

Fall meteor shower mania

The Christmas Spirit is still a bit away, but the heavens will warm you up as the winter chill sets in. Historically, the Leonids meteor shower has produced some of the greatest celestial storms in history, with rates as high as many thousands of meteors per hour.

These storms sometimes recur in cycles of 33-34 years. Most years, the Lion whimpers rather than roars, producing a maximum of perhaps 10-15 meteors per hour. Like the October Orionids, the Leonids ordinarily pick up steam after midnight and display the greatest meteor numbers just before dawn. This year, however, the last quarter moon will be shining near the radiant point of the shower in the constellation Leo. The unwelcome presence of the moon is sure to dampen this year's



Neel Roberts
The Sky's the Limit

Leonid display. The Northern Taurids is a more mediocre shower but longer lasting one (Oct. 12 - Dec. 2) and the peak number is forecast at about seven meteors per hour.

Typically, you see the maximum numbers at around midnight to 1 a.m., when Taurus the Bull moves nearly overhead.

This year, the bright waning gibbous moon shines right in front of the constellation Taurus, making 2011 an unfavourable year for watching these rather slow-moving but sometimes bright fireballs.

Sky watch for the next month

On Sunday, you'll get that hour of sleep back while the moon enters into its 11th day waxing.

A partial solar eclipse will occur at 11 p.m. with a magnitude of .905 near the coast of Antarctica at latitude $-68^{\circ} 34.1'$, longitude $+82^{\circ} 24'$ on Nov. 24. You can go to NASA's website and watch it live.

The Leonid meteor shower peaks Nov. 17 after night fall until dawn looking towards the constellation of Leo. Originating from the comet 55P/Tempel-Tuttle, it should produce meteors at the rate of 15 per hour.

It's a rare month to have two meteor showers in a row but on Nov. 11 and 12, look towards the constellation of Taurus for a meteor shower. You should see about seven meteors per hour. The meteors are also known

as "Halloween fireballs" because they are usually more prominent around that time.

Public events for the next month

On Dec. 10 starting at 5 a.m. (yes, that's in the early morning that Saturday) come and see a rare total lunar eclipse. It will actually set as the sun rises in the morning in an eclipsed state. Treats and refreshments are provided free of charge, and all are welcome. For further information, contact the Vulcan Tourism and Trek Station at 403-485-2994 or go to www.vulcantourism.com.

Neel Roberts is a member of the Calgary chapter of the Royal Astronomical Society of Canada. Neel welcomes your questions and comments at 403-485-2683 and Neel_Roberts@ptccanada.com.