

Sudbury Astronomy Club



Friday Feb. 3, 2012

Time 7:30 pm

Agenda:

1. "**AGM** Annual General Meeting"
 2. "**Position of the Planets in the Solar System**" by Wilf Meyer.
 3. "**Dome Presentation** of the sky" by Robert Pothier.
 4. Writing a book on the "**History of the Club**" presented by Jorge Virchez and Julien Dompierre.
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Reminder

Dan Madden (Treasurer) again will be bringing to the meeting this Friday the **2012 RASC Observer's Calendar** for paid members and sponsors and the **2012 Observer's Handbook**. The Observer's Handbook costs \$20.00 each. Note: This Observer's Handbook includes Free PC Planetarium software. If you ordered the Handbook please bring your money for payment. Thank you. If the Calendars and Handbooks are not picked up at the February meeting Dan will bring them again to the March meeting. After March if you haven't picked up the Calendar or Handbook you will have to pick them up at Dan's residence.

Reminder: The Loaner Scope is available to any member of the club.

Sudbury Astronomy Club meeting - 3rd February 2012

Planet Positions

Sun

- In Capricornus

Mercury

- Superior conjunction on the 7th, then reappears in the western evening sky; steep evening ecliptic; favourable viewing late February and into March

Venus

- Western evening sky; 39 degrees from Sun; 1.1 Au from Earth; visible for four hours after sunset

Mars

- In Leo; 142 degrees from Sun; 0.8 AU from Earth; rises mid-evening

Jupiter

- In Aries; western evening sky; 75 degrees from Sun; 5.03 AU from Earth; visible till about midnight

Saturn

- In Virgo; near Spica; rises late-evening; 108 degrees from Sun; 9.45 AU from Earth

Uranus

- In Pisces, 45 degrees from Sun, 21 AU from Earth

Moon

- Full Moon February 7th, known to the Algonquin tribes as Snow Moon, or Hunger Moon, or Famine Moon
- Next New Moon February 21st

Looking Ahead

- Venus - Uranus conjunction on the 9th; 0.3 degree separation; visible in the southwestern evening sky shortly after sunset
- Spica - Moon - Saturn conjunction in Virgo on the 12th; gibbous moon; visible in southeastern morning sky before sunrise
- Moon - Jupiter - Venus conjunctions on February 25th and 26th in the southwestern evening sky.
- Mars opposition on March 3rd; Mars - Earth separation 0.8 Au (Mars-Earth oppositions repeat every 2 yrs and 50 days)
- Venus - Jupiter approach; conjunction March 11-15
- Venus inferior conjunction and transit on June 5th
- Valentine's Day February 14th

Prepared by: Wilf Meyer

2nd February 2012

Comet Neat



Comet **C/2002 V1 (NEAT)** is a non-periodic [comet](#) that appeared in November 2002. The comet peaked with an [apparent magnitude](#) of approximately -0.5 , making it the 8th brightest comet seen since 1935. It was seen by [SOHO](#) in February 2003. At perihelion the comet was only 0.099258 [AU](#) (14,848,800 [km](#); 9,226,600 [mi](#)) from the Sun. (Slight controversy arose when the comet failed to break up when it approached the sun, as expected by some scientists if it were a small comet.)

The comet was hit by a [coronal mass ejection](#) during its pass near the sun; some rumoured it had "disturbed" the sun, but scientists dismissed this notion. The [scientific consensus](#) is that there is no link between comets and CMEs that can not be explained through simple [coincidence](#),^[7] and there were 56 CMEs in February 2003. On February 18, 2003, comet C/2002 V1 (NEAT) passed 5.7 degrees from the Sun. C/2002 V1 (NEAT) appeared impressive as viewed by the [Solar and Heliospheric Observatory](#) (SOHO) as a result of the [forward scattering](#) of light off of the dust in the coma and tail. After the comet left [LASCO](#)'s field of view, on February 20, 2003, an object was seen at the bottom of a single frame. Although technicians dismissed this as a [software bug](#), rumours persisted that the object had been expelled from the sun.

Continued on next page.

The orbit of a long-period comet is properly obtained when the [osculating orbit](#) is computed at an [epoch](#) after leaving the planetary region and is calculated with respect to the [center of mass of the solar system](#). Using [JPL Horizons](#), the barycentric orbital elements for epoch 2020-Jan-01 generate a [semi-major axis](#) of 1,100 AU, an [apoapsis](#) distance of 2,230 AU, and a period of approximately 37,000 years.

Light Pollution

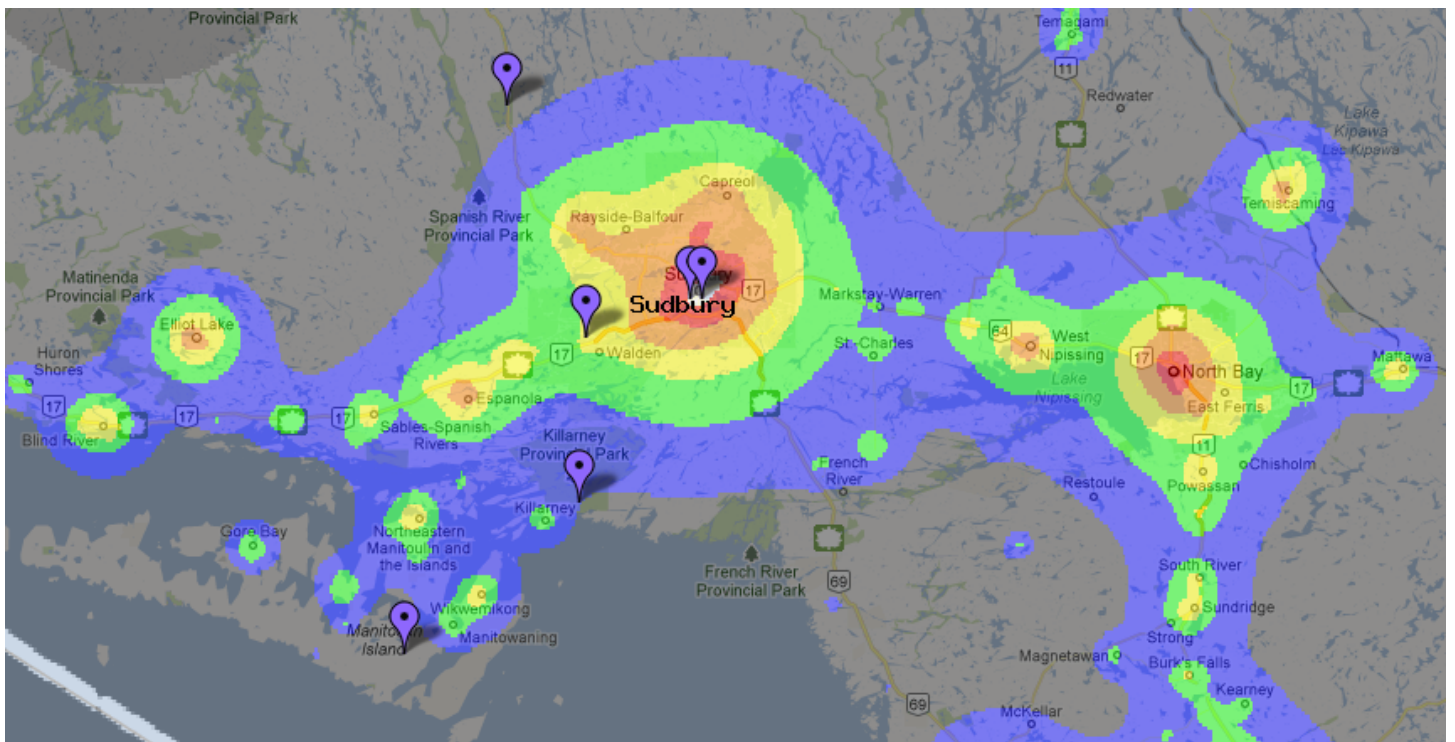
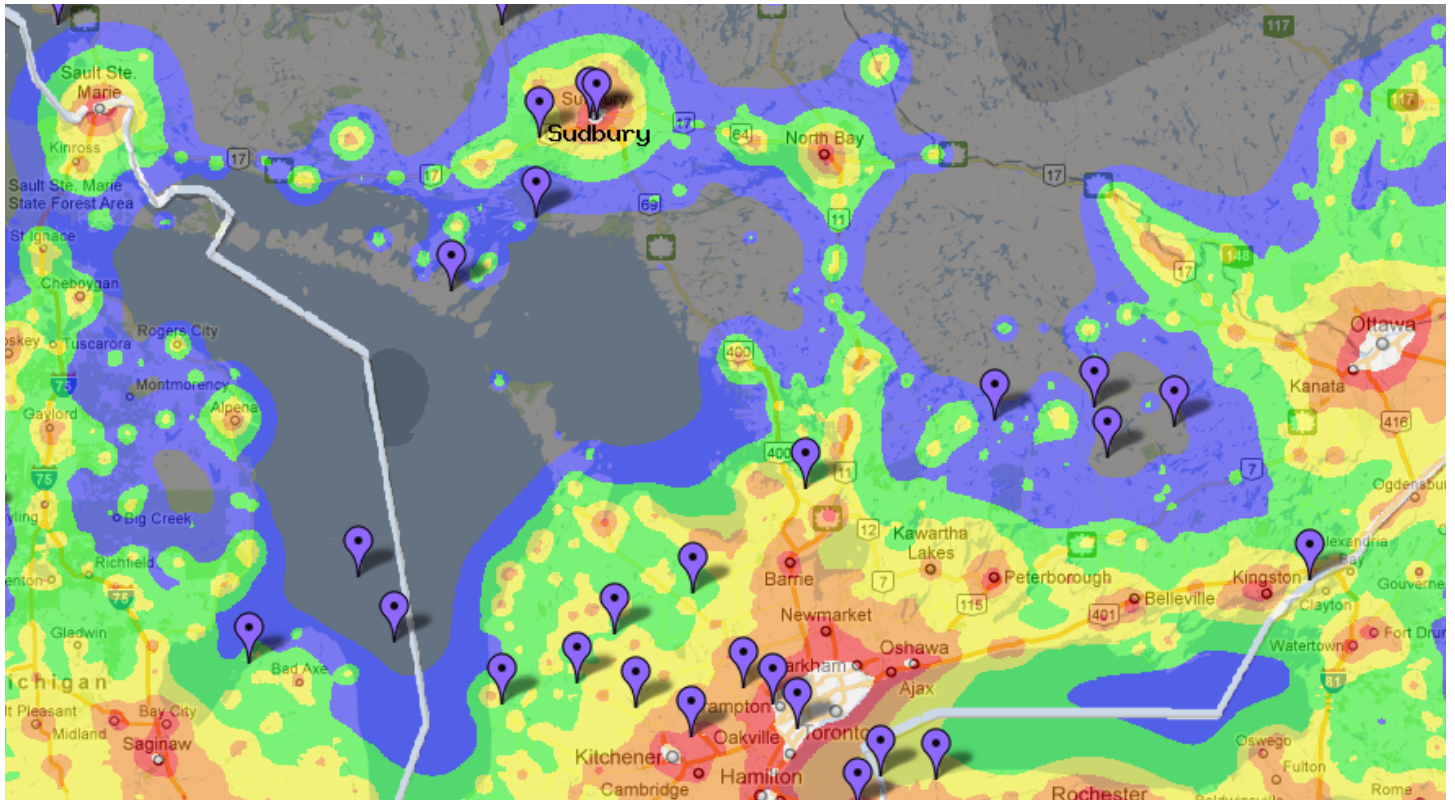
Article submitted by Julien Dompierre

Light pollution is the most important threat for the amateur astronomer. The "Dark Sky Finder" website (http://www.jshine.net/astronomy/dark_sky) shows a very interesting map of the light pollution that overlaps the map of North America provided by Google. It is very helpful in the search of the perfect dark site close to your home.

The first picture (below) is a general view of southern Ontario. The first remark is that there is no salvation for amateur astronomers from Greater Toronto Area. To find a dark sky, they must travel as far as Bruce peninsula, north of Parry Sound or north of Peterborough, Belleville, Kingston in the direction of Algonquin Park.

The second picture (below) shows the surroundings of Sudbury. The sky is better here than in GTA. Generally, it is sufficient to drive half an hour from downtown Sudbury to find a decent dark sky. It is better to go south, east or west, rather than to go north, such that your south horizon will not be blemished by the lights of Sudbury.

On this second picture, six sites are pointed by a purple and black marker. Two are in downtown Sudbury, one in Science North, one in Dynamic Earth. The site west of Sudbury corresponds to the Sudbury Astronomy Club Ken Odaisky Memorial Observatory at Camp Wassakwa and the one north of Sudbury is at the Halfway Lake Provincial Park. Finally, there are two markers south of Sudbury, one for the Killarney Provincial Park Observatory and one on Manitoulin Island at the Gordon's Park Eco Resort, which is a designated RASC dark sky preserve.



STARGAZER STEVE

WHO IS STARGAZER STEVE!!
and What does he do?

Steve Dodson is a fellow amateur astronomer, who as a 2nd grader saved his allowance for a Telescope, and made his first 6-inch scope in grade 8.

As **Stargazer Steve**, he makes Telescopes that are designed to give more observing satisfaction to beginners and experts alike, by focusing on design for performance.

In 1981, already an amateur astronomer with decades of observing experience, Steve built the largest mobile Telescope in Canada, and brought it to the Star Party that launched the Sudbury Astronomy Club.

In the 1990's Steve pioneered high-performance low-cost Reflecting Telescope Kits.

Steve has participated in the building of over 4000 Telescopes, including solo projects and activities with children, Astronomy Clubs and people of all ages.


The International Astronomical Union has named **Asteroid #13822**
“**Stevedodson**”.

Over **2000 Stargazer Steve Telescopes** have been shipped throughout Canada, the US, and around the World.

More Info at <http://stargazer.isys.ca>
<http://neo.jpl.nasa.gov/orbits/> (Put
13822 in the blue box)




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