



Photo: Dave Gamble



November 30 to December 6, 2020 RASC Weekly: Stellarium Software and Mars 2020 talk!

Monday, November 30, 2020 - 19:00 to 22:00 EST
RASC Toronto Centre: Stellarium Software Introductory Course

Run by RASC Toronto Centre, the course will be surrounding the use of the Stellarium planetarium software on your computer in a basic fashion. The course will be free to RASC Toronto Centre Members.

Course Overview

Stellarium is a powerful planetarium application available for Windows, Macintosh, and Linux computers. The free software can be used to learn the sky and plan astronomical observing sessions. If logging observations, it be used to corroborate and confirm celestial objects seen. Educators, presenters, and outreach volunteers may use the software for demonstrations, presentations, and What's Up discussions.

Participants will learn how to set up the software for a specific location, date, and time. They will learn how to view the simulated sky, zoom and pan, and search for and select celestial objects. Features such as gridlines, the meridian, sky settings, and red light mode will be explored. This will provide an amateur astronomer with a basic overview of the Stellarium program.

Classes will take place on Zoom. Class sizes are limited to 10 individuals. A waiting list will be kept if additional participants wish to sign up.

Note: This training is not for the paid Stellarium app on smartphones or the Stellarium web app.

For more information visit the [course page HERE!](#)

[Register for The Stellarium Software Introductory Course](#)

Tuesday, December 1, 2020 - 15:30 to 17:00 EST
Insider's Guide to the Galaxy: Orion Deep Dive

Did you notice this week's banner? Those beautiful objects are located in this week's constellation deep dive!

Orion is one of the most recognizable constellations in our night sky, and is a favourite of astronomers everywhere for all the treasures it holds. Join us for a deep dive into the constellation and everything in it! We'll also be previewing the winter planets and discussing the upcoming Great Conjunction of Jupiter and Saturn, where they will be so close to one another that you'll be able to see them in the same field of view of a telescope!

[Register for Insider's Guide to the Galaxy](#)

Sunday, December 6, 2020 - 17:00 to 19:00 EST
RASC Montreal, Ottawa, & NextGen: Mars 2020

Hosted by Dr. Farah Alibay and run by RASC Montreal Centre, Ottawa Centre, & NextGen Committee!

The Royal Astronomical Society of Canada (RASC) Montreal Centre is excited to invite you to learn all about the engineering of NASA's Mars 2020 mission and the Perseverance Rover during a webinar by Montreal-born Dr. Farah Alibay. Dr. Alibay is a flight system engineer on the team that will "drive" the rover on Mars, having prior experience with 2 other Mars missions at NASA's Jet Propulsion Laboratory (JPL). Dr. Alibay possesses an undergraduate and master's degree from the University of Cambridge in the U.K., and a Ph.D. from the Massachusetts Institute of Technology, all in Aerospace Engineering.

We are pleased to co-host this exciting Zoom Webinar with the RASC Ottawa Centre and the RASC NextGen Committee. The event is scheduled for Sunday, Dec 6th at 5 pm EST to accommodate an audience of all ages and backgrounds to enjoy this inspirational speaker!

Registration is free of cost! After registering, you will receive a confirmation email containing information about joining the webinar.

[Register for Mars 2020](#)

Astro-image of the Week

Dave Gamble

We are featuring winners of RASC's AstroImaging Certificate. Winners will be featured in the banner of RASC Weekly. More information on the RASC AstroImaging Certificate is available [here](#).

01 HORSEHEAD PANORAMA: "Horsehead Panorama" including the Alnitak, the Flame Nebula, and the Horsehead Nebula illustrates the variety of emission, dark, and reflection nebulae in this part of the Orion Molecular Cloud Complex. To me this is the most dramatic scene in the deep sky, giving a graphic impression of the depth and layering of the various elements.



The sub images were taken on 2015 February 17 from Sky Trails Observatory in Summerland, B.C. A Borg 101E apo in f/4.2 astrograph mode was used with a modified Canon XSi DSLR operating at ISO 1600 with an IDAS V3 filter. Twelve 10-minute guided exposures were combined with 10 dark frames and processed with ImagesPlus software.

Categories: Artistic

To see the large image, check out the [RASC AstroImaging Zenfolio page](#).

Robotic Telescope Data Now Available!

Calling all astroimagers! The data from our Robotic Telescope is finally available for purchase. This is the perfect gift for the aspiring astroimagers in your life, and with no shipping costs! Have you been checking out the contests we've been hosting with SkyNews Magazine over the past couple months? ALL of the data from the RASC Robotic Telescope for 2019 and 2020 is now available for purchase. You'll receive data for over 30 different narrowband and LRGB targets in two different styles (raw, where you can calibrate the data yourself to have the most control over the final result, and pre-calibrated, for beginner or intermediate astrophotographers). For THIS YEAR ONLY we are releasing two years' worth of data for the price of one! Adults pay only \$100, and students receive a 50% discount.



Head to our online store to purchase this item! Choose the item (adult or student) that applies to you or the person you're buying the item for. If you plan on gifting this purchase to someone, please email telescope@rasc.ca to inform them of your intent.

[Buy Now](#)

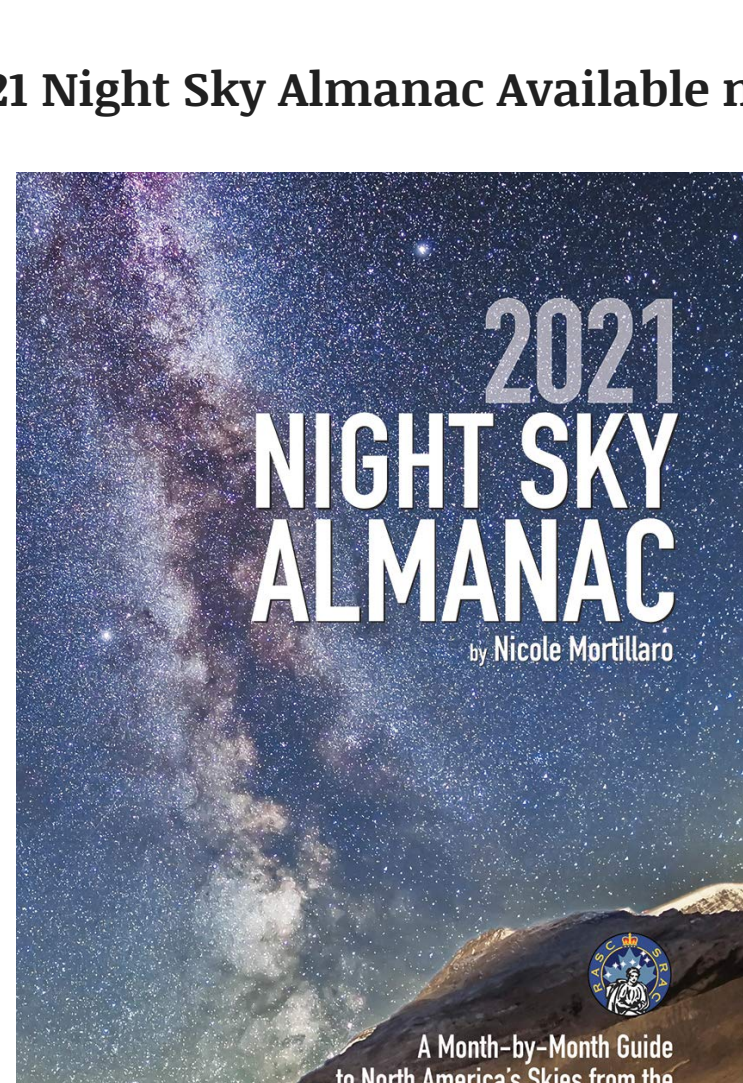
Check out the [image gallery](#) for more information about the available data sets and to view some of the processed images.

This represents years of work of the Robotic Telescope team, and we are all so excited to be able to release this data for use. Stay tuned in early 2021 as we launch new elements of the Robotic Telescope Program that will allow you to help choose the targets and become more involved.

Gift Memberships

This holiday season, give the gift of a RASC membership to your friends and loved ones! A RASC membership includes a wealth of resources and a chance to connect with a large community of astronomy enthusiasts. If you have a budding astronomer in your life, our annual membership makes an excellent gift! To purchase a membership, contact our Membership Coordinator, Adela Zyfi at mempub@rasc.ca or (519) 783-1529.

2021 Night Sky Almanac Available now!



[Buy 2021 Night Sky Almanac](#)

This Week's Observing Targets

Monday, November 30, 2020 - 2:30 - 7:00 EST

Penumbral eclipse

We had a penumbral eclipse last night! It was visible from North America, but we didn't talk about it too much because penumbral eclipses can be a bit underwhelming. Because the Moon only goes into a small part of the Earth's shadow, the Moon just looks slightly dimmer. Did you get out and see it? Tag us in your photos on social media!

Monday, November 30, 2020 - 4:32 EST

Full Moon

Known as the "Beaver Moon" by Native American tribes, this was specifically the time they set beaver traps near swamps. Other names include "Frosty Moon" and "Dark Moon." You will still be able to see it tonight!

Member Highlights



Have you heard about Sam? He recently underwent gene therapy that has allowed him, for the first time, to see clearly in the dark. This article was brought to our attention by the members of our Facebook group, and with their encouragement and support, we sent Sam his first telescope! Here he is (through a Zoom call), seeing Mars for the first time through his scope. Sam is now a member of RASC Montreal and looking forward to exploring the sky even more. Welcome to the Society, Sam!

Do you know a member who you think deserves a spot in our newsletter? Let us know! communications@rasc.ca with your submissions.

[View this email in your browser](#)