stars, Thursday, October 14th, 6:30 p.m. Graduate student Alexander DeSouza made an excellent digital slide presentation, "Our Solar System," and this was followed by some good questions from the audience. Harold Tutt also arrived and listened to the presentation.

Everybody had a chance to observe the outline of a hazy Moon through the 25.4cm dome refractor. Alexander and I also set up the RASC London Centre's 25.4cm Dobsonian on the roof patio to show a few visitors Jupiter before it disappeared completely into the clouds. I spoke with one man about choosing a Dobsonian telescope and gave him a

(Continued on page 5)

November 2010 Pocket Sky Atlas Challenges

As nights get longer and colder, for those who travel any distance, it is a good time to review and replenish your cold weather gear for observing. It's also a good time to have your vehicle's battery tested to insure there are no chilling surprises when you turn the key to get home after a long night in the cold. If you can, observe with a buddy, if this is not possible, let someone know where you are going and check in with that person when you get back.

I've indexed the object to its star chart page.

Naked Eye:

Matar, page 72, Sadalsuud, page 75

Small Scopes and binoculars:

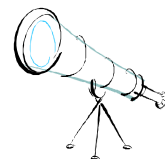
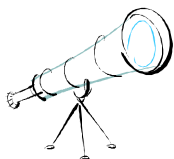
M2 Page 77, NGC 7448 page 74

Larger Scopes:

NGC 7606 Page 76; 7009, page 77

Bonus objects:

NGC 7686, Page 72 NGC 1778 page 12



Happy hunting.
John Kulczycki

RASC London Centre brochure. It was a very successful evening despite the clouds.

Exploring the Stars, St. Thomas Aquinas High School, October 19th, 2010

Graduate student Alexander DeSouza made his digital slide presentation, “Mars,” before 20 visitors (12 students and 8 adults) from the St. Thomas Aquinas High School Grade-9 class, Tuesday, October 19th, 6:30 p.m.

Clear skies early in the evening enabled Alexander to show visitors excellent views of the Moon through the Cronyn Observatory’s 25.4cm refractor. I showed them the Moon and Jupiter through the 25.4cm Dobsonian from the roof patio. Clouds later interfered with observing and I showed visitors the Ring Nebula (M57) in the constellation Lyra. Mike Roffey arrived and set up his 80mm Sky-Watcher refractor on a Celestron Go-To mount, showing people the Moon and Jupiter between clouds.

Students and adults were pleased with the Exploring the Stars event despite the clouds frequently obscuring the view. We closed down the Observatory at 9:00 p.m. after a very worthwhile evening.

Exploring the Stars, October 20th, 2010

Graduate student Robin Wing reported making his digital slide presentation, “Constellations,” before a family group of about 25 children (ages 6—10) and 10 adults who arrived at the Cronyn Observatory for Exploring the Stars, Wednesday, October 20th, 6:30 p.m. The sky was clouded out but Robin took the group upstairs to look at the big 25.4cm refractor and showed them how the dome opened and moved. The children found Comet 103P/Hartley, Jupiter, Orion, the Little Dipper and Polaris on the computer. They also made their own constellations out of the stars on the screen and made stories about them.

Exploring the Stars, Eagle Heights Public School, October 26th, 2010

Cloudy skies and rain showers greeted 46 visitors (7 adults and 39 children) from the Eagle Heights Public School, Grade-6, for Exploring the Stars at the Cronyn Observatory, Tuesday, October 26th, 6:30 p.m.

Graduate student Robin Wing made his presentation, “Our Messy Solar System,” and this was followed by questions. I gave a tour of the big 25.4cm refractor, including opening the dome. Robin then took half the

group downstairs while I answered questions and students played on the computer in the dome. The sky partially cleared and I briefly showed one student Jupiter before clouds obscured it again. I directed the telescope towards Vega and Epsilon Lyrae but the students had to go home by then. We closed the Observatory at 9:00 p.m.

Exploring the Stars, 1st Clinton Pathfinders, November 2nd, 2010

Graduate student Alexander DeSouza made his digital slide presentation before 45 visitors from the 1st Clinton Pathfinders, which included about 30 children and 15 adults. This Exploring the Stars presentation was for the Girl Guides Astronomy Badge. Alexander gave them some Star Finder planispheres. Afterwards Alexander showed them Jupiter through the 25.4cm dome refractor under clear skies. I showed them Jupiter as well as the orange and blue double star Albireo through the London Centre’s 25.4cm Dobsonian. Greg Andres showed them Jupiter and the Andromeda Galaxy (M31) in his 20.3cm Sky-Watcher Dobsonian. I also gave them a star and constellation tour with my green laser pointer. Everybody was gone by 8:15 p.m., after a very successful evening.

Exploring the Stars, 1st Glencoe Girl Guides, November 3rd, 2010

Cloudy skies and rain greeted 16 visitors (10 children and 6 adults) from the 1st Glencoe Girl Guides for Exploring the Stars at the Cronyn Observatory, Wednesday, November 3rd. Graduate student Alexander DeSouza began his presentation for the Girl Guides Astronomy Badge around 6:40 p.m. I set up the RASC London Centre photo display and laid out a few brochures and copies of “Become a Sidewalk Astronomer.” Alexander gave the group a tour of the 25.4cm refractor in the dome and everybody was gone by 7:50 p.m. after a satisfactory evening despite the clouds and rain.

Exploring the Stars, 1st Parkhill Scouts, November 9th, 2010

Clear skies greeted 25 visitors (15 children and 10 adults) from the 1st Parkhill Scouts, for Exploring the Stars at the Cronyn Observatory, Tuesday, November 9th. Graduate student Emily McCullough distributed Star Finder planispheres, explaining their assembly, and this was followed by her digital slide presentation on the Solar System.

Emily showed people Jupiter through the big 25.4cm dome refractor—with the first few visitors seeing the

shadow of the moon Io just moving off the planet's left edge. I showed them Jupiter through the 25.4cm Dobsonian. I also showed them Albireo and a few visitors also viewed the Ring Nebula (M57) and the Andromeda Galaxy (M31). I gave two star and constellation tours with my green laser pointer. After everybody had viewed through the telescopes, Emily gave a tour of the big refractor in the dome and explained the Standard and Sidereal Time clocks on the wall. Everybody was gone by 8:30 p.m. after thanking us for a very interesting evening.

Exploring the Stars, 110th Brownies, November 10th, 2010

A clear sky greeted 26 visitors (15 children and 11 adults) from the 110th Brownies for an evening of Exploring the Stars at the Cronyn Observatory, Wednesday, November 10th, 6:30 p.m. Graduate student Robin Wing made his digital slide presentation for the Brownie Exploring Space Badge. Paul and Charlene Kerans set up their 30.5cm Meade Lightbridge Truss-Tube Dobsonian and 10x50mm binoculars (with tripod mount) on the Observatory's roof patio. I set up the RASC London Centre's 25.4cm Dobsonian.

Robin showed the Brownies the Moon through the 25.4cm refractor in the dome. Paul and Charlene Kerans showed them the Moon through the binoculars and Jupiter and the Andromeda Galaxy (M31) in the 30.5cm Dobsonian. I showed them Jupiter and the orange and blue double star Albireo in the 25.4cm Dobsonian and gave a sky tour with my green laser pointer.

I gave 18 Galileo Moment cards to one of the leaders and everybody was gone by 8:30 p.m. It was a very enjoyable and educational evening for the Brownies.

Exploring the Stars, 1st West Lorne Scout Group, November 11th, 2010

A clear sky greeted 23 visitors (14 children and 9 adults) from the 1st West Lorne Scout Group when they arrived at the Cronyn Observatory for Exploring the Stars, Thursday, November 11th, 7:00 p.m. Greg Andres and his son Abram brought their 20.3cm Sky-Watcher Dobsonian. Graduate student Emily McCullough took the group into the dome immediately to observe the nearly 6-day-old Moon in the 25.4cm refractor and Jupiter in the London Centre's 25.4cm and Greg's 20.3cm Sky-Watcher Dobsonian. Three of the Galilean moons formed a triangle to the west (left) of Jupiter and one was to the east (right) of the planet.

Emily then took them back downstairs for her digital slide presentation, "Our Messy Solar System," and some activities. They returned to the dome again for some splendid views of Jupiter through the 25.4cm refractor and the two Dobsonians. Through the Dobsonians they also viewed the Moon, Albireo and M31. I gave them a sky tour with my green laser pointer. The Scouts were gone by 9:00 p.m. after a very enjoyable evening doing and learning about astronomy.

Cronyn Observatory 70th Anniversary, October 25th, 2010

By Robert Duff

Graduate student Amanda Papadimos made her digital slide presentation celebrating the 70th anniversary of the Cronyn Observatory, Monday, October 25th. Dr. Shantanu Basu and Peter Jedicke followed, thanking her with closing remarks. There were about 28 people present. Afterwards people enjoyed two large cakes, one vanilla and the other chocolate, and toured the dome. There was much lively discussion about the Cronyn's history and significance to science at Western.

RASC London Centre members present included Peter Jedicke, Patrick Whelan, Adam Priestap-Suttis and Cheryl, Greg Andres and son Abram, Eric Clinton, Mike Jager and myself (Bob Duff). Astronomy faculty members and students present included Dr. Shantanu Basu, Prof. Jim Moorehead, Dr. Phil Stooke, Dr. Amelia Weh-lau, Phil McCausland, Amanda Papadimos and others.

Cronyn Observatory Open House, Saturday, October 30th, 2010

Graduate student Sarah Malek made her digital slide presentation, "The Future of Our Sun," shortly after 7:00 p.m. before a small group of visitors to the Cronyn Observatory Open House, Saturday, October 30th, 2010. Professor Jan Cami showed a few people Jupiter between clouds in the big 25.4cm refractor before the sky completely clouded out. I (Bob Duff) set up the 25.4cm Dobsonian on the Observatory's roof patio and showed people Jupiter, before it clouded out, and then the weather vane on the Engineering Building. Jan Cami directed the big refractor towards the communications tower in south London for the benefit of 8 late arriving visitors. Together with 15—20 visitors who arrived earlier, a modest estimate might be about 23 visitors. We closed the Observatory around 8:30 p.m.