Coming Attractions

Friday, March 13, 2026: Monthly Meeting

Featured Presentation:

Tyler Funk's "Dark Skies" movie documentary

Saturday, March 14, 2026 Members' Observing Night
Glenlea Observatory,
8:00pm start (see page 7)

Friday, April 10, 2026: Monthly Meeting

Featured Presentation:

Ryan Wierckx, University of Manitoba

"Research update and astrophotography"

Saturday, April 11, 2026 Members' Observing Night
Glenlea Observatory,
8:00pm start

Winnicentrics

Newsletter of the Winnipeg Centre of the Royal Astronomical Society of Canada

Tales from the Glenlea Observatory

Nearly 50 years ago, in 1976, the Winnipeg Centre built an observatory at Glenlea. Council at the time had been planning its construction for several years beforehand but it was a slow process in 1973, with an ongoing fundraising drive to raise the few thousand dollars needed (fees in 1973 were only $7.50 per year). Progress was slow and seemed to be getting slower—until one member purchased the lumber, rented a storage space, and informed Council that the rent would run out in a month and the lumber would have to be gone by then.

Actually, it wasn't quite that dramatic, but it was the push that was needed. Ed Dyer—Alan Dyer's dad, who was a carpenter –offered us a space at Kapyong Barracks to build the dome and the RASC members spent the summer of 1976 constructing the facility at Glenlea. The design consisted of a single building with the observatory and dome on one side and a warm room on the other. They were separated by an insulated wall, but you could go from one to the other inside. The telescope was elevated in order to clear the warm room and so we ended up with two-story observatory that we have today. The dome was covered in Masonite (which was flexible) and the opening was an up-and-over sliding door, much like the one we have now. There was a considerable amount of donated materials and labour, especially the cement and piling, but in the end, we knew our observatory project was nearly done when a flat-bed truck took the dome to Glenlea on a quite Sunday morning.

The first telescope in the dome. From left to right: Phyllis Belfield, President Roy Belfield, Jay Anderson, Judy Anderson (From the Winnipeg Free Press*)*

The first telescope in the dome was a 12-inch Newtonian loaned by the University of Manitoba; it was later replaced by a 14-inch Celestron.

It wasn't long afterward that we had our first experience with the observatory's

YouTube https://bit.ly/2FrcZJZ

https://bit.ly/3iSmFed

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(For details on how to use the forums and join the various sub-groups, see page xx.

Winnicentrics is published six times a year by the members of the Royal Astronomical Society of Canada—Winnipeg Centre, Incorporated. Any opinions expressed are those of the author(s).

Submissions or comments can be sent to newsletter@winnipeg.rasc.ca

Jay, Stan & Kevin after the water has dropped enough to enter the site after the 1997 flood. Jay is indicating the height of the flood on the wall of the warm room. The building in the background is a UofM classroom

nemesis: springtime flooding, and in particular, the flood of 1979. The observatory suffered minimal damage, as its walls were bare and it was only necessary to clean out the silt and mud afterward. The warm room, however, was affected more severely, making necessary an extensive cleanup and drying out.

The home-made dome had been a problem from the start, as the shutters tended to warp and were difficult to open. In 1986, the Centre decided to replace it, and, with the help of a provincial grant, ordered an Ash Dome from Illinois. In addition to the dome, the Centre paid for an employee of Ash Manufacturing to come to Winnipeg to help assemble the structure. In the end, the project cost nearly $16,000 but the Centre was left with a solid and well-built housing that still opens to the night sky.

For six years, the observatory remained largely unaffected by spring floods, though occasional water levels made it up to the observing pad. In the spring of 1996, our period of grace came to an end, when water levels peaked a few inches above the warm room floor. It was an ugly mess in the warm room, but the observatory section was only marginally affected, as it had no insulation in the walls and no panelling on them.

Construction of the warm room in 1998.

In the next winter of 1996-97, it became apparent that another flood was likely as a heavy snowpack had accumulated by late December. The early restoration that had started in the fall of 1996 was halted to await the spring. Good thing, as the winter of 96-97 was one of the snowiest on record and by late spring water levels were even higher than 1996—over half-way up the wall of the warm room. Repairs were no longer possible; the building was unusable and had to be demolished and rebuilt.

The rebuild was carried out through the summer and fall, financed with the help of a $7000 grant from the provincial government. The new design separated the warm room and the observatory buildings and the warm room was raised three feet above the pad. The elevated building proved its worth in 2009 when water levels in the spring peaked about 1 inch below the underfloor insulation.

In the 50 years since its construction, floodwaters have reached above the observatory floor nearly a dozen times but never into the warm room. It's usually pretty easy to clean up the mess, since the substructure of the warm room

March Meeting Schedule

Friday, March 13, 2026 at 7 p.m.

7:00 pm: Beginner's Session

7:30 pm: Regular session

- **Announcements**
- **Annual General Meeting and elections**
- **What's Up? – upcoming events in the sky**
- **What's New? – new discoveries in astronomy**

8:30 pm: Social break

9:00 pm: Main presentation: Tyler Funk's "Dark Skies" documentary

10:00 pm: after-meeting pizza

April Meeting Highlight

Friday, April 10, 2026 at 7 p.m.

Main Presentation: Ryan Wierckx, University of Manitoba

"Research update and astrophotography"

Regular meetings of the Winnipeg Centre are normally held in the Robert B. Schultz Lecture Theatre in St. John's College at the University of Manitoba, 92 Dysart Road. Free parking is available in the lot across the street. The theatre is on the lower (basement) floor of the College. Meetings are usually held on the second Friday of each month from 7 p.m. to 10 p.m.

After the meetings, members who wish to do so usually retire for pizza and more conversation about astronomical topics.

Meetings can also be attended on Zoom beginning at 7:00 pm on meeting nights. Zoom links are provided in an email note several days ahead of the meeting date.

Dates may be amended to avoid conflicts with exam schedules and Bomber games.

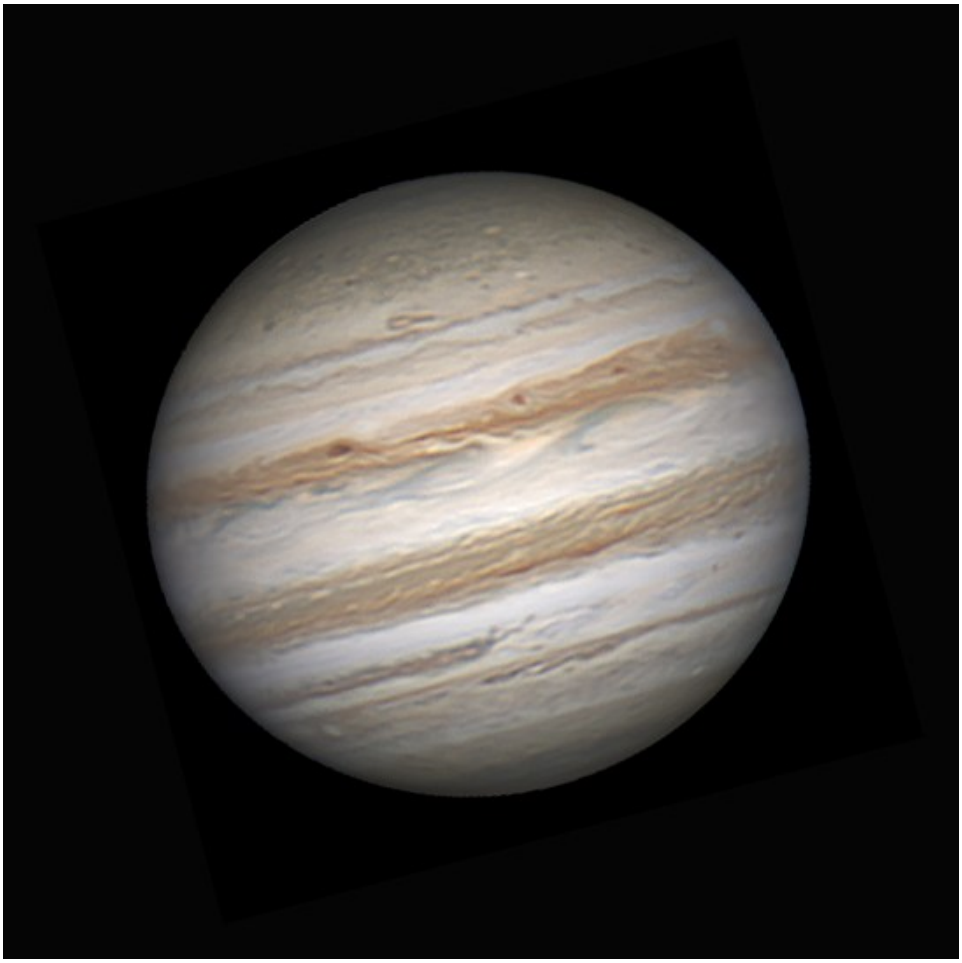
Meeting proceedings are also available on YouTube after the event.

The 2022 flood level was well below the warm room floor, but the observatory took another hit.

and the observatory building have no insulation or drywall to be damaged. With the construction of the bathroom about a decade ago, which is at ground level, damage to insulated floors and walls became more expensive.

After five decades, past flooding has now rotted the sole plate on the observatory walls and a major repair is needed to keep the structure from gradually failing. We can fix this by lifting the building and inserting new 2x6 plates or by rebuilding the whole structure. The lower walls are also in bad shape and will have to be replaced with something more durable. Replacement of the sole plates is the preferred option, but there has also been discussion in the Observatory Committee about rebuilding, either on the same footprint, or nearby.

Rebuilding will require lifting the structure a few inches, removing the old plate, and inserting a new one—ordinarily, not a greatly complicated problem except for a 600 kg dome on the roof. The Observatory Committee hopes to get this task done in the summer, either by Centre members or by a suitable commercial company. Stay tuned.



Mike Karakas provides us with these two images of Jupiter, acquired while visiting Curaçao in January. Pictures of this quality require a very stable atmosphere; something that is more common in the tropics.

The top image shows the Great Red Spot (GRS), a feature that has been present since at least 1831 and perhaps as early as 1665. Its nature is still uncertain, particularly the cause of its reddish colour. Observations from the *Juno* spacecraft suggest that it reaches a depth of 200-500 km.

Structures within the GRS are rotating counterclockwise (it's a high-pressure region) with a period of about 4 1/2 days. It sticks up around 8 km above the lower cloud deck and is a little bigger than the Earth in size.

The lower image shows the other side of Jupiter and emphasizes the enormous complexity of its cloud bands. The dark bands are called *belts*; the light ones, *zones*. The zones are colder than the belts and represent areas where the atmosphere is upwelling from below; belts are warmer, descending air.

The two cloud bands are separated by jet stream winds, flowing in opposite directions on the opposing sides of each band. The winds help shape the small structures that lie between the bands, which often have an appearance like marbles rotating between two opposite wind streams.

The belts and zones carry many fine-scale structures, particularly small white ovals, and there are often festoons that cross over from belts to zones, such as in the centre of both of Mike's images. The flow around the GRS is particularly complex and the winds carry various cloud eddies overtop of the structure and deposit them on the downstream side. The bands rise to different altitudes, with the higher and colder zones adopting a lighter colour because of the presence of ammonia, which forms whiter clouds in the lower temperatures.

Toward the north and south of the bands, the atmosphere breaks down into a more disorganized structure, composed of small cyclonic and anticyclonic storms.

Sky Notes for March and April

March 3: Total lunar eclipse : 3:50 am – 7:17 am (moonset)

March 1-15 and beyond: Zodiacal light in evening sky

March 8: Daylight saving time begins

March 8: Venus and Saturn tougher in evening twi-light

March 19: New Moon

March 20: spring equinox

April 2: Full Moon

Early April: Comet C2026/A1 may be naked-eye

April 17: New Moon

April 20: Mercury, Saturn, Mars in conjunction early morning

March's Lunar Eclipse

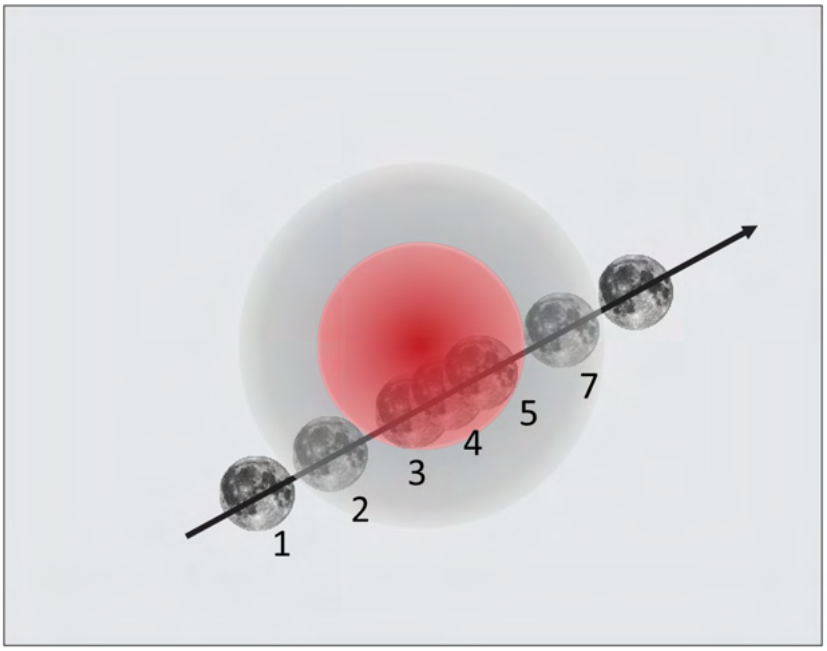
The early morning of March 3 will see a total lunar eclipse, low in the western sky before sunrise. The moon will just pass through the lower part of the Earth's shadow, giving an eclipse with a bright lower edge to the Moon and a darker brick-coloured centre, as shown in the diagram. The eclipse will still be in its partial phases when the Moon sets at 7:17 am.

At the start of partial phases, the Moon with be 30° high in the WSW; In the nearly 1 hour of to-tality, it will descend from 19° to 10° above the western horizon. If skies are clear, the brick-red moon, low over the horizon, could make for a very attractive view and photograph.

The penumbral part of a lunar eclipse is difficult to see until the moon is close to the darker umbral part of the shadow where the partial eclipse be-gins and ends. Photography will show he gradual-ly darkening moon, but your eye will only catch it on one edge near stage 2 in the diagram.

Photographing a lunar eclipse is not an easy task as the brightness of the shadowed surface often dictates an exposure of a second or two. This is enough to cause a small amount of blurring of details in a non-tracking large telescope, but probably not in a smart telescope such as a See-Star or Dwarf.

The real difficulty in photographing a lunar eclipse comes during the partial phases, when a very bright illuminated limb contrasts with a much darker shadowed region. There is no way to capture both of these in a single exposure, and so you much be prepared to do some processing on a computer afterward to put the two together.



Winnipeg Eclipse Times:

1. **Penumbral begins: 2:44 am**
2. **Partial begins: 3:50 am**
3. **Total begins: 5:04 am**
4. **Mid Eclipse: 5:33 am**
5. **Total ends: 6:02 am**
6. **Moonset: 7:17 am**

Whatever your ambition at 5 in the morning, the eclipse is worth at least a quick look through the window.

The Images Page

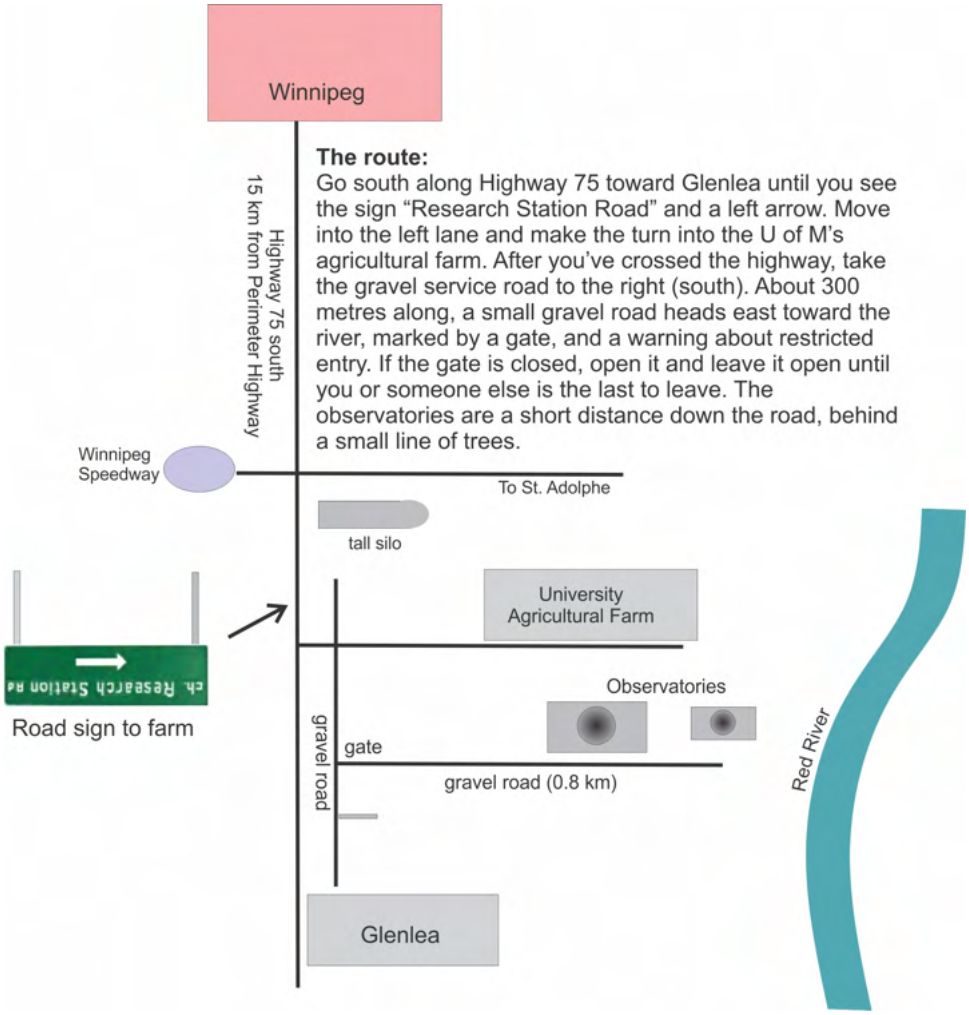
Paul Shelton captured M101, taken from his back yard in March, last year. It is an LRGB exposure (luminance, red, green, blue) overlaid with Halpha emission to show the red nebulae.

The January 10 potluck was well attended with over 30 Centre members sharing. Food offerings were plentiful and delicious.

Kevin Nebroski acquired this image using his Dwarf 3 smart telescope from Cabo San Lucas, an impressive result for a new camera. Currently, the nebula is prominent in the night sky.

Getting to Glenlea Observatory

The Winnipeg Centre maintains a working observatory and warm room at the University of Manitoba's Research Farm, 15 km south of the city. The observatory contains a 30 cm Meade telescope on a fork mounting. Members of the Centre may sign out the use of this telescope provided they have first taken a short instruction course on its use.



The Meade provides outstanding views of the night sky. Its large aperture collects more than 1800 times as much light as the human eye. It is capable of magnifying more than 500 times under favourable conditions.

The warm room provides a convenient place for members to take refuge from winter temperatures and summer mosquitoes, or to wait out a passing cloud. The building also provides desk space and lighting for planning a night's observing session. A cement pad with power in front of the warm room and observatory provides a convenient space to place members' telescopes while conducting personal observing programs.

Entrance is by a service road parallel to Highway 75. There is a gate across the road that is not locked. It can be left open while you use the site, but should be closed by the last person leaving.

Etiquette requires that you approach the observing site with your headlights off if that's possible on your model of car. If possible, use your parking lights to drive toward the observing site. Proceed slowly, and be careful about parked cars along the road, or people walking. If you cannot turn off your headlights, dim them and turn them off when you reach the observatory. You might wish to turn around at the end of the road so that you are facing the direction back toward the highway at the end of the evening.

In order to access the facilities, you will need a key. These are available to all Centre members.

Remember to close up the buildings that you used, the observatory dome, and the gate, if you are the last one to leave.

To get there, go south on Highway 95 (Pembina Highway) until you see a sign pointing to the University Research Station. Turn into the Station, then make a sharp right turn (south) along the gravel access road. When you come to a steel bar farm gate along the access road, open the gate (if it's closed) and go down the dirt road to the observatory. Close up when you leave.

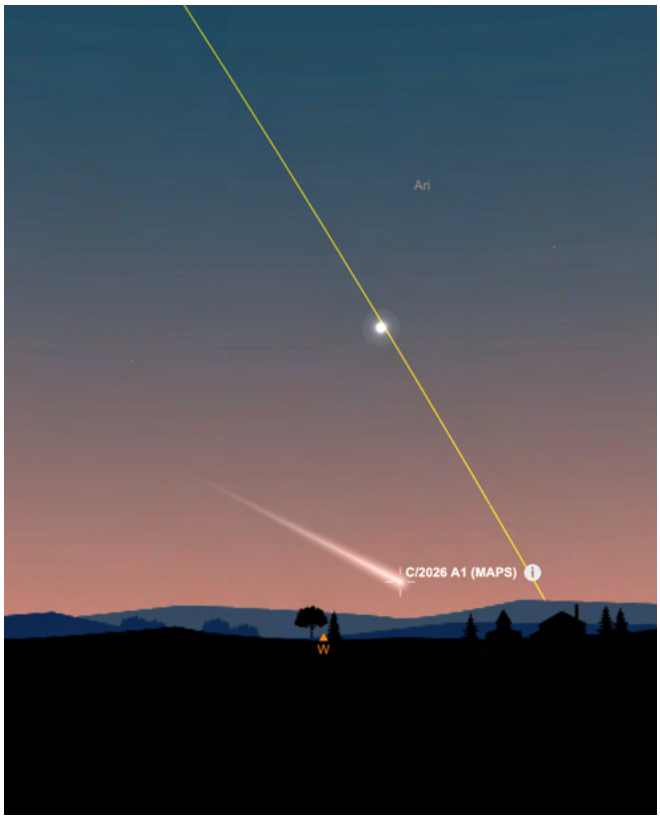
Are we in for two spectacular comets?

Two comets, one new, one old, are on a path toward perihelion in April. Comet C/2026 A1 (MAPS) will pass 160,000 km above the Sun on April 4; Comet C/2025 R3 (PANSTARRS) will do the same on April 20 at a distance of 76 million km. Estimates of peak brightness are all over the map, ranging from –7.7 to +8 for MAPS and from –2.5 TO +8 for PANSTARRS.. Both will be close to the Sun and in a bright sky when they are most favourable for observing.

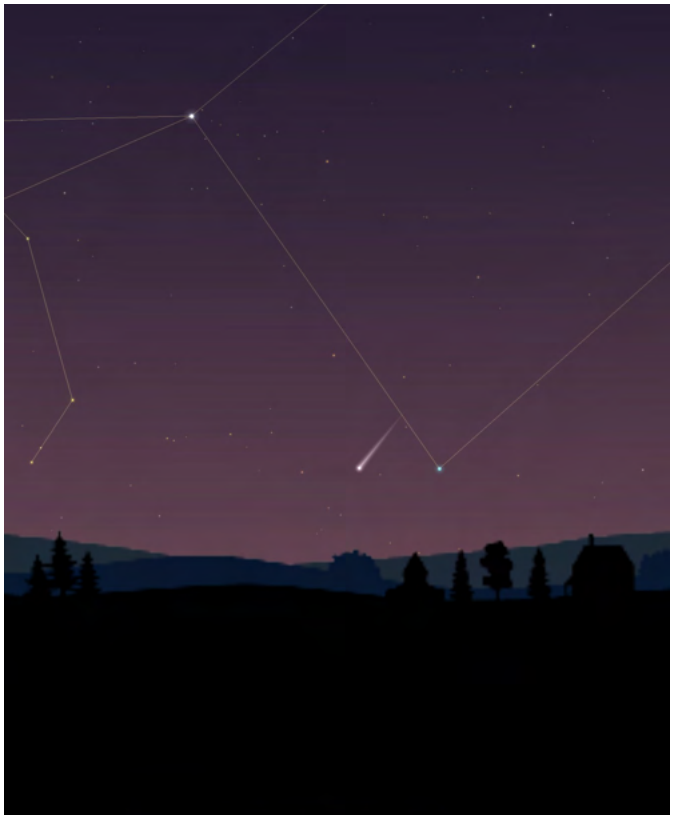
C/2026 A1 (MAPS)) is a sun-grazing comet and may not survive its passage across the solar surface. Others with similar orbits sometimes produce spectacular tails as they evaporate, putting a magical jewel into the twilight sky. MAPS was discovered by and named after the MAPS program, led by Alain Maury, Georges Attard, Daniel Parrott and Florian Signoret. It was discovered using a Celestron 11 with a f/2.2 Hyperstar focal reducer (?). The comet is estimate to be about 1.5 km in size.

C2025 A1 is not well placed for observing prior to perihelion, but might reach daylight visibility in the few days after April 4, or at least have a long, striking tail. It will be very close to the Sun, just above the horizon at sunset on the 6th and a little farther away on the 10th. It will brighten and fade very quickly, so the observation window is only two or three days long.

This will be a challenging object, but has a possibility of becoming a very striking comet.



Comet C/2026 (MAPS) on April 6 at 8:22 pm as depicted by SkySafari Pro. It will move toward the left and upward in the following days, putting it a little farther from the Sun, but fainter.



Comet C/2025 R3 (PANSTARRS) as depicted by SkySafari on April 19 at 5:00 in the morning. PANSTARRS is better positioned than MAPS in a darker sky, but the extent of its tail is still speculative

Comet PANSTAARS has been billed as the possible “Great Comet of 2026” but that was before MAPS showed up. Since calculations of eventual brightness are rife with uncertainties, it will be a time of considerable anticipation as they approach the Sun and the Earth. PANSTARRS is closest to the Sun on April 20 and to the Earth on the 27th, but its likely to be lost in the Sun’s glare on the latter date. Best observing will be between those two dates; it will be tough or impossible to see after the 27th when it moves into the evening sky.

One thing that can be said of both of them is that they will have a large measure of hype in the coming month.

NASA has a little bigger telescope than most of us and put it to good use on Comet MAPS in February

This image, from Gerald Rhemann and Michael Jäger , shows Comet C/2025 R3 PANSTARRS on January 16.

Vice-President Judy Anderson presents an “Explore the Moon” certificate to Adam Gear at the February meeting. To receive the certificate, an observer must identify 40 structures on the lunar surface and docu-

With comets in the news this month, here’s Comet NEOWISE from August 2020. Photos such as this can be done with nothing more than a camera and a tripod—even a cell phone.

Sometimes it's more than just astronomy. Ralph Croning caught an errant gull crossing the Sun last September and immortalized it in this image. He used a SeeStar S50 in video mode. Ralph also noted the resemblance to Orion's belt in the arrangement of the three sun-spots.

Groups.IO: How to Subscribe to and Use the Centre's Forums and E-Mail Lists

The Centre uses the Groups.IO platform for all of its forum and email services. To join, go to https://rascwpg.groups.io and click, "Forgot Password" when you are asked to log in. Enter the email that you used when you joined the Centre.

You'll receive a reply telling you how to set up a password. Once you've done this and logged in, you'll see a blue menu across the top of your screen (**See the diagram on the next page**). If you click on "Your Groups", you will see that you are already subscribed to "rascwpg.groups.io". This is the Centre's all-hands email, where we send meeting invitations, event news, and information we are required to send to all members (like calls for nominations for Board positions, news about the AGM, and so on).

The "main" group is used by Council to communicate with all members. This helps prevent important emails from ending up in a spam folder, and it also archives the email where you can see it again. This "main" group can only be accessed by the Council Executive; it generates a few emails per month at most, so it shouldn't overwhelm you with messages.

Click on "Subgroups" on the left-hand menu, and you'll be presented with a list of the various special-interest forums attached to the rascwpg group. These include a solar group, a sketching group, a binoculars group, a groups for posting astroimages, an armchair astronomy group, a buy & sell, an equipment discussion group, and a solar system imaging group. If you are interested in a topic, click on that group and you'll be brought to that group's home page. You can click "join this group" there, and start getting the posts emailed to you, but you can also read them without joining.

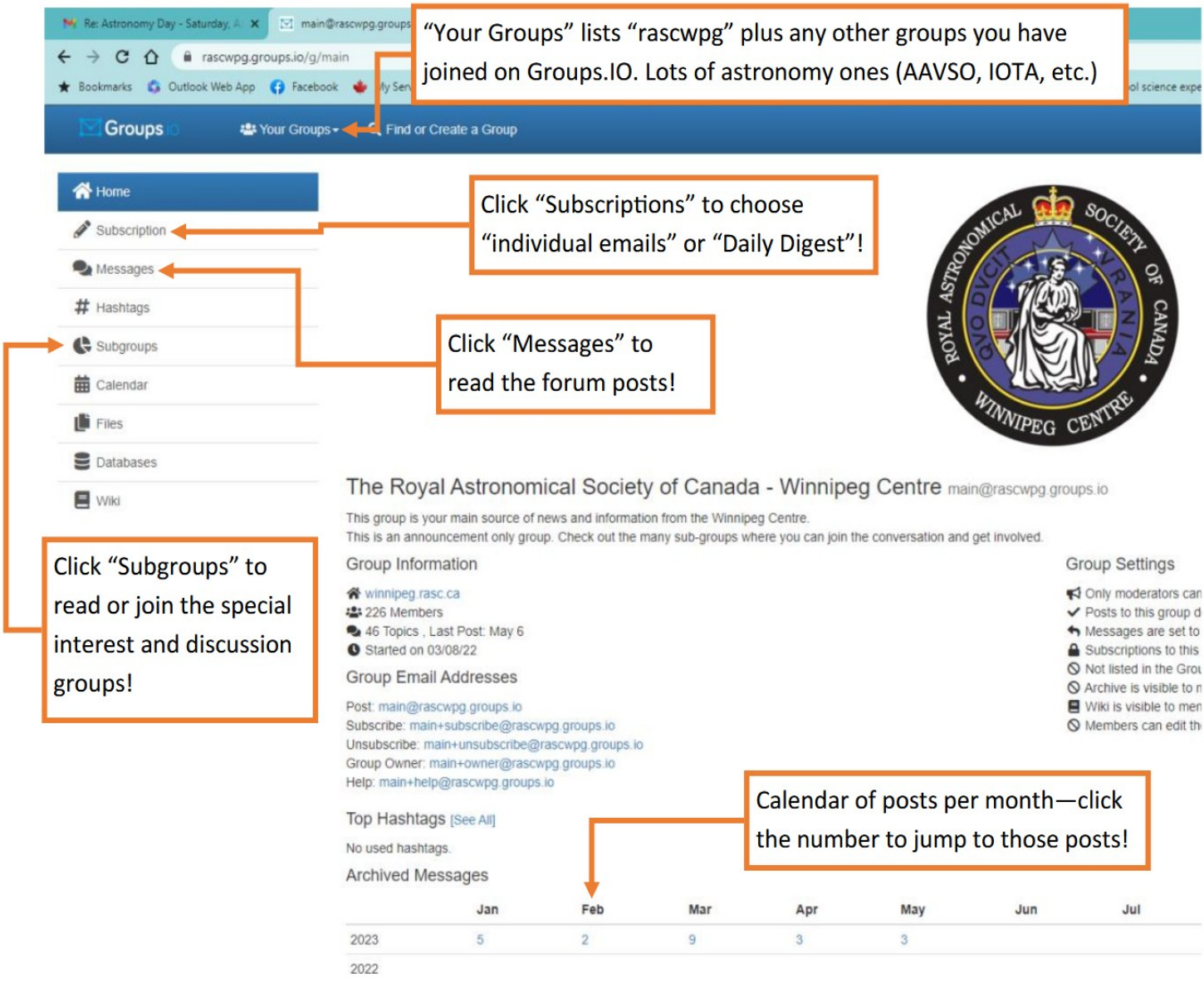
Luckily, you can adjust the settings for each group. Go to the group you want to adjust, and click "Subscription" on the left-hand menu. This allows you to select how to receive emails: as individual messages as soon as they are posted (this is the best setting for the "rascwpg-main" group because it may contain timely information like a meeting change or observing session cancellation) or as a "Daily Digest," where all messages for the day are collected into one email.

Every time someone posts to a group, every member in that group gets an email according to their personal settings. The messages are also archived, forming a valuable reference of the Centre's activities and discussions. There are some really good nuggets of wisdom in the forums already, and it would be a shame to lose them.

The key things to remember about Groups.IO:

- **If you unsubscribe from or haven't subscribed to the "rascwpg-main" group, you will not receive Centre emails**—this is the only way they are sent out! Please don't do this, or you will not receive important information like notices of meetings, calls for elections, special observing sessions, and other important stuff,
- Most conversation happens in the "rascwpg-general" forum. Other groups are more focused in their topic. If you're not sure where to post a specific question or idea, "general" is the place for it.
- You have to set your email preferences for each group—if you want daily digests, you have to set that up in the group's home page.

If you'd like help getting set up on Groups.IO, email newsletter@winnipeg.rasc.ca and we'll figure out a way to walk you through it.


"Your Groups" lists "rascwpg" plus any other groups you have joined on Groups.IO. Lots of astronomy ones (AAVSO, IOTA, etc.)
Groups
Your Groups
Find or Create a Group
Home
Subscription
Messages
Hashtags
Subgroups
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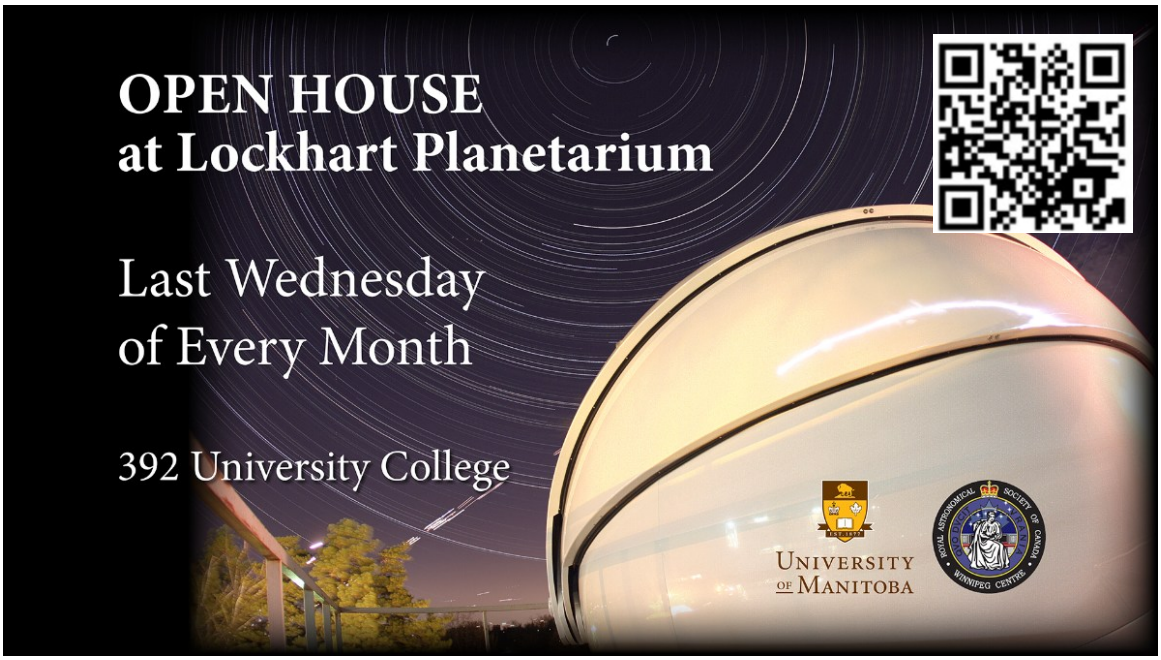
Wiki
Click "Subscriptions" to choose "individual emails" or "Daily Digest"!
Click "Messages" to read the forum posts!
Click "Subgroups" to read or join the special interest and discussion groups!
The Royal Astronomical Society of Canada - Winnipeg Centre main@rascwpg.groups.io
This group is your main source of news and information from the Winnipeg Centre.
This is an announcement only group. Check out the many sub-groups where you can join the conversation and get involved.
Group Information
winnipeg.rasc.ca
226 Members
46 Topics , Last Post: May 6
Started on 03/08/22
Group Email Addresses
Post: main@rascwpg.groups.io
Subscribe: main+subscribe@rascwpg.groups.io
Unsubscribe: main+unsubscribe@rascwpg.groups.io
Group Owner: main+owner@rascwpg.groups.io
Help: main+help@rascwpg.groups.io
Group Settings
Top Hashtags [See All]
No used hashtags.
Archived Messages
Calendar of posts per month—click the number to jump to those posts!
Jan Feb Mar Apr May Jun Jul
2023 5 2 9 3 3
2022


OPEN HOUSE
at Lockhart Planetarium
Last Wednesday
of Every Month
392 University College
University of Manitoba

Upcoming Events

Here are some Centre events you might want to attend:

Thursday, March 12: Public presentation at the Living Prairie Museum on from 7:00 to 8:30 pm. The Museum is at 2095 Ness Avenue, next to Sturgeon Heights Collegiate. There will be a talk about astronomy, followed by a telescope demonstration and a trip outside to look at the sky if the weather is clear.

Sunday, March 29, 2-5 pm: Spring Telescope Tune-Up at Eastview Community Church, 315 Maxwell King Drive E (off Henderson Highway, on the north edge of the city). This event is for Centre members and will feature subjects such as telescope collimation, minor repairs and fixes, cleaning optics, several small presentations, demonstration of smart 'scopes and binoculars and a discussion of upcoming special astronomical events. Tea, coffee, and some hot snacks will be provided.

Saturday, April 25: Astronomy Day. We'll be setting up at Assiniboine Park to show the Sun to passers-by during the day and the sky during the evening. This is a particularly popular event if the weather cooperates. Bring your telescope and set up behind the Pavilion.

Saturday, May 9: Science Rendezvous at the University of Manitoba. This is a huge event at the UofM and we participate by setting up telescopes and showing off the Sun, accompanied by astronomy students from the university. As presenters, we are usually entitled to pizza and drinks during the afternoon. Be prepared to be very busy.

Friday, August 7: On the Move Daycare. This is a chance to teach about astronomy and show off a few telescopes to the very young (the next generation of RASC members). Be prepared for off-the-wall questions that will make you think deeply about surprising topics.

Weekend, August 22-23: Spruce Woods Public Event. Every year the Centre puts on a day and night sky show for campers at Spruce Woods—an event timed to coincide with a first-quarter moon. It's a popular event and part of our contribution to the Park in exchange for use of Spruce Woods for our star party in September. A small group of Centre members will camp out in a reserved spot and, after showing the sky and making presentations to the public, will use the rest of the night for their own activities. If you want to be in on it, wait for a call for volunteers in the coming months.

Thursday-Sunday, September 10-13: Spruce Woods Star Party (SWSP), our premier get-together as RASC members to celebrate the night sky. Three nights of observing in a dark location at New Moon. This is a great opportunity to get completely immersed in astronomy for three or more nights (some members come early and leave late). Fees include breakfast on Sunday morning. Even if you can only attend for one night, bring the family and enjoy a last camp-out for the year. There's lots of room because the Park opens the overflow camping area for us. A great chance to look through some big telescopes and follow Gerry's patented sky tour.