

# Software for processing of autonomous observatory data

- Calibrations
  - How to store master flats and darks
  - How to create them
  - How to use them
- Data extraction
  - Which solutions works and which does not work?
  - Standardize it?
- Transient detection

# Calibrations

- Any software for creating and using calibration database?
  - HEADAS not counting (it is high energy astrophysics after all..).
  - Create, store and use master darks and flats
  - Properly looks for calibrations files
    - By validity dates
- How to integrate it to image processing?
  - Stand-alone, library, fully integrated?

# Data extraction

- How?
  - Aperture, PSF photometry
  - How to automatize as much as possible?
- Stand alone, library or integrated?
- Database
  - PostgreSQL or independent?
- Database access
  - XML-RPC?
  - VO?

# Transient detection?

- With all possible filters
  - Mentioned in Pi of the Sky presentation
- Configurable, extensible, easy to use
  - Add new filters
  - Look for different transients
    - meteorites,..
  - Customizable for various setups
    - Pixel size, FWHM, ..
- With graphical user interface (images in DS9, regions,..)

# Use case I

- I want to observe XXX-YYY
- I want to have rough light curve
- Solution I:
  - Learn all, observe it, produce data
- Solution II:
  - Ask local expert
- Solution III:
  - Let software do the work – enter name, get email when done

# Use case II

- Color image for PR/public observation
- Solution I:
  - Learn all, process data, produce nice image
- Solution II:
  - Ask local expert
    - → it's easy, but I do not have to do it
- Solution III:
  - Software