

RASC victoria council

*this month
monday nights*

President/Website Editor/Email Lists

Joe Carr
president@victoria.rasc.ca

First Vice President/ Telescopes / Schools

Sid Sidhu
vp@victoria.rasc.ca

Second Vice President

John McDonald
vp2@victoria.rasc.ca

Treasurer

Joe Carr
treasurer@victoria.rasc.ca

Secretary and Recorder

Li-Ann Skibo
secretary@victoria.rasc.ca

Librarian

Charles Banville
librarian@victoria.rasc.ca

Skynews Editor/ Past President

Scott Mair
scottmair@gmail.com

National Representative

Chris Gainor
nationalrep@victoria.rasc.ca

Members at Large

Bill Almond, Sandy Barta, Dave Bennett, Jim Hesser, David Lee, Ed Maxfield, Colin Scarfe, Malcolm Scrimger, Dirk Yzenbrand

New Member Liaison

Bruno Quennville
newmembers@victoria.rasc.ca

Astronomy Cafe

Fairfield Community Centre,
1330 Fairfield, Victoria
7:30-11pm

Call John at 250.480.0928 for directions and information. New comers are especially welcome. Come and enjoy!

**ASTRONOMY
CAFÉ**



second wednesday of the month

Monthly Meeting

7:30 PM, Elliott Lecture Theatre,
Rm 060, UVic.

as sky and interest dictate

New Observers Group

Hosted by Sid Sidhu.
1642 Davies Road, Highlands.
Call 391-0540 for information and directions.

by email

Observer/CU Volunteers/ Members email lists

Contact Joe Carr to subscribe to these email lists for important, timely, member-related news.

skynews



this month

Life at the Top: Tales from telescope mountains

**by Dr. Jasper Wall,
UBC Physics and Astronomy**

November 15, 2008, 8:30 PM, Gorge Vale Golf Club, 1005 Craigflower Road, Victoria, BC

What's it really like at major observatories? I have been to many, seen many telescope mountains, and have lived the mountain life in more than one guise. I'll try to convey the flavour of a few of these places, relating some of the bizarre experiences along the way. These stories will include a brief account of my role in Apollo 11 and 12; I was part of the team at the Parkes telescope which was prime station for the moon landing, and I was in the control room when Neil Armstrong stepped onto the moon.

Bio:

Dr. Wall received his Bachelors degree from Queens University in 1963 and his Masters at University of Toronto in 1965. His Doctoral degree was completed at the Australian National University in Canberra in 1970 producing a deep sky survey at 2700 MHz

Over his distinguished career, Dr. Wall has been the Head, Astrophysics, Royal Greenwich Observatory, UK; Director, Isaac Newton Group of Telescopes, La Palma, Spain; Head, Astrophysics, Royal Greenwich Observatory, UK; Director, Royal Greenwich Observatory, UK; Professor, Astrophysics, University of Oxford, UK; and Adjunct Professor, Dept of Physics and Astronomy, UBC.



His research area is observational cosmology focusing on large-scale structure and galaxy evolution. He is particularly interested in the origin and evolution of galaxies, active galactic nuclei, unified models, and statistics in astronomy .

address change? information incorrect

Contact the National Office

Telephone - 416.924.7973 or toll-free in Canada 888.924.RASC

Fax - 416.924.2911

Email - nationaloffice@rasc.ca

Post - RASC, 136 Dupont Street, Toronto, ON M5R 1V2

General enquiries - natonaloffice@rasc.ca

743-6633

**Rocks, Minerals, Crystals
Books, Posters, Globes, Toys
Magnifiers, Microscopes
Binoculars, Telescopes**

Tuesday - Saturday
10am to 5pm

Island Telescope Science Emporium

Mill Bay Center (beside Thrifty Foods)



*Happy Holidays
from
Brian & Joanne*

Centre of the Universe

Beginning November 1st, the Centre will be closed to drop-in visitors. Group visits are available by appointment; please contact us.

We are now taking the opportunity to concentrate on our school programs to provide the best educational services possible to visiting students and teachers. If you are interested in booking a field trip to the observatory for your class, please call us.

Any special events open to the public during the fall and winter season will be announced, so keep an eye open and don't miss out.

School and group visits (10 persons or more) may be arranged at other times; reservation required in advance. To book, please call 250-363-8262 or e-mail us at cu@nrc-cnrc.gc.ca.

The Sky this Month

Nov. 12	Full Moon
Nov. 19	Last Quarter Moon
Nov. 27	New Moon
Nov. 30	Venus and Jupiter together in the sky

In the fall, you will find the Big Dipper fairly low in the sky towards the north. Boötes sets relatively early and will be found close to the horizon. Fall's most dominant constellation, Pegasus the Flying Horse, is visible towards the southeast. To see Pegasus, look for the big square in the sky.

Cygnus the Swan, also known as the Northern Cross, is still high up in the sky. If you can locate Cygnus, you will have also found the Milky Way, as the Swan appears to fly right through the Milky Way.

The Planets This month, Venus is visible in the west just after sunset. Jupiter is quite low in the sky and sets a couple of hours after the sun. Saturn will be seen in the early hours of the morning, with Mercury rising in the east just before sunrise.

The Moon "The Saanich Year" by Earl Claxton tells us that the month of November displays the Moon of the Shaker Leaves. This is the time when the trees shake off their leaves while we feel the wind and coolness approach.

on the cover

Veil Nebula - Wide Field

by John McDonald

I have been itching to try the veil with the modified Canon 350d (Rebel). It was a beautiful evening but not really a veil night as the moon was not far past full and quite bright. Despite the resulting sky glow the nebula shows up nicely.

Details

Location:- Old 16 inch site at the Dominion Observatory, Victoria.

Equipment:- Modified Canon 350D, 300 mm Canon L lens and HEQ5 mount.

Exposure:- 35 - 58s light frames at ISO 800 plus 23 darks and 25 flats.

Processing:- Stacked and digitally developed in Images Plus. Additional enhancement in Photoshop

observers group

RASC Victoria Centre and the NRC have signed a License to Use Land Agreement which gives members of Victoria Centre expanded access to NRC property on Observatory Hill.

If you are a member in good standing of Victoria Centre RASC, consider yourself an "active observer", and wish to take advantage of this opportunity, please send an email to the 1st or 2nd Vice President. More information on this program see: <http://victoria.rasc.ca>

contact us on-line

Web Site

www.victoria.rasc.ca

New Members

newmembers@victoria.rasc.ca

General Inquiries

info@victoria.rasc.ca

The Chemical Weather Report

“Sunny tomorrow with highs in the mid-70s. There’s going to be some carbon monoxide blowing in from forest fires, and all that sunshine is predicted to bring a surge in ground-level ozone by afternoon. Old and young people and anyone with lung conditions are advised to stay indoors between 3 and 5 p.m.”

Whoever heard of a weather report like that?

Get used to it. Weather reports of the future are going to tell you a lot more about the atmosphere than just how warm and rainy it is. In the same way that satellite observations of Earth revolutionized basic weather forecasting in the 1970s and 80s, satellite tracking of air pollution is about to revolutionize the forecasting of air quality. Such forecasts could help people plan around high levels of ground-level ozone—a dangerous lung irritant—just as they now plan around bad storms. “The phrase that people have used is chemical weather forecasting,” says Kevin Bowman of NASA’s Jet Propulsion Laboratory. Bowman is a senior member of the technical staff for the Tropospheric Emission Spectrometer, one of four scientific sensors on NASA’s Aura satellite. Aura and other NASA satellites track pollution in the same way that astronomers know the chemical composition of stars and distant planetary atmospheres: using spectrometry. By breaking the light from a planet or star into its spectrum of colors, scientists can read off the atmosphere’s gases by looking at the “fingerprint” of wavelengths absorbed or emitted by those chemicals. From Earth orbit, pollution-watching satellites use this trick to measure trace gases such as carbon monoxide, nitrogen oxide, and ozone. However, as Bowman explains, “Polar sun-synchronous satellites such as Aura are limited at best to two overpasses per day.” A recent report by the National Research Council recommends putting a pollution-watching satellite into geosynchronous orbit—a special very high-altitude orbit above the equator in which satellites make only one orbit per day, thus seeming to hover over the same

spot on the equator below. There, this new satellite, called GEOCAPE (Geostationary Coastal and Air Pollution Events), would give scientists a continuous eye in the sky, allowing them to predict daily pollution levels just as meteorologists predict storms. “NASA is beginning to investigate what it would take to build an instrument like this,” Bowman says. Such a chemical weather satellite could be in orbit as soon as 2013, according to the NRC report. Weather forecasts might never be the same.

Learn more about the Tropospheric Emission Spectrometer at tes.jpl.nasa.gov. Kids can learn some elementary smog chemistry while making “Gummy Greenhouse Gases” out of gumdrops at spaceplace.nasa.gov/en/kids/tes/gumdrops.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Example of visualization of data from the Tropospheric Emission Spectrometer. These frames are from an animation that steps through transects of the atmosphere profiling vertical ozone and carbon monoxide concentrations, combining all tracks of the Aura satellite during a given two week period.

