

Saskatoon Skies

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

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

<https://saskatoon.rasc.ca/newsletters.html>

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MEMBERSHIP? JOIN TODAY!

Regular: \$111.00 /year

Youth: \$61.10 /year

Family: \$105.50 + \$42.90/additional adult + \$22.20/additional youth

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>.

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)
- borrow the Centre's projector to give astronomy outreach presentations – contact Les Dickson at astrochem@sasktel.net
- rent the Centre's Telescopes <https://saskatoon.rasc.ca/telescopes.html>
- use of the Centre library
- SkyNews Magazine (bimonthly)

SASKATOON CENTRE'S MAIN OFFICERS:

President – Les Dickson

Vice-President – Brent Burlingham

Secretary – Tenho Tuomi

Treasurer – *vacant* (**Les Dickson interim**)

National Council Rep – Les Dickson

Canadian Tire money - Darrell Chatfield

If you cannot attend a meeting but would like to donate your old Canadian Tire money please to assist with club purchases, email Darrell at novachat@sasktel.net.

NEWSLETTER INFO

Newsletter Editor – Colin Chatfield

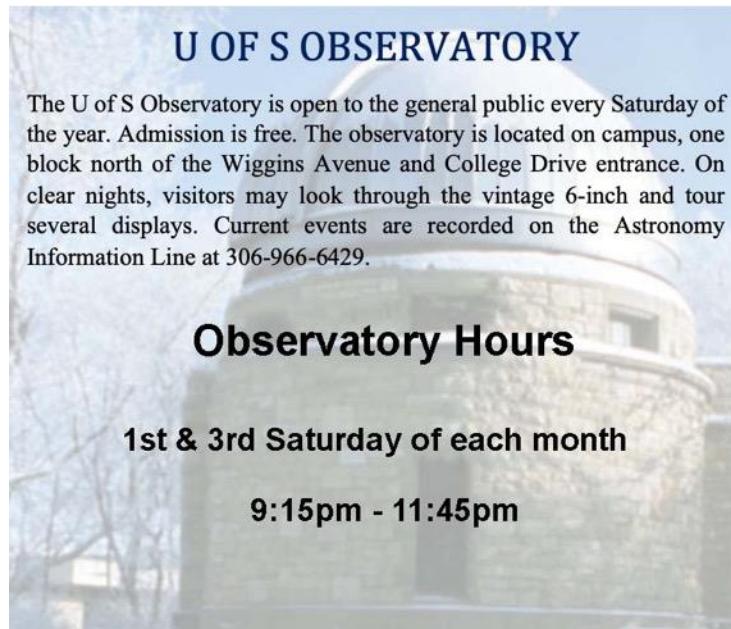
Copy & Collate – Les & Ellen Dickson

Labels & Temps – Mark de Jong

Web Posting/Content Editor – Tenho Tuomi/Andrew Kostiuk

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 colcha@gmail.com in MS Word or text format. Images (new or old): any format, less than 30MB, sent by e-mail as attached files. Send any articles of interest to the night sky or astronomy. **Deadline for submission of all articles for an upcoming issue is the first Friday of each month!**

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 colcha@gmail.com for rates. Members can advertise non-commercial items for free.



Hours subject to change, so check below for more info -

Website - <https://artsandscience.usask.ca/physics/facilities/observatory.php>
Facebook - <https://www.facebook.com/usaskobservatory/>

RASC CALENDAR OF EVENTS & MEETING INFO

Aug 12	Perseid Meteor Shower peaks	
Aug 16-20	Saskatchewan Summer Star Party	Cypress Hills

Observer's group viewing starts at dusk at the Sleaford Observatory dark site. Get there early and set up for a great night of observing! Members and their guests only

For a complete list of club events, please visit: <https://saskatoon.rasc.ca/activities.html>

September RASC General Meeting for all members and guests

Join us on September 18th, 2023 at 8:00PM (Executive meeting at 7:00pm)

Webinar (info below) or in person in room 175, U of S Physics building

7:00pm - **RASC Executive Meeting** (Members may attend the executive meeting as observers if they wish)

A Zoom registration link and phone-in numbers will be emailed to Members who prefer meeting online.

After that, the procedure to register and join the meeting is the same as for the webinar (explained below).

NOTE: links to register to attend the webinar will be emailed out as well so we know who is planning to attend. After registering, an email invitation will be sent with a link to join via computer or a number to phone in. When joining via computer, participants will have to first download and install the Zoom app, if they have not done so already.

8:15pm - **Main Program -**

“What’s Up This Month?” – Colin Chatfield

Speaker to be announced

MINUTES OF JUNE MEETINGS

Les & Ellen Dickson

Agenda for the Monthly Executive Meeting - RASC Saskatoon Centre Monday, June 19, 2023 - 7:00 pm - Hybrid: In-person Room Phys 175 & Online

Attending: Les Dickson, Ellen Dickson, James Wood, Darrell Chatfield, Daryl Janzen, Yannis Pahatourogloou, Brent Burlingham, Ron Waldron

- 1. Call to order** 7:10 pm – Les Dickson (President and Chair)
- 2. Call for additional announcements/items** to add to agenda
- 3. Approval of the May Executive meeting minutes** as circulated in the June newsletter.

Ron Waldron objected to the wording of the motion from the May meeting directing that the letter by Ron Waldron be removed and the edited version republished. In a letter to the Executive, Ron asked that the motion be amended to read “Given that the article written in the March newsletter by Ron Waldron and entitled State of the Saskatoon Centre has caused concern to one of our members, we will remove its content only and mark it as “removed at member’s request”. After much debate, it was decided that the motion as recorded in the minutes of the May Executive meeting would stand as is (see below), but that the issues raised by Ron in his letter and in the debate in this meeting would not be dismissed. At the September meeting these and related concerns will be revisited.

Moved: Tenho Tuomi, Seconded: Les Dickson. CARRIED.

- 4. Announcements from the Chair** – Les Dickson
 - Acknowledge and welcome new attendees
- 5. President’s Report**
 - Per motion carried at the May Executive meeting, the March newsletter has been edited and reposted.
 - Gordon Sarty has quit his role posting newsletters on our website over what he saw as censorship in removing Ron’s letter from the March newsletter. Alternate arrangements will be made until a replacement can be found.
 - Results of Green Laser Pointer (GLP) exam given by Pierre Schierle were presented by Les Dickson; a policy needs to be developed to certify those who have taken suitable training and passed the exam to be certified to use GLP in educational outreach activities

6. Reports from the Executive Council

6.1 Acting Treasurer: Les Dickson

Motion: Moved by Les Dickson, seconded by Brent Burlingham, that the invoice for the policy renewal of our Directors' and Officers' Insurance with Cooperators Insurance in the amount of \$424.00 be paid. CARRIED.

6.2 National Council Rep: Les Dickson

- Annual General Meeting (separate from the General Assembly) to be held Sunday June 25 on-line, 2 to 3 hours in length, attendance is free.
- National's budget for 2023 predicting a deficit
- Membership dues not fully covering membership benefits
- Many National office staff were laid-off to reduce expenses.

6.3 SSSP Chair: Les Dickson

- A presentation at the General Meeting will be given in lieu of a report

6.4 Sleaford Site: Darrell Chatfield

- Darrell reported on recent repairs to the Warm-up Shelter
- The new riding lawn mower appears to be working well and users like it
- A discussion on additional cameras for security to continue
- The old gate to Sleaford site needs to be replaced
- Darrell has researched different suppliers and options and believes "Thrifty" gates from Peavey Mart would be the best; these would be 14' gates with wheels; approximate cost \$1200, to be shared with the University

Motion by Darrell Chatfied: That a new gate be purchased and installed, with a cost not to exceed \$1200. Seconded by Brent Burlingham. CARRIED.

6.5 Others? None

7. Old Business

7.1 Any? None

8. New Business

8.1 Motion regarding making 2021-2022 financial statements be made available to the membership: Tenho Tuomi

- There was insufficient time to consider this motion, so it was deferred to the September meeting.

- 8.2 Motion regarding filing with the ISC Corporate Registry and registration of our Corporate Office: Les Dickson and Jim Gorkoff
 - Jim Gorkoff was not in attendance, so the motion was deferred to the September meeting.
9. **Call to adjourn** - moved: Tenho Tuomi, Seconded: Brent Burlingham. Adjourned at 8:01 pm.

Executive meeting minutes prepared by Les Dickson from notes taken by Ellen Dickson (acting Recording Secretary) and Les Dickson.

**Agenda for the Monthly General Meeting - RASC Saskatoon Centre
Monday, June 19, 2023 - 8:00 pm - Hybrid: In-person Room Phys 175 & Online**

10 members attending at beginning of meeting.

1. **Sharing / Networking Time** 8:00 – 8:15 PM – all members
2. **Call to order – 8:15 PM** – Les Dickson (President and Chair)
3. **Call for additional items or changes to the agenda**
4. **Call out to new members/guests:** None.
5. **Adoption of the May General Meeting minutes as circulated in the June newsletter.** Moved: Brent Burlingham, Seconded: Ellen Dickson. CARRIED.
6. **Executive Meeting summary** – Les Dickson

NEW BUSINESS

7. No new business.

PROGRAM

8. - **Saskatchewan Summer Star Party 2023** – Les Dickson, Chair SSSP 2023 Committee. Les gave an update and invitation to Saskatoon members to attend.
 - **What's Up This Month** – Colin Chatfield
 - **The Discovery of Comet Petriew** – Vance Petriew, President of the RASC Regina Centre. In 2001, Vance Petriew of Regina, Saskatchewan discovered a brand-new comet at the Saskatchewan Summer Star Party. Vance will share his story of the discovery and some of the historical aspects of the comet over the years. Since the comet is here again this summer, Vance will provide a current update for it and look

at what we can expect for future visits from this Saskatchewan comet. Vance Petriew is an amateur astronomer from Saskatchewan whose passion for astronomy has led him to numerous achievements. In 2001, Vance became the first person to discover a comet in Saskatchewan and has won awards for his discovery including the RASC Ken Chilton Prize and the Edgar Wilson Award. He was instrumental in getting the Dark-Sky Preserve started in Cypress Hills and played a significant role in getting the "100 Years of Astronomy in Regina" history book created. Vance Petriew is currently the President of the RASC - Regina Centre and lives in White City, SK with his wife Jennifer and three wonderful daughters.

9. **Call to adjourn** –Moved: Jim Wood, **Seconded:** Yannis Pahatouroglo. Adjourned at 9:30 pm.

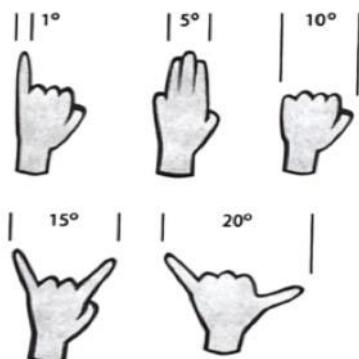
Minutes prepared by Les Dickson from notes taken by Ellen Dickson (acting Recording Secretary) and Les Dickson.

AUGUST NIGHT SKY EVENTS AND INFO

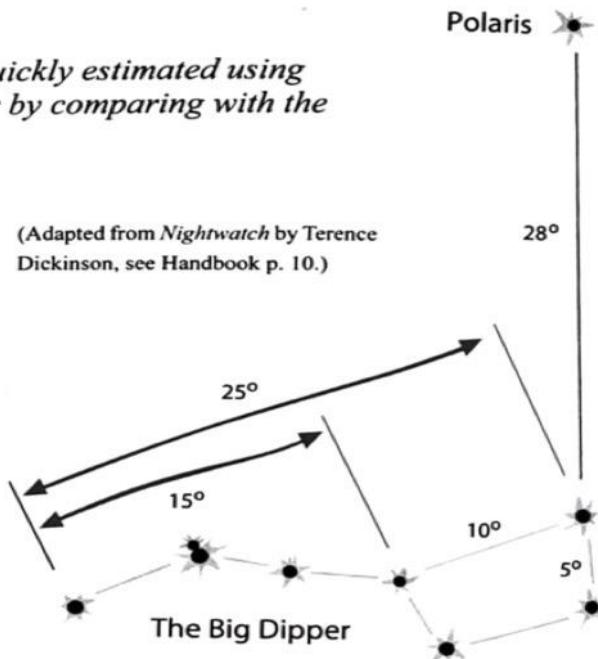
Images on the next few pages taken, with permission, from the 2023 Observer's Handbook. It can be obtained by joining the RASC here <http://rasc.ca/join> or ordered from <https://secure.rasc.ca/Portal/Shop/RASC/StoreMain.aspx?Category=CURRPUB>

HANDY SKY MEASURES

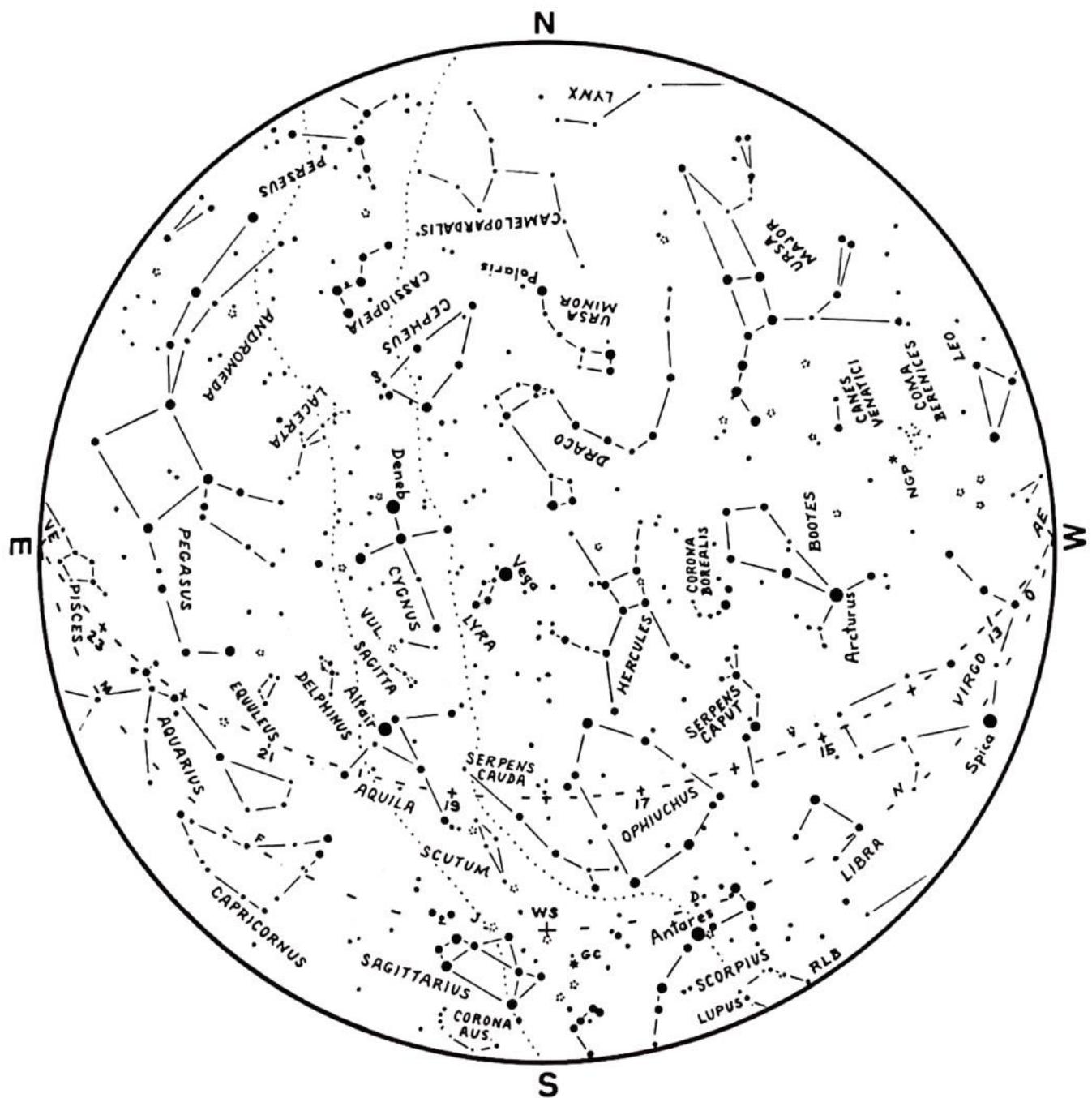
Angular measure in the sky can be quickly estimated using the fingers of an outstretched arm, or by comparing with the star separations in the Big Dipper.



(Adapted from *Nightwatch* by Terence Dickinson, see Handbook p. 10.)



Time (UT)				AUGUST EVENTS	Jupiter's Satellites	
	d	h	m		West	East
Tue.	1	18	32	full Moon		
Wed.	2	6		Moon at perigee (357310 km) Large tides		
		8	00	Algol at minimum		
Thu.	3	10		Saturn 2° N of Moon		
Fri.	4	22		Neptune 1.5° N of Moon		
Sat.	5	4	49	Algol at minimum		
Sun.	6					
Mon.	7			Venus at aphelion		
		2	46	Moon at ascending node		
Tue.	8	1	38	Algol at minimum		
		10		Jupiter 3° S of Moon		
		10	28	last quarter		
Wed.	9	1		Uranus 3° S of Moon		
		13		Moon 1.4° S of Pleiades (M45)		
Thu.	10			Mercury at aphelion		
		2		Mercury greatest elongation E (27°)		
		22	27	Algol at minimum		
Fri.	11					
Sat.	12					
Sun.	13	8		Perseid meteors peak		
		11		Venus in inferior conjunction		
		19	16	Algol at minimum		
		22		Pollux 1.7° N of Moon		
Mon.	14					
Tue.	15					
Wed.	16	9	38	new Moon (lunation 1245)		
		12		Moon at apogee (406634 km)		
		16	05	Algol at minimum		
Thu.	17					
Fri.	18	11		Pallas 1.1° S of Moon, occultation†		
		23		Mars 2° S of Moon		
Sat.	19	12	54	Algol at minimum		
Sun.	20					
Mon.	21	16	23	Moon at descending node		
Tue.	22	9	43	Algol at minimum		
Wed.	23	5		Mercury stationary		
Thu.	24	9	57	first quarter		
Fri.	25	2		Antares 1.1° S of Moon, occultation‡		
		6	32	Algol at minimum		
Sat.	26					
Sun.	27	8		Saturn at opposition		
Mon.	28	3	21	Algol at minimum		
Tue.	29	3		Uranus stationary		
Wed.	30			Venus at greatest heliocentric lat. S		
		16		Moon at perigee (357181 km) Large tides		
		18		Saturn 2° N of Moon		
Thu.	31	0	10	Mercury at greatest heliocentric lat. S		
		1	36	Algol at minimum		
				full Moon (largest in 2023)		



REIMBURSEMENT FOR CENTRE EXPENSES

The Centre has a reimbursement procedure on submission of expense claims. A writeable pdf claim form can be found on the Centre webpage under the Executive tab. The expense form **must** be submitted *along with original receipts* to the Treasurer within 30 days of the transaction. All expenditures must be preapproved by the Executive or be within allocated budgets.

Please contact the Treasurer with any inquiries.

SLEAFORD GATES

Darrell Chatfield - Sleaford Site Coordinator

Well, we got the Sleaford gates installed on July 5, 2023! It was quite a process to source the gates, pick them up, and then install them.

I had done some research into the type of gate we wanted, but settled on a 16' and a 12' Thrifty gate from Peavey Mart. It had somewhat the same profile as our old ones. Colin and I picked them up on June 28th with his trailer, but the 16' gate hung over 6' past the end of the trailer. Hence the need for all the flags, tie down straps, etc.

So after getting them to my house for storage until we could install them, I noticed that the 16' gate had some damage that I did not see at first, so my wife and I went back a few nights later to exchange it. (Another long drive to Peavey Mart and back).

So I organized a work party on July 5th to install the gates. We had Colin and myself, of course, along with Les Dickson and Yannis P. out to help. It was quite a warm day, but a nice one at that.



As you can see in the picture, the old gates were definitely needing to be replaced! So we started to set up the 16' section first by attaching the wheel assembly. Next, we had to establish a level point to install the hinge pins since the old posts are way out of level.

We worked on the 12' section wheel assembly first before hanging on the hinge pins. (I had the idea of



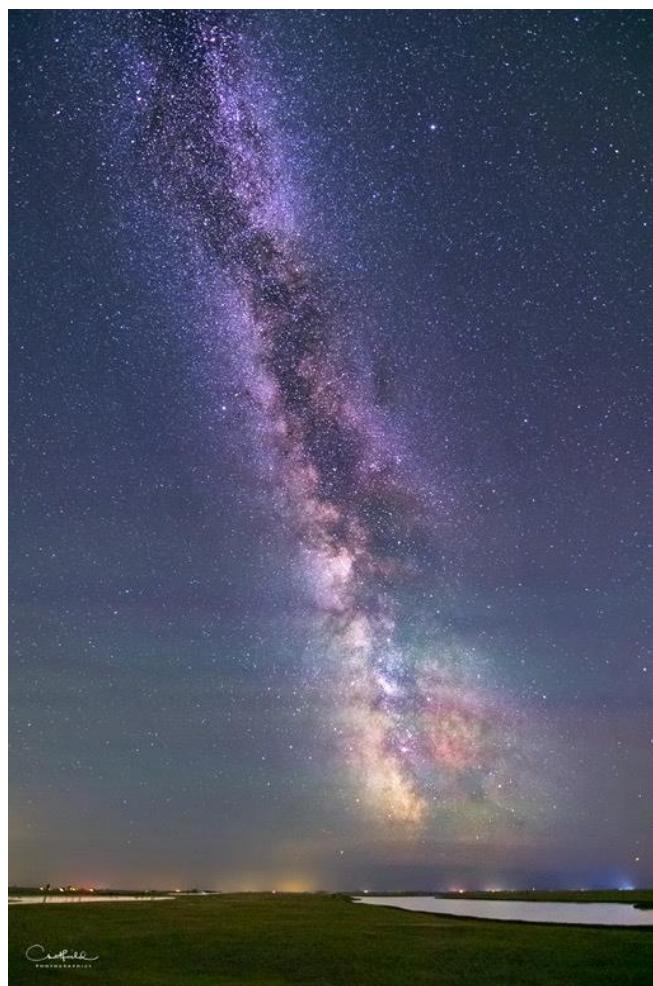
turning one hinge pin upside down on each fence section to make it more difficult for them to be stolen). Colin thought that we should install a 3rd hinge pin on each of them for extra support at a later date.

I used my sawzall to cut up the old gate sections and haul them back to Saskatoon for recycling, which we did.

Here is a picture of the finished product.

They are level, and straight! We are using the chains the gates came with for closing for now. This may be the way they will stay, since the weakest vandalism point in the system is the chains and not an expensive lock.

Many thanks to my wife, Colin, Les, and Yannis for their help in this large, but important project.



Milky Way from Last Mountain Lake observation tower. From July 27th by Colin Chatfield



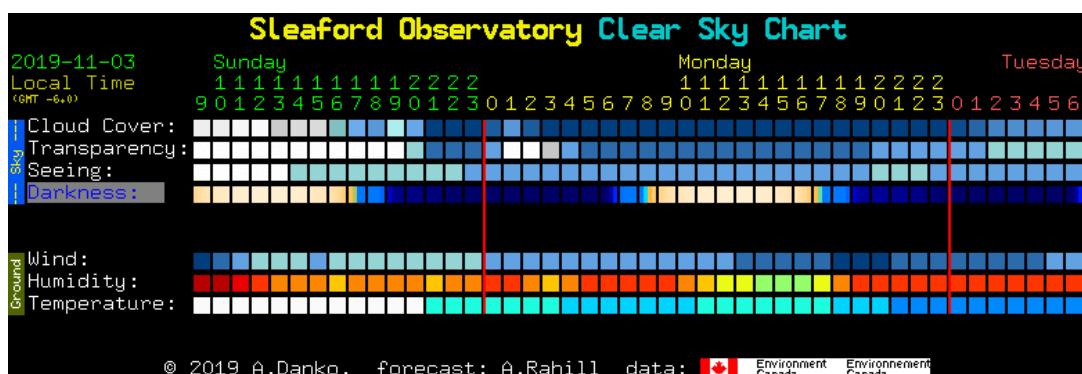
Half Moon by Justin Lukan

CLEAR SKY AND WEATHER INFO

To find clear skies, visit the Clear Dark Sky website -

<https://www.cleardarksky.com/csk/>

Once there, one can enter your location to find clear skies. The chart will appear as follows:



Environment Canada provides weather information for astronomy -

www.weather.gc.ca/astro



Saskatchewan Light Pollution Abatement Committee -

<http://myotherlife.net/slpac/>



www.darksky.org

SASKATCHEWAN SUMMER STAR PARTY 2023

All things have come together for another great star party. We are expecting close to 300 people this year.

SSSP is being held August 16 to 20, 2023 at the Cypress Hills Dark-sky Preserve and Interprovincial Park south of Maple Creek, Saskatchewan.

Our confirmed guests are Alan Dyer (Strathmore, AB), Kenneth Luciak (Regina, SK), Tara Magee (Eastend, SK), Chris Beckett (Regina, SK), Pierre Schierle (Regina, SK) and Rick Huziak (Saskatoon, SK). Our Kids Program is being run by Emily, Vanessa and Melody Petriew (White City, SK).

I wish to thank all of the members of the organizing committee from the Saskatoon and Regina Centres of the RASC, and the on-site volunteers from Centres and clubs from all over western Canada. We also thank the staff of the Cypress Hills Interprovincial Park and the Resort at Cypress Hills.

Check out our website for more information. You can find us at <https://sssp.saskatoon.rasc.ca/>. For more information, contact us at either sssp.sk@sasktel.net or by calling Les Dickson at his cell number 306-270-9184.

Come on down and enjoy our clear dark skies!



BOOKS AND EQUIPMENT FOR SALE

All books are in either new, or like new condition. Retail price in brackets. Please email at novachat@sasktel.net or text/call 306-222-0515 if you want a particular book to make arrangements. All books being sold by Darrell Chatfield.

“Deep-Sky Observers Handbook” Volume 1-5 Enslow-Lutterworth \$40.00

“International Encyclopedia of Astronomy” 1987 Patrick Moore Color \$10.00

“Backyard Astronomers Guide” T. Dickinson & Alan Dyer 2008 Color \$25.00

“Atlas of Deep Sky Splendors” 1978 H. Verhenberg (50.00) B & W \$22.00

“Amateur Astronomers Catalog of 500 Deep Sky Objects” Vol 1 1980 B & W
R. Morales \$15.00

“Observing the Constellations” 1989 J. Sanford Color charts \$10.00

For Sale: 8 inch Dobsonian Sky-Watcher telescope. Very good condition. Comes with manual, two Plossl eyepieces (10 mm & 25 mm), 2x Barlow, 2" eyepiece adapter and moon filter, plus tools. \$400. Contact Kim Mysyk 306-612-2485.





Nice aurora on August 4 at 11:16 pm. 5 second exposure at ISO 1600 in the twilight with 10mm lens.

Taken by Tenho Tuomi

OBSERVING CERTIFICATES AND CLUBS

RASC OBSERVING PROGRAMS AND CERTIFICATES

The RASC offers four observing certificates for **members** who observe all objects in each of the following observing lists in this chapter:

THE MESSIER CATALOGUE (p. 312)

THE FINEST NGC OBJECTS (p. 316),

THE DEEP-SKY CHALLENGE OBJECTS (p. 320),

DEEP-SKY GEMS (p. 322).

See rasc.ca/certificate-programs for details and contact the RASC Observing Committee Chair at rasc.ca/contact/observing for further information.



The RASC also offers the **Explore the Universe Certificate** for novice observers (who do not have to be RASC members), the **Explore the Moon Certificate** for beginning members, and the **Isabel Williamson Lunar Observing Certificate** and the **Double Stars Observing Certificate** for intermediate to advanced members. In addition, **Astroimaging certificates** are available for those members with a photographic bent. See rasc.ca/astro-imaging-certificate

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,
Donna-Lee May*

Ron Waldron	108
Brent Gratias	104
Marcel Müller-Goldkuhle	94
Wade Selvig	75
Wayne Schlakohl	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, B. Gratias*

Wayne Schlakohl	55
Jim Goodridge	35

ISABEL WILLIAMSON LUNAR OBSERVING CERTIFICATE

Certified at 140 Objects:

T. Tuomi, N. Jensen

EXPLORE THE MOON CERTIFICATE

T. Yaworski

Brent Gratias	37
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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

Messier, Finest NGC, and David Levy's Deep-Sky lists in the *Observer's Handbook*.

The Explore the Universe list is available here <http://www.rasc.ca/explore-universe>
Messier and Finest NGC lists, charts and logbooks: <https://www.rasc.ca/certificate-programs>

Herschel 400 List: <http://www.astroligue.org/al/obsclubs/herschel/hers400.html>

Chatfield Binocular List is at: https://saskatoon.rasc.ca/Chatfield_Binocular_List.pdf

"Isabel Williamson Lunar Observing Program Guide" program details can be found at:

<https://www.rasc.ca/isabel-williamson-lunar-observing-program>