



www.csiro.au

Proposal writing

Phil Edwards
Head of Science Operations
CSIRO Astronomy and Space Science



You are entering a hard hat area!

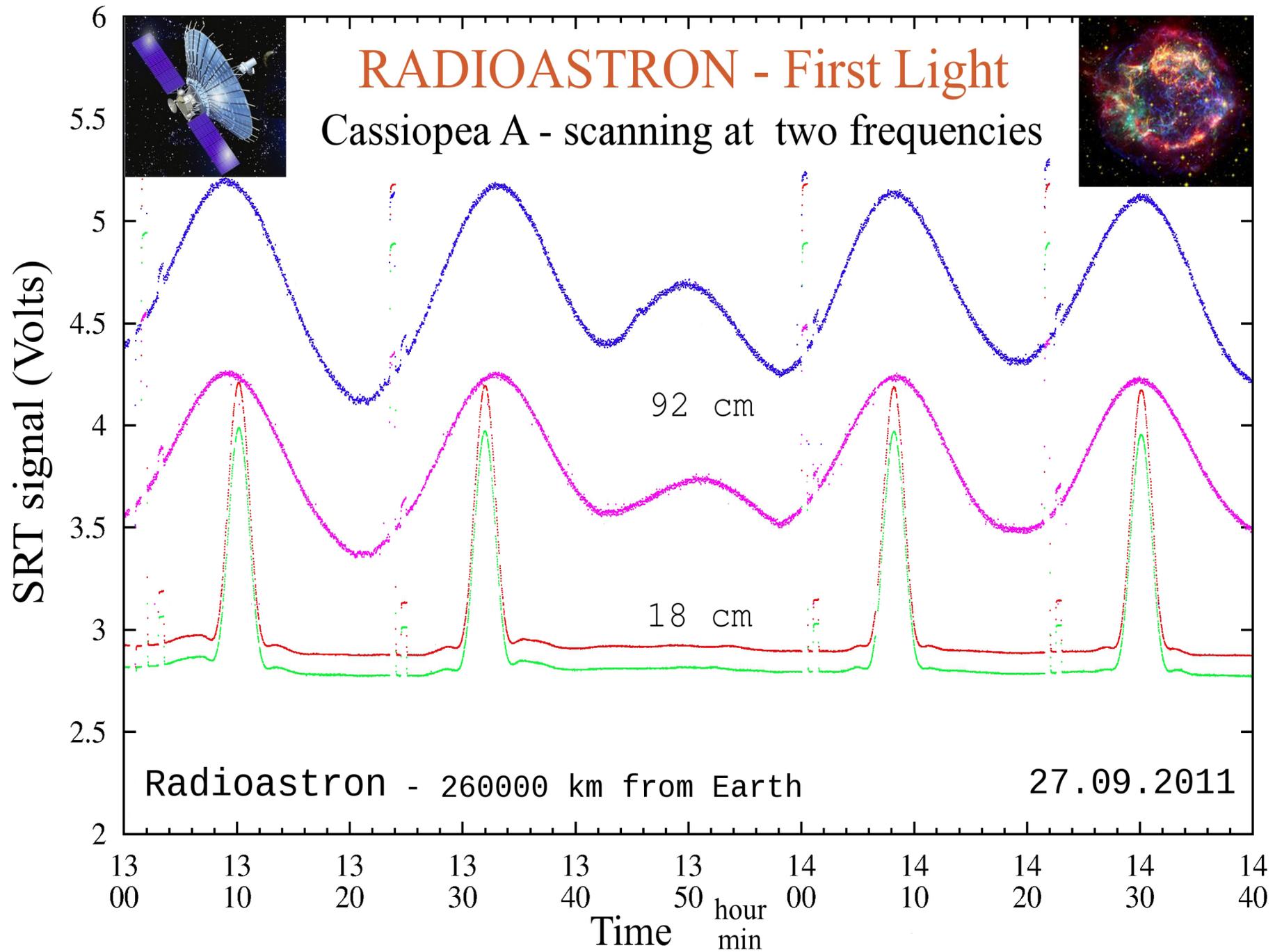
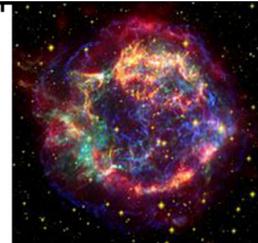


Picture courtesy Dave Jauncey



RADIOASTRON - First Light

Cassiopea A - scanning at two frequencies



Overview

- Proposal Types
- What is the Time Assignment Committee
- When do they meet?
- What do they look for in a proposal?
- Tips for writing a proposal

ATNF proposal types

- **Standard**

- For Parkes, ATCA, & Mopra, a proposal is considered for one semester then must be resubmitted for further consideration
- For LBA and Tidbinbilla, proposals stay valid for one year

- **NAPA**

- Non A Priori Assignable

- **ToO**

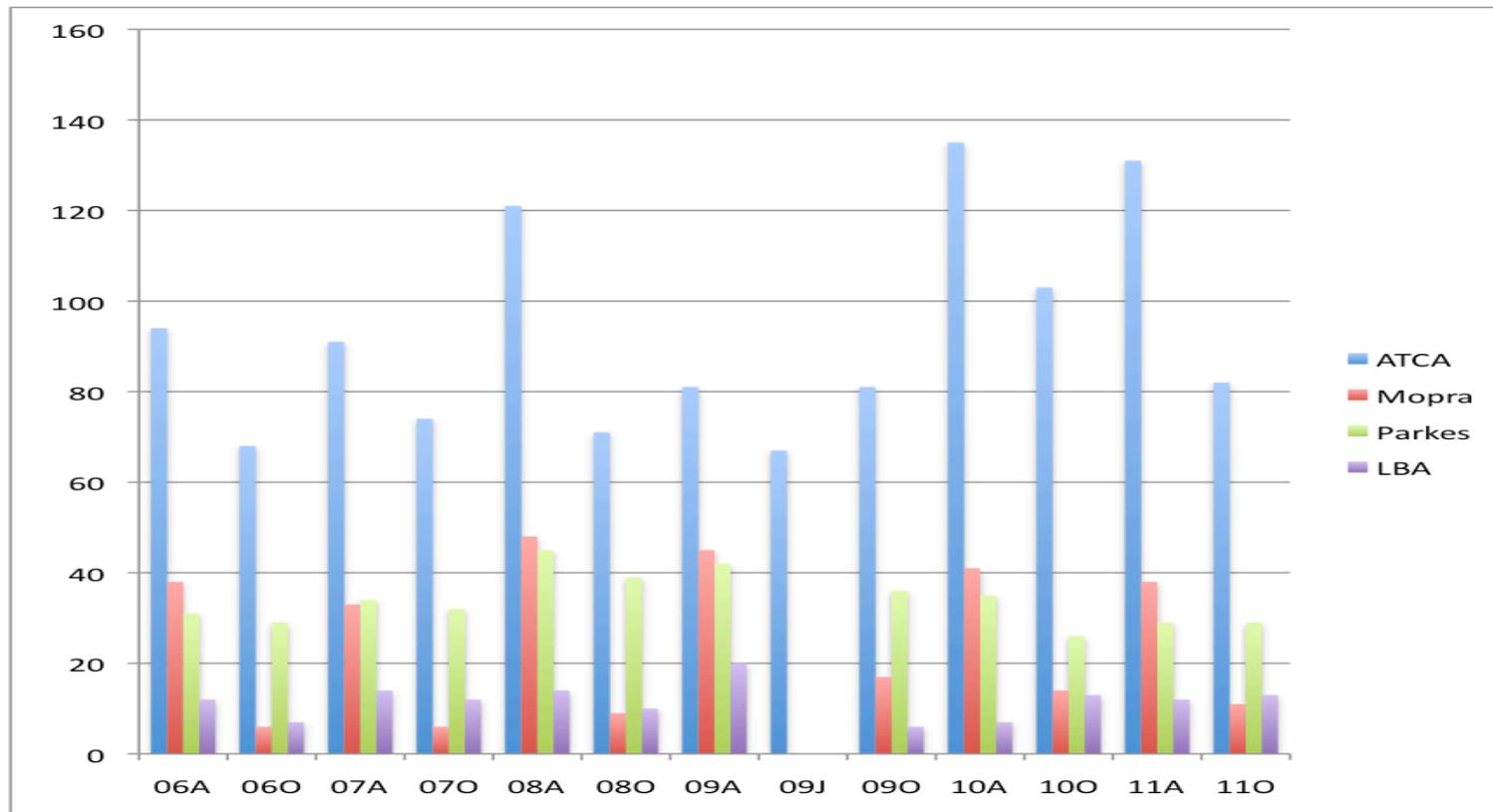
- Target of Opportunity – can be submitted any time

- **Continuing, or “pre-graded”**

How the TAC works

- The ATNF receives
 - ~220 proposals for the APR semester, and
 - ~160 proposals for the OCT semester.
- The ATNF Time Assignment Committee now consists of
 - ~10 members, who attend the TAC meeting, and
 - ~20 external readers, who submit their grades and comments before the meeting
- All proposals are discussed in the meeting, grades reconsidered, and reviewers' comments collated

Number of proposals submitted



Number of proposals submitted for the ATNF facilities for each semester for the last 6 years: 06a is the 2006 APR semester, 06o the 2006 OCT semester, etc. A special 2009 JUL semester was used for the ATCA only following the installation of CABB in March 2009 to allow astronomers to base proposals on the early indications of CABB performance.

Preparing a proposal

- **Start early!**
- The Call for Proposals comes out one month before the proposal deadline, i.e., May 15 and Nov 15
- There's an old software proverb:
 - *“The first ninety percent of the task takes ninety percent of the time, and the last ten percent takes the other ninety percent.”*



Preparing a proposal

http://www.atnf.csiro.au/news/newsletter/apr08/ATNF_news_Apr08.pdf

- Re-read the Call for Proposals
- Re-read section 4 of the OPAL Users Guide
- Complete Cover Sheets, Observation Table, Scientific Justification
- In the Observation Table, include any overheads (for pointing, calibration, or insurance against bad weather).
- While the TAC knows its ATCA from its ALMA, its DFB from its PRB, and its VLA from its TLA, don't assume that it is familiar with every cherished acronym in your field of study.



The basics

- Three pages allowed for justification (unless Large Proposal) including figures & references
- Page margins of at least 1.5cm
- Font size of 11+
- Use section headings, indent paragraphs or use spacing
- Use clear figures with informative captions and accreditations. Colour now acceptable!

More good advice!

<http://www.atnf.csiro.au/observers/docs/opal/guide.html>

- What question will these observations answer?
- How will these observations answer it?
- Why this telescope, and why do it now?
- Avoid trying to cram too much into your page allocation. Use a reasonable font-size, space between paragraphs, section headings and informative captions.
- Allow plenty of time for your co-Is to read and comment.
- Read it through carefully one last time before submitting, or better, get a colleague to read it.

The key questions to ask yourself

- Would *you* want to read this proposal?
Late at night?
On a plane?
Along with 80 others just like it?
- See Chris Tinney's presentation at the ALMA workshop --
<http://www.atnf.csiro.au/research/workshops/2011/ALMA/presentations.html>



If your proposal fails to get time

- Read and consider the feedback from the Time Assignment Committee
- Ask for feedback from your co-Is
- Download some data from the archives and gain some experience in data reduction
- Offer to help with others' observing runs
- Offer to be a Duty Astronomer
- Try again next time, and address the feedback from the TAC



If the TAC has misunderstood a key point, contact the TAC chair.

If your (non-) preferred date ranges change, notify the scheduler as soon as possible.



For a different perspective...



... be prepared to serve on a TAC yourself!



- A good proposal...

- is clear and concise
- is supported by appropriate references
- places the work in the broader context of the field
- justifies the request for time, time range, observing frequency, bandwidth, spectral resolution, angular resolution, and calibration scheme
- considers previous observations of the source field
- makes a very good first draft for the opening sections of the paper that will result from your observations!



CSIRO/ATNF

Philip Edwards
CSIRO ATNF Head of Science Operations

Email: Philip.Edwards@csiro.au

Web: www.atnf.csiro.au



Thank you

Contact Us

Phone: 1300 363 400 or +61 3 9545 2176

Email: Enquiries@csiro.au **Web:** www.csiro.au

