



We have our own 'outer space' here on Earth ... This web site presents the games light plays in our atmosphere.

<http://www.sundog.clara.co.uk/atoptics/phenom.htm>

# Skynews



*This Month*

**Dr R. Elizabeth Griffin**

**Modern Treasure-Hunting in Astronomy's Historic Records**

The talk will outline the development of stellar physics ("astrophysics"), photometry and astrometry over the past 120 years, explaining how and why astronomers kept their (photographic) records, and describing further uses to which the same material could be (and in some cases has been) put. It will provide more details of my own research, which straddles both the photographic and the digital eras, and will use that to illustrate some of the triumphs of archive mining—but will not altogether gloss over the attendant trials and tribulations.

Dr. Griffin did her undergraduate studies at University of London with a degree in Astronomy (1963) and completed her Ph.D at Cambridge University (1966) on "The Atmosphere of Arcturus". She has done independent research in stellar spectroscopy at Cambridge until 1995, but carrying out all observing work overseas—mostly at Mount Wilson, then at Calar Alto (Spain), and latterly at the DAO. Dr. Griffin moved to Oxford in 1995 and relocated to Victoria last Fall. Dr. Griffin authored nearly 100 papers on projects involving stellar spectroscopy, and some on data archiving (and even a few on Women in Science topics).

Dr. Griffin is currently Chair of two IAU Working Groups involving (a) spectroscopic archives and (b) rescuing information from photographic plates.

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- Email Lists:** [rascvic-list@victoria.rasc.ca](mailto:rascvic-list@victoria.rasc.ca)
- Skynews:** <http://victoria.rasc.ca/resources/email/skynews-list.htm>
- Victoria Council members:**
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**RASC Victoria Council**

**This Month**

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Ed Maxfield, Frank Ogonoski,  
Blair Pellatt, Bruno  
Quenneville, Colin Scarfe

New Members Liason:  
Sandy Barta

On  
**CLEAR**  
Fridays

**Astronomy Cafe**

At Sandy Barta's, 2949 Michelson Road,  
Sooke, BC  
Call 642-0205 for more information or  
directions.  
And you **WILL** need directions!  
Newcomers are most welcome.

Come and enjoy!

**Note:**

**The Café will no longer  
be every Friday night.**



**Please:**

**Call or check our website to find out  
if it's likely to be clear.**

Oct  
24

**New Observer's Group  
At Sid Sidhu's:**

1642 Davies Road (off Millstream Lake  
Road) at 8:00 PM.  
Call 391-0540 for more information or  
directions

Nov  
22

**November Meeting**

The November Meeting is our Annual  
Dinner. See details in this Newsletter

Oct  
15

**Back by Popular Demand  
Every 3<sup>rd</sup> Wednesday  
Astro Imaging at  
Bill Almond's**

354 Benhomer Drive  
478-6718

**Yes, We post important,  
timely, member-related  
news to our email list.**

Online information about the RASCVic  
and Skynews email lists:  
<http://victoria.rasc.ca/resources/email/>

*Future Meetings*

**Annual Meeting—November 22**

We don't have our regular meeting in November, so don't come to our meeting room at Uvic.

We have our Annual Dinner Meeting on Saturday November 22 at the Gorge Vale Golf Club.

Please contact our Treasurer for more information and DO let her know if you're coming.

*Address Change? Information Incorrect?*

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*President's Message*

A successful RASC Victoria Star Party on the third weekend of September brought down the curtain on a memorable summer for all of us in the Victoria Centre.

The clouds that came with the turn to fall weather earlier in the month parted on Friday September 19. Those of us who brought out our telescopes and binoculars to the Victoria Fish and Game Association were rewarded with clear and steady skies that were available for viewing immediately upon completion of the evening talks and prize draws.

On Friday evening, Julie Bolduc-Duval gave us an excellent presentation on the Gemini Telescopes, and the next day, John Vincent told us about his successful eclipse pursuit last December in Australia, Sid Sidhu and Lauri Roche gave us their school astronomy presentation, and David Lee spoke on astronomical imaging.

The equipment on hand both evenings ran the gamut from binoculars and small scopes to David Luttman's 20-inch Dobsonian. Although my ETX gave me excellent performance, I spent much of the two observing sessions wandering around to see what others had on view.

By the time of the Star Party, Mars had become old hat, but I did get a couple of great glimpses of the features on Mars' surface and its shrunken polar cap to close off an unforgettable summer of Mars observing. Joe Carr gave me a rare glimpse of Uranus and Neptune, which weren't far in the sky from the Red Planet.

Most of us focused on faint fuzzies, such as the Ring Nebula, M13, the Dumbbell and even the Little Dumbbell. Some of our more experienced observers like David Luttman, Bill Weir and Guy Walton were finding faint and little-known NGC objects to add to their observing logs.

Unfortunately, the dew of September put a literal damper on each evening's activities, but not before a lot of observing had been done. During the days, we enjoyed great food and better companionship, plus some solar observing.

*Continued on page 3*

The deadline for the next issue of Skynews is

**October 25 2003**

Get your Skynews early and in colour. Tell Laura, our Treasurer, that you get Skynews on line and we won't mail you a copy.

*President's Message Continued*

Of course, none of this would have been possible without the efforts of Rich Willis, who organized the event, and many other volunteers, notably Frank Ogonoski. Now we are moving into our fall season, which means monthly meetings, the November banquet and other activities that are organized by volunteers in the Victoria Centre Council.

It's time to form a new council for the coming year. If you want to help us make sure that 2004 has many memorable activities and services for all of us in the Victoria Centre, please consider serving on council. I'd be delighted to hear from you. And if I don't hear from you, don't be surprised if you hear from me!

*Chris Gainor*

*Newton Ball Award*

Our banquet is coming up on November 22, and it's time to think about the recipient of this year's Newton Ball award.

Members' names nominated to Council for the Newton Ball Award shall meet the following conditions:

**Term of Membership**

The nominated member shall have been a continuous member of the RASC for a minimum of five years.

**Definition of Service**

"Service" means any type of activity by a member that has benefited all members of the Victoria Centre in general. Personal achievements in the field of astronomy shall not constitute eligibility for this Award.

**Recognition of Past Service**

Members who are not currently active in the Centre due to age, infirmity or some other reason, shall be eligible for nomination in recognition of past service to the Centre membership which has formerly gone unrecognized, with the proviso that the nominated person shall still be a member in good standing in the RASC.

In the year 2001 the Council of the Victoria Centre, RASC, established this award to recognize the achievements of Centre members who have given exemplary service to the Centre's objectives and its membership. The 2001 winner was Jim Hesser and the 2002 winner was Sid Sidhu.

*Continued on page 4*

*How Do I?*



I started a website that documents successful webcam settings for taking pictures of the planet Mars: <http://www.webcam-astrophotography.com> Learn what works and what does not when taking pictures of Mars.

Some of the questions it answers are:

- How many frames should be stacked from an astrophotography AVI?
- How many minutes long can my webcam AVI be before blurring occurs?
- How do dust donuts affect image quality?
- What percentage gamma should I use for my webcam?

Don't do webcam astrophotography? You might still get value from this website, just by admiring the stunning beauty of Mars.

*Alwyn Botha*

*More Star Party Pictures*



*Star Party pictures provided by David Lee and Chris Gainor*



*Moon Image by David Lee*

*Newton Ball Award Continued*

**Status of Nominees**

Any person nominated for the Service Award shall be a member in good standing in the RASC.

**Acceptance of Nominations**

At a regular meeting held in either September or October, Council will accept written nominations from the membership. All nominations shall be taken into consideration by Council when deciding who shall be the recipient of the Award.

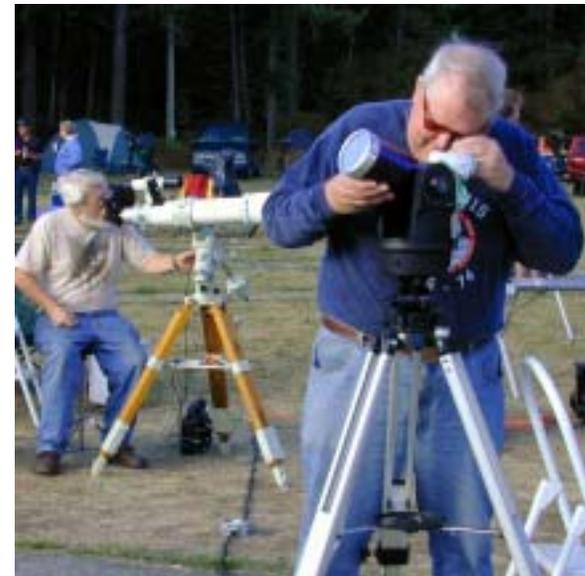
**Judicial Authority of Council**

A majority vote of Council will decide the winner with the President's vote breaking a tie. The Council may decide, at its sole discretion, not to make an award in any one year if it is judged by Council that none of the nominations qualify.

**Term of Re-eligibility**

Any person presented with the Award shall not be eligible to be awarded it again until five years after the anniversary of the previous Award.

*Chris Gainor*



*The Space Place*



**(un)Fasten your Seatbelts**

The "fasten seatbelts" light turns off, and you get up to ask the stewardess for a pillow; it's going to be a long flight. Only a kilometre ahead in the cloudless sky, a downward draft of sheering winds looms. When the plane hits these winds, the "turbulence" will shake the cabin violently and you could be seriously hurt.

You don't know about those winds, of course, and neither does the pilot. Today's weather satellites can't see winds in clear skies: they rely on the motion of clouds to infer which way the winds are blowing.

"Believe it or not, their best indication of wind sheer right now is warnings from aircraft that have gone through it ahead of them," says Bill Smith of NASA's Langley Research Center.

But a new satellite technology being pioneered by NASA and NOAA could improve this shaky situation. It's called GIFTS, short for Geosynchronous Imaging Fourier Transform Spectrometer. GIFTS is an infra-red sensor that can detect winds in cloudless skies by watching the motions of atmospheric water vapor. Water vapor is mostly invisible to the human eye, but it reveals itself to GIFTS by the infra-red radiation it absorbs.

Smith is the lead scientist for EO-3, a satellite designed to test out this new technology. Slated for launch in 2005 or 2006, EO-3 will carry GIFTS to Earth orbit where it can produce 3-dimensional movies of winds in the atmosphere below.

These wind data will not only improve safety, but also help the airlines save money. Knowing the winds along a flight route allows airlines to adjust the plane's fuel load accordingly, thus reducing the weight that the engines must lift. Saved fuel means saved money and less pollution.

GIFTS can help planes avoid another potentially lethal problem, too: Ice forming on their wings. If a cloud contains "supercooled" water droplets whose temperature is below freezing, those droplets will form ice on the wings of planes that pass through it. By looking at about 1700 different frequencies of the light coming from clouds, GIFTS can measure the temperature of the cloud top and

*Continued on page 6*

*Star party Pictures*



*The Night sky*

**November 2 to 8**

We get to enjoy another totally eclipsed Moonrise at sunset on the 8<sup>th</sup>. Here's your chance to take a stab at estimating the Moon's brightness. Is this one deeper than the last one? Check out page 140 of the RASC 2003 Observer's Guide and give your estimate a scientific edge.

I'm looking forward to the flood of snap shots ...

**November 9 to 15**

You absolutely must make the opportunity to see Saturn! We have a terrific view of the south face of Saturn's rings to they are now at their widest since we saw the rings edge-on in 1995. The wide-open rings also make Saturn very bright. Here's another opportunity to dull a few pencil points as you observe this planet. Can you detect detail in the rings?

**November 16 to 22**

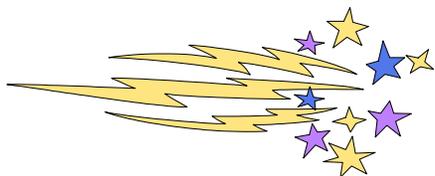
Leonids peak on the 18. This year's Leonids won't be anything like the fireworks of past years, but there's not reason why you shouldn't get out again and enjoy! The Observer's Handbook predicts 15 per hour—how many DO you see?

Cloudy? Just too cold to get out and chance a few bright sparks? Check out Page 224 of the Handbook. Philip Gebhardt tells you how to detect meteors with your FM radio telescope. He's also got a few links to web pages if this comfy way of observing appeals to you.

**November 23 to 29**

Saturn keeps getting better and better (read that as bigger and bigger) as it gears up for its opposition on New Year's Eve. Keep sketching.

Maybe you've noticed Venus in the still-bright sky. Extend your right arm and make a fist. Place Venus to the left side of your fist and, rotating your fist about Venus, find Mercury to the lower right of Venus off the right-hand side of your fist. You'll make your job easier if you can envision a line from Venus to the now-set Sun. You've just traced the ecliptic, or the Solar System plane, in the sky. Of course, you've made sketches showing Mercury's foray into the dawn.



*The Space Place Continued*

determine whether it contains water droplets that could cause aircraft icing. With information from GIFTS in hand, pilots can simply avoid clouds that appear dangerous.

Once EO-3 demonstrates the accuracy of GIFTS, airlines will be able to capitalize on this potential to make flying a cheaper and safer experience.

Learn more about the GIFTS instrument and other advanced technologies being tested on the EO-3 mission at [nmp.jpl.nasa.gov/eo3](http://nmp.jpl.nasa.gov/eo3). Kids can go to The Space Place to play a data compression game related to EO-3 at:

[spaceplace.nasa.gov/eo3\\_compression.htm](http://spaceplace.nasa.gov/eo3_compression.htm)



EO-3, carrying the GIFTS instrument, will be in a geosynchronous orbit for extended monitoring of large regions of our planet and enabling observation of weather patterns at higher resolution than possible with existing geostationary satellites.

*by Patrick L. Barry and Dr. Tony Phillips*

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

*Star Party Report*

**Greetings Everyone**

Well the [2003 RASCALs Star Party](#) was a success! We had over 100 members and public attending and we had a total of 49 Telescopes on the field! This is encouraging! I had hoped for more but it was better than last year's attendance. Our expenses were down, so we will actually make some money to put back in for next year's party which I promise will be *much bigger and better!*

We bid a fond farewell to Scott Mair and Julie Buldac-Duval of the DAO who were both in attendance on Friday night! Julie gave us a wonderful talk on the Gemini North and South Telescopes, as well as an insight on the Altair Project which was Canada's main contribution to these telescopes. We awarded each of them with the first two newly-designed RASC Victoria Centre Golf shirts, giving them our thanks for the support and generosity they have shown our Club! They will be sorely missed by us and the people up on the Hill. We wish them all the best that life has to offer in their new endeavours!

A BIG thank you to Bruno Quenneville, who in four days had the logo designed and 4 shirts made so we could have them for the presentation! If anyone is interested in having our club logo on a tshirt, golf shirt, hat or any other piece of clothing, just go down to *The Dogs Ear* in the Mayfair mall and they will do it for a very reasonable amount. \$23.00 for a nice golf shirt (that includes the shirt too!)

Friday night was spectacular except for the dew, which didn't bother me much but shut down a few telescopes a little early. Brenda's Kitchen was on hand to feed us some of her great food (as usual) it's so simple and reasonable to have her and her great crew *aka: her family*, do the cooking and the clean up for you! *Thanks again Brenda!*

Brian and Joanne Robilliard of [Island Eyepiece](#) had their booth setup and were as helpful and dedicated to our club as we have come to depend on over the last few years. Where else could you have the opportunity to try out so much new gear before you buy, and get the great deals that Brian and Joanne afford to our club members. They also contributed so many great door prizes including a pair of \$25.00 gift certificates, a pair of 10x50 Binoculars and a pair of Celestron 8x35 Binoculars with built in Digital Camera! *Wow guys that was fantastic.*

This was a big year for [Celestron](#) with their come back from the brink! This was also the first year that they have donated a door prize, and it was a terrific one! They donated a NexStar GT80, (80 mm Computerized GoTo Refractor with Tripod) which was won by Darryl Whitworth and his son on the Friday night draw. Congratulations and a big thank you to Celestron!

*Continued on page 8*

*Star Party Report Continued*

Not to be outdone, [Meade](#) has come through for us for the third year in a row with a donation of a Meade ETX 105 complete with Auto Star Computer and a deluxe field Tripod (Valued at \$1200.00 Can) which was won by a soon to be new RASC member Kathryn Farr! *Congratulations Kathryn and a big thank you to Meade for their continued support.*

Saturday was a busy day! We had lots of Scopes set up with Solar filters as well as Franks 8" set up with Pearson College's H-Alpha Filter. At 2pm Sid Sidhu and Lauri Roche gave us an updated version of their school presentation. It was very informative, as well as letting us see what the kids see when Sid tours the schools. Thanks guys, it was great!

At 3pm John Vincent gave a great presentation of his trip to Australia last December to view the total Eclipse of the Sun! It was a very interesting and informative talk with some fabulous photos! I know how hard John worked on this - his first ever presentation (he had to learn a computer program to put on his show). It was a job well done. Thanks John!

At 7pm David Lee gave a very informative talk on the differences between the main types of Astrophotography, I must say that I learned a lot from his presentation. Thanks as always David!

Our Telescope awards were handed out after David's presentation. Our winners were as follows:

For Merit	Don Van Akker
For Innovation	Alex Schmid
For Excellence	Guy Walton

Thanks to our judges: Frank Ogonoski, Ed Maxfield, and Chuck Fitness; to David Lee for the doing the Certificates; and to Bruno Quenneville for having the Award Plaques made.

Well, as advertised the weather was perfect all weekend and the seeing was fantastic, especially on Saturday Night when the dew was not as bad as Friday night.

I would like to personally thank everyone who attended this years Star Party. To those of you who didn't make it, you missed out on a great time! I would also like to thank everyone who helped to put on this Party with special thanks to Frank, Bruno and John Love.

Well that's it for 2003! Hope to see all of you and more next year! Stay tuned!

*Rich Willis*  
VP RASC (Victoria) & Star Party Co-Coordinator