Alberta gets partial annular solar eclipse

By Neel Roberts

Have you ever seen an eclipse of the sun yet? This maybe your chance as Alberta will get a partial view (78%) of a "Annular Solar Eclipse" after the Thanksgiving long weekend. Unlike a "Total Solar Eclipse" which in many cases is a once in a life-time event, it's not as spectacular. You can check out the details *https://sciencing.com/darkest-portion-moons-shadow-during-solar-eclipse-3210.html* but in a nutshell the annular is not as noticeable by the naked eye as the total. An annular is much more distinguished through a telescope with solar filters.

A solar eclipse occurs when the moon gets between the Earth and the sun, casting a shadow upon the Earth. In the case of and annular, it does not display the sun's corona ring during totality. The key is the umbra which casts the Moon's shadow on the Earth. In the case of the total, it hit's the surface of the Earth whereas the annular doesn't resulting in a what we see. The United States will get the best view *https://solarsystem.nasa.gov/news/2332/new-nasa-map-details-2023-and-2024-solar-eclipses-in-the-us/* near Eugene, Oregon at around 9:18 a.m. PDT if you want to make the trip.

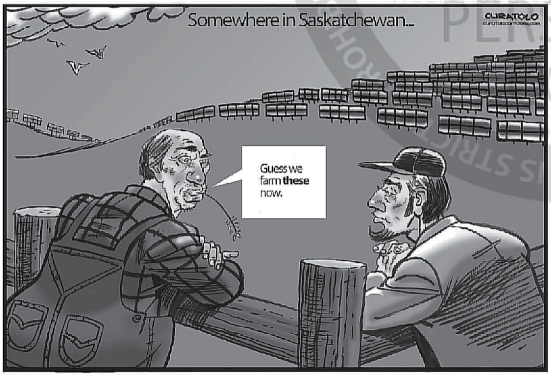
This will be a good warm up for the total solar eclipse coming Monday, April 08th, 2024. Coded the Mex-Am-Can eclipse *https://eclipse2024.org/eclipse_cities/statemap.html*, it'll start in the Pacific Ocean on the west coast of Mazatlán, Mexico moving up to Maverick County Texas, entering Canada at Pelee Island and finishing off in the Atlantic Ocean near Bonavista, Newfoundland. Wherever you are, it'll be worth the drive, travel, etc. THE BEST IS YET TO COME!

Sky watch for the next month: Download this month's sky free chart at *https://in-the-sky.org/newscal.php?month=10&year=2023&maxdiff=7#datesel and charts https://in-the-sky.org/skymap2.php, https://www.heavens-above.com/SkyChart.aspx, http://whatsoutinight.com/Resources/2023/10octWOTSky.pdf*

1 Annular Solar Eclipse- Saturday October 14th look East around 7:00 pm as these two rises very close for a spectacular view all night. *https://in-the-sky.org/news.php?id=20231014_09_100*

2 Zodiacal Light- Did you catch this last month? It's a faint, roughly triangular, whitish glow seen in the night sky extended up from the vicinity of the sun along the ecliptic or zodiac. Best time is from Thursday, October 12th for 2 weeks in the East before dawn. *https://earthsky.org/astronomy-essentials/zodiacal-light-false-dusk-how-to-see-explanation*

3 Orionids Meteor Shower Peaks- Sunday, October 22nd after sunset just to the north of constellation Orion's bright star Betelgeuse. With the second-fastest entry velocity of the annual showers at 10-20 per hour, meteors from the Orionids produce yellow and green colors and have been known to produce an odd fireball. The Waxing Gibbous Moon will be around first quarter phase at the shower's peak but will set at 23:22 clearing the night. *https://in-the-sky.org/news.php?id=20231022_10_100*



4 Draconid Meteor Shower Peaks- Sunday, October 22nd best seen after twilight facing NEE high up at 15 meteors per hour. While not as dramatic as other showers it can occasionally spew hundreds an hour and moon will set at 23:22 present no interference. *https://in-the-sky.org/news.php?id=20231022_10_100*

For This Month's Events Check the Calendar- *https://calgary.rasc.ca/calendar2023.htm#oct* and YouTuber Late Night Astronomy *https://www.youtube.com/@LateNightAstronomy/videos*

Mark down Saturday, October 14th from 09:30 am to 11:30 am for view of the Annular solar eclipse at Ambrose University. Free and all welcome weather permitting.

Happy Fall and cooler days!

Neel Roberts is a local astronomer in Southern Alberta and welcomes your comment at *Neel_Roberts@ptccanada.com, Tel: (403) 560-6574. Check out his work at www.ptccanada.com.*