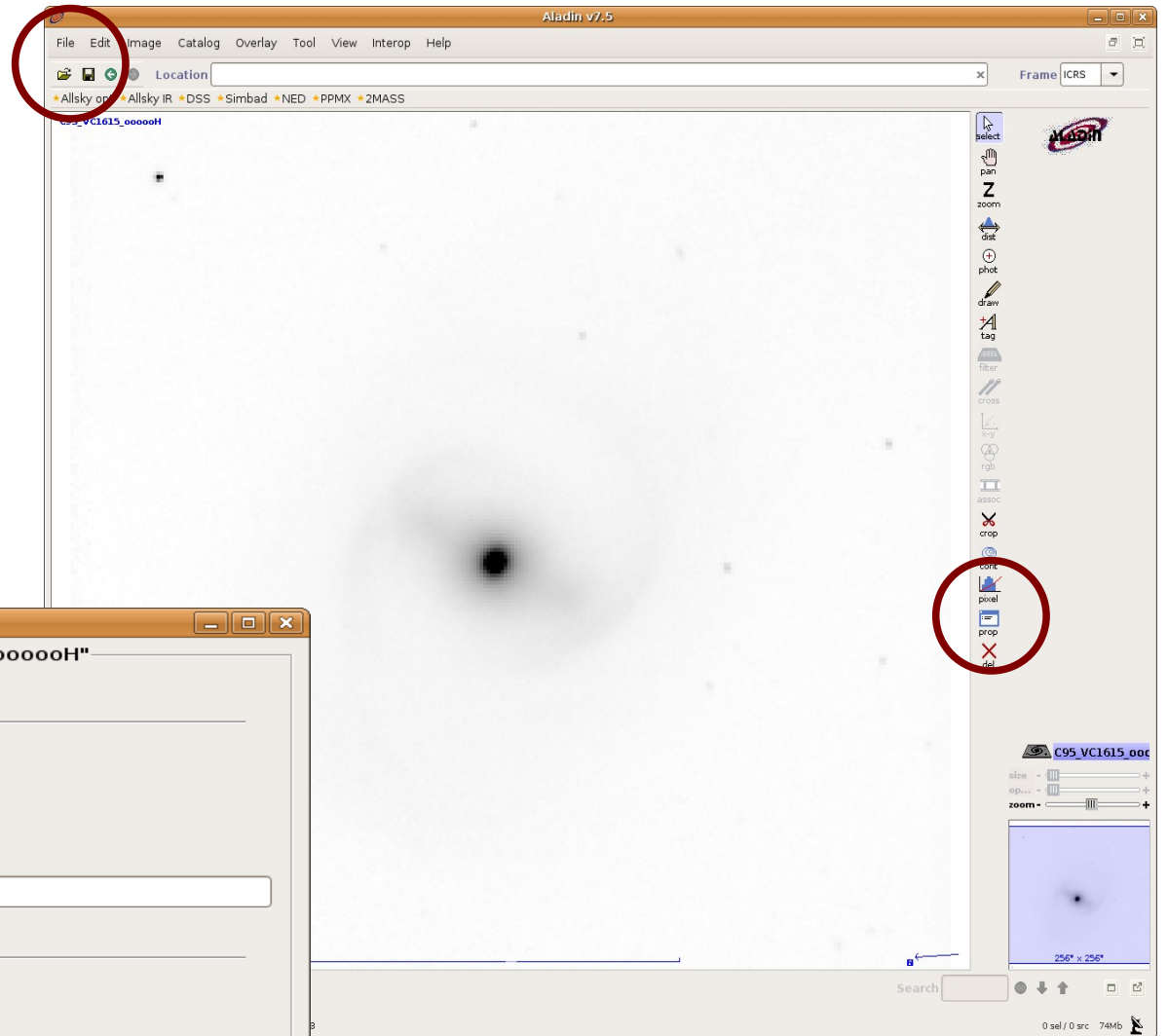# Astrometric calibration with Aladin

Bernd Vollmer

CDS, Observatoire de Strasbourg

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(uncalibrated image from the GoldMine database; Gavazzi et al. 2003)

- Load the uncalibrated image (*File → Open local file...*)

- Get header information (*prop* on right column)

- Click on *New* (Astrometrical reduction)

- Put the coordinates and associated pixels (e.g. from SIMBAD)

- Guess the pixel size

- Click on *modify*
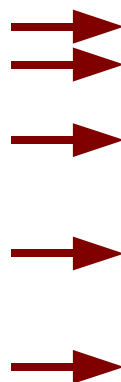
- By clicking on *by WCS header*, you can check your fits header
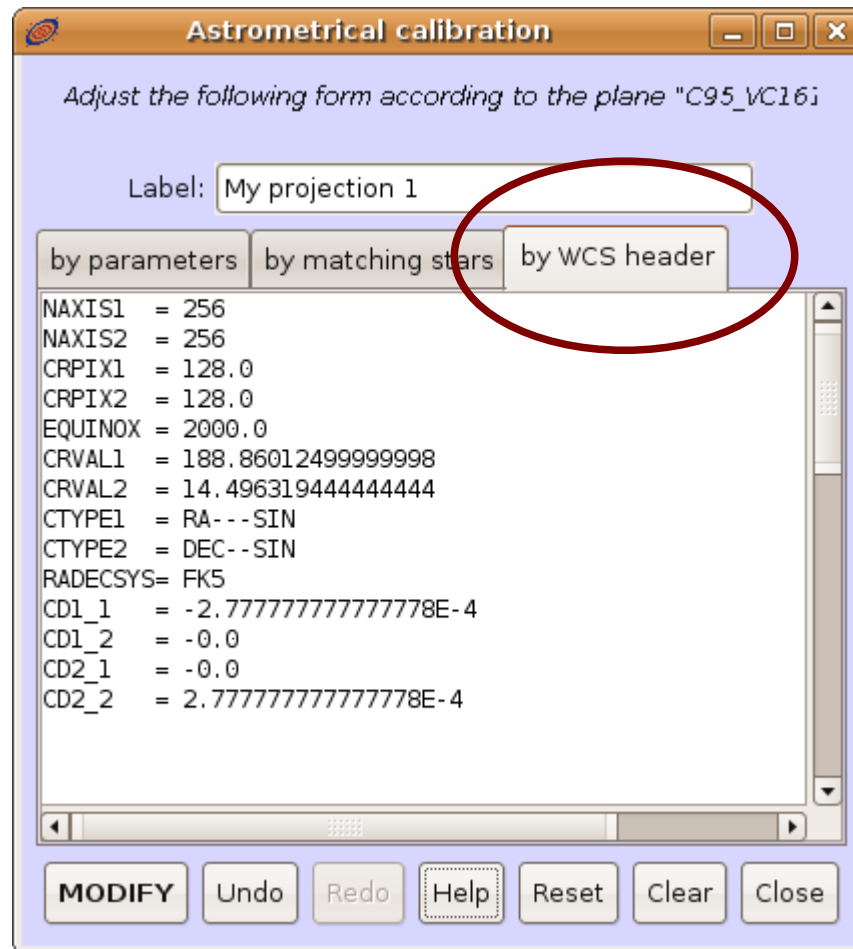
- Chose a calibrated image from your preferred image database (e.g. Aladin image database; *File → Load astronomical image*)

- Chose a point source catalog in this region from the VizieR catalog database (e.g. 2MASS, USNO, GSC; *File → Load catalogue*)
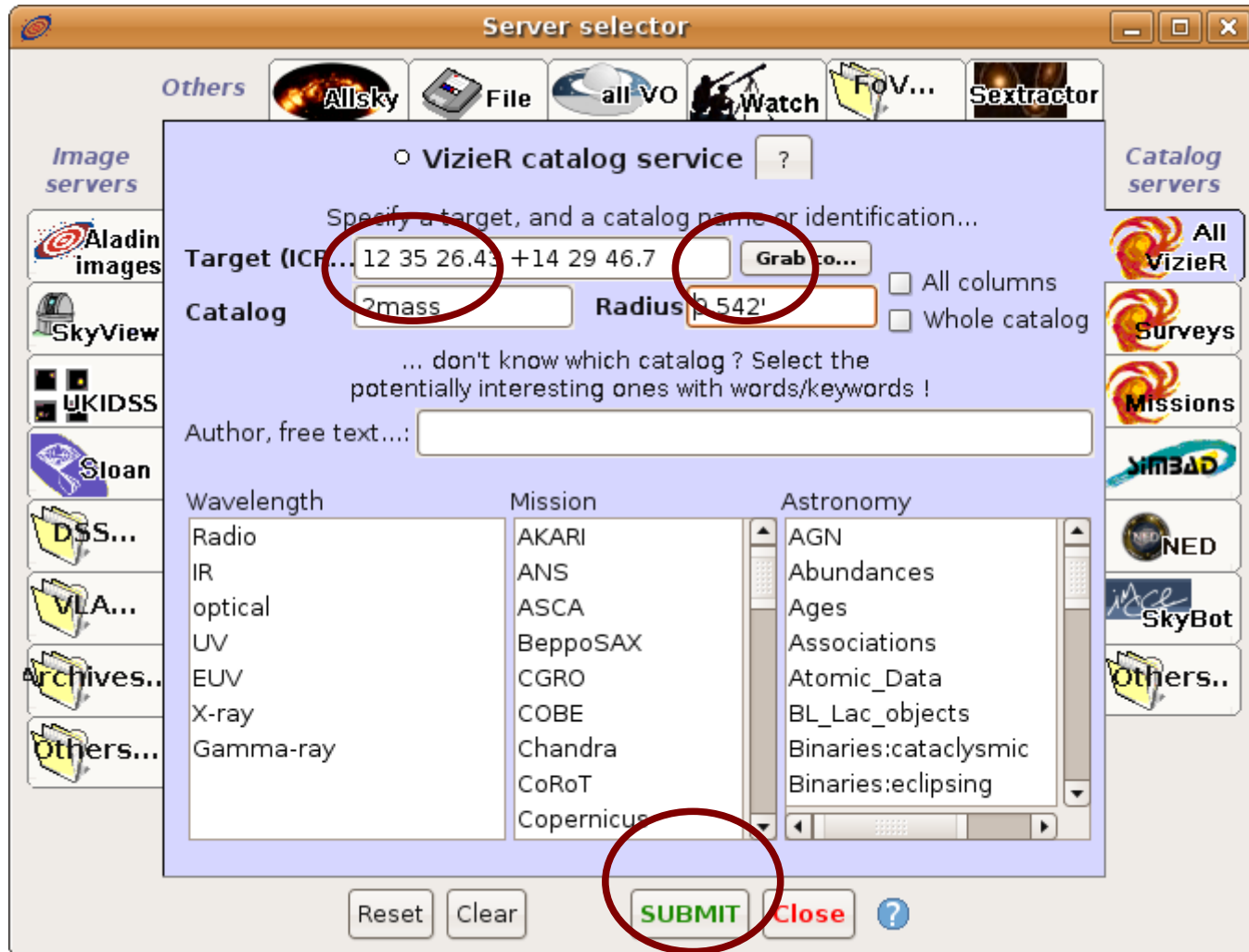
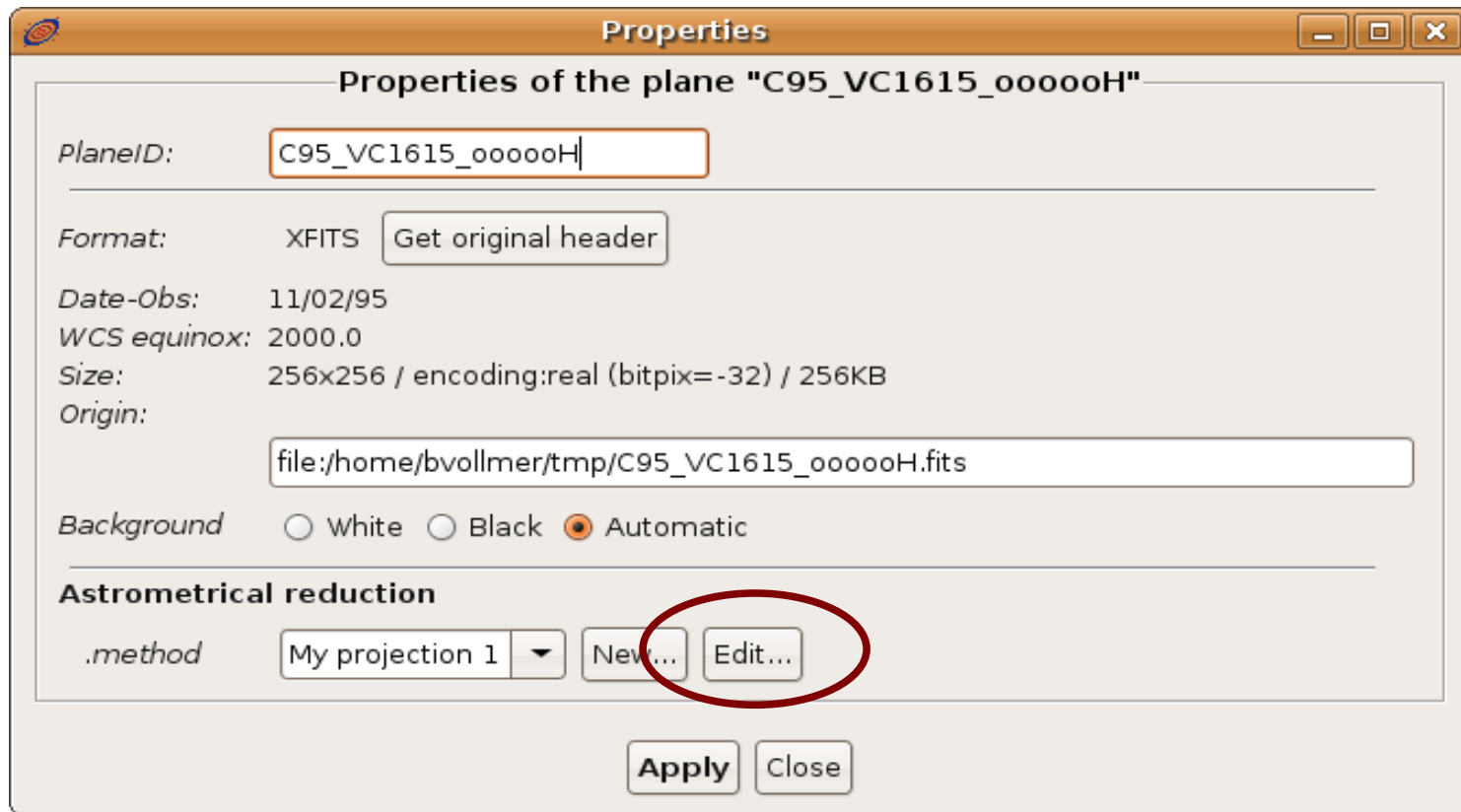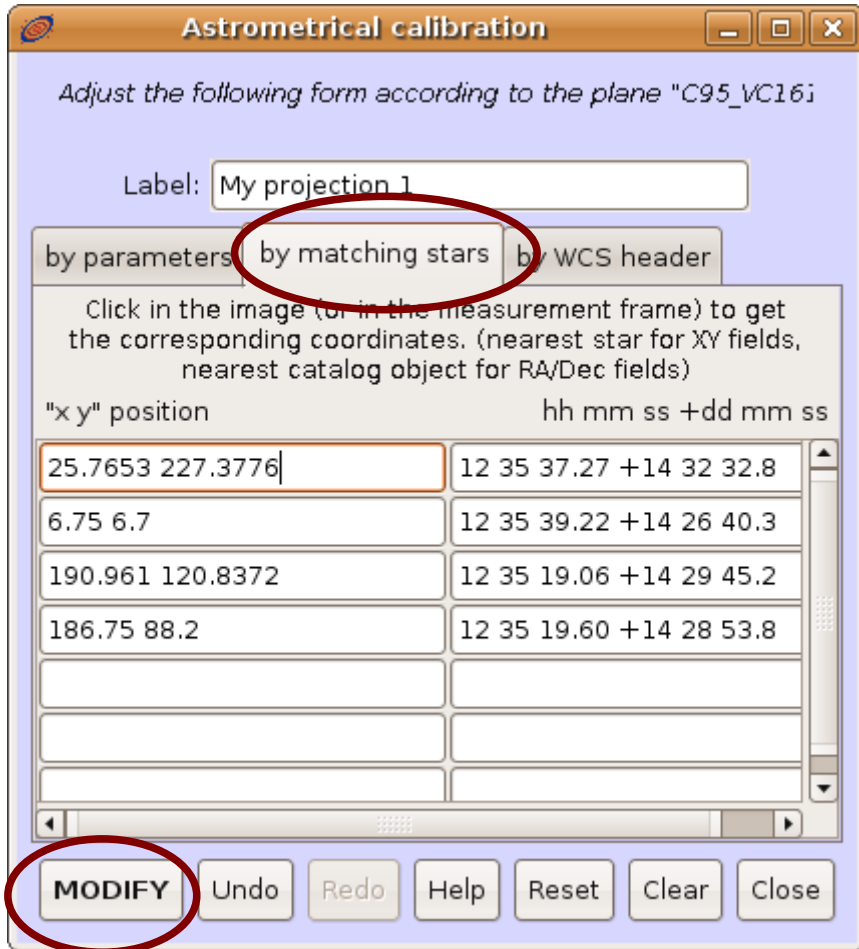- Change into double view mode (*multiview*)

- You can load an image into a window by clicking and dragging of an image plane on the image stack on the right hand side
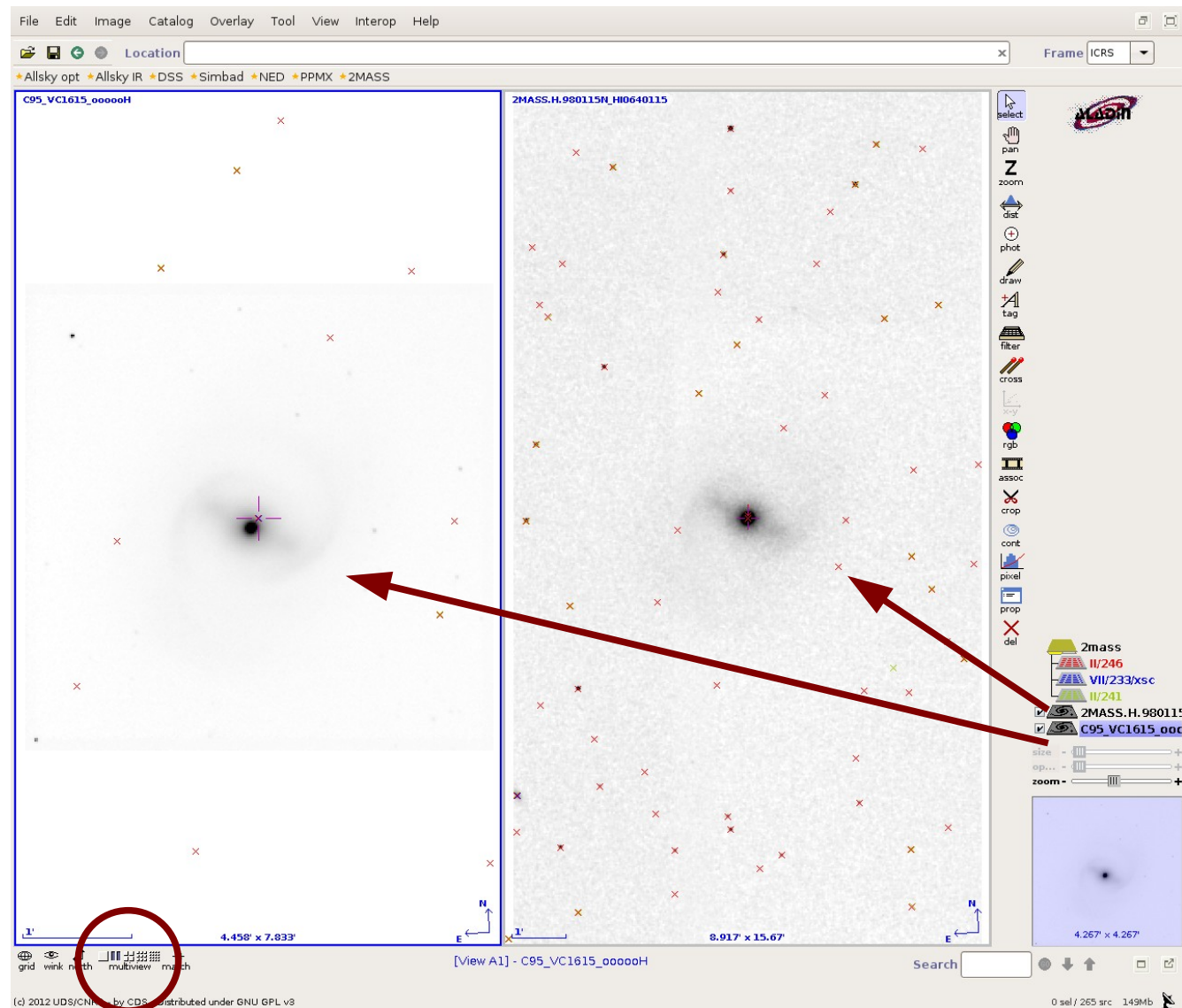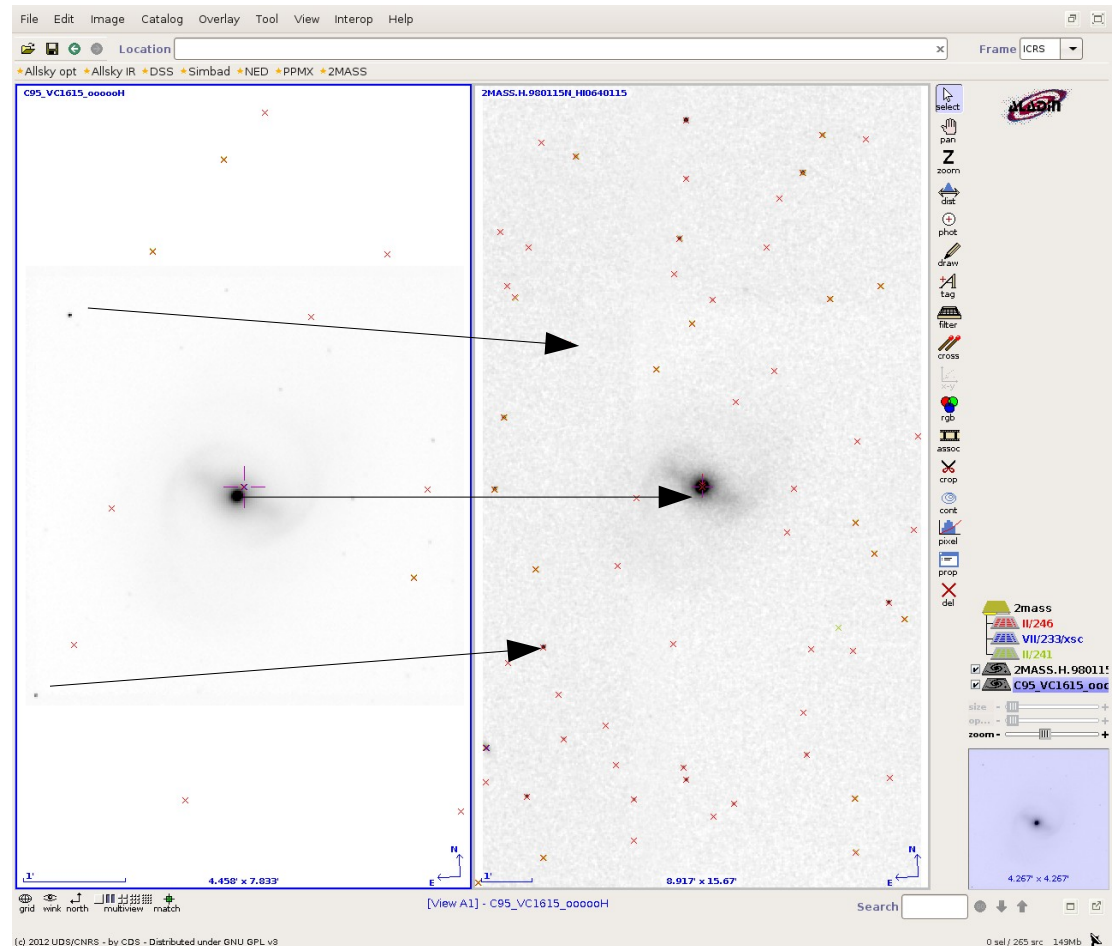
- Activate the uncalibrated image by clicking on its plane on the image stack (the image frame will become blue)

- Click on *prop* on the right column

- *Edit* the image header

- Chose *by matching stars*

- Alternately click on a star on the uncalibrated image and on the corresponding star on the calibrated (2MASS) image

- Click on *modify*; the new image header is calculated

- Change into single view (*multiview*), zoom, and refine your astrometric calibration

- Save the fits file with the new astrometric calibration (*File → Export planes*)