

Space quakes “supersize” the Northern Lights

For those of us who have seen the northern lights, I don't have to tell you how magnificent they are, especially at this time of the year. Also known as the aurora borealis, Canadians have a privileged view of this space phenomena that many overseas tourists will pay big bucks to see. But can it get better? Recently, researchers using NASA's fleet of five THEMIS spacecraft have discovered a form of space weather that packs the punch of an earthquake and plays a key role in boosting the normal sparking bright lights. Better known as “space quakes,” an earthquake in the Earth's magnetic field, these enhanced surges give a beautiful enlargement to the natural luminosity displayed in the sky.

In the spring, sky gazers east of Edmonton were fortunate enough to witness one on May 28. “It looked like it was raining auroras,” reported photographer Zoltan Kenwell. “Blues, purples, and greens were all over the place,” he explained in awe in the www.spaceweather.com



Neel Roberts
The Sky's the Limit

newsletter. Check them out at <http://infocusimagery.com/2011/05/30/raining-auroras/>.

In fact, he has a whopping 4,000-plus photos on his website, <http://photos.infocusimagery.com/f1010409540>, of the aurora borealis, so he's seen it enough times to know when it's spectacular.

Can you catch one yourself? Of course you can — take that one-in-a-million chance that it'll happen the night you are out for a stroll, or you can just simply do what he does. Believe it or not, there's a service you can sign up for, for a fee of \$5 per month, in exchange for which you will receive a phone call when it's likely that one is over you. Check out <http://spaceweather-phone.com/> for details!

The Cree people called

the northern lights the “Dance of the Spirits,” but no matter what your background is, you can't help but give credence to the divine significance behind this majestic display.

Sky watch

After supper, at 7:30 p.m., on Sept. 12, in the east watch the legendary harvest moon rise. In the days before electricity, farmers counted on the lamp of the harvest moon to gather their crops, and even in today's harvest, it's a bonus considering it stays up all night.

The Fall Equinox officially arrives Sept. 23 at 2:05 a.m.

The Zodiacal Light is a faint, roughly triangular, whitish glow seen in the night sky extended up from the vicinity of the sun along the ecliptic or zodiac. It was discovered by the astronomer Giovanni Domenico Cassini in 1683 and later explained by Nicolas Fatio de Duillier in 1684. It's trying to find, but the best time is from Sept. 25 for two weeks before dawn, in the northeast.

On Sept. 29, look west at sunset at about 7:30

p.m. and see Venus and Saturn between the sun and moon on the way down for the evening.

Public events

The Alberta Star Party, hosted by the Royal Astronomical Society of Canada-Calgary, takes place in the Starland Recreation Area Campground near Drumheller Sept. 23-25. Camping fee is \$15 per night, and all are welcome. For further information, contact David Brown at 403-274-6723 or AlbertaStarParty@shaw.ca.

Monthly public stargazing at the Vulcan Tourism and Trek Station is back Sept. 12 at 7 p.m. Through the telescope, we'll catch the harvest moon rising at 7:30 p.m. Our indoor presentation is called the “Star Trek Observing List,” which shows you all the places the crew visited, like the Andromeda Galaxy. Afterwards, we'll show you the real thing outside, so don't miss it. Treats and refreshments are provided free of charge, and all are welcome. For further information, contact Vulcan Tourism at 403-485-2994.