

Saskatoon Skies

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

Volume 54, Number 08

September 2023



Royal Astronomical Society of Canada
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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
September Night Sky Events & Info	5-7
Reimbursement for Centre Expenses	7
Sleaford Observatory Upkeep	8
Clear Sky Chart / Weather Info / Light Abatement Info	10
Saskatchewan Summer Star Party 2023	11
Observing Certificates & Clubs	12-13

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

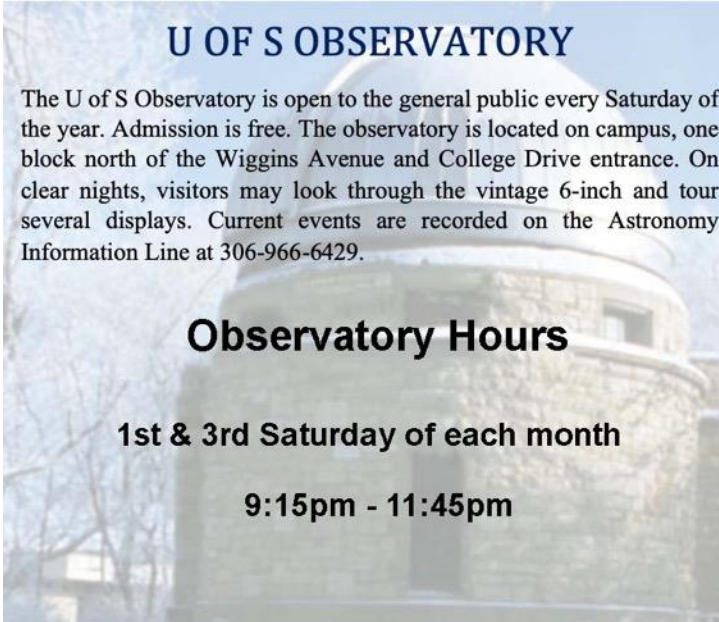
Copy & Collate – Les & Ellen Dickson

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.

A graphic with a background image of the U of S Observatory building. The text is centered and reads: "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 306-966-6429.", "Observatory Hours", "1st & 3rd Saturday of each month", "9:15pm - 11:45pm".

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 306-966-6429.

Observatory Hours

1st & 3rd Saturday of each month

9:15pm - 11:45pm

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

Sept 16	Observer's Group - Sleaford Observatory	Brent Gratias
Sept 18	RASC Saskatoon Centre General Meeting	Les Dickson

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

"SSSP 2023" - Les Dickson

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.

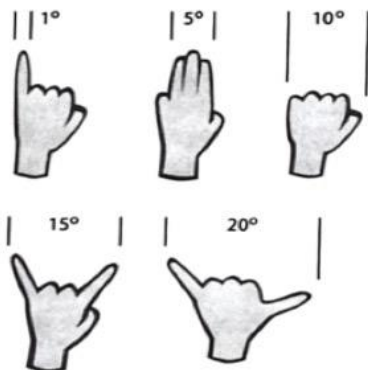
“Deep-Sky Observers Handbook” Volume 1-5 Enslow-Lutterworth	\$40.00
“International Encyclopedia of Astronomy” 1987 Patrick Moore Color	\$10.00
“Backyard Astronomers Guide” T. Dickinson & Alan Dyer 2008 Color	\$25.00
“Atlas of Deep Sky Splendors” 1978 H. Verhenberg (50.00) B & W	\$22.00
“Amateur Astronomers 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

SEPTEMBER NIGHT SKY EVENTS AND INFO

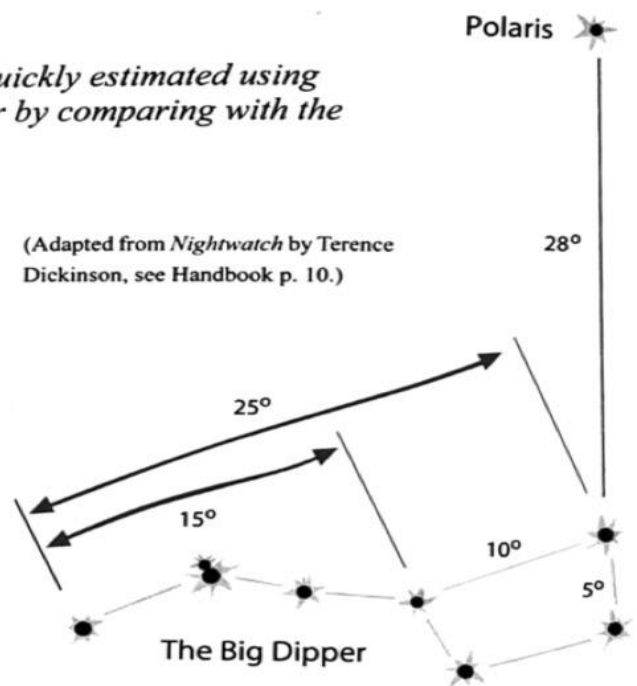
Images on the next few pages taken, with permission, from the 2023 Observer’s Handbook. It can be obtained by joining the RASC here <http://rasc.ca/join> or ordered from <https://secure.rasc.ca/Portal/Shop/RASC/Store/StoreMain.aspx?Category=CURRPUB>


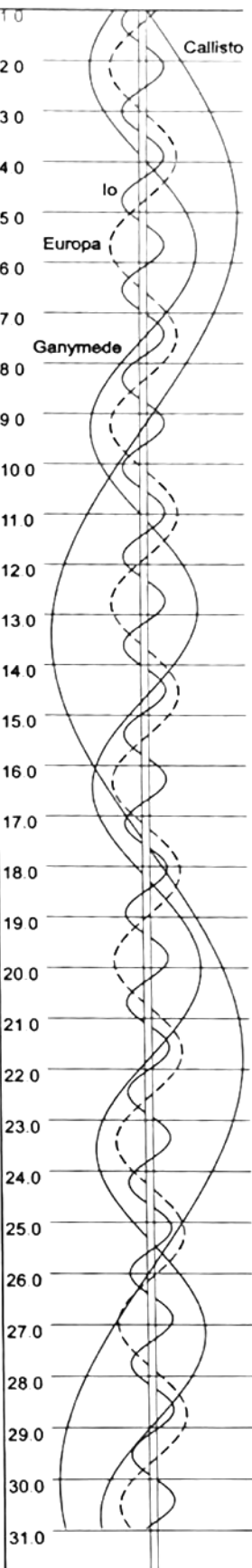

















HANDY SKY MEASURES

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.

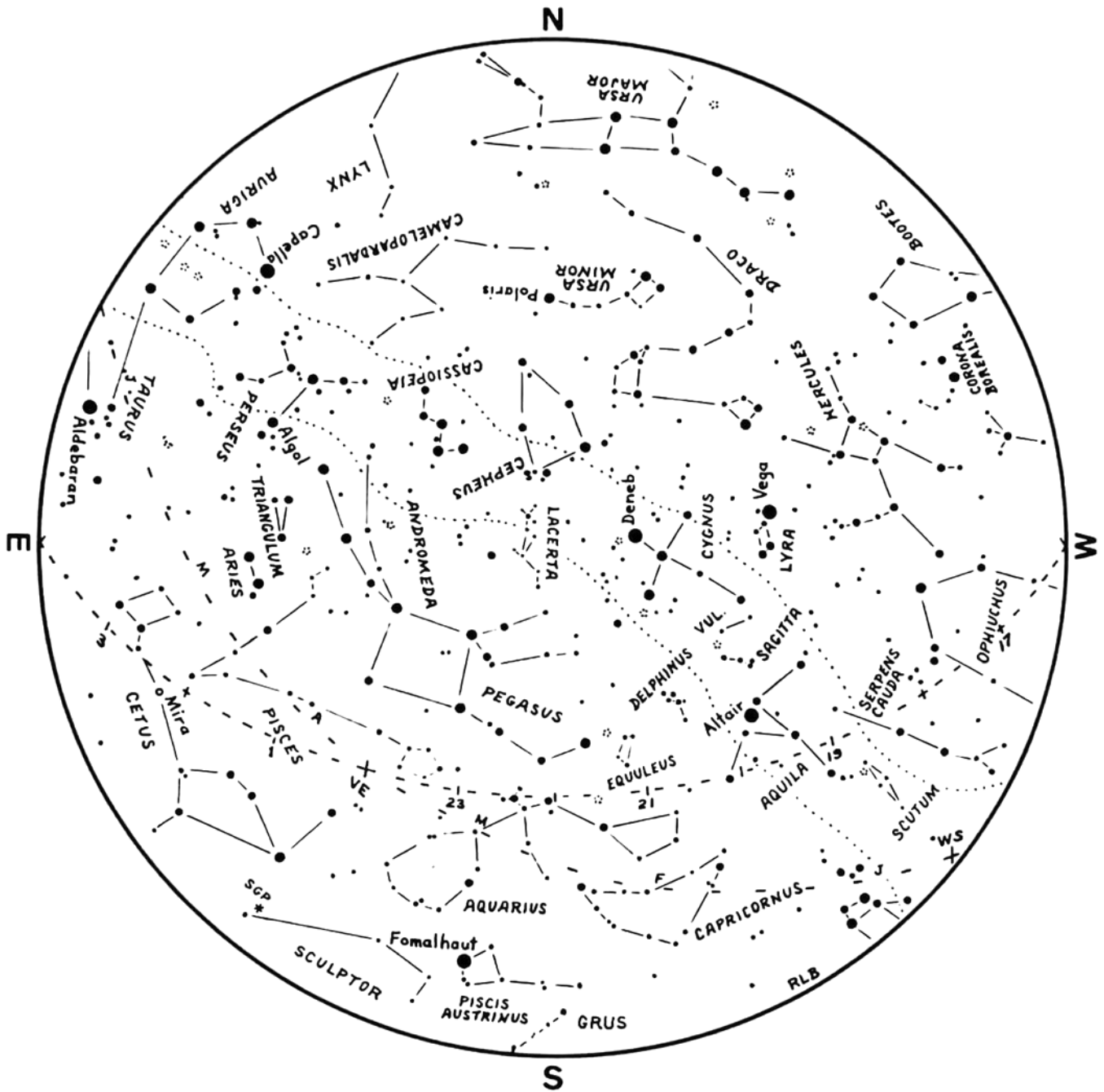


(Adapted from *Nightwatch* by Terence Dickinson, see Handbook p. 10.)



Time (UT)		SEPTEMBER EVENTS	Jupiter's Satellites	
d	h m		West	East
Fri.	1	Zodiacal light vis. in N lat. in E before morning twilight for next two weeks		
	7	Neptune 1.4° N of Moon, occultation†		
Sat.	2 20 59	Algol at minimum		
Sun.	3 4	Venus stationary		
	7 44	Moon at ascending node		
Mon.	4 20	Jupiter 3° S of Moon		
	21	Jupiter stationary		
Tue.	5 9	Uranus 3° S of Moon		
	17 48	Algol at minimum		
	20	Moon 1.2° S of Pleiades (M45)		
Wed.	6 11	Mercury in inferior conjunction		
	22 21	last quarter		
Thu.	7			
Fri.	8 14 37	Algol at minimum		
Sat.	9			
Sun.	10 4	Pollux 1.5° N of Moon		
Mon.	11 11 26	Algol at minimum		
Tue.	12 16	Moon at apogee (406291 km)		
Wed.	13			
Thu.	14 8 15	Algol at minimum		
Fri.	15 0	Mercury stationary		
	1 40	new Moon (lunation 1246)		
Sat.	16 19	Mars 0.7° S of Moon, occultation‡		
Sun.	17 5 04	Algol at minimum		
	19 18	Moon at descending node		
Mon.	18			
Tue.	19	Mercury at ascending node		
	7	Venus greatest illuminated extent		
	11	Neptune at opposition		
Wed.	20 1 53	Algol at minimum		
Thu.	21 8	Antares 0.9° S of Moon, occultation††		
Fri.	22 13	Mercury greatest elongation W (18°)		
	19 32	first quarter		
	22 42	Algol at minimum		
Sat.	23	Mercury at perihelion		
	6 50	Equinox		
Sun.	24			
Mon.	25 19 31	Algol at minimum		
Tue.	26			
Wed.	27 1	Saturn 3° N of Moon		
Thu.	28 1	Moon at perigee (359911 km)		
	16 20	Algol at minimum		
	17	Neptune 1.4° N of Moon, occultation†††		
Fri.	29 9 57	full Moon		
Sat.	30 16 49	Moon at ascending node		

†Data from *Earth and Sky*



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 OBSERVATORY UPKEEP

Ron Waldron

Keeping Sleaford Observing Site Alive and Well

The club's Sleaford Observing Site is located 50km east of Saskatoon near Colonsay and just slightly south of Highway 5 to Humboldt. It is a great place for experienced observers and newcomers to astronomy to hone their telescope and observing skills. It is also a year-round facility with a warm-up shelter included. Simply put, it is one of the better perks to becoming a member of our club.

However, along with the privilege of using the site comes a responsibility to assist with its yearly maintenance. This most often involves cutting grass in the summer and snow blowing in the winter but can include painting and repair from time to time. Currently the grass cutting, and snow blowing is being done by Larry Scott and Brent Gratias and the major repairs by Darrell Chatfield and Rick Huziak.



Recently, our past president, Mike Dolan took the initiative to seek out and have the club purchase a used riding mower. It required a fair bit of maintenance but thanks to the efforts of Mike, Darrell and Colin Chatfield, the mower is now operational and makes short work of what used to be a big job. On that note, if any member has a gas-powered weed whacker they would be willing to donate to the club, it would be much appreciated.



If you are a regular or even sporadic user of the Sleaford Observing Site, we ask you to consider giving back in one of the following ways:

1. Signing up to take a turn cutting the grass in the summer months and another turn snow blowing in the winter months. Please let Brent Gratias (brentandtracey@hotmail.com) know if you can assist with these.
2. Volunteering to help Darrell Chatfield (novachat@sasktel.net) when a call is put out for maintenance and repairs.

The Sleaford Observing Site is the major expense in our club's operation and deserves our support and attention year-round.



*Milky Way over abandoned church take
in August 2023 by Colin Chatfield*



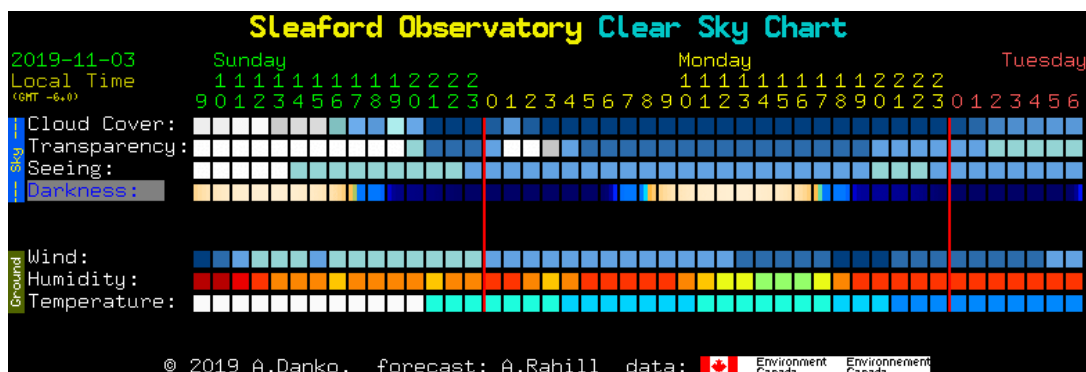
Super Moon from August 30, 2023 by Ron Waldron

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

ANOTHER SUCCESSFUL SSSP

Les Dickson - SSSP Chair 2023

August has come and gone and with it another successful star party! My thanks to all of the organizers and on-site volunteers who helped make this possible. The weather did not always cooperate, but we were able to get in a few days of good viewing. On the other hand, our daytime activities made up for it.

We had a great slate of speakers and presentations:

- Tara Magee and Rick Huziak “Exploring the Land of the Living Skies” and “Beyond Through the Lens of a Camera”
- Pierre Schierle “Green Laser Pointer Safety and Certification”
- Rick Huziak “Learning & Understanding Magnitudes”
- Emily, Vanessa and Melody Petriew “SSSP Kid’s Workshop”
- Ken Luciak "Five Astronomical and Atmospheric Phenomena Explained"
- Alan Dyer "Enjoying the Coming Eclipses"
- Chris Beckett “Touring Our Universe Through Binoculars”

We had an official count of 291 attendees, a little down from our usual ~325 pre-COVID. Some of the decrease can be attributed to changes in park camping policies which now prevent people from doubling up in paid camping sites and camping in the overflow area of the Meadows campground.

I will be following up this article with more details in a presentation at our September general meeting.



Eagle and Omega Nebulae by Justin Lukan



Comet C/2023 P1 (Nishimura) was discovered on August 12. I took my first picture of it on August 17. In this picture taken August 20 it is below the faint comet 29P/Schwassmann-Wachmann. By the middle of September comet Nishimura is expected to brighten to magnitude 2 or 3 but unfortunately too close to the sun to be seen any more. 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 Schlapkohl	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 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
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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.astroloague.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>