

# Saskatoon Skies

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

Volume 56, Number 06

June 2025



Royal Astronomical Society of Canada  
Saskatoon Centre Incorporated  
Box 31086, RPO Broadway  
Saskatoon, SK S7H 5S8

WEBSITE: <https://saskatoon.rasc.ca/>  
E -MAIL: [sk\\_centre@rasc.ca](mailto:sk_centre@rasc.ca)  
FACEBOOK: [RASC Saskatoon Centre](#)  
INSTAGRAM: [@RASCYXE](#)

To view *Saskatoon Skies* digitally, see our website:  
<https://saskatoon.rasc.ca/newsletters.html>

In This Issue:	
Membership Information / Officers of the Centre	2
Newsletter Info / U of S Observatory Info	3
Calendar of Events & Meeting Info	4
Books and Equipment For Sale	5-6
Minutes of May Meetings	6-8
June Night Sky Events & Info / Reimbursement for Centre Expenses	9-11
Clear Sky Chart / Weather Info / Light Abatement Info	13
SSSP 2025 - June Update	14-15
Observing Certificates & Clubs	15-16

## 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
- borrow the Centre's projector to give astronomy outreach presentations - contact Les Dickson at [astrochem@sasktel.net](mailto:astrochem@sasktel.net)
- rent the Centre's Telescopes <https://saskatoon.rasc.ca/telescopes.html>
- use of the Centre library
- Journal of the RASC (electronic format)

### SASKATOON CENTRE'S MAIN OFFICERS:

**President** - Brent Burlingham

**Vice-President** - John Takala

**Secretary** - Lorie Tedford

**Treasurer** - Les Dickson

**National Council Rep** - Joelle Sheard-Patrick

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](mailto:novachat@sasktel.net).

# NEWSLETTER & U OF S OBSERVATORY INFO

**Newsletter Editor** - Colin Chatfield

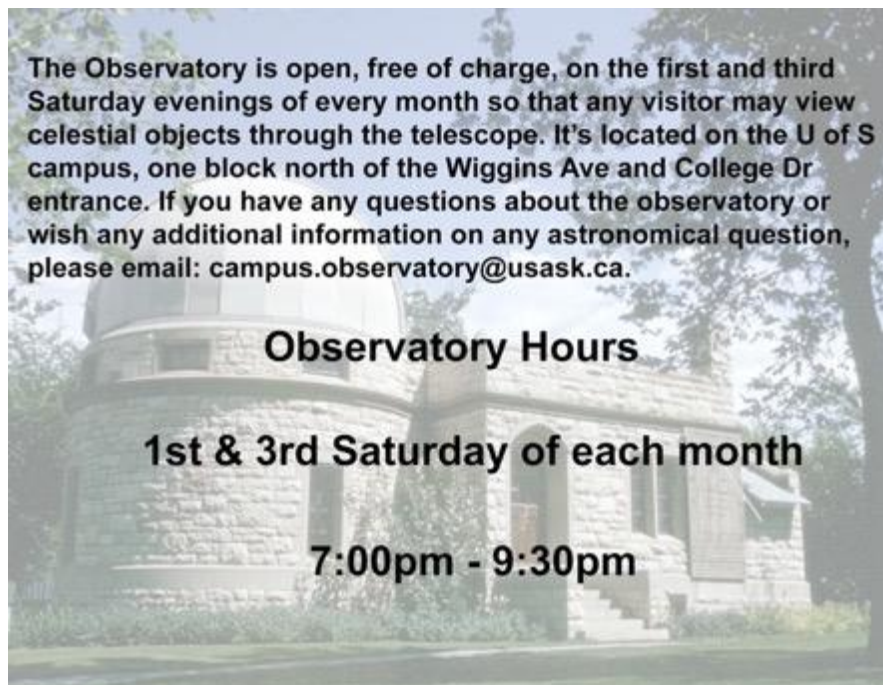
**Copy & Collate** - Les & Ellen Dickson

**Labels & Temps** - Mark de Jong

**Web Posting/Content Editor** - Tenho Tuomi/Andrew Kostiuk/Brent Burlingham

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 80 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](mailto: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](mailto: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

<b>June 16</b>	<b>RASC Saskatoon Centre General Meeting</b>	Brent Burlingham
<b>June 21</b>	<b>Observer's Group - Sleaford Observatory</b>	Nick Larsen

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>

### June RASC General Meeting

for all members and guests

**Join us on June 12th, 2025, at 8:00PM (Executive meeting at 7:00pm)**  
Webinar (info below)

**\*Please note:** the meeting will be at the U of S Observatory at 108 Wiggins Ave (on the U of S Campus)\*

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. 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

***"Saskatchewan Summer Star Party"*** - Les Dickson

***"Meteorites...a Down to Earth Subject"*** - Darrell Chatfield

## 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](mailto:novachat@sasktel.net) or text/call 306-222-0515 if you want a particular book or to make arrangements. All books being sold by Darrell Chatfield.

<b>"Deep-Sky Observers Handbook"</b>	Volume 1-5	Enslow-Lutterworth	\$40.00
<b>"International Encyclopedia of Astronomy"</b>	1987	Patrick Moore	Color \$10.00
<b>"Backyard Astronomers Guide"</b>	T. Dickinson & Alan Dyer	2008	Color \$25.00
<b>"Atlas of Deep Sky Splendors"</b>	1978	H. Verhenberg	B & W \$22.00
<b>"Amateur Astronomers Catalog of 500 Deep Sky Objects"</b>	Vol 1	1980	B & W \$15.00
	R. Morales		
<b>"Observing the Constellations"</b>	1989	J. Sanford	Color charts \$10.00

Please email me if you want to see any items - [novachat@sasktel.net](mailto:novachat@sasktel.net). Darrell Chatfield

- **2 - 1.25" rack and pinion focusers** for refractor type telescopes. Brand new. Never used. Inset diameter is 57mm. Heavy duty type with metal knurled knobs. All have boxes. \$20.00 each.

- **Original Celestron orange tube C5" scope** with tangent arm. Fork arms. SCOPE ONLY. No tripod or wedge. 5 x 30 finder, 1.25" visual back, diagonal, eyepiece, lens cap, metal case. Was used as a spotter scope. Not a mark on the tube. Clean looking. \$250.00

- 1 1.25" eyepiece extender - 3" long \$20.00
- 1 1.25" Celestron off axis guider c/w 12.5mm ep. Can be illuminated. New. \$45.00
- 1 Celestron 1.25" reticle. Can be illuminated \$20.00
- 1 3.5" long 1.25" tele-extender \$20.00
- 3 1.25" visual backs new \$10.00 each
- 1 1.25" to 0.965" visual back \$10.00
- 1 Camera to visual back adapter Lightly used \$10.00
- 1 Threaded visual back to 16mm male threads camera adapter \$10.00

- Original orange tube Celestron finder. 10 x 40mm. 304mm (12") long. Comes with bracket meant for a C8" telescope but would fit other scopes. Not a mark on these items. \$65.00

- 6" primary mirror in a 3- point adjustable mirror cell. Some mirror spots. Nice condition. \$85.00 (came from the following tube).



- 7" diameter x 48" long aluminum Newtonian style tube. Ivory exterior with blackened interior. Also has a focuser. Finder bracket supplied as is. There may be some packing tape on the outside that needs to be removed. \$75.00

## MINUTES OF MAY MEETINGS

Lorie Tedford

### **Minutes of the Monthly Executive Meeting of the RASC Saskatoon Centre Monday, May 12, 2025 - 7:00 pm Hybrid: Online & In-person: U of S Observatory**

**Attending:** Brent Burlingham, Lorie Tedford, Les Dickson, Joelle Sheard-Patrick, Darrell Chatfield, John Takala, Yannis Pahatouroglou, Jeff Swick, Nick Larsen

- 1. Call to order** 7:00 pm – Brent Burlingham (President and Chair)
- 2. Approval of the Executive meeting minutes for April 2025** as printed in the May newsletter. Moved by Darrell Chatfield, seconded by Nick Larsen; carried.
- 3. Call for additional announcements/items to add to the agenda.**
- 4. Announcements from the Chair** – None to present.
- 5. Old Business - Reports from the Executive Council**
  - 5.1 President's Report – Brent Burlingham**
    - Thanks to everyone who attended the Global Astronomy Month event held at River Landing. There was about 70 people in attendance. Observed the Sun, Jupiter and Mars.
    - The Meewasin Dark Skies Event at Beaver Creek was cancelled.
    - Science Rendezvous was also a success at the Observatory. There was about 100 people who attended to observe at the sun.
  - 5.2 Acting Treasurer – Les Dickson**
    - Discussion about submitting the last year's report to ICS as it is completed. Les was going to discuss with Jim about going back to past year's to try and make those reports work.
  - 5.3 National Council Rep – Joelle Sheard-Patrick**
    - None to present.
  - 5.4 Activities Coordinator – Joelle Sheard-Patrick**
    - The On the Moon event is planned for June 6<sup>th</sup> at River Landing.

### **5.5 Sleaford Update – Darrell Chatfield**

- The ramp was damaged during snow removal. Darrell in contact with the RM.
- The weeds in the fenced area for the roll off telescope need to be taken care of. The dates of May 31/June 1 or June 7/8 was offered to get a group together to pull weeds.

### **5.6 Beginner's Astrophotography Workshop – Nick Larsen**

- May 24<sup>th</sup> starting at 10 a.m. at the U. of S. Observatory. Contact Nick for questions or inquiries.

### **5.7 Fundraising Update – Verity Moore-Wright**

- None to present.

## **6. Old Business**

### **6.1 Introduction to Astronomy and Telescopes Workshop**

- Ron Waldron will host a workshop in the Fall, date is TBD.

### **6.2 Monthly Meetings**

- Concerns about lack of progress at monthly executive meetings.
- Additional meetings on the weekends will take place on a case-by-case basis depending on the nature of the work and deadlines.
- Discussed the possibility of emailing the membership for assistance but did not want to spam inboxes.
- Discussed switching the executive and general meeting times. The format of the meetings will stay as is.

### **6.3 Club Assets Update**

- There are two telescopes left to sell. If any members are interested contact Nick Larsen or Darrell Chatfield.

## **7. New Business**

### **7.1 Signing Authority**

- Nick Larsen made a motion to add John Takala as a third person for signing authority. Mark de Jong seconded the motion, carried.

### **7.2 Garry Stone**

- Discussed purchasing flowers and a card from the club in memory of Garry Stone.

### **7.3 Sleaford Observing Night Social**

- Discussed adding a supper out at Sleaford at the next observing night on May 24<sup>th</sup>. More information to follow.

#### **7.4 City of Saskatoon Open Doors Event**

- The U. of S. Observatory is participating in the City of Saskatoon Open Doors event and the RASC has been invited to participate alongside the University. The Event is on June 1<sup>st</sup>. More details to follow.

**8. Motion to adjourn** by John Takala, **seconded** by Nick Larsen; **carried**. 7:56 PM.

### **Minutes of the Monthly General Meeting of the RASC Saskatoon Center Monday, May 12, 2025 - 7:00 pm Hybrid: Online & In-person: U of S Observatory**

Minutes taken and prepared by Lorie Tedford.

- 1. Sharing/Networking Time** - 8:00-8:15 pm – all members.
- 2. Call to Order** – 8:15pm – Brent Burlingham (President and Chair)
- 3. Call for additional announcements/items to add to the agenda.**
- 4. Call out to new members/guests:** None.
- 5. Adoption of the April General meeting minutes** as printed in the May newsletter. Moved by Les Dickson, seconded by Yannis Pahatouroglou, carried.
- 6. Executive Meeting Summary** – Brent Burlingham
  - The RASC had several outreach activities with a large amount of interest with the public. There are a few upcoming events:
    - o On the Moon June 6<sup>th</sup> at River Landing.
    - o City of Saskatoon Open Doors Event at the U. of S. Observatory on June 1<sup>st</sup>.
  - There will be a group going out to Sleaford for maintenance of the fenced area and take care of the weeds. If you are interested in helping, contact the RASC.
  - There will be a Beginner's Astrophotography Workshop hosted by Nick Larsen on May 24<sup>th</sup> starting at 10 a.m. Contact Nick for more information.
  - There will be a Introduction to Astronomy and Telescopes Workshop hosted by Ron Waldron in the fall. The date is to be determined.
  - There are two scopes for sale, if any members are interested contact Nick Larsen or Darrell Chatfield for more information.

#### **7. Program**

**7.1 “Solar Max and Aurora”** presented by Ron Waldron.

**8. Call to adjourn** – Moved by Darrell Chatfield, **seconded** by Nick Larsen; **carried**.





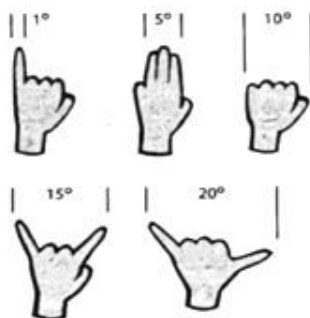
*Lunar eclipse by Justin Lukan*

## JUNE NIGHT SKY EVENTS AND INFO

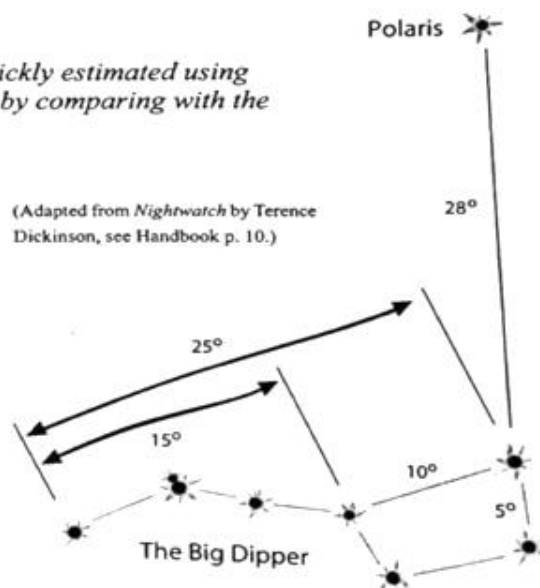
Images on the next few pages used, with permission, from the 2024/25 Observer's Handbook. It can be obtained by joining the RASC here <http://rasc.ca/join> or ordered from <https://secure.rasc.ca/store>.

### 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.*



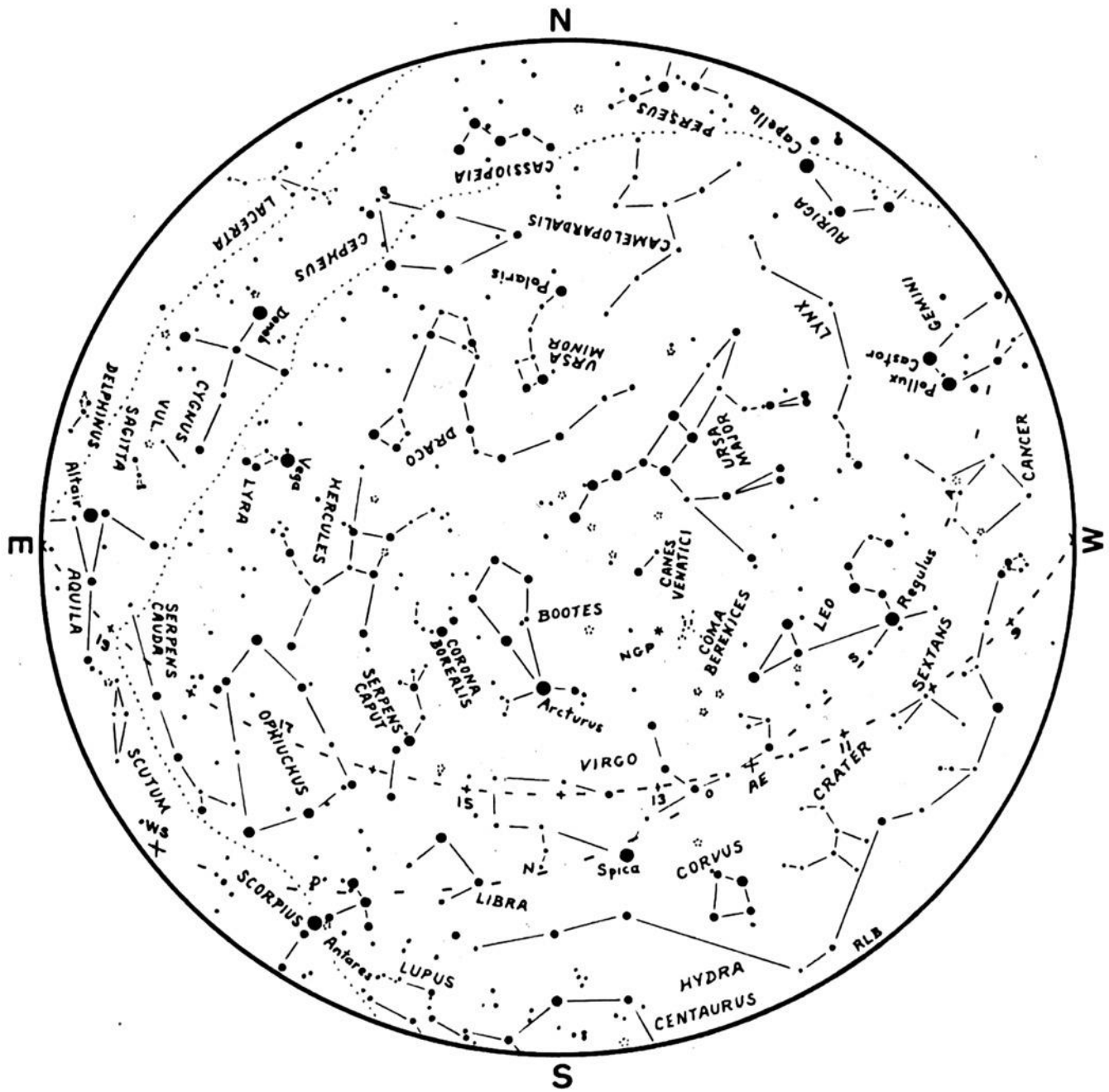
(Adapted from *Nightwatch* by Terence Dickinson, see Handbook p. 10.)



RASC OBSERVER'S HANDBOOK 2024 – STANDARD EDITION

Time (UT)			JUNE EVENTS		Jupiter's Satellites	
d	h	m			West	East
Sun.	1		Mercury at perihelion		1.0	Ganymede Europa Io Callisto
	4		Venus greatest elongation W (46°)		2.0	
	10		Mars 1.4° S of Moon		3.0	
Mon.	2	2	Regulus 1.7° S of Moon		4.0	
Tue.	3	3 41	first quarter		5.0	
	7	08	Algol at minimum		6.0	
	21		Pallas Stationary		7.0	
Wed.	4	1 33	Moon at descending node		8.0	
Thu.	5				9.0	
Fri.	6	3 57	Algol at minimum		10.0	
	15		Spica 0.5° N of Moon, occultation <sup>1</sup>		11.0	
Sat.	7	11	Moon at apogee (405 553 km)		12.0	
Sun.	8	20	Mercury 2.0° N of Jupiter		13.0	
Mon.	9	0 46	Algol at minimum		14.0	
Tue.	10	11	Antares 0.3° N of Moon, occultation <sup>2</sup>		15.0	
Wed.	11		Mercury at greatest heliocentric lat. N		16.0	
	7	44	full Moon		17.0	
	21	35	Algol at minimum		18.0	
Thu.	12		Venus at aphelion		19.0	
Fri.	13				20.0	
Sat.	14	17	Pluto 0.1° N of Moon, occultation <sup>3</sup>		21.0	
	18	24	Algol at minimum		22.0	
Sun.	15				23.0	
Mon.	16				24.0	
Tue.	17	4	Mars 0.8° N of Regulus		25.0	
	15	13	Algol at minimum		26.0	
Wed.	18	9 41	Moon at ascending node		27.0	
	19		Vesta stationary		28.0	
	19	19	last quarter		29.0	
Thu.	19	4	Saturn 3° S of Moon		30.0	
	4		Neptune 2° S of Moon		31.0	
Fri.	20	12 02	Algol at minimum			
Sat.	21	2 42	Solstice			
Sun.	22					
Mon.	23	4	Moon 0.6° N of Pleiades (M45)			
	5		Moon at perigee (363 178 km)			
	8	51	Algol at minimum			
Tue.	24	15	Jupiter in conjunction with the Sun			
Wed.	25	10 32	new Moon (lunation 1268)			
Thu.	26	5 40	Algol at minimum			
Fri.	27	6	Mercury 3° S of Moon			
Sat.	28					
Sun.	29	2 29	Algol at minimum			
	8		Saturn 1.0° S of Neptune			
	11		Regulus 1.5° S of Moon			
Mon.	30	1	Mars 0.2° S of Moon, occultation <sup>4</sup>			

<sup>1</sup>S half of Africa. Madagascar. Kerguelen Is. E Antarctica. southernmost New Zealand.



## 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.





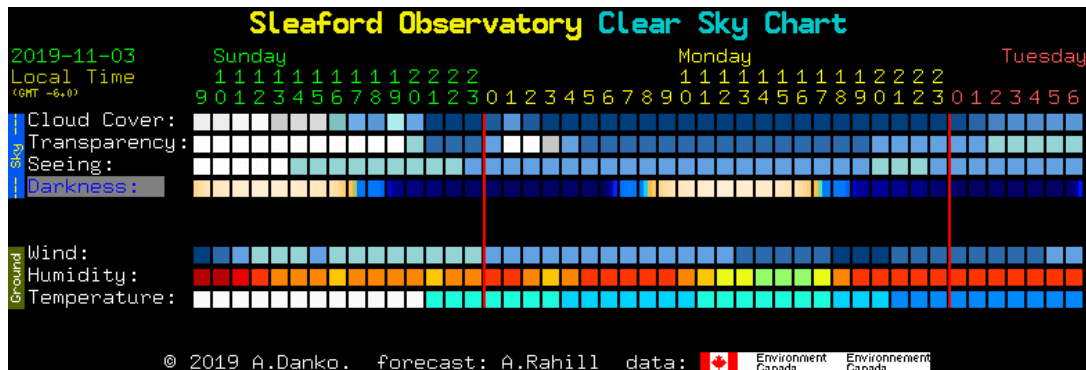
*Photos by Jeff Swick from the recent U of S Observatory open house*

## 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](http://www.weather.gc.ca/astro)



Saskatchewan Light Pollution Abatement Committee -

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



[www.darksky.org](http://www.darksky.org)

# SSSP 2025 - JUNE UPDATE

Les Dickson

The Saskatchewan Summer Star Party will be held at the Cypress Hills Interprovincial Park Center Block, 30 km south of Maple Creek on Highway 21. It runs from noon of Wednesday August 20th to noon Sunday August 24th. This is the premier outreach and fund-raising event the Saskatoon Centre, along with the Regina Centre, puts on each year. I strongly encourage our Saskatoon Centre members to attend and support this event, now in its 28th year!

The early registration period ends on Saturday, July 12th. After that date, registrations will cost \$10 more in each category of Single, Couple, and Family. During this period, we are also taking reservations for our banquet, catered by the Resort at Cypress Hills. Places in the banquet will be limited after that date, as we must inform the Resort shortly after how many people will be attending.

Our programming includes day-time presentations, a workshop for children, evening clinics, and observing from some of the darkest skies in western Canada. Our confirmed guests and presenters include:

- Dr. Chris Herd, Professor in the Faculty of Science – Earth & Atmospheric Science Administration, University of Alberta
- The RADSAT-SK2 Project Team, College of Engineering, University of Saskatchewan
- Kimberly Sibbald, Alberta
- Nick Larsen, Saskatoon Centre
- Ron Waldron, Saskatoon Centre
- Jennifer Petriew, Regina Centre and Joelle Sheard-Patrick, Saskatoon Centre

Thank you, Joelle, Nick and Ron, for stepping up to help this year. I am still looking for an evening clinic presenter, so contact me if you would like to contribute to our programming.

A major effort this year is the restoration of the cairn at the entrance to the Meadows Campground commemorating the 2001 discovery of Comet 185P/Petriew at SSSP. The cairn was first unveiled during the 2002 SSSP in a ceremony including representatives of the Saskatchewan government. Since then, as the accompanying photo shows, the cairn has deteriorated and is in significant need of repair or potentially replacement. Plans are to refurbish the base and install and secure a new bronze plaque to replace the existing laminated image. We would also like to make this a distinctive monument by placing a laser cut metal image of a comet on top of the cairn. There will be an unveiling ceremony during the star party. The costs to rebuild and update the cairn currently exceed the funds



raised by donation over the past year. We will be proposing that the Regina and Saskatoon Centres make significant donations to make up the shortfall in funds necessary to complete the project in time.

Our organizing committee has been working hard to make this event another success. However, some of our committee members have had health issues that are preventing them from organizing and attending some important aspects of the star party. We especially need someone to organize and run the Thursday evening BBQ. I encourage our Centre's members, who benefit from the funds raised by this event due to the hard work of a small number of dedicated people, to volunteer to help make this year's star party another success. We hope to see you there!



For more information, see the website at <https://sssp.saskatoon.rasc.ca>.

Contact us at [sssp.sk@sasktel.net](mailto:sssp.sk@sasktel.net) or call Rick Huziak for camping and registration information at 306-280-1899 (cell) or Les Dickson at 306-270-9184 (cell).

## 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](http://rasc.ca/certificate-programs) for details and contact the RASC Observing Committee Chair at [rasc.ca/contact/observing](http://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](http://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 Schlapkohl	43
Ellen Dickson	34
Graham Hartridge	9

#### CHATFIELD BINOCULAR CERTIFICATE

##### Certified at 35 to 40 Objects:

*T. Tuomi, R. Huziak*

Jim Goodridge	12
---------------	----

#### 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
Brent Burlingham	97

#### EXPLORE THE UNIVERSE

##### Certified at 55 to 110

**Objects:** *T. Tuomi, B. Gratias*

Wayne Schlapkohl	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
---------------	----

#### 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.astroloague.org/al/obsclubs/herschel/hers400.html>

Chatfield Binocular List is at: [https://saskatoon.rasc.ca/Chatfield\\_Binocular\\_List.pdf](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>