

Saskatoon Skies

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

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A great shot by Tenho Tuomi of the Moon, Mars and Venus taken from his farm.
2 sec exposure, f/5.6, 55mm, ISO1600.



Saskatoon Centre

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

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

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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. 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)
- 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*
- use of the Centre library

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

*Note: The hours above are out of date and pending newsletter update.
For current hours please visit:
<http://artsandscience.usask.ca/physics/observatory/hours.php>*

SASKATOON CENTRE'S MAIN OFFICERS:

President – Tim May

Vice-President – Alan Duffy

Secretary – Marcel Müller-Goldkuhle

Treasurer – Norma Jensen

National Council Rep – Rob Shepard

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

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.

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

RASC CALENDAR OF EVENTS

February 25	Observers Group at Sleaford	Larry Scott
February 27	RASC General Meeting	Tim May
March 20	RASC General Meeting	Tim May
March 25	Messier Marathon at Sleaford	Larry Scott
April 17	RASC General Meeting	Tim May
April 22	Observers Group at Sleaford	Larry Scott

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

February RASC General Meeting

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

Monday, February 27th, 2017 at 8:00PM

Note: One week later than usual, to accommodate the Family Day holiday.

Presented by Alan Duffy:

Using SDR# and Radio Sky Spectrograph for Radio Astronomy

Tutorial/Demonstration plus Examples of 'Data'

SDR# (pronounced "SDR Sharp") is a popular and free program that supports several software defined radio (SDR) units. The user interface is simple to use and also has advanced features. It also allows the use of plugins that are created by third-party developers. An SDR# plugin was developed in Saskatoon by Alan Duffy that allows data collected by SDR# to be sent to a program called Radio-Sky Spectrograph which may be used to record many hours of spectrograph data. Radio-Sky Spectrograph was developed for observing Jupiter decametric radio emissions, but may also be used for solar and other observations (such as meteor scatter and also auroral scatter). There will be a tutorial/demonstration of how to setup SDR# and the plugin to pipe data to Radio-Sky Spectrograph along with some cool examples of spectrographs.

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

Minutes of the January Meetings - *Marcel Müller-Goldkuhle*



Minutes of the Executive Meeting, January 16, 2017

Meeting called to order by Tim May at 7:08 PM

Approval of minutes of Nov 21 Executive Meeting: Moved by Norma Jensen & Rob Sheppard.

Approved.

Reports:

- Sleaford: Snow was removed at Sleaford end of December.
- Treasurer: Quote for planned Sleaford renovation to be submitted by April.
- Newsletter: Closing Date for the next Newsletter edition is Feb 3rd.
Article submissions are always welcome.
- Membership: Currently 82 members in total, this is 7 more than Jan 2016
The rationale for the temporary member status was discussed. As people should rather become regular members, decision was made not to offer this option any more.
The benefit of having business cards with the Club's contact information was raised. Les Dickson offered to issue an updated draft.
- Secretary: Email forwarding from the Club's email address was tested and still has to be updated. Marcel to follow up with the National Centre.
Council/Board Information to be updated on the RASC Website (Marcel). Only Executives to be shown, not Directors.
- SSSP: The committee is looking for members. Coordinator positions are to be filled.
Meetings are held monthly.
Camping Registration opens in April
- Other: The position of the coffee supply coordinator is to be filled.

Old Business:

- Event Coordinator: Position still to be filled.
- Astronomy Youth Club: No Update
- Stand Up Signs: To be purchased for public events
Size is about 2' x 6'
Money was already approved
Darrell and Les to get a quote

New Business:

Canada's 150-year Anniversary:

National Centre asked centres if they are willing to participate in a National Star Party.

Tim to inform the National Centre that the Club is interested in participating.

Asteroid Day: UN General Assembly announced an Asteroid Day on June 30, Participation to be revisited as it is one day after the 150-year Anniversary.

Sky News: It is possible to get magazine bundles for public events (100 for \$25)

TBC if shipping is included

It was suggested to buy bundles.

Beside public events they can also be laid out in waiting rooms at doctor offices.

50th Centre Anniversary:

The Club's 50th Anniversary is taking place in 2018, discussion about events and an agenda to be started this year.

Meeting adjourned at 8:00 PM.

Minutes of the General Meeting, January 16th, 2017

Meeting called to order by Tim May at 8:17 PM.

Report:

Tim gave an update about the topics, which were discussed during the Executive Meeting.

Presentations:

Rick Huziak: The New Explore the Universe Guide Handbook

Alan Duffy: Radio Astronomy using Software Defined Radio (SDR)

President's Note – *Tim May*

The New Year is underway and hoping for warmer weather soon to come, for more outside hobbying...

Activities will be coming up and unless we have a person or people step up to help with getting events underway we will have to pick/ask for volunteers as each activity comes along. Please consider helping out when the time comes.

We are open for suggestions on speakers, and please consider giving a talk yourself on something you like to do in the hobby – any level of interest is welcome – we want to hear and see what you are working on, looking at or trying out. I have a fear of speaking in public (yikes...totally forgot what I was going to say!!) but it's a lot easier when it's a topic I like, know about, and have an interest in showing. Especially if I am having a problem getting something to work – explaining it usually gets someone in the audience thinking up solutions and improvements, so it's all good! Give it a try.

There is an eclipse trip on the horizon for a lot of people, I think, and I am trying to figure out a way to get to the path with some camping involved. Driving with someone to share the load would be cool, if anyone is headed south for this and has extra room or would like company on the road let me know, maybe we can post travel plans for those wanting or offering rides. SSSP planning has started, and we should get some ideas kicking around for the 50th anniversary programs for 2018. I saw some notes in last year's newsletter that there were some ideas put out by Mr. Goodridge and I'd like to hear what those were and if there has been any activity along those lines. Please let me know, we'll make a date for some planning over some food and drink and maybe looking at the sky!?

Observer's Group – *Larry Scott*

Another month has rolled by without me rolling out a telescope. Our Observer's Group scheduled for January 21st was cancelled due to clouds and snow again. I have been keeping an eye on Venus as it climbed the sky after sunset and have fielded several "What's that bright star in the southwest?" questions from friends and family. It certainly catches the eye in the evening and is a great starter for astronomical conversations.

I'm ever hopeful that in the coming months there will be a clear, dark night for stargazing when I am not otherwise occupied.

Our next scheduled Observer's Group at Sleaford is for February 25th with moonless evenings from the 15th to the 28th.

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	43
Schlakohl	
Ellen Dickson	34
Graham	9
Hartridge	

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	13
Charpentier	

EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

T. Tuomi,

Wayne	55
Schlakohl	
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	400
Chatfield	
Tenho Tuomi	378
Rick Huziak	246

LEVY DEEP-SKY GEMS

Certified at 154 Objects:

Tenho Tuomi	150
Darrell	70
Chatfield	



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.astrolounge.org/al/obclubs/herschel/hers400.html>

Binocular List is at: https://www.usask.ca/rasc/Chatfield_Binocular_List.pdf

"Isabel Williamson Lunar Observing Program Guide:

<http://www.rasc.ca/sites/default/files/TWLOP2015.pdf>

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