

Saskatoon Skies

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

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October 2016



*A star trails picture taken near Bishop, California, by Kris Ohnander.
Approximately 8 hours of data, taken in November 2014.*



Saskatoon Centre

The Royal Astronomical Society of Canada

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To view *Saskatoon Skies* digitally,
see our website:

<http://www.usask.ca/rasc/newsletters.html>

In This Issue:

Membership Information / Bottle Drive / Officers of the Centre	2
U of S Observatory Hours / Light Pollution Abatement Website	2
Calendar of Events / Notice of Meeting	3
Minutes of the September Meetings	4-5
Saskatoon Centre Executive Election October 2016 – <i>Les Dickson</i>	5-6
The Perseid Meteor Shower – <i>Tenho Tuomi</i>	7-8
Observer's Group – <i>Larry Scott</i>	8
Observing Clubs and Certificates	9

MEMBERSHIP? JOIN TODAY!

Regular: \$85.00 /year

Youth: \$45.00 /year

Family: \$80/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 <http://www.rasc.ca/join-us>

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 <https://www.usask.ca/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!

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:

Interim President – Les Dickson

Vice-President – to be filled

Secretary – Tenho Tuomi, 306-858-2453

Treasurer – Norma Jensen, 306-244-7360

National Council Rep – to be filled

Bottle Drive &
Canadian Tire \$
By Les Dickson

If you cannot attend a meeting but would like to donate your Canadian Tire money please email me at astrochem@sasktel.net

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

Newsletter Editor – Kris Ohnander

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. Submissions should be sent by e-mail to the editor at krisohn@gmail.com in msword or text format. Images: any format, less than 30MB, 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. Saskatoon Skies accepts commercial advertising. Please email the editor at krisohn@gmail.com for rates. Members can advertise non-commercial items free of charge.

RASC CALENDAR OF EVENTS

October 17	RASC General Meeting and Elections!	Les Dickson
October 29	Observers Group at Sleaford	Larry Scott
November 21	RASC General Meeting	Les Dickson
November 26	Observers Group at Sleaford	Larry Scott
December 3	Observers Group at Sleaford	Larry Scott

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

October RASC General Meeting

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

Monday, October 17th, 2016 at 8:00PM

***Annual General Meeting and
Elections for Centre Executive***

Short Presentation by Les Dickson:

“What’s in a name? Stargazers vs Amateur Astronomers”

Presentation by Rick Huziak:

“Grasslands and Old Man on His Back DSP Summer Programs”

This past summer, six trips were made to Saskatchewan’s Southwest Dark-Sky Preserves to support programming. I will describe what we did at Grasslands National Park and Old Man on His Back Prairie and Heritage Conservation Area.

Note: There will be an Executive Meeting at 7:00PM

Minutes of the September Meetings

Minutes of the September 19 Executive Meetings

(Notes taken by Norma Jensen and interpreted by Les Dickson.)

The meeting was called to order by President Les Dickson @ 7:05 pm

Present: Les Dickson, Ellen Dickson, Larry Scott, Mark De Jong, Rob Shepard, Norma Jensen, Kris Ohnander, Erroll Frazer-Harrison, James Gorkoff (guest), Gordon Sarty (guest).

Moved by Rob Shepard and seconded by Larry Scott that the minutes of the June 20 Executive meeting be accepted as circulated. Carried.

Reports:

Rick Huziak spoke about renovations at Sleaford: The roll-off is clean from mice. The dome is to be demolished and the rubble pile to be removed in October.

Kris Ohnander set the next deadline for newsletter items on October 7. He mentioned that Brian Clark Alan School requested help for a school open house with star night.

Larry Scott is organizing the Sleaford Open House (along with Stan Shadick) scheduled for October 24. He would appreciate some volunteers to help out. The members' pot luck to start at 4:30 pm and the guests from the city to arrive by convoy from the Field House at 7:30 pm. The Observers' Group is scheduled for October 1. There was some discussion of sending out a general e-mail to members each month to alert people of upcoming Observers' Group dates; this will be tried in October.

Mark De Jong reported that we had now 79 regular members and 5 family members.

Rob Shepard mentioned professor from Western U. (Dr. Livio Tornabene) who might make a good speaker for a meeting.

Old Business:

Les Dickson would like us to restructure our fees to eliminate the Centre surcharge as it is now and ask each person who wants a printed copy of the newsletter to pay full cost of printing and mailing: \$25/year. There was some discussion. To provide more facts on which to base further discussions, Jim Gorkoff will supply info on the last 15 years of income and expenditures.

Gordon Sarty and Les Dickson talked about a meeting they had with Lana Elias, Director of Outreach at the College of Arts and Science, U of S about collaboration in science outreach. Gordon thought that the University might be a source of funds for bringing in speakers for our meetings and could provide some support for SSSP as part of science outreach. There are possibilities to explore but most ideas are somewhat nebulous at the moment. Les, Erroll and Gordon will try to keep discussions going to see where this might lead.

New Business:

Norma Jensen reported that the invoice from the University for the shared Sleaford site costs for 2015-2016 has been paid.

Larry Scott presented a motion to have the Executive approve a yearly expenditure of \$200 for on-going maintenance for yard equipment at Sleaford. Seconded by Norma Jensen. Carried.

Meeting adjourned at 8:00 pm.

Minutes of the September 19 General Meeting

Minutes prepared by Les Dickson

The meeting was opened at 8:15 pm

The minutes of the General Meeting of June 20, 2016 were approved.

President Les Dickson presented a summary of reports and business from the Executive Meeting. Les emphasized the importance of filling vacant positions in the Executive at the Annual General Meeting and Election at the October meeting. The positions of President, Vice-President, Secretary and Activities Coordinator are vacant.

On behalf of George Charpentier, Les Dickson presented George's "SSSP2016 Slideshow".

Ashley Stock, an undergraduate student in the Department of Physics and Engineering Physics, presented a talk on "General Relativistic Radiative Transfer in Curved Space Time: Application to Black Hole Emissions".

Adjourned by 10 pm.

Saskatoon Centre Executive Election October 2016

Prepared by Les Dickson, President, Saskatoon Centre

Each fall, in October or November, we hold our Annual General Meeting and Election for the Executive. We elect certain members of the Executive, and appoint others. A list of current holders of such offices are given below at the end of this article.

This past year has been difficult with a number of positions left un-occupied. We also have a few Executive members who are stepping down. The significant positions of President, Vice-President, Secretary and Events Coordinator are open. Les Dickson, who was elected for one year as President to

finish out Jim Goodridge's two-year term, is stepping down. Tenho Tuomi, who has worked very hard as our Secretary for many years, would like to step down. We have not had a Vice-President for two years or more. Dale Boan is stepping down as our Activities Coordinator.

On the positive side, Norma Jensen has agreed to continue as Treasurer if elected, and Rob Shepherd has agreed to continue as National Advisory Council Representative if elected. Kris Ohnander would like to continue as Newsletter Coordinator, and Errol Frazer-Harrison has would like to continue as Telescope Rental Coordinator and Councillor-at-Large. Larry Scott would like to continue as Observing Coordinator. Mark De Jong would like to continue as Membership Coordinator. Other positions at this time are to be determined.

It is disappointing that very few members are willing to step up and help run the Centre. I was unable to even get more than Ellen Dickson to volunteer to be part of a committee to find candidates for the open Executive. I stand by my statement at the last meeting that I would not even consider accepting a nomination to continue as President as long as we did not have the crucial positions of Vice-President, Secretary, Treasurer and National Advisory Council Representative filled. There could be implications with regards to our standing as a functioning Centre of the national organization, and perhaps implications with regards to our status as a corporation under Saskatchewan law, if we do not have a functioning and effective Executive. I encourage all of you to think about how you can participate and support the Centre. See you at the meeting October 17th.

The Current Executive offices for the Centre are as follows:

President – Les Dickson

Vice-President

Secretary – Tenho Tuomi

Treasurer – Norma Jensen

National Advisory Council Representative – Rob Shepherd

The other offices appointed by the Executive officers on the recommendation of the membership are as follows:

Newsletter – Kris Ohnander

Events Coordinator – Dale Boan

Sleaford Site Coordinator – Darrell Chatfield

Observing Coordinator – Larry Chatfield

Councillor(s) at Large – Errol Frazer-Harrison and Curtis Tuplin

Meeting Room Coordinator – Ellen Dickson

Photographer and Archivist – George Charpentier

The Perseid Meteor Shower – *Tenho Tuomi*

On the morning of August 12 I took 250 20-second pictures from 00:52 to 02:37 local time with a Canon T5i camera set at ISO 3200 and a 10-20mm Sigma lens set at 10mm and F/3.5, and caught 7 meteors. On the morning of August 13 I took 257 pictures from 01:25 to 02:58 but raised the ISO to 6400 and caught 10 meteors. Camera was on a driven EQ2 mount.



7 Pictures stacked from August 12th. Foreground added from a separate picture.

10 Pictures stacked from August 13th.





Both Nights combined into
one picture.

Observer's Group – *Larry Scott*

The Sleaford Open House scheduled for September 24th was postponed due to heavy rain preceding the event. Skies did clear up that evening but the roads were in poor shape. With lots of help we rescheduled for the following Saturday, October 1st. Although it was cloudy in Saskatoon, the skies were clear at Sleaford. Between the change of dates and the cloudy skies in Saskatoon our turnout was low with around 20-30 visitors showing up. Thanks to all who helped out with special kudos to Stan, George and Les for their assistance. Thanks to everyone who showed up with a scope and to the U. of S. who helped with the convoy and the roll-off. Skies were clearish with a stiff breeze out of the east. Not the greatest conditions but we were able to show some objects to our guests and it's not often we get to see a lightning show in October.

We can look forward to Moonless evenings from around October 22nd till November 5th with our Observer's Group scheduled for October 29th.

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. Chatfield, T.
Tuomi, L. Scott, G. Charpentier,
B. Johnson, L. Dickson, B.
Burlingham, Norma Jensen*

Ron Waldron	108
Wade Selvig	75
Wayne Schlapkohl	43
Ellen Dickson	34
Graham Hartridge	9

Chatfield BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

T. Tuomi, R. Huziak

Jim Goodridge	12
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FINEST NGC CLUB

Certified at 110 Objects:

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

Larry Scott	110
Scott Alexander	97
Norma Jensen	83
Sandy Ferguson	23
George Charpentier	13

EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

T. Tuomi,

Wayne	55
Schlapkohl	
Jim Goodridge	35

Isabel Williamson Lunar Observing Certificate

Certified at 140 Objects:

T. Tuomi, N. Jensen

HERSCHEL 400 CLUB

Certified at 400 Objects:

R. Huziak, D. Chatfield, T. Tuomi

Gordon Sarty	251
Scott Alexander	117
Larry Scott	45
Sandy Ferguson	18

HERSCHEL 400-II CLUB

Darrell Chatfield	400
Tenho Tuomi	378
Rick Huziak	246

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.astroloague.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.shtm>