

# R.A.S.C. - Belleville Centre

Newsletter - January, 2005

Welcome to the January, 2005 edition of your Newsletter, presented by your ever popular and user-friendly Newsletter Editor, yours truly.

Even though this letter will not be as extensive as the one for December, 2005, I hope that it will be informative enough to keep you awake long enough to garner something from it.

I suppose that many of you were out observing during the month of December, 2005 with a significant large number of clear nights. Many epic tales will be told of your major astronomical discoveries will be spread far and wide about what was observed by you.

Some pertinent observing information:

## **01) Lunar Observing**

New Moon: 29 January, 2006 (Sunday)

14:15 or 02:15 p.m.

First Quarter: 06 January, 2006 (Friday)

18:56 or 06:56 p.m.

Full Moon: 14 January, 2006 (Saturday)

09:48 or 09:56 a.m.

Third Quarter: 22 January, 2006 (Sunday)

15:14 or 03:15 p.m.

## **02) Planetary Observing** (courtesy of R.A.S.C.'s Observer's Handbook)

Mercury: observed with difficulty in the first few days of the month before sunrise very low in the south-east.

Venus: quickly becomes lost in evening twilight in the south-west during the first week of the month. It is in inferior conjunction on 14 January, 2006. By the end of the month, Venus emerges out of the morning twilight sky but southern hemisphere observers have a better observing of Venus at this time.

Earth: favourably visible to most people most of the time under most sets of observing conditions and circumstances. What else can be said about this planet?

Mars: was at opposition on 07 November, 2005, and is next at opposition on 24 November, 2007. Except during the month of January, 2006, Mars is not in the best state of observing. Mars is more than 60° above the south-south-east horizon at the end of evening twilight and sets near 02:30 a.m. in the west-north-west. Mars is in the constellation Aries at this time.

Jupiter: rises in the east-south-east near 02:00 a.m. and stands nearly 30° above the south-south-east at the beginning of morning twilight. Jupiter is in the constellation Libra at this time.

Saturn: at opposition on 27 January, 2006. It rises in the east-north-east soon after sunset and stands about 25° above the west horizon at the beginning of morning twilight.

### 03) Meteor Showers

Approximate Shower Radiant Radiant Z.H.R.

Date of Maximum R.A. Decl.

03 January, 2006 Quadrantids 15h 21m +48.5°80

10 January, 2006 Coma Berenicids 11h 40m +25.0°8

16 January, 2006 delta Cancriids 08h 24m +20.0°7

08 February, 2006 alpha Centaurids 14h 00m -59.0°10

26 February, 2006 delta Leonids 10h 36m +19.0°24

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### How Many Astronomers Does it Take to Change a Lightbulb?

A: I thought astronomers used standard candles.

A: Two: one to change the bulb, the other to complain about the light pollution.

A: Only one, but you have to go to Hawaii to get the really good bulbs.

A: Three, plus or minus seventy-five.

A: Eight:

1 observational astronomer to measure luminosity and red-shift of bulb

1 theoretical astronomer to calculate spherical co-ordinates of bulb

1 departmental head to write to SERC, sorry, PPARC, for project funds

1 astronomical engineer to design and build the bulb replacing satellite

1 starling SIG programmer to write satellite control and data reduction software

1 NASA mission control expert to arrange satellite launch and say "t-2 go for main engine start....." etc.

1 remote observer to manipulate the satellites arm once in elliptical orbit around light bulb

1 Grad student to act as scapegoat in event of mission failure

A: Four:

A research student to sit around and not learn anything.

His/Her supervisor to explain how much harder it was to change light bulbs when he/she was a research student.

An amateur astronomer to make sure it's a low pressure sodium light bulb with proper shading to reduce light pollution (right kids!).

Some technical johnny to actual change the light bulb and generally keep the place running while the astronomers contemplate their NGC's.

A:  $10^8$ , because astronomers love really big numbers!

A: None, they wouldn't change it because it ruins their night vision.

A: What's a light bulb?

A: Four:

One to actually change the darn thing.

One to operate the CCD camera to measure the number of photons it emits whilst his friend operates the computer to do the task (bit techie)

And another to complain about how the CCD is out of focus and how the light bulb actually looks like a polo mint.

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KEEP ON LOOKING UP - THAT IS WHERE THE FUN IS