

NAME: _____

DATE: _____

This time, in the interest of time, we will be using a small test image to learn how to do PSF photometry. Grab the compressed image from the course webpage and put it in a directory of choice.

1. When is PSF photometry a better choice to aperture photometry?
2. Outline the logical steps of PSF photometry. No IRAF details, only logic.
3. Inspect the test image and provide basic information on its contents – size, header information, image statistics, background, etc.
4. Check (and add if necessary) header keyword/value pairs for gain (1.0), readout noise (0.0), min and max good data value, exposure time (1.0), filter id ('V'), airmass (1.0), observation date (today). Recap here what keyword names you used.

5. Run `daoedit` and set up all important parameters in `datapars`, `centerpars`, `fitskypars`, `photpars` and `daopars`. Explain your choices and list the values you used. Save them to an external file.

6. Run `daofind` to create an initial target list. List and explain the parameters you used.

7. Run `phot` to get initial photometry results. List and explain the parameters you used.

8. Run `pstselect` to create a PSF target list. List and explain the parameters you used.

9. Run `psf` to compute a PSF model. List and explain the parameters you used.

10. Run `allstar` to do PSF photometry. List and explain the parameters you used.