

Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

Vol. 45, No. 5

May 2014



Ron Waldron presents a 25 minute digital tour of the universe at Beaver Creek during Astronomy Week Activities, held on April 4th and 5th. Approximately 70 people came out in somewhat hazy but workable conditions to view the moon and the planets Jupiter and Mars. Photo by George Charpentier.



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The Royal Astronomical Society of Canada
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WEBSITE:

<http://www.rasc.ca/saskatoon>

E-MAIL: skstars@shaw.ca

To view *Saskatoon Skies* in colour, see our Website:

<http://homepage.usask.ca/~ges125/rasc/newsletters.html>

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MEMBERSHIP? JOIN TODAY!

Regular: \$82.00 /year

Youth: \$43.00 /year

Family: \$77/year

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the National Office at <national@RASC.ca>!

Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook
- Journal of the RASC (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- borrow the Centre's Data Projector to give astronomy outreach presentations – contact Les Dickson at astrochem@sasktel.net
- rent the Centre's Telescopes <http://homepage.usask.ca/ges125/rasc/telescopes.html>
- discounts to Sky & Telescope Magazine*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

*New subscription or renewal of Sky & Telescope? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 – 4th Street East, Saskatoon, SK S7H 1H8, or email her at norj@sasktel.net.

U OF S OBSERVATORY

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

Observatory Hours:

January–February	7:30–9:30 pm
March	8:30–10:30 pm
April	9:30–11:30 pm
May–July	10:00–11:30 pm
August	9:30–11:30 pm
September	8:30–10:30 pm
October–December	7:30–9:30 pm

SASKATOON CENTRE'S MAIN OFFICERS:

President – James Gorkoff, 644-1343

Secretary – Tenho Tuomi, 306-858-2453

Vice-President – Jim Goodridge, 370-8530

Treasurer – Norma Jensen, 244-7360

Bottle Drive & Canadian Tire \$ By Colin Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 934-7046.

Newsletter Editor – Ron Waldron

Copy & Collate – Les & Ellen Dickson

Labels & Temps – Mark de Jong

Web Posting – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science material. **Articles can be sent by mail in any format to the Centre's mailbox.** Submitted materials can be returned upon request. Submissions may also be sent by e-mail to the editor at rmwaldron@shaw.ca as a .doc, no indents, no tabs, one line between paragraphs. Images: jpg please, no larger than 1 – 1.5 MB, sent by e-mail as attached files. **Deadline for submission of all articles for an upcoming issue is the first Friday of the month!**

A separate by-mail subscription to Saskatoon Skies is available for \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise indicated), provided that proper source credit is given. **DEADLINE for submissions** for each month's issue is the 1st Friday of the month. Saskatoon Skies accepts commercial advertising. Please call the editor 306-665-3392 for rates. Members can advertise non-commercial items free of charge.

**LIGHT POLLUTION
ABATEMENT
WEBSITE AT:
www.ras.sk.ca/lpc/lpc.htm**

RASC CALENDAR OF EVENTS

May 8	Sask Summer Star Party organizing meeting	Jim Goodridge
May 12	RASC Executive and General Meeting	Jim Gorkoff
May 23	Observer's Group at Sleaford	Larry Scott
May 24	Solar Observing at Farmer's Market for City Nature Festival	
June 16	RASC Executive and General Meeting	Jim Gorkoff
June 16-29	RASC General Assembly – Victoria, BC	Victoria Centre
June 28	Observer's Group at Sleaford	Larry Scott
July 26	Observer's Group at Sleaford	Larry Scott

For a complete list of club events, please check out: <http://www.usask.ca/rasc/activities.html>



General Meeting

for all members and guests
Room 175 Physics Bldg
University of Saskatchewan

Monday, May 12th at 8:00 PM

Program

Jim Goodridge will be showing examples of do it yourself astronomy projects including:

- Turning a really bad telescope into something useable;
- Making your own image stabilized binocular (no batteries – but you will be surprised);
- Making a diffraction grating Spectrometer from a CDROM or DVD;
- Homemade Astrolabe;
- Diffraction Micrometer for measuring double stars.

Note: there will be an Executive meeting at 7:00 PM

Minutes of the April Meeting – *Tenho Tuomi*

Jim Gorkoff called the meeting to order at 7:05 PM

Moved by Les Dickson and Jim Goodridge that the minutes of the March 17 Executive meeting be approved as distributed. Carried.

Committee reports:

Treasurer's Report - Jim Gorkoff reported a total of \$30,956 in various accounts.

Membership Report - Mark de Jong reported 70 members in our Centre.

Fundraising Report – Jim Goodridge suggested that Fall might be a better time for the Soby's gift cards. He also reported that Dale Parker had donated a Nextstar SE mount, Celestron 8" SC telescope, four Hyperion 68 degree eyepieces, and a Night Owl WW80 eyepiece to the club.

Observing Co-ordinator Report – Jim Goodridge reported that 12 people came to Sleaford for the Messier Marathon.

Events Co-ordinator Report – Jim Goodridge reported that the March 29 Earth Hour at Circle Park Mall, the April 4 Public Observing at Lakewood, and the April 5 Public observing at Beaver Creek all had clear skies with over 100 in attendance at each one. Thanks to the seven who brought their telescopes and the ones who looked after the tables and took in \$19 in donations. Ron Waldron gave a talk to about 70 people at Beaver Creek.

Next event is solar observing on May 24 at the Farmer's Market with the Nature City Festival. Help is need, particularly for a site co-ordinator.

Saskatchewan Light Pollution Abatement Committee – Rick Huziak reported delays in getting a city-wide plan. Colin Chatfield is helping to get photographs to document progress.

Other Business:

It was suggested that Dale Parker's donated eyepieces be used on the loaner scopes, and that the mount and telescope be advertised for sale.

On May 10 there will be a get-together at Les and Ellen Dicksons for a farewell for Barb Wright.

Moved by Les Dickson that the meeting adjourn. 7:55 PM.

The General Meeting started at 8:05 PM with a presentation "Stellar Studies" by Taylor Bell and Hope Boyce, showing some of their spectroscopy laboratory work in Astronomy 214 at the University of Saskatchewan.

Observer's Group Notes – *Larry Scott*

The April 26th Observer's Group was so rained out I forgot to officially cancel it, sorry about that. After the rain and snow moved on there was one evening of clear skies, low humidity and no moon on Wednesday, April 30th. Three members seized the opportunity to explore the night sky. That night, in more or less chronological order:

Driving out at 20:00 there's a nice sundog in the western sky; arriving around 20:30, we set up and watch as the sun sets and reveals a thin crescent moon following it; flights of ducks and geese cruise over our heads looking for that night's rest stop; next comes Jupiter and Mars as the sky darkens, neither will take high power as the skies are still somewhat unsettled; comet C2012 K1 (PANSTARRS) is a faint fan of light drifting through the tail of Ursa Major; some galaxy hunting in the Coma-Virgo area; bright bands of aurora pop up low in the north and are nice enough that I'm not overly vexed by their presence; with the brightened sky I return to Mars and pile on higher powers as my scope and the sky have settled allowing a spectacular view of Syrtis Major; time for some coffee and a muffin; on to globulars M3 and M5; Saturn is quite low and mushy but it's still Saturn; coyotes are singing; an irregularly flashing light travels through the sky, probably a tumbling satellite; there goes a nice meteor; is it really 01:30 already, time to pack up; one more look at Saturn and M5; sign out; turn breaker off; lock door; close gate; Scorpius is out the driver's window all the way home; back in my driveway at 03:45 and the robins are already up singing.

That turned out to be a really good night. For your next opportunity at this kind of excitement, our next scheduled Observer's Group is May 23rd which coincides with a possible meteor shower early on the 24th. There will be moonless evenings from about May 19th to June 1st.

Invitation for Astronomy Night – *Tenho Tuomi*



An excerpt from Garry's comments about the evening,

"Took a quick shot of the moon at 9:34 last night just before packing up--was just three people left I think. Nice time all around---Larry was just blown away with seeing Jupiter and the four moons . Too bad Mars was so low although most thought it was still quite "cool" . For a while the seeing was perfect and views of the moon were exceptional. Seemed to be quite a few young people very interested. Warren didn't think he would volunteer to go to Mars--seeing it through the C-8 was as close as he wanted to get..I had fun last night."

A very good night, even the sky cleared up. Garry Stone came over to help with his telescope; about 16 adults and 9 children at the Lucky Lake library for astronomy.

Left Picture - I have three of the children representing the sun, moon and earth, and how the moon goes around the earth causing eclipses (illustrating next week's eclipse).

Picture below - my telescope.



Even the RCMP stopped to see what we were doing. Garry gave him a lesson on how to use a sextant.



Left picture - alternative picture for the sun, moon, and earth skit.

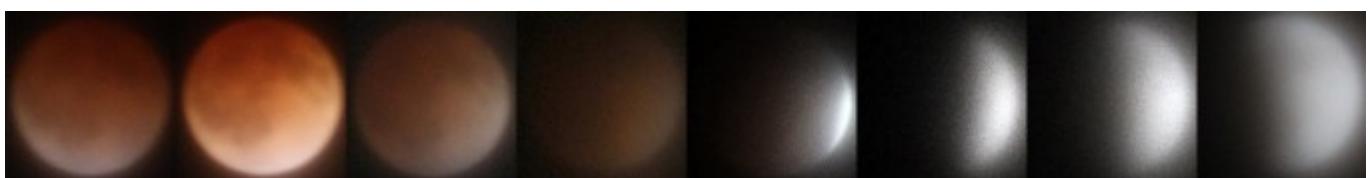
Picture below - Garry Stone and his C-8 telescope, and the crowd that was around it all evening.



Picture Above - third telescope. A lady had bought a goto telescope and brought it to the library, and asked me how to use it. I could not help her for I had never been able to get one to work. She called the 90 year old gentleman from whom she had bought the telescope, and he came and showed her how to use it.

Total Lunar Eclipse Clouded Out for Most Viewers – *Tenho Tuomi*

Photo sequence through cloudy conditions taken by Tenho Tuomi using 300mm lens from Lucky Lake, SK



Astronomy at Lakewood Civic Centre – Jim Goodridge

We had a very successful public viewing event on April 4th at Lakewood Civic Centre. Our estimate of public attendance was between 100 and 125 people. It was a very enthusiastic crowd. I am not sure if we signed up any new members or not but there was lots of interest, we also sold about 6 star finders and gave away lots of brochures. Objects viewed were Jupiter, Mars, the moon and M3. That is probably not a complete list, but you get the idea.

We had many members come out to support the event so many thanks to them, even if you can't bring a telescope you can help out many other ways and the members who came tonight really showed that. Thanks to the following people who brought telescopes:

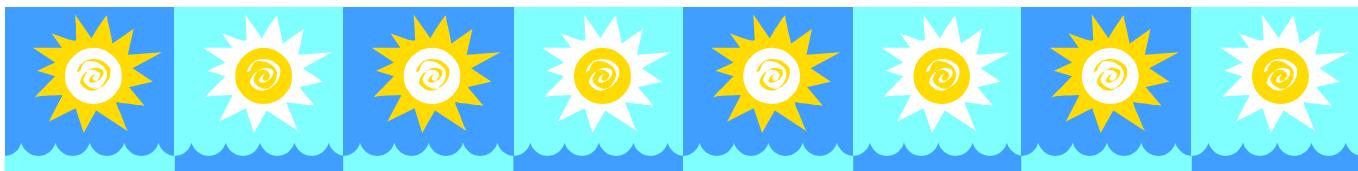
Larry Scott
Barb Wright
Ron Waldron
Les Dickson
Ellen Dickson
Jim Goodridge

A big thank you to Jeff Swick who set up the event with Lakewood and arranged for the interviews with CTV. The television interviews have a huge effect on attendance. I missed Jeff's interview on CTV evening news but it must have been really good because several people mentioned it.

A Great Night of Viewing – Kathy Gallenger

Lakeridge School in Saskatoon had the wonderful opportunity to have the Star Lab Portable Planetarium at the school on April 7th and 8th. Students from Kindergarten to grade 2 and students from grade 6 to 8, were excited and thrilled to learn about the constellations from the Starman, Ron Waldron. After viewing the Star Lab, the whole school was abuzz with excitement. They enjoyed learning the stories behind the constellations and seeing how the stars move across the sky in the Star Lab. My grade 1 class presented Mr. Waldron with a thank you booklet on the last day he was with us.

To help the Star Lab adventure become a reality, on the evening of April 8th, Ron and I invited all the staff, students and parents at Lakeridge School to view the moon and Jupiter through our telescopes on the school tarmac. Little did we know how many excited people would show up! It was a gorgeous, clear night and there were over 200 people of all ages lined up to view! To top it off, we even had the International Space Station fly overhead, which many people had not seen before. It was a great evening of viewing and educating the public, and an experience we will never forget!





As President and on behalf of The Royal Astronomical Society of Canada Saskatoon Centre Incorporated I wish to thank Mr. Dale Parker for his generous donation of a computerized Nexstar SE mount (inclusive of software, instructions and ac adapter, all as pictured below) as well as 3 Hyperion 68 degree eyepieces (5mm, 8mm and 13mm) and a Night Owl WW80 degree 30mm eyepiece. At the most recent executive meeting, it was decided that the eyepieces would be turned over to Gord Sarty to be used in our telescope outreach/rental program and the Nexstar Mount would be sold with the proceeds of each going to the Saskatoon Centre.

We wish to offer the mount to members before we put it out to the general public for sale after 30 June 2014. The mount was used for a short time to hold a Celestron SCT 8 inch telescope and retails for around \$600.00. All reasonable offers will be seriously considered. If interested, please contact Jim Gorkoff @ 306-664-1343 or jgorkoff@yahoo.ca.

SSSP Opens Registration – *Rick Huziak*

Time to organize your summer's end to attend the Saskatchewan Summer Star Party! SSSP 2014 has now opened registration! The star party is held on the new moon weekend of August 21 - 24!

Fr. Lucian Kemble Memorial Lecture Speaker: Chasing Solar Eclipses - Murray Paulson has spent half a lifetime chasing solar eclipses around the world, from the arctic to the tropics, on ships, planes, from dry land and from tropical islands. Murray will share his exotic chase adventures, illustrated with pictures and “home” movies, and warm us all up for August 2017!

Under Living Skies Public Lecture Speaker: Sky With Nothing to Get in the Way: The Beauty of Prairie Skies - Alan Dyer presents an array of his images and time-lapse movies of the prairie night sky, touring you around many of the wonderful sights currently visible in the summer night.

Saturday Talk and Night Workshop: Night Myopia - Boston-based science teacher (and ex- Sky and Telescope contributor) Joshua Roth will summarize the likely causes of night myopia and outline strategies for seeing the unmagnified sky as well as possible. He then will facilitate an under-the-stars clinic using diagnostic lenses from Toronto-based Optego.

All of our popular activities are back: welcome BBQ, solar observing, swap table, photo contest, on-site astro-vendors, astro-art display, 10-year awards, door prizes, banquet, moose and much more! We are also going to formalize a potluck supper for the Sunday stragglers, to be held at the Cypress Observatory yurt. Come have a blast!

The star party is held at the Cypress Hills Inter-provincial Park, 30 km south of Maple Creek, Saskatchewan. Everyone is welcome. We cater to the entire family, from seasoned observers to ripe newbies and we don't forget about spouses and kids! As a matter of fact, we'll run a Kids' Workshop in the Yurt on Saturday morning, while the rest of you catch up on sleep!

We will be mailing out bunches of brochures to all the RASC and independent astronomy clubs this week, so pick one up at your next club meeting! Register early, and decide NOW if you are coming. Please take a moment to [**read our webpage**](#) regarding Camping in the Meadows if you are camping and since we opened camping for this event six weeks ago, we now have 100 of the 106 sites booked. However, do not despair – we can fit a hundred more overflow campers into the Meadows and we have use of the rustic campsites at the Dark-sky campground next door.

Each site has power, water, a fire pit and a picnic table. If you are tenting, no sweat – there is room hundreds of tents on the powered sites or in tent overflow. The renovated Meadows now has a Service Centre with showers and flush toilets, and all outhouses have been replaced with flush toilets and running water. There are also many resort rooms, condos and cabins available for those who like that sort of accommodation. (Tell the resort you are “with the star party” when booking those rooms, or they will tell you that they are full!)

Registration forms are also up on the website so take a look and see what we offer! Join your 325 closest friends at SSSP'14!

Sky Buys and Mirror Cells

FOR SALE:

CELESTRON CELESTAR 8" DELUXE TELESCOPE C/W 2" METAL TRIPOD, WEDGE, FINDER, EYEPIECE - \$2400.00

ADDED UPGRADES:

FEATHER TOUCH FOCUSER - 250.00
WILLIAM OPTICS 2" DIAGONAL - 200.00
FLOCKED DEW SHIELD - 100.00
TELRAD - 55.00
BOBS KNOBS - 40.00
DRYEYE DEW HEATER - 150.00
MAIN SCOPE CASE - 150.00
TRIPOD CASE - 80.00

TOTAL VALUE - \$3425.00 WILL SELL FOR \$1500.00

This scope is in excellent shape! It has seen many objects, such as the Finest NGC's, the Herschel I and some of the II's. This particular scope was ‘recommended’ by a former Celestron employee some years ago now. He happened to be visiting our SSSP at that time, so after meeting him, he politely came and looked through my telescope. He gave it an excellent optical review! Set this scope on an object, and it will track perfectly for hours. Please call **Darrell at 374-9278** for more information. I will consider serious offers. Thank you.

CELESTRON SKY MASTER 20 X 80 BINOCULARS - \$75.00

This item is in excellent shape. Provides great views of the skies. Used twice! Please call **Darrell at 374-9278** for more information. Thank you.

MEADE 32mm PLOSSL EYEPIECE 2 in. barrel - Series 5000 – 60 deg. AFOV

\$75

Contact Ron Waldron by e-mail strman@shaw.ca



Observing Clubs and Certificates

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 140 Lunar, 154 Sky Gems or 35 Binocular objects, or Explore the Universe and earn great OBSERVING CERTIFICATES!

MESSIER CLUB

Certified at 110 Objects:

R. Huziak, G. Sarty, S. Alexander,
S. Ferguson, D. Jeffrey, D. Chatfield, B.
Christie, K. Noesgaard,
M. Stephens, B. Hydomako, T. Tuomi, L.
Scott, G. Charpentier, B. Johnson, M.
Clancy, L. Dickson, B. Burlingham, K.
Houston

Norma Jensen	110
complete	
Ron Waldron	105
Wade Selvig	75
Garry Stone	57
Bernice Friesen	45
Wayne Schlapkohl	43
Barb Wright	40
Ellen Dickson	34
Jeff Swick	24
Graham Hartridge	9

Chatfield BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

M. Stephens, T. Tuomi, M. Clancy,
R. Huziak, K. Maher

Jim Goodridge	Up!	12
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FINEST NGC CLUB

Certified at 110 Objects:

R. Huziak, D. Jeffrey, G. Sarty,
D. Chatfield, T. Tuomi

Larry Scott	Done!	110
Scott Alexander		97
Norma Jensen		72
Sandy Ferguson		23
Kathleen Houston		23
George Charpentier		13
Mike Clancy		7

EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

M. Clancy, T. Tuomi, K. Maher,
B. Gratias

Wayne Schlapkohl	Done	55
Sharon Dice		31
Jim Goodridge	Up!	35

Isabel Williamson Lunar Observing Certificate

Certified at 140 Objects:

T. Tuomi

Norma Jensen	133
Jeff Swick	29

HERSCHEL 400 CLUB

Certified at 400 Objects:

D. Jeffrey, R. Huziak, D. Chatfield, T.
Tuomi

Gordon Sarty	251
Scott Alexander	117
Sandy Ferguson	18
Larry Scott	20

HERSCHEL 400-II CLUB

Darrell Chatfield	Done!	400
Rick Huziak		246
Tenho Tuomi		160

LEVY DEEP-SKY GEMS

Certified at 154 Objects:

Tenho Tuomi	150
Darrell Chatfield	70



The Messier, Finest NGC and David Levy's Deep-Sky Gems lists can be found in the *Observer's Handbook*.

The Explore the Universe list is available on the National website.

On-line Messier and Finest NGC lists, charts and logbooks: <http://www.rasc.ca/observing>

On-line Herschel 400 List: <http://www.astroleague.org/al/obsclubs/herschel/hers400.html>

Binocular List is at: http://homepage.usask.ca/%7Eges125/rasc/Chatfield_Binocular_List.pdf

'Isabel Williamson Lunar Observing Program Guide:

<http://www.rasc.ca/observing/williamson-lunar-observing-certificate>

Program details can be found at: <http://www.rasc.ca/williamson/index.shtml>