

# There is a lot to see in the sky in December

## Sky watch for the next month:

### • Moon, Jupiter and Regulus

**triangle** — Thursday, Dec. 11 after sun down look west to see these three for much of the evening.

### • Christmas Eve Mars/Moon Delight

— Just after sunset before Christmas on Wednesday Dec. 24 look for the red planet to be just south of our moon.

### • Geminid and Ursid Meteor

**Shower** — We actually have two mild meteor showers this month of which Geminid peaks Saturday, Dec. 13 just after midnight on a bright, waxing, gibbous moon that'll interfere with the Geminids throughout most of the peak night and Ursid shower Monday, Dec.

22 after sundown when earth moves through the centre of the dust trail left behind by the comet until the moon comes out at 10 p.m. For more on all meteor showers check out the International Meteor Organization at [www.imo.net/calendar/2015](http://www.imo.net/calendar/2015).

### • Winter Solstice

**Arrives** — Sunday, Dec.21 is officially the shortest day of the year at 4:03 p.m. This occurs when the sun reaches its most southerly declination of -23.5 degrees and likewise the North Pole is tilted 23.5 degrees away from the sun. Depending on the Gregorian calendar, the December solstice occurs annually on a day between Dec. 20-23.



**A young star gazer looks through the astronomy binoculars and can see the rings of Saturn.**



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On this date, all places above a latitude of 66.5 degrees north are now in darkness, while locations below a latitude of 66.5 degrees south receive 24 hours of daylight.

### Public Events for the next month:

Monthly public stargazing at the Trek Center on Friday, Dec. 12 starting at 7:30 p.m. Last stargazing for the year, so check us out if you haven't and celebrate our fourth anniversary of the RASC Calgary at the Trek Center with cake and refreshments. Short indoor presentation on "Christmas in the sky" followed by stargazing through the 11-inch Celestron Telescope. Treats and refreshments provided free of charge and

all are welcome. Experts are on hand the second Friday of the month at 7:30 p.m. to explain the heavens, teach scoping skills and help develop your knowledge of the sky. For further information, contact the Trek Center at 403-485-2994. The website [www.vulcantourism.com](http://www.vulcantourism.com) will be updated regularly.

Merry Christmas and thanks for reading all year!

*Neel Roberts is a member of the Calgary chapter of the Royal Astronomical Society of Canada-the nation's leading astronomy club founded in 1849 with more*



*than 4,000 members and 29 centers across Canada. Neel welcomes your questions and comments at 403-560-6574 or e-mail: [Neel\\_Roberts@ptccanada.com](mailto:Neel_Roberts@ptccanada.com). The members meet the second Friday at the Trek Center in Vulcan monthly and you can check them out at <http://calgary.rasc.ca/vulcan2015.htm>.*



Photos by Neel Roberts

**Simon Ducatel of Vulcan peers through the 11-inch scope during a frigid Friday night. At left, Roland Dechesne explains the Christmas story and how the Magi of the Bible fits in with astronomy.**