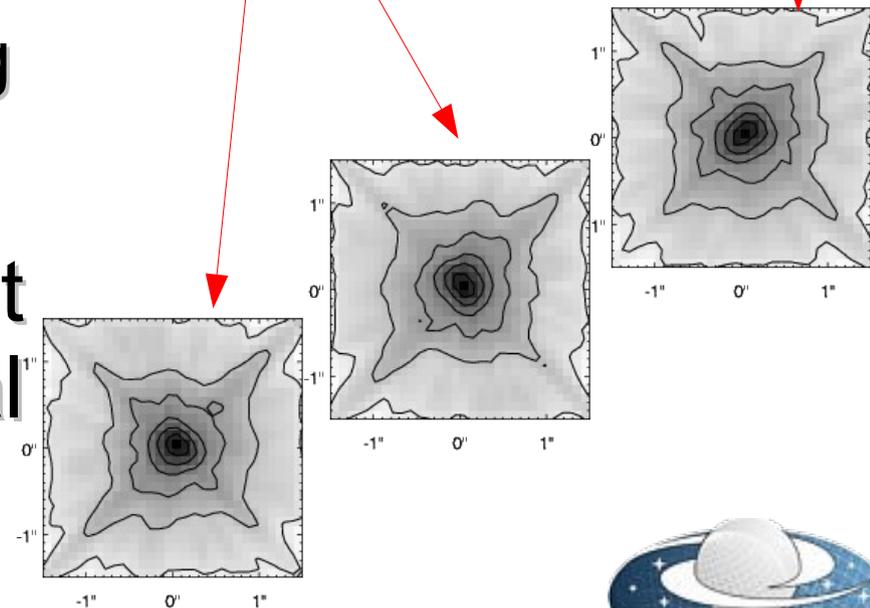
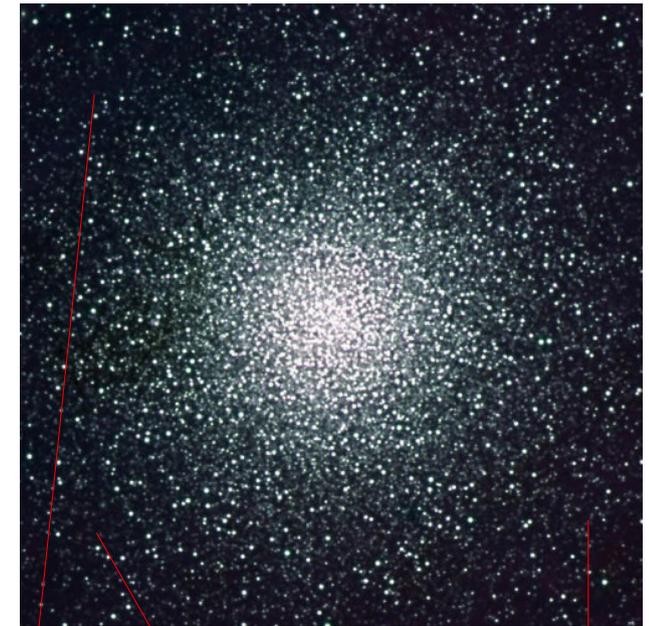


Characterisation v.2 use-cases

- **Crowded-field photometry**
- **Full spectrum fitting**
- Datasets with complex provenance
- Polarisation data

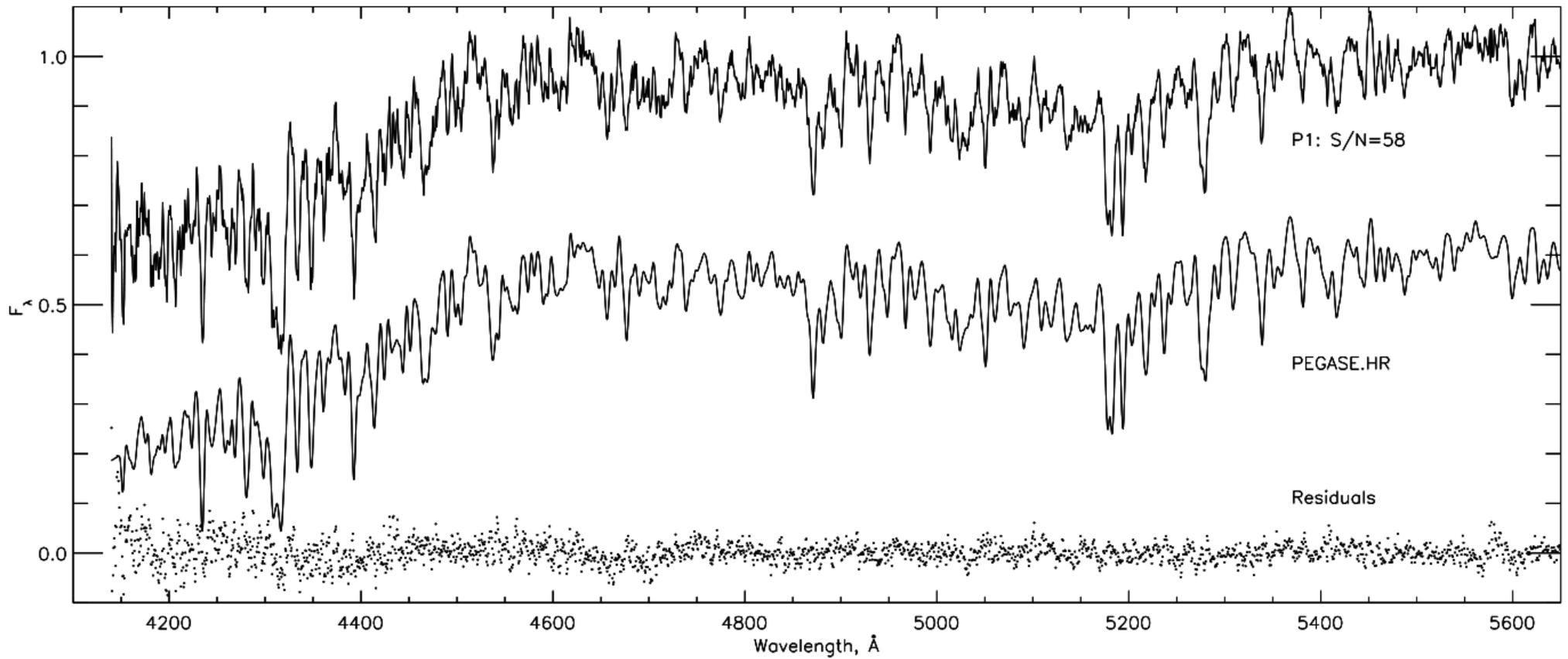
Crowded-field photometry

- In crowded fields the aperture photometry does not produce adequate measurement quality
- Simultaneous multiple PSF-fitting is used instead (e.g. DAOphot)
 - Object detection on the frame
 - PSF determination / modelling
 - PSF fitting at given positions
- PSF variations are significant across the field due to optical distortions of the system



Full spectrum fitting

- A model is fitted against an observed 1D-spectrum. It has to be convolved with the instrumental response
- Need to know the spectral resolution variation along the wavelength



Example: SDSS 1D-spectrum

