

# Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

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March  
2006

## Saskatoon's Fifteenth Messier Certificate Coming Up

*Tenho Tuomi and Garry Stone checking the log book of Mike Clancy for an application for the fifteenth Messier Certificate for a member of the Saskatoon Centre. Way to go! Soon we could have more for there are four who have less than twenty Messier objects to find for a certificate.*



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Saskatoon Centre  
The Royal Astronomical Society of Canada  
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[www.usask.ca/psychology/sarty/rasc](http://www.usask.ca/psychology/sarty/rasc)  
E-MAIL: [rmwaldron@shaw.ca](mailto:rmwaldron@shaw.ca)  
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# MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: \$65.00 /year   Youth: \$34.25 /year   Lifetime: \$1100

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the membership coordinator, Mike Clancy, or renew through the National Office and let Mike know that you did!

## Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook
- The Journal of the RASC (bimonthly)
- SkyNews Magazine (bimonthly)

- use of the Centre library
- discounts to Sky & Telescope Magazine\*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

*\* New subscription or renewal of Sky & Telescope? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 - 4th Street East, Saskatoon, SK S7H 1H8, or fax 306-659-2170.*

## SASKATOON CENTRE'S MAIN OFFICERS:

**President** – Ron Waldron, 382-9428

**Secretary** – Al Hartridge, 373-0034

**Vice-President** – Garry Stone, 857-4707

**Treasurer** – Norma Jensen, 244-7360



## BOTTLE DRIVE & CANADIAN TIRE \$ by Darrell Chatfield

Thanks to your donations we have collected \$100.00 in Canadian Tire Money! Please keep bringing your bottles and Canadian Tire Money to the General meetings. I will collect them after the meeting concludes. If you cannot make it to the meeting but would like to contribute, please call me at 374-9278.

LIGHT POLLUTION  
ABATEMENT  
WEBSITE AT:  
[www.ras.sk.ca/lpc/lpc.htm](http://www.ras.sk.ca/lpc/lpc.htm)

## About this Newsletter...

**Newsletter Editors** – Tenho Tuomi, Ken Maher **Copy & Collate**– Rick Huziak **Labels & Temps** – Mike Clancy **Web Posting** – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science articles. Articles can be sent by mail in any format to the Centre's mailbox. Submitted materials can be returned upon request. Submissions may also be sent by e-mail – preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached .JPGs (.GIFs also accepted). Send e-mail submissions to the editor at <tuomi@sasktel.net>. Please send articles in "generic" formats with simple formatting – one tab at the beginning of paragraphs, one space after commas and periods. A separate by-mail subscription to Saskatoon Skies is available for \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise stated), but source credit is requested. DEADLINE for submissions is the 26th of each month. Saskatoon Skies accepts commercial advertising. Please call the editor for rates. Members can advertise non-commercial items free of charge.

## U OF S OBSERVATORY

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

## Observatory Hours:

January-February	7:30-9:30 pm
March	8:30-10:30 pm
April	9:30-11:30 pm
May-July	10:00-11:30 pm
August	9:30-11:30 pm
September	8:30-10:30 pm
October-December	7:30-9:30 pm

# RASC CALENDAR OF EVENTS

Mar. 20	<b>RASC Executive Meeting -- 6:30 p.m., 175 Physics, U of S</b>	Ron Waldron	382-9428
Mar. 20	<b>RASC General Meeting -- 7:30 p.m., 175 Physics, U of S</b>	Ron Waldron	382-9428
Mar. 24/25	<b>Messier Marathon - at dusk, Sleaford</b>	Larry Scott	934-5801
Apr. 17	<b>RASC Executive Meeting -- 6:30 p.m., 175 Physics, U of S</b>	Ron Waldron	382-9428
Apr. 17	<b>RASC General Meeting -- 7:30 p.m., 175 Physics, U of S</b>	Ron Waldron	382-9428
Apr. 21	<b>Observers Group - 9:00 p.m., Sleaford Observatory</b>	Larry Scott	934-5801
Apr. 21-23	<b>George Moore's Astronomy Workshop</b> – Edmonton Centre	Sherry Campbell	(403) 433-1516
May 5	<b>Astronomy Day</b> , Lakewood Civic Centre	Larry Scott	934-5801
May 6	<b>Astronomy Day</b> , Lawson Height's Mall & Beaver Creek	Larry Scott	934-5801
May 6	<b>Astronomy Day</b> , Gateway Mall & Prime Ministers' Park (PA)	Ken Maher	763-8493
May 18-22	<b>2006 RASC General Assembly</b> , Ottawa	--	--
May 19	<b>Observers Group</b> - 10:00 p.m., Sleaford Observatory	Larry Scott	934-5801
Aug. 24-27	<b>Saskatchewan Summer Star Party</b> - Cypress Hills Inter-provincial Park	Barb Wright	249-1990



## BOOKS FOR SALE

by Bruce Brandell, Sales Coordinator

All items will be available at our next meeting or call 249-1119, or email [bruce\\_brandell@yahoo.com](mailto:bruce_brandell@yahoo.com)

Title	Author	# Avail	Price
<b>Calendars</b>			
RASC 2006	RASC	2	\$11.00
<b>Books</b>			
The Backyard Astronomer's Guide	Dickinson & Dyer	2	\$45.00
Night Sky Atlas	R. Scagell	3	\$27.00
The Moon Observer's Guide	P. Grego	1	\$13.00
Firefly Astronomy Dictionary	Firefly	1	\$13.00
Skyways – Astronomy Handbook for Teachers	M.L. Whitehorse	3	\$20.00
The Beginner's Observer's Guide	L. Enright	1	\$19.00
Observer's Handbook 2006	RASC	4	16.00
Variable Star Charts [CD]	AAVSO	1	5.00
Astrophotography	G.N. Patterson	lots	\$3.00
<b>Miscellaneous</b>			
RASC Centennial Mug		2	\$5.00
RASC Stickers, blue or white		lots	\$1.00
SSSP 2001 Pin (Summer Triangle)		17	\$2.00
SSSP 2002 Pin (Comet)		29	\$2.00

Why Not Buy a \$20.00 gift certificate to J.D.Peppercorns restaurant in Saskatoon?



Half the ticket cost goes to RASC.

Help us reach our fundraising goal of \$500.00!

Certificate sales at all RASC meetings. Or e-mail [Barb.wrightb@sasktel.net](mailto:Barb.wrightb@sasktel.net)

## SKY BUYS & MIRROR CELLS

*The Saskatoon Centre's Swap and Sale Page!*

**For Loan to Members:** Slide set for talks on general astronomy and light pollution. You can borrow this set any time you want to give a talk to your favourite group. Contact Rick Huziak at 665-3392.

**For Sale:** 7 X 50 Bushnell Extra Wide Angle Binoculars \$40.00 Firm; 2X Omcon Barlow - \$20.00; 1 New 19mm Antares W70 Eyepiece - \$60.00 Contact Ron Waldron at 382-9428 or by e-mail at [rmwaldron@shaw.ca](mailto:rmwaldron@shaw.ca)

# FUND RAISING DINNER



Mulberry's (sturdy stone) - 124-3rd Ave North  
**May 13th** (full moon), dinner at 6 - cocktails at 5:30

**\$12.00 per person**  
ticket sales at March and April meetings.

**Silent auction** (members to submit to Barb or Norma),  
**50-50 draw**, and **Door Prizes**  
No ticket purchases after May 8th

contact Barb (249-1990) wrightb@sasktel.net,  
or Norma (244-7360) njensen@scs.sk.ca.

## MINUTES OF THE GENERAL MEETING February 20, 2006

by Al Hartridge

1. Meeting called to order at 7:30 p.m.
2. Approval of the minutes of the previous meeting.  
Moved by Mike Clancy, seconded by Norma Jensen and carried.
3. Highlights of Executive meeting presented by Ron Waldron.
4. Committee Reports:
  - Events: Jeff Swick; Astronomy day, Messier Marathon, lunar observing.
  - Fundraising: Darrell Chatfield; Canadian Tire money - \$97.50, Bottle drive \$94.50, Kalium mine may be willing to make another sizable donation to Sleaford, Raffle for quilt will be held at the SSSP, Steak Night will be held at Mulberry's 6:00 p.m. May 13, 2006 \$12.00 per person.
  - Membership: Mike Clancy; 76 fully paid up members, 2 associates and 12 temporary members.

-- Sask. Light Abatement Committee: meeting held last Thursday, the priority is to work on the City, rumour has it that the City intends to install full cut off lighting in all new areas, the concept of a dark sky lighting award is also being considered.

5. Presentations:
  - A Famous Historical Astronomer - Darrell Chatfield
  - Auroral Bands SSSP 2005 - Darrell Chatfield
  - Occultation of a star by asteroid 530 Turandot - Rick Huziak
  - The Antares 80mm Sentinel Refractor - Ron Waldron
6. Meeting adjourned at 9:00 p.m.

## MINUTES OF THE EXECUTIVE MEETING

February 20, 2006

by Al Hartridge

1. Meeting called to order at 6:34 p.m.
2. Approval of previous minutes. Moved by Rick Huziak, seconded by Tenho Tuomi and carried.
3. Special Membership Meeting update: both issues were passed at National Council.
4. Messier Marathon: will be held evenings of Mar. 24 and Mar. 25.
5. Astronomy Day: May 6, 2006. Will try to get a spot at Lawson Heights mall for the display. A public star night will be organized at Lakewood Civic Centre the evening prior to astronomy day and also a public star night will be held at Beaver Creek following the display at Lawson Heights. A gastronomy night will be held after the display and before the star night. Also a slide show will be presented before the star night at Beaver Creek.
6. Suggested changes in meeting formats: Longer coffee breaks so members can socialize, moving some of the committee reports to general meeting, finding new ways to welcome guests and prospective members.
7. Observer's Report: Larry said it was cloudy for last observers' night. He will recharge batteries for laser pointer. He will go out to the observatory at Sleaford cloudy or not on Friday Feb. 24.
8. SSSP, the next meeting will be on Sunday Feb. 26 at 2:30 p.m. at Barb Wright's
9. Mike Clancy will send updated membership list periodically to all executive members. He will also send a copy of the National treasurer's report to Norma Jensen when he gets it.
10. Meeting adjourned at 7:30 p.m.

## MONDAY, MARCH 20, 7:30 PM – ROOM 175, U OF S

Presenting

"The Framis Group Inc.  
Dark Sky Calculator" --  
Les Dickson



"George Moores'  
Astronomy Workshop" --  
Sherry Campbell  
(Edmonton Centre)

"6" John Dobson Solar Telescope"  
-- Richard Huziak

*Note: There will be an executive meeting at 6:30 p.m.*

# Letter from Cypress Hills International Park

December 30, 2005

R.A.S.C. Saskatoon Centre  
Attention: Ron Waldron

On September 28th 2004, the Cypress Hills Dark-Sky Preserve was officially designated through a partnership of Saskatchewan Environment, Alberta Community Development, Parks Canada Agency and the Royal Astronomical Society of Canada (RASC).

Cypress Hills Interprovincial Park is the first provincial park in both Saskatchewan and Alberta to be officially recognized as a Dark-Sky Preserve. In addition, Fort Walsh NHS is the first protected area administered by Parks Canada to receive this designation. The designation will help to enhance visitors' appreciation of the Park with the night sky as part of the natural, historical and cultural experience. It will also provide opportunities for new interpretive and educational programs, attracting more visitors and adding economic benefits to the respective provincial and local tourism industries.



Through the initiative and dedication of three volunteers with the Royal Astronomical Society of Canada, and their cooperative work with the three managing government agencies within Cypress Hills Interprovincial Park, it took less than two years for the Dark-Sky Preserve idea to become a reality. The three volunteers are Rick Huziak (RASC -Saskatoon Centre), Bob King (RASC - Calgary Centre), and Vance Petriew (RASC -Regina Centre).

We would like to acknowledge these three exceptional individuals and their contributions to this internationally-significant designation. All three continue to assist our agencies in the promotion of dark-sky principles and the implementation of responsible lighting practices within Alberta and Saskatchewan.

We thank you for your support of Rick Huziak in his RASC role as he has volunteered many hours to this initiative while providing education, expertise and encouragement to our three park agencies. We trust that you share our recognition of Rick's outstanding work ethic and dedication.

Sincerely,

Julie MacDougall  
Site Manager  
CHIPP – Alberta

Brad Mason  
Park Area Manager  
Cypress Hills Park Area

David Rohatensky  
Site Manager  
Fort Walsh National  
Historic Site

## Saskatoon Centre Financial Statement for 2005

### Operating Statement for the Fiscal Year Ended September 2005.

	2004-05	2003-04
<b>Revenue</b>		
Membership Fees	1953.07	1760.00
Public Education	434.36	-
Merchandise	1055.84	1464.86
Donations	16.00	366.13
Star Party	10,488.55	8492.57
Coffee Fund	-	122.50
Dinners, Raffles	2322.77	-
Newsletter	-	35.00
Equipment Rental	-	65.00
Interest	225.55	3.33
<b>Total Revenue</b>	<b>16496.11</b>	<b>12309.99</b>
<b>Expenses</b>		
Public Education	644.29	565.35
Taxes and Licenses	10.00	10.00
Star Party	9914.27	8163.12
Utilities	554.21	-
Insurance	632.00	429.00
Repairs and Maintenance	1316.20	982.66
Office Supplies & Postage	226.59	123.57
Merchandise	1226.76	2062.62
Depreciation	511.59	511.59

	Miscellaneous	246.24	319.24
<b>Total Expenses</b>	<b>15282.15</b>	<b>12847.91</b>	
<b>Net Surplus (Deficit)</b>	<b>1213.96</b>	<b>(537.92)</b>	

### Statement of Assets and Liabilities at September 30, 2005.

	2004-05	2003-04
<b>Assets</b>		
Cash	7799.34	18712.94
Term Deposits	15207.96	-
Raffle Fund	311.24	310.71
Telescope Fund	-	2229.49
Buildings	9839.27	10,350.86
Book Inventory	150.00	489.85
<b>Total assets</b>	<b>33307.81</b>	<b>32093.85</b>
<b>Liabilities</b>		
Surplus (Deficit)		
Balance forward	32093.85	
Current Year Surplus (Deficit)	1213.96	
Balance end of Year	33307.81	
<b>Total Liabilities and Surplus</b>	<b>33307.81</b>	<b>32093.85</b>

# Saskatchewan Summer Star Party

by Barb Wright

Planning has begun for SSSP 2006, August 24-27.

This is the 10th year for SSSP so we would like to recognize that accomplishment. We are in the process of lining up a special presentation in cooperation with the park. This is the 75th anniversary for Cypress Hills Interprovincial Park, so they will be celebrating this summer too.

Our featured speaker is Scott Young, of Winnipeg,

likely the incoming national president of RASC.

We are in need of people to join the planning committee. Please consider becoming a part of this, you would be welcomed!

The March meeting will be a joint meeting with Regina members, at Craik eco-centre.

Contact Barb Wright to volunteer your services.

## Of Sucky Skies and (530) Turandot

by Rick Huziak

Poor weather in Saskatoon postponed an Occultation Star Party planned on the evening of February 23/24, where Norma Jensen, Darrell Chatfield, Bill Hydomako, Kathleen Houston and I were to observe the occultation of an 8th magnitude star in Cancer by the asteroid (530) Turandot from my backyard.

The sky was so poor that we all decided to skip the event. Norma, Kathleen and Darrell stayed at home, but Bill came over sporting his normal Timmy's coffee gift. We watched the Turino Olympics replay coverage, and every 1/2 hour of so, I took a non-enthusiastic look at a deteriorating sky. But at 1:20 a.m. with barely 10 minute to go before the scheduled occultation, Bill suggested we take a last look. To my horror, the sky had cleared, and I rushed out to set up my scope and set my watch to stopwatch mode so I could at least get a timing of the event. Bill rushed to get his binoculars from his car.

Everything was very rushed, and as I was completing my set-up, I thought I may have seen a brief wink-out of the star - less than a second - but I thought this was too early and ignored it. About 5 minutes later, after continuous staring, and seeing nothing, Bill asked if we were past the event time, and sure enough, we were well past.

So - due to a poor sky and rushed preparation, we saw nothing for certain - different than the 7 second, 8-magnitude drop that had been predicted.

In the meantime, Tenho Tuomi, near Lucky Lake and Garry Stone at the Diefenbaker Dam were trying to catch the west edge of the asteroid's shadow. But despite 13- & 15-minutes watches around the planned

time, they saw nothing.

All this indicates that the path of the asteroid had shifted. Well ... not that the path had shifted, but that the predictions were in error, and in actual fact, the path was seen by other observers in the US centered about 40 km NE of the predicted path. This is a bit more than usual, but often paths shift, and this is why a wide spread of observers is desired - even if you think you will be off the path. Sometimes you will be surprised, like anyone who did not heed my direction not <'not' in italics> to go to the Sleaford Observatory, which would have been central on the shadow!

However - don't despair because you didn't see this one - others happen all the time. And even a null report is useful (so send it in with particulars to [david.dunham@jhuapl.edu](mailto:david.dunham@jhuapl.edu) ). Null reports sample the dark sky around the asteroid and have the potential of discovering or ruling out asteroid satellites.

Hope for clear skies for next time, and for better observing instructions, see my article in the Journal of the RASC, December 2005, pp 217 - 221.

P.S. from Tenho Tuomi

Could not get the WWV time signal for it has been too long since I have had the old Hammurlund SP600 receiver on. Instead I dragged my wife Velma out of bed to keep track of the time while I observed. She determined that she would never make an astronomer if observing has to be done at night.

Garry Stone had everything set up right; a WWV receiver, a tape recorder running, and a stop watch, but the asteroid did not cooperate.

# Changes in the Journal Delivery to Members

by Peter Jedicke

16 Feb 2006

Dear Member,

Both proposed changes to our by-law were accepted by a large majority of the membership at last Saturday's Special Meeting of the Society in Mississauga, Ontario. The two initiatives were:

Initiative One: Proposal to Amend Society Fee Distribution and Adoption Procedures Initiative Two: Proposal to Enable the Print and Electronically Delivered (PED) Journal

The second initiative will have the most impact on members since it will mean that, after a phase-in period, you will no longer receive in the postal mail a paper copy of the Journal as part of your membership fee.

All members will be able to access the Journal electronically on the Internet, as you have already been able to do for the past year or so. You can also print out a single copy of the Journal for your own use on your printer. However, there will be an optional charge of \$15+GST (\$15US outside of Canada) if you wish to continue to receive the Journal in paper form by postal mail.

This change in the delivery method of the Journal will be phased in as follows:

- Regular and Youth members will continue to receive a paper copy until your membership expires. You will be offered the paper subscription at the time of your next membership renewal.

- Regular and Youth members who have paid more than one year in advance will continue to receive a paper copy until the August 2006 issue. You will be contacted and offered the paper subscription in advance

of the October 2006 issue.

- Life members will continue to receive the paper copy until the August 2006 issue. In advance of the October 2006 issue, you will be offered the paper subscription on your annual Life Member Statement.

On the same day as the Special Meeting, the National Council of the Society approved a budget for 2006. Unfortunately, a significant deficit is again projected. In light of this, to save the Society some money I ask you to consider either of the following options, similar to what I described in my article in the October, 2005, issue of the Journal:

1. If you prefer not to receive the paper version of the Journal, please go to:

<http://www.rasc.ca/journal/optout.html>

and choose to stop receiving the paper version of the Journal immediately.

2. If you intend to subscribe to the paper version of the Journal, please consider donating about \$3 for each issue between now and when your membership expires. You can either send a cheque with a note to the National Office or donate with your credit card using the eStore (\$10 or more). Access the appropriate item on the eStore from

<http://www.rasc.ca/journal/optout.html>

We are very excited about the future of the Journal in the electronic medium. At the same time, we are pleased that we can continue to make the Journal available on paper to those members who wish to receive it in the traditional way. I hope you will continue to share your enthusiasm for astronomy with us.

Clear skies,  
Peter Jedicke, President <[president@rasc.ca](mailto:president@rasc.ca)>

## Saturn This Season

by Tenho Tuomi

Pictures of Saturn taken March 11 of last year and February 19 of this year. Saturn's rings were open to their maximum in 2003 and are slowly tilting until they will be edge on to us in 2010 when they cannot be seen at all. After that we start seeing the north side of the rings. Saturn has a 29.5-year orbit around the sun.



# 2006 General Assembly, Ottawa

<http://www.rasc.ca/rascnews/2006GA.shtml>

## The 2006 RASC General Assembly will be held in Ottawa on the Victoria Day Weekend, May 18th - 22nd.

The 2006 GA will be held on the campus of Carleton University. In addition to the GA program there will be several interesting tours including.

- David Florida Lab satellite testing facility
- Canada Museum of Science and Technology
- Tour of the National Gallery of Canada
- City of Ottawa bus tour
- Private viewing of the IMAX film "Magnificent Desolation - Walking on the Moon" and guided tour of the Museum of Civilization

In addition to celebrating the Ottawa Centre's 100th anniversary, we have assembled an excellent array of speakers for the 2006 General Assembly with two major themes: Canadian Space Astronomy and Astronomy in the 21st Century.

## Friday, May 19th Astronomy Tools

- Tom Kaye: The Spectrashift Project: Radial velocity detection of extra solar planets by non-professionals
- Tim Puckett: Running an amateur international automated supernova search program
- Paul Boltwood: Developing a highly refined observatory for working with the pros
- avid Levy: Comet hunting then and now
- Paul Mortfield: Automating remote imaging and photometry
- Doug George: Building an automated observatory with off the shelf components
- Paul Campbell: Solar radio astronomy and a magnetar observation

## Saturday, May 20th

### The Future of Advanced Amateur Astronomy in the Age of Overwhelming Professional Sky Surveys - A Discussion Forum

Sky survey programs like LINEAR nearly shut out amateur comet and asteroid hunters. Pan-STARRS will have a greater impact on astronomy since it will image the entire visible sky from Hawaii down to 24th magnitude every four days.

Dr. Robert Jedicke of the University of Hawaii and member of the Pan-STARRS project will kickoff the morning session with his talk: "The Next Decade of Solar System Discovery with Pan-STARRS"

The discussion forum will explore the effects that massive digital sky surveys may have on advanced amateur astronomy.

The panelists will include:

- Dr. Rick Fienberg, Editor-in-Chief, Sky & Telescope magazine and Chair of the Pro-Am Committee of the American Astronomical Society
- Dr. Robert Jedicke, University of Hawaii and member of the Pan-STARRS project
- Dr. Douglas Welch, McMaster University, is active in both professional and amateur astronomical communities
- Tim Puckett, Leader of an international group of amateur supernova hunters
- David Levy, Author, popular public speaker and long time comet hunter
- Douglas George, Creator of Maxim DL, astronomy imaging software

Moderator: Peter Ceravolo

Audience participation will be encouraged.

## Saturday, May 20th Canadian Space Astronomy

The Saturday afternoon session will feature:

- Dr. Neil Rowlands: Com Dev: Canada's Contribution to the James Webb Space Telescope
- Dr. Anthony Moffat: University of Montreal: The Canadian BRITE Nanosat Mission
- Mr. Randy Attwood: RASC Past President: A historical overview of Canada's space program

Session Chair: Dr. Jaymie Matthews, University of British Columbia and MOST micro-satellite science team leader

## Saturday, May 20th Helen Sawyer Hogg Public Lecture

The Saturday evening public lecture will feature:

- Dr. Alan Hildebrand of the University of Calgary and Ottawa Centre Past President: "Hunting For Doomsday Asteroids From Earth And Space "

## Sunday, May 21st

### Afternoon Speaker Program

- Rick Fienberg: 2009 World Year of Astronomy
- David Clark: ClearSky, a 3D astronomical program demonstration
- Terence Dickinson: Digital SLRs and the democratization of personal astrophotography
- Rolf Meier: Webcams for planetary imaging

## Sunday, May 21st

### General Assembly Banquet Speaker

Dr. Douglas Welch of McMaster University and Member of the Gemini Telescope Board of Directors: "Coming Down from the Mountain: The Changing Nature of Professional Astronomy"

The 2006 GA promises to be spectacular! Plan now to attend.

# The Planets This Month, March 2006

by Murray D. Paulson, Edmonton Centre

The month of March is highlighted with a solar eclipse which is only visible along a track from the coast of Brazil, across Africa, Turkey and then terminating somewhere in the north of Mongolia. This will be one of the longest eclipses of the last decade.

**Mercury** starts off the month in a plummet toward the sun. It is on its way down from its greatest eastern elongation back in February and will pass 3 and a quarter degrees above the sun on March 11. In just over a week's time, it should be far enough from the sun for safe daytime observation but its slender crescent will only shine at magnitude 2.9. By month's end, Mercury will shine at .9 magnitude and sit over 23 degrees from the sun. In the eyepiece you will see its 9.5" fat crescent. On April 8th, Mercury arrives at its greatest western elongation and shines at magnitude 0.3 and shows a 7.7" half phase in the eyepiece. The circumstance of this morning apparition are unfavorable because the ecliptic is slanted almost parallel to the horizon. So the morning sky is not going to relinquish this mote of light. If you want to observe it, use a goto scope or one with setting circles and hunt it down in the daytime sky. Now for those who may witness the solar eclipse, Mercury will be a nice target 25 degrees west of the sun.



**Venus** starts off March shining at magnitude -4.5 in our morning sky, 45 degrees from the sun. In the eyepiece it will show you a 31" disk. Venus arrives at its greatest western elongation this month on the 24th when it stands 46.5 degrees from the sun. In the eyepiece it will show you a 25" 49% illuminated disk. It has dimmed slightly to magnitude -4.3. Venus will also be a highlight during this month's solar eclipse, 46.5 degrees west of the sun.

Taurus now sports two nearly identical red stars as **Mars** cruises through this month. It will be interesting to note the similarities and the differences between the two as we get this great opportunity. Mars has now shrunk to only 6.7" and shines at magnitude 1. You will only be able to see the major features in the eyepiece, but the gibbous phase will be quite obvious. On March 5th, the first quarter moon passed 2 degrees

above Mars in the evening sky. One lunar month later, the performance will repeat on April 3rd, but this time Mars will be below the horizon, so we get to see Mars set with the moon 6.5 degrees north west of it. The next evening, as twilight descends, we see the moon 4.5 degrees above Mars. At this time, Mars sits in the horns of the bull and its 5.6" disk shines at magnitude 1.2.

**Jupiter** starts off this month sitting in Libra and shines at magnitude -2.2. In the eyepiece you will see its quartet of moons around the 40" disk. Jupiter rises just after midnight and isn't well placed for observing until the pre-dawn hours. By month's end, things have improved a bit, and it rises in the southeast by 10:30 p.m. and it now shines at magnitude -2.3. By midnight Jupiter sits at an altitude of 15 degrees and in the eyepiece it shows a 43" disk.

This month, **Saturn** has drifted away from the Beehive but remains in the constellation of Cancer. I have noticed over the last month that Saturn has finished off a corner of another great square comprised of the left twin of Gemini and the small dog star Procyon. Nice. This month Saturn shines at magnitude 0.0 and in the eyepiece it will show you a 19.5" disk. There are a few times this month that it is visited by the moon. On March 10 a gibbous moon passes above Saturn and it is closest just after twilight. In one lunar month, on April 6th, it happens again and the moon passes 3.4 degrees above it, and this also happens just after twilight. This month Iapetus starts off at an eastern elongation on about the 9th of March, and in 20 days time on March 29th, it will orbit around to directly below Saturn, 42 seconds of arc away. At this time Titan will be in line with it and actually farther away from Saturn, an indication of the odd inclination of Iapetus's orbit. This should be a cool observation. Iapetus will shine at roughly magnitude 11. Iapetus's eastern elongation is on April 18th, when it will sit 9.5' of arc away from Saturn. Note there will be an alignment of Iapetus, Titan and Rhea on this evening. The earlier western elongation held Titan at elongation as well.

So enjoy the play of the planets, and clear skies till next month. (especially on March 29!)

# The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

*Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or 40 Herschel II  
Explore the Universe, or 35 Binocular Objects and earn great OBSERVING CERTIFICATES!*

## MESSIER CLUB

### Certified at 110 Objects:

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B.Christie, K.Noesgaard, M.Stephens,  
B.Hydomako, T.Tuomi, L.Scott,  
G.Charpentier, **Bob Johnson**

<u>Mike Clancy</u>	<b>Done!</b>	110
<u>Les Dickson</u>		105
<u>Brent Burlingham</u>		97
<u>Brent Gratias</u>		96
<u>Mike Oosterlaken</u>		93
<u>Lorne Jensen</u>		89
<u>Ken Maher</u>		87
<u>Margo Miller</u>		77
<u>Wade Selvig</u>		75
<u>Kathleen Houston</u>		72
<u>Garry Stone</u>		57
<u>Ellen Dickson</u>		29
<u>Norma Jensen</u>	<u>Up!</u>	31
<u>Brian Friesen</u>		15
<u>Barb Wright</u>		6

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### Certified at 110 Objects:

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D.Chatfield, T.Tuomi

Scott Alexander	97	
Larry Scott	Up!	94
Bill Hydomako	55	
Sandy Ferguson	23	
Mike Oosterlaken	20	
Mike Clancy	7	
George Charpentier	4	

## Chatfield BINOCULAR CERTIFICATE

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## HERSCHEL 400 CLUB

### Certified at 400 Objects:

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<u>Gord Sarty</u>	251
<u>Tenho Tuomi</u>	220
<u>Scott Alexander</u>	117
<u>Mike Oosterlaken</u>	68
<u>Sandy Ferguson</u>	18

## HERSCHEL 400-II CLUB

### Certified at 400 Objects:

<u>Darrell Chatfield</u>	250
<u>Richard Huziak</u>	211

The Messier & Finest NGC lists can be found in the Observer's Handbook. The Explore the Universe list is available on the National web site. The Herschel 400 list is available at the web site listed below. The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

On-line Messier and Finest NGC lists, charts and logbooks - check out:

<http://www.rasc.ca/observe.htm>

On-line Herschel 400 List - check out the official site at:

<http://www.astroleague.org/al/obsclubs/herschel/hers400.html>



## RASC Observers Group Notes

### by Larry Scott, "Interim" Observers Group Coordinator

We had a sparsely attended (Les and Ron) Observers Group on February 24th under hazy skies with a temperature of -20C. Although transparency ranged from poor to "is that Sirius over there?" the seeing was reasonably steady. We looked at Saturn, Auriga, the Ursa Major Moving Group, and several open clusters before moving inside. There was a talk on the mythology's associated with Auriga as well as some discussion regarding Les and Ellen's new digs (congratulations).

out to be a better night than Friday and I want to thank Norma for dragging me out.

There will not be an Observers Group scheduled for March as we will be having the Messier Marathon at Sleaford the weekend of March 24th and 25th. Sunset will be around 19:30 so if you want to get those first few objects you need to be set up and ready to go by 20:00. If you're late don't worry, there's only another 100 or so Messiers you can look for before dawn. I'm expecting the most people out on Saturday, but I'm planning on being out both nights for those that can't make it on one night or the other. As always these plans are weather dependent so keep your eyes on the forecast. Larry.

Note from Norma Jensen: "Found 6 last night at Sleaford - cold but one of the best nights for viewing in some time."

# **GEORGE MOORE'S ASTRONOMY WORKSHOP - APRIL 21ST to 23rd, 2006**

## **REGISTRATION FORM**

Name: \_\_\_\_\_  
(last name first) please print

Address: \_\_\_\_\_

Telephone #: \_\_\_\_\_  
Home \_\_\_\_\_ work \_\_\_\_\_

E-MAIL address: \_\_\_\_\_

Please check which status is applicable:

RASC Member \_\_\_\_\_ Teacher \_\_\_\_\_ General Public \_\_\_\_\_

FEE:	before March 14, 2006	March 15 to April 10, 2006
Adults	\$ 90	\$ 100
Youth	\$ 75	\$ 85

Youth is 15 years and under, and they must be accompanied by an adult. Payment must be enclosed with form to guarantee registration. Cheques should be payable to: RASC - Edmonton Centre. NO refunds after April 10, 2006. Registration forms can also be mailed to:

GMAW, c/o S. Campbell, 333 SouthRidge, Edmonton AB T6H 4M9.

Additional Questions: (780) 433 - 1516

FOOD: Please indicate any dietary needs or allergies.  
\_\_\_\_\_  
\_\_\_\_\_

ACCOMMODATION: Accommodation is inside a private school with dorm rooms. We have limited rooms available for couples, which may have two (2) to four (4) bunk beds. If you have a preference for roommate(s), please name them here.  
\_\_\_\_\_

TRANSPORTATION: Maps will be provided.

SEMINARS: In addition to the primary guest speaker, Jaymie Matthews, you have the possibility to attend two seminars. In order to help us assign halls/rooms for these sessions, please indicate which session you would like to attend. The "teacher" sessions are tailored to the grade 6 and 9 Alberta Sky Science Curriculum, but non-teachers are welcome to attend. Please choose one from each session.

First Seminar Session  
 Teacher's Session/Orla Aaquist  
 It's About Time/Krista Stefan  
 Collimation/Larry Wood & Luca Vanzella  
 Digital Photography/Murray Paulson &  
Mike Noble

Second Seminar Session  
 Teacher's Session/Orla Aaquist  
 Sketching/Sherry Campbell  
 Collimation/Larry Wood & Luca Vanzella  
 Rocketry/Adrian Liggins

For Office Use only: received date \_\_\_\_\_ Reg. # \_\_\_\_\_  
payment enclosed \_\_\_\_\_ Deposited \_\_\_\_\_