

Saskatoon Skies

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

Vol. 40, No. 7

July 2009

Double Rainbow Delight



Tenho Tuomi took time out from meteorite hunting on May 9 to appreciate the beauty of a double rainbow gracing the sky over Buzzard Coulee, Saskatchewan

Photo by Tenho Tuomi



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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

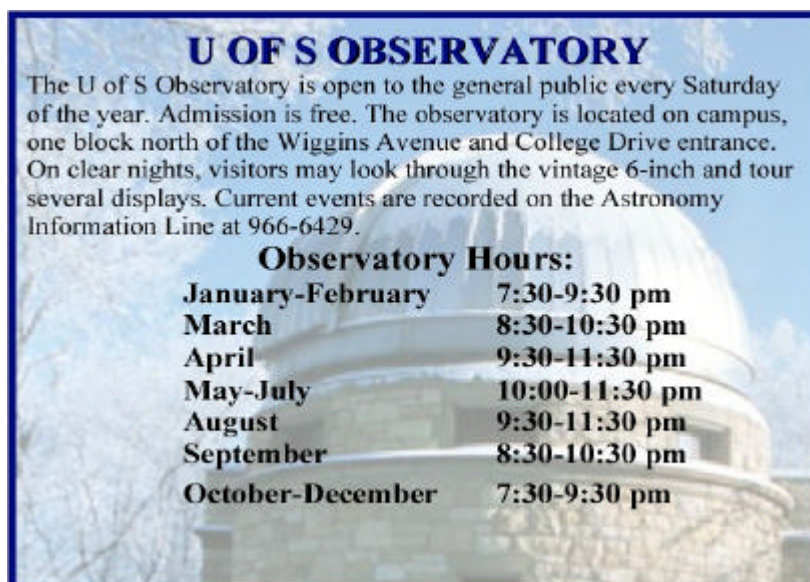
Associate: \$33 /year

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.



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

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.

RASC CALENDAR OF EVENTS

July 24	Observers Group – 9:30 pm, Sleaford Observatory	Larry Scott	934-5801
July 24-26	Calgary RASC Star-B-Q – Caroline, AB	http://calgary.rasc.ca/starbq2009.htm	
Aug 13-16	RASC General Assembly & SSSP – Cypress Hills	Barb Wright	249-1990
Aug 21	Observers Group – 8:00 pm, Sleaford Observatory	Larry Scott	934-5801
Aug 21-23	Spruce Woods Star Party – Spruce Woods Park, MB	http://winnipeg.rasc.ca/	
Sep 3	Opening Reception for “Celebrating the Night Sky” Exhibit - 7:00 pm, Frances Morrison Library Gallery	Kathleen Houston	665-3392
Sep 15-20	Northern Prairie Starfest – Black Nugget Lake, AB	http://www.edmontonrasc.com/nps.html	
Sep 18	Observers Group – 7:30 pm, Sleaford Observatory	Larry Scott	934-5801
Sep 19-20	Alberta Star Party - Starland Recreation Area, AB	http://calgary.rasc.ca/asp2009.htm	
Sep 21	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S	Barb Wright	249-1990
Sep 21	RASC General Meeting - 7:30 pm, 175 Physics, U of S	Barb Wright	249-1990

August 13 – 16

Join Us at the Premier Canadian Event of the International Year of Astronomy:

The RASC National General Assembly & Saskatchewan Summer Star Party In Cypress Hills Park, Saskatchewan

Presented by the Saskatoon and Regina Centres
of the Royal Astronomical Society of Canada

Discover Saskatchewan’s Living Skies

At the 2009 RASC General Assembly & Saskatchewan Summer Star Party

This year, the biggest and best astronomy convention in Canada will be the 2009 RASC General Assembly, held in conjunction with the Saskatchewan Summer Star Party. The year 2009 is also the International Year of Astronomy, and the 2009 GA will be held, for the first time, at a dark-sky site. What better place to hold the GA than the Cypress Hills Dark-Sky Preserve, with light pollution abatement featured as one of IYA’s themes? The 2009 GA will include all the traditional program activities of past GAs but will also include observing and clinics under magnitude 7+ skies!

Planned day-time events include the Ruth Northcott Lecture, solar observing, an IYA Galileo Moment, a BBQ, scientific presentations and poster sessions, a Wine and Cheese reception, the Fr. Lucien Kemble Lecture, Banquet, tour of the Maple Creek Winery and

Fort Walsh, RASC National Council meetings, and the Annual General Meeting of the national RASC.

Our venue, the Cypress Hills Interprovincial Park & Dark-Sky Preserve, is located in the southwestern corner of Saskatchewan, 30 kilometres south of Maple Creek on Hwy 21. We will have some loaner telescopes and camping equipment available, and there is ample room for tents, as well as powered RV sites.

This year, the New Moon is on August 20, in the week following the event. We suggest that those who wish to enjoy the moonless dark skies in the Meadows Campground stay for a few extra nights following the GA. For full details, see our Website: <http://homepage.usask.ca/~ges125/rasc/sssp2009.html>

Minutes of the Executive Meeting June 15, 2009 *by Jim Young*

1. Meeting called to order at 6:40 pm.
2. Approval of the minutes of the previous (May) meeting: Moved by Jim Young, seconded by Les Dickson, and carried.
3. National Rep: Les Dickson stated that the copy of our by-laws is ready to send to National. When approved this will make Associate Memberships in the Centre available.
4. After a discussion it was moved by James Gorkoff that the membership list should be given to the Executive and that other members who need this information can view the list at meetings or get what is needed from a member of the Executive. Seconded by Norma Jensen and carried.
5. IYA Activities:
 - Art Show will be opened September 3 at the Frances Morrison Library
 - The Pod Cast is in the process of being done.
 - Special Edition of the Newsletter is well under way.
 - Setting up astronomical viewing for Parks Day (July 18) in conjunction with IYA is going along well. Contact Richard Huziak for more information.
6. Dates for SSSP 2010 have been changed to August 12-15.
7. Meeting adjourned at 7:25 pm.

Minutes of the General Meeting June 15, 2009 *by Jim Young*

1. Meeting called to order at 7:40 pm.
2. Approval of the minutes of the previous (May) meeting after Item #6 was cleared up: A 15-passenger van has been rented for the 2009 GA/SSSP. Moved by Darrell Chatfield, seconded by Richard Huziak, and carried.
3. Events:
 - Tenho Tuomi gave a talk to the Saskatoon Amateur Radio Club.
 - There was a good turnout at the Relay for Life.
 - A reminder about Parks Day (July 18) for IYA. Call Richard Huziak for more information.
4. Sleaford Site (Darrell Chatfield): A summer work party for general cleanup at the site is needed. July 11 (rain date July 18).
5. SSSP (Les Dickson): The dates for SSSP 2010 have been changed to Aug 12-15.
6. Membership (Mark de Jong): Our current membership numbers are 63 Regular, 1 Youth, 3 Associate, 3 Life, 6 Temporary.
7. Light Abatement (Rick Huziak): Very busy. Casino lights are still a big problem. The government Act controlling the light etc. is being changed. Good progress is being made with the City of Saskatoon.
8. Newsletter (Christine Kulyk): A slight change in the format of Calendar & Meeting Announcements is being made, so that a single page can be used as a bulletin-board poster or handout. The Special Issue will be ready for August as planned.
9. IYA Activities: See Executive Minutes.
10. Presentation by SF writer Robert J. Sawyer: "Astronomy & Science Fiction"
11. Meeting adjourned at 9:35 pm.



Several wonders in one picture. I got up at 3:15 am on June 19 to take a picture of the grouping of the Moon, Mars and Venus (on the right) and was greeted by magnificent Noctilucent clouds.

Photo by Tenho Tuomi

President's Message

by Barb Wright

Registrations have been pouring in for our upcoming RASC General Assembly & SSSP! Be sure to look at the Website

<http://homepage.usask.ca/~ges125/rasc/sssp2009.html> for the jam-packed weekend plans (August 13-16). The Sunday tour to the Maple Creek Winery and Fort Walsh is likely to fill up fast, but don't be too disappointed if you don't get in, as we will very likely organize a reprise of this feature next year. With

everyone's help and participation, here's to a successful GA/SSSP!

We expect IYA activities to continue throughout the summer. Let's let people know we are here. One of the highlights of this year, our group art exhibit "Celebrating the Night Sky," will be up for the entire month of September at the Frances Morrison Library Gallery. See page 7 of this issue for details. Have a great summer; see you in Cypress Hills.

Editor's Corner

by Christine Kulyk

Be sure to keep a copy of page 3 of this issue on your bulletin board to remind you of our upcoming events. In fact, we encourage you to post a copy on your community or office bulletin board as well! We've rearranged the format for that page so that it will make a handy poster or handout sheet to promote Centre activities.

The increased publicity and activity associated with the International Year of Astronomy are bearing much fruit. In the Saskatoon Centre, we've gained three new

members since our last issue. Let's welcome to our club **Donald Fentie**, **Lorne Knibbs**, and **Rachel Reisinger**, all of Saskatoon. We hope to see you at coming meetings and events!

Congratulations to Garry Stone for being the subject of a profile featured in *The Outlook*. The full-page article, titled "A Conversation With Garry Stone," written by John McPhail, appeared on page 9 of the newspaper in Outlook, Saskatchewan, on June 19.

BOOKS FOR SALE

by Bruce Brandell, Sales Coordinator

NEW! Take a book for a "test drive" before buying:

Members may borrow a book for a month's trial period before deciding to buy. Just sign an IOU, then take a book home for a closer look, pay for it or return it at the next meeting.

Look for these featured titles available for purchase at an upcoming meeting:

CELESTIAL SAMPLER

by Sue French (2005) ----- \$26.00

An in-depth month-by-month sampling of the stars and constellations, with valuable tips on observing techniques followed by 12 very clear monthly sky charts showing constellations, asterisms, clusters, and

nebulae. For example, on pages 126-7, you are led from Albireo (head of the Swan), through Anser (in Vulpecula) to the Coathanger (Brocchi's Cluster), which I readily found with 10x50 binoculars last summer.

ATLAS OF THE CONSTELLATIONS

by Giles Sparrow (2007)-----\$15.00

Charts and diagrams of all 88 constellations, with brief descriptions of the main features of each, including clusters, galaxies, parts of the Milky Way, and nebulae. Features detailed maps of six selected parts of the celestial sphere: the North and South poles, the Square of Pegasus, Orion, Ursa Major, and the Milky Way.

Radio Talk

By Tenho Tuomi

On June 9, I was the guest speaker at the 7:30 pm meeting of the Saskatoon Amateur Radio Club (<http://ve5aa.dyndns.org>). I was invited to speak about astronomy. I talked about the similarities and differences between amateur radio and astronomy as a hobby, and the similarities and differences between the amateur radio and astronomy clubs. I could do that for I have belonged to both. I still am a licensed amateur radio operator VE5TT.



Both hobbies have contests and goals that are eligible for certificates. Both have public outreach and service programs. Both are technical and scientific. I think my conclusion was that the big appeal in both hobbies is the diversity: that whatever your interest is, you will find something there that will appeal to you.

After my talk, I showed some of my astronomy pictures from my website (<http://www.lex.sk.ca/astro>) which are my QSLs, or proofs of contact, and handed out IYA material that was left over from my star nights at the libraries. My talk was a little different about astronomy, but it seemed to be well received judging from the number of questions.

The amateur radio and astronomy clubs in Saskatoon are very similar, having about the same number of members and about the same number active in the monthly meetings, and both seem to appeal to the same kind of people. There is a lot of overlap between the two hobbies. Both hobbies have national organizations as well. Amateur radio has a provincial organization, which astronomy does not. However, belonging to these is optional for local amateur radio club members.

There were about 25 radio club members at the meeting, plus 4 of us from our Centre. I would like to thank Pat Gakis and Rick Huziak for coming to support me. Rick brought his meteorites, and there was great interest in those. Pat brought her telescope, but the meeting adjourned at 9:30 pm, before it became dark enough to find Saturn.

SETI@home Celebrates 10th Anniversary

(News Release From the SETI Institute in Mountain View, California)

The world's largest and longest-running volunteer computing project, SETI@home, celebrated its 10th anniversary in May, with 140,000 participants and 235,000 computers powering the search for intelligent signals from space. Although no extraterrestrials have been found yet, the project continues to excite the public and has spurred the development of dozens of similar volunteer-distributed computing projects.

SETI@home uses home computers to sift through radio data acquired from the Arecibo Observatory in Puerto Rico in search of patterns that might indicate an intelligent source. Three months after its debut in May 1999, 1 million people had signed up in 223

countries, running the screensaver software on home and work computers and in grade-school classrooms, universities, and even government offices. Over the past decade, more than 5 million people have signed up.

SETI@home, however, remains a shoestring operation. It got off the ground with just \$100,000 in funding from The Planetary Society and Paramount Pictures, and although companies like Sun Microsystems and Intel supply it with server computers, it is now solely funded by donations from volunteers.



"Celebrating the Night Sky"

an International Year of Astronomy exhibition
hosted by the RASC Saskatoon Centre.

September 2–October 1, 2009

Visual and fabric artists, astronomers, writers, and students
share their visual exploration of the night sky experience.



Location: The Gallery, Frances Morrison Library
311 – 23 Street E., Saskatoon, SK

Reception: Thursday, September 3, 7:00-8:30 pm

Drumming and Stargazing:
23 Street East, at the riverfront, 8:30-10:00 pm

Exhibition Hours:

Monday - Thursday 10:00 am - 9:00 pm

Friday & Saturday 10:00 am - 6:00 pm

Sunday 1:00-5:30 pm

Curator: Kathleen Houston (975-7542)

Website: <http://www.saskatoonlibrary.ca>

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See website for details on our Observer Nights & driving directions



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Observers Group Notes

by Larry Scott



On June 26, we met at Sleaford to conduct a physics experiment. We were able to prove that doubling the number of lawnmowers will halve the amount of time required to mow a given area of grass. A big thank you to all the lawnmowing fairies. Also, a welcome to new member Donald Fentie, who made it out to Sleaford for the first time. Sadly, there was precious little observing due to cloudy skies, but the yard looked great.

A brief caution regarding wildlife on the roads. The deer population appears to be up this year. I've seen lots of deer on the road to Sleaford, including some inside the city limits one night on my way back from Sleaford. There have also been reports of a moose cow having settled in near the Colonsay road. Please be careful out there, especially on the way home when we might be a little tired.

Next scheduled Observers Group is July 24, with moonless evenings from about the 17th till the 29th. Nights are starting to get longer, so we should be able to get a few hours of dark-sky observing in.

IYA Efforts Are Wowing Them Worldwide

(News Release From the International Astronomical Union)

As the International Year of Astronomy 2009 reached its halfway mark, over a million people have already looked at the sky through a telescope for the first time, and even more have newly engaged in astronomy. UNESCO and the International Astronomical Union launched 2009 as the International Year of Astronomy under the theme "The Universe, Yours to Discover," as a global celebration of astronomy and its contributions to society and culture, with events at national, regional, and global levels throughout 2009.

The Galileoscope project headlines the IYA2009, with the aim of providing low-cost telescopes that offer views far better than those obtained by Galileo Galilei some 400 years ago. By the end of July, the first 60,000 Galileoscopes will have been shipped, and a further 100,000 are currently in production.

But perhaps the most impressive figures for the IYA2009 have come from the national activities that have brought together hundreds of thousands of people in many countries for astronomy-themed events. More than 400,000 people gathered for the Sunrise Event on New Year's Day in Busan City, South Korea. In Brazil, the 2009 Brazilian Olympiad of Astronomy and Astronautics saw more than 750,000 students participate from 32,500 schools. In Paraguay, the IYA2009 launch featured a concert with

over 1,600 musicians and an audience of over 15,000. In Norway, every student from grades 5-11 will soon receive a free astronomy kit, including a Galileoscope and an educational guide. For the first time in postal service history, and in just six months, more than 70 postal agencies around the world have issued over 140 new stamps inspired by astronomy.

Many new initiatives are in the works. For example, October 23-24 will see the launch of Galilean Nights, the follow-up to the highly successful 100 Hours of Astronomy. Here are some Websites to check out for details:

- Official IYA2009 website: <http://www.astronomy2009.org/>
- Around the World in 80 Telescopes archive: <http://www.100hoursofastronomy.org/component/webcast/webcast/6>
- Galileoscope website: <http://www.galileoscope.org/>
- From Earth To The Universe website: <http://www.fromearthtotheuniverse.org/>
- Dark Skies Awareness website: <http://www.darks skiesawareness.org/>
- Cosmic Diary website: <http://www.cosmicdiary.org/>
- Portal To The Universe website: <http://www.portaltotheuniverse.org/>
- Galilean Nights website: <http://www.galileannights.org>

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. Hydromako, 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		89
Margo Millar		77
Wade Selvig		75
Garry Stone		57
Ellen Dickson		32
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	50
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EXPLORE the UNIVERSE

Certified for Certificate:

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

Sharon Dice	23
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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

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.astroloague.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>



Sky Buys and Mirror Cells

The Saskatoon Centre's Swap and Sale Page

FOR SALE: 12.5" split-tube Dobsonian. Too heavy for girl astronomer to move in and out of car. Purchased six months ago. I am located in Saskatoon. Available immediately, or will deliver to Summer Star Party August 13-16 in Cypress Hills, Saskatchewan. \$1,500 Canadian. Shipping not included. Contact Norma: norj@sasktel.net



FOR SALE: 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).