

Saskatoon Skies

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

Vol. 40, No. 11

November 2009

Sleaford Nights



Our annual Open House at the Sleaford Observatory on October 23-24 drew over 100 enthusiasts, despite cloudy skies. Events Coordinator Patricia Gakis notes, "Everybody had a good time learning about astronomy!"

Photo by Jeff Swick



Saskatoon Centre

The Royal Astronomical Society of Canada
P.O. Box 317, RPO University
Saskatoon, SK S7N 4J8

WEBSITE:

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

E-MAIL: wrightb@sasktel.net

TELEPHONE: (306) 249-1990

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

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

MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: \$77.00 /year

Youth: \$41.00 /year

Associate: \$33 /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 membership coordinator, Mark de Jong, or renew through the National Office and let Mark know that you did!

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
- The Journal of the RASC (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- 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 – Barb Wright, 249-1990
Secretary – Al Hartridge, 373-0034
Vice-President – Jeff Swick, 373-3902
Treasurer – Norma Jensen, 244-7360

Bottle Drive & Canadian Tire \$

By Darrell Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 374-9278.

Newsletter Editors – Christine Kulyk & Tenho Tuomi

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 clkulyk@sasktel.net – preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached files.

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 20th of the preceding month. Saskatoon Skies accepts Commercial advertising. Please call the editor 306-858-2453 for rates. Members can advertise non-commercial items free of charge.

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

RASC CALENDAR OF EVENTS

Nov 13	Observers Group – 7:30 pm, Sleaford Observatory	Larry Scott	934-5801
Nov 16	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S	Barb Wright	249-1990
Nov 16	RASC General Meeting - 7:30 pm, 175 Physics, U of S	Barb Wright	249-1990
Nov 17	Leonid Meteor Shower – Sleaford Observatory	Larry Scott	934-5801
Dec 11	Observers Group – 7:30 pm, Sleaford Observatory	Larry Scott	934-5801
Dec 13-14	Geminid Meteor Shower - Sleaford Observatory	Larry Scott	934-5801
Dec 14	Christmas Potluck Social - 6:00 pm, 175 Physics, U of S	Barb Wright	249-1990
Jan 9	Observers Group – 7:30 pm, Sleaford Observatory	Larry Scott	934-5801

RASC SASKATOON CENTRE GENERAL MEETING MONDAY, NOVEMBER 16, 7:30 PM

Room 175, Physics Bldg, U of S

“What’s the Buzz on Buzzard Coulee?”
by Mel Stauffer



Note: There will be an Executive Meeting at 6:30 pm.

November Meeting Presentation: “What’s the Buzz on Buzzard Coulee?”

by Mel Stauffer

15 tonnes of asteroid entered Earth's atmosphere at about 17:27 local time over central-western Saskatchewan on November 20, 2008. It exploded at least six times, putting on a dazzling light show in the sky that lasted for only about 5 seconds but was seen by hundreds of people and caught on several video cameras, as well as cameras designed just for such events. This brilliant meteor was the largest to occur in Canada in at least the last century, and although most of the space rock (meteoroid) was melted or vapourized, several hundred kilograms managed to land, and

approximately 2,000 fragments have been found by numerous searchers, making it the largest fall recorded in Canada. The meteorite (all of the meteorite fragments combined) is classified as an H4 Chondrite, one of the most common varieties, but scientific study has barely begun, and since no two meteorites are exactly the same, it is possible that surprises could arise. This talk mainly will be about how meteorites are classified, how Buzzard Coulee fits into the scheme of things, and what it all means.

Minutes of the Executive Meeting October 19, 2009 by Al Hartridge

1. Approval of the minutes of the previous meeting: Moved by Tenho Tuomi, seconded by Les Dickson, and carried.
2. Treasurer's Report (Norma Jensen): The financial statement and SSSP report for the year will be given at the next meeting. Currently, there is \$65,646.70 in total of all accounts (term, checking, and GIC).
3. Events (Patricia Gakis):
 - IYA Galilean Nights activities will take place as part of the Sleaford Open House. A volunteer to lead a convoy out to the dark site on Friday night is required. There will be a potluck supper on Saturday at 5:00 pm. Saturday afternoon, Rick Huziak will give an instructional tour of the roll-off shelter. Ron Waldron will give a presentation on one of the evenings.
 - Wintershines festival in January is putting restrictions on what they want us to do.
 - IYA concert conducted by George Charpentier on Oct. 17: Those who brought scopes for public observing noted the site had nowhere to park and unload, nowhere to set up.
4. Nominations Committee: There may be some adjustments to job descriptions of officers.
5. Education Program: New members may be offered a basic information program with the last night using telescopes.
6. Insurance: Jim Gorkoff has contacted our insurance agent, who in turn will check with SGI. At present, the degree of liability insurance is not clear. SGI may come up with a package more suitable to our needs.
7. Recovery through flight insurance re. Caroline Shoemaker's cancellation: Les Dickson has been notified that the Centre will be refunded the money we paid for Shoemaker's airline ticket.
8. Meeting adjourned at 7:25 pm.

3. Secretary's Report (Al Hartridge): A summary of Centre activities in 2009.
4. IYA Activities: There have been in excess of 45 events registered for IYA.
5. Events Coordinator (Patricia Gakis):
 - IYA Galilean Nights activities to include Open House at Sleaford Oct. 23-24.
 - The IYA concert conducted by George Charpentier was a success; but in the future, there must be a better way to get equipment to this area for public observing sessions.
 - There have been requests from Wintershines Festival (Jan. 23 – Feb. 7) and from the Children's Discovery Museum at Market Mall for presentations.
6. Observers Group: Some tasks need to be completed before the winter sets in.
7. Sleaford Site Coordinator (Darrell Chatfield): New decking for the shelter has been installed, and a new building mainly for storage is being investigated.
8. Light Abatement (Rick Huziak): Grasslands Dark Sky Preserve was declared on Oct. 2. Rick showed some pictures of the event.
9. Results of Election of Officers:
RASC Saskatoon Centre Council:
President: Barb Wright
Vice President: Jeff Swick
Secretary: Ron Waldron
Treasurer: Norma Jensen
Past President: Garry Stone
Newsletter Co-Editors: Christine Kulyk & Tenho Tuomi
National Council Representative: Rick Huziak
Events Coordinator: Patricia Gakis
Fundraising Coordinator: Colin Chatfield
Membership Coordinator: Mark de Jong
Observing Coordinator: Larry Scott
Sleaford Site Coordinator: Darrell Chatfield
SSSP Coordinator: Barb Wright
Councillors-at-Large: Les Dickson & Jim Gorkoff

Minutes of the General Meeting October 19, 2009 by Jim Young

1. Approval of the minutes of the previous meeting: Moved by Rick Huziak, seconded by Jim Gorkoff, and carried.
2. Treasurer's Report (Norma Jensen): See Executive meeting minutes.

Other Positions:

Librarian: Darrell Chatfield
Centre Photographer: George Charpentier
Meeting Room Coordinator: Graham Hartridge
Publication Sales Coordinator: Bruce Brandell
Web Master: Gordon Sarty

10. Presentation: Jeff Swick showed pictures from some of the year's events.
11. Meeting adjourned at 9:30 pm.

President's Message

by Barb Wright

The International Year of Astronomy is coming to a close, and looking back over the year, we have been very busy and very much in the public eye during the entire year. Our activities have been very successful and generated a good deal of publicity:

Our 100 Hours of Astronomy were full enough to have the City proclaim Astronomy Week in Saskatoon during that time. Our General Assembly at Cypress Hills resulted in 420 registrants, and it's a terrific thing to have a speaker receive a standing ovation. The art

exhibit at Frances Morrison Library was also a great feather in our caps!

I am very proud of the participation and activity of our Centre. Well done! to every member. Some of the things we have done in 2009 were one-time events because of IYA, but perhaps others will continue in the following years. And hopefully, we will continue to see increasing growth and interest in the Saskatoon Centre.

Editor's Corner

by Christine Kulyk

For our December issue, I'm inviting everyone to contribute a brief, personal account of your own earliest "Galileo Moment": the defining factor that first inspired your interest in astronomy. We're looking for 50 words or less from each contributor. If you have a photo of the event, object, or person that got you started, please send that along as well. (See bottom of page 2 for submission details.)

At our October meeting, our annual Elections saw some fresh faces joining our Centre Council. I'd like to extend my best wishes to all for a great year ahead! At the same time, we should all extend a vote of

thanks to retiring Council members Al Hartridge and Jim Young, for their long-standing commitment to our Centre and their involvement in countless activities over the years. I believe Jim Young, in particular, has been with our Council longer than anyone else...please correct me if I'm wrong! Such dedication and long service is rarely seen in volunteer activities and deserves to be highly commended.

A huge RASCal pat on the back is also due to Darrell Chatfield and Rick Huziak, who put their backs to the boards on the deck at the Sleaford Observatory, just in time for our October Open House.

Welcome to our Newest Members

The following people have joined the RASC Saskatoon Centre during the past few months. We offer one and all a hearty welcome, and we look forward to seeing you at upcoming events!

Colin Chatfield
Levi Doerksen
Bernice Friesen

Stephanie Goertzen
James Goodridge
Greg Hesterman

Claude Lapointe
Clayton Rolfe
Ash Starzynsky

The Ultimate Visual Experience

by Christine Kulyk

[The following text appeared as an artists' Vision Statement for our Centre's group exhibit at the Frances Morrison Library Gallery in September.]

The enjoyment of astronomy is, above all, a visual experience. Images of the constellations, comets, the Milky Way, distant galaxies, our own Moon, or the surprising surfaces of other planets engage us in ways that nothing else can. They connect us to the cosmos, with an impact that is at once intellectual, emotional, and profoundly spiritual.

The same impact is felt when we step outside under a starry sky and simply look up. Suddenly, the immediate surroundings of our daily lives are enveloped in a vaster universe. Seen through binoculars or a telescope, it gleams and glows in vistas that are awe-inspiring. Captured with a camera or drawing, it can be shared, studied, or simply admired for years to come.

Astronomy developed historically as a way of making sense of the cosmos, our place within it, and how its various elements affect us. Careful observations of the motions of the Sun, Moon, and stars gave priest-kings and farmers the ability to predict the next spring flood or fall harvest. Charting the precise positions of bright stars in constellations helped sailors navigate the seas and land travellers find their way home across expanses of snow, prairie grass, or desert dunes.

Thus, from earliest times, astronomical objects became the subjects of art in all its forms. Awed equally by its cyclical motions as by its unpredictables — the startling sight of a “falling star,” the eerie glow of a new comet, or the outburst of a supernova — our ancestors often viewed the night sky as the mysterious domain of mythical beasts and godly beings.

To us today, its mystery remains undiminished. As our new telescopic tools enable us to look farther and farther into the universe, the things we discover there are stranger and stranger.

Yet for those of us who frequently step out under the sky on clear nights, eager for the chance to see a familiar celestial object or something totally new, astronomical observing is the ultimate visual experience. And capturing the essence of that experience on film, in digital form, in sculpture, on canvas, paper, or textile, or in words, can be the ultimate creative challenge.

Picture Gallery



Darrell beams amid new decking
that impressed Sleaford Open
House visitors

Photo by Jeff Swick

Even clouds and chilly air couldn't
keep Saskatoon Centre members
from enjoying the night at the
Sleaford Open House

Photo by Jeff Swick



Tripod-mounted picture of the
setting Sun taken with a Nikon D90
on August 1

Photo by Colin Chatfield



Galaxy NGC253
October 26
Canon Rebel XT camera
Orion XT12 Telescope

Photo by Tenho Tuomi



Comet 217P
October 17
Canon Rebel XT Camera
Orion XT12 Telescope

Photo by Tenho Tuomi



On November 4-5, **Mercury** passes behind the Sun in superior conjunction. May and November are the only months that Mercury can pass directly in front of or behind the Sun. Mercury then spends the rest of the month climbing towards its mid-December elongation. This is an evening apparition, and the fall ecliptic compounded by the negative inclination of Mercury's orbit makes this one very hard to find. It will only climb out of the evening sky glow into visibility in December, near the time of its greatest eastern elongation. On November 17 at 2:12 am, Mercury will be found just 3.2 degrees away from the Moon.

Venus is the hallmark of Dawn, and it will accompany us for the next month or so before it sits too low in the dawn's glare. Venus has been slowly sliding down the morning sky, and in the early part of November, it lies at an elongation of 16 degrees and shines at magnitude -3.9. In the telescope, it will show you a 10.3" disc. You may still find it in the morning twilight, but it will be harder over the next few weeks. By December, it will be at 9 degrees elongation and show a magnitude -3.9, 9.9" disc in the eyepiece. It rises 50 minutes before the Sun, and you can sweep it up in binoculars just south of where the Sun will rise.

Have you noticed that red star in the morning sky? Well, that's **Mars**; it is back and coming in for the 2009-10 opposition. It is luring me and my telescope out into that fresh morning air. Mars now has returned to prominence in the morning sky, glowing at magnitude 0.3 in the constellation of Cancer. In the eyepiece, it will show you an 8.2" disc. By the first week of December, Mars will have moved across the border into Leo and shine at magnitude -0.1. In the eyepiece, it has now grown to 10.3" and shows considerable detail. It rises just after 9:00 pm and is above 20 degrees altitude by midnight. Mars will look obviously gibbous in the eyepiece, with Syrtis Major facing us. We are a little less than 2 months from opposition. Take the opportunity at a dark site to have

a good look at it over the next few months. It will grow, and if you are patient, will show you plenty of details despite its small size.

Jupiter still lingers with us this fall. It transits at around 7:00 pm early in the month, but it is heading west fast. At the beginning of the month, Jupiter shines at magnitude -2.4, and it shows a 40.7" disk in the eyepiece. It transits about 7:00 pm, so don't wait too late to get out and view it. Over the month, it shrinks as we leave it behind, and by early December, it will shine at magnitude -2.2 and the disk will shrink to 37.2" in diameter. At this time, Jupiter sets at only 10:00 pm.

Saturn rises 4 hours before the Sun at the beginning of November and shines at magnitude 1.0. In the eyepiece, you will see its 16.4" disk surrounded by the ring system, which will be turned up at 3.4 degrees. Saturn will reside in Virgo this year, running interference with the galaxies there. By the first week of December, Saturn will rise 7 hours before the Sun, at 1:25 am. It will have expanded to 17" and shine at magnitude 0.9.

Uranus sits below the circlet of Pisces and shines at magnitude 5.8. Its pale blue-green 3.5" disc can be seen at moderately high magnifications. At the beginning of November, it transits the meridian at 9:00 pm local time. By early December, it transits the meridian at 7:00 pm and is a good evening object. Bring a finder chart, because it is not obvious among the faint stars of Pisces.

Neptune sits at the east end of Capricornus and shines at magnitude 7.8. Its pale blue disc is only 2.3" but fairly obvious if the seeing supports high magnification. At the beginning of November, it transits the meridian just after 7:00 pm, so catch it soon if you are interested; December will be too late.

All-Star Telescope

www.All-StarTelescope.com

Our Mission: Helping People Discover the Wonders of the Night Sky



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CGEM800 - \$1899.95
CGEM925 - \$2499.95
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Celestron NexStar SE
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NexStar 4SE - \$449.95
NexStar 6SE - \$799.95
NexStar 8SE - \$1199.95



Orion StarBlast 6" Celestron FirstScope \$339.95
\$59.95 Collapsible 10&12"

Coming Soon:
Ethos 21mm

*Note: All prices subject to change with changes in currency exchange rates.

DSLR
Astrophotography
Workshop with Alan Dyer
November 7 - 1:30 PM
(optional lecture on life planets)
&
Celestial Celebration
November 7 - 7:00 PM
(free event)

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SKY BUYS & MIRROR CELLS

The Saskatoon Centre's Swap and Sale Page

5" Astroscan telescope. Red exterior. Good condition.
8" Celestron Celestar Deluxe S/C telescope. Includes many extras and upgraded items, such as finder, W/O diagonal, Feathertouch focuser, Telrad, Bob's Knobs, Dry Eye dew heater system, padded main scope case, and tripod bag. This scope has great optics, as attested to by a former Celestron employee at a previous SSSP. This scope has seen me through 3 certificates, and will track for hours on end. If you want a great scope, then please consider this one. Over \$3,300 invested. Asking \$1,700. Will consider offers. Please contact Darrell (306-374-9278; novachat@sasktel.net).

BOOKS FOR SALE:
by Bruce Brandell, Sales Coordinator

NOW AVAILABLE! 2010 RASC Observer's Calendar\$15.00

This colourful calendar features photos by RASC members from across Canada, with monthly info about conjunctions, eclipses, meteor showers, etc. Makes a great Xmas gift!

SPECIAL PRICE! COSMOS by Sylvia Ardit & Marc Lachièze-Rey.....\$25.00

A stunning collection of 188 images taken by space-borne cameras including space probes and the Hubble. (Normally sells for \$49.95.)

The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 135 Lunar, 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

Ken Maher	Done!	110
Norma Jensen		108
Ron Waldron		105
Kathleen Houston		90
Margo Millar		77
Wade Selvig		75
Garry Stone		57
Ellen Dickson		32
Wayne Schlapkohl		31
Jeff Swick		24
Barb Wright		23
Bruce Brandell		5

FINEST NGC CLUB

Certified at 110 Objects:

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

Larry Scott	Done!	110
Scott Alexander		97
Sandy Ferguson		23
George Charpentier		13
Ken Maher		10
Mike Clancy		7

Chatfield BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

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

Isabel Williamson Lunar Observing Certificate

Norma Jensen	61
Jeff Swick	13

The Messier & Finest NGC lists can be found in the *Observer's Handbook*.

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

The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

On-line Messier and Finest NGC lists, charts and logbooks – check out:

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

On-line Herschel 400 List – check out the official site at:

<http://www.astroloegue.org/al/obsclubs/herschel/hers400.html>

Copies of the Isabel Williamson Lunar Observing Program Guide can be purchased from Bruce Brandell.

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



EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

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

Wayne Schlapkohl	55
Sharon Dice	23

HERSCHEL 400 CLUB

Certified at 400 Objects:

D. Jeffrey, R. Huziak, D. Chatfield

Tenho Tuomi	398
Gordon Sarty	251
Scott Alexander	117
Sandy Ferguson	18

HERSCHEL 400-II CLUB

Darrell Chatfield	315
Rick Huziak	211

Observers Group Notes

by Larry Scott

Our streak of well-attended Observers Groups came to a halt on October 16 with two members. Just as well, as the skies went from clear and decent to socked-in by 22:00. Fortunately, we will have another meeting on November 13 to make up for it. Moonless evenings for deep-sky observing will be available from about November 7 to 22.



On a recent CBC Radio show, I heard a pilot reporting about the increased incidence of laser pointers being directed at airplanes. This is a felony offence! Please be careful with your laser pointers, and spread the word, as he specifically mentioned amateur astronomers in this interview.