



# PyKOSMOS: A Python-Based Spectral Reduction Suite

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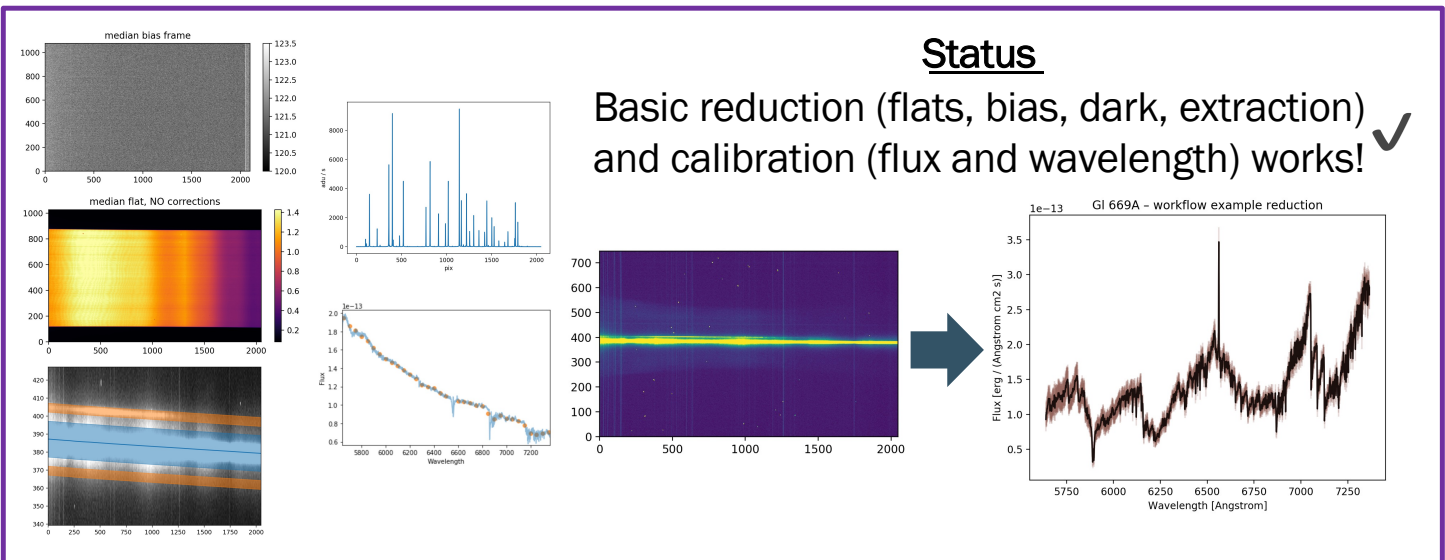
## Project Goal

A reliable, well documented, easy to use, Python-based package capable of quick-look and basic spectral reduction.

Built on the “PyDIS” framework, based on traditional IRAF workflow, using new Astropy methods where available! 

## Status

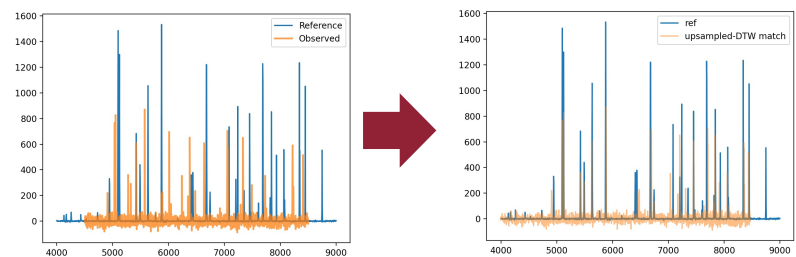
Basic reduction (flats, bias, dark, extraction) and calibration (flux and wavelength) works! ✓



## Currently Developing

Using *Dynamic Time Warping* to robustly & automatically solve wavelength solutions from arclamps!

*Simulated arclamp recovery with broken & non-linear solution*



## Goals (Help Welcomed!)

- Build an archive of reference calibration data for DIS and KOSMOS
- Create real-time, hands-free reduction scripts (easy)
- Implement “optimal extraction” (medium)
- 2D wavelength solutions (hard)
- More test data to benchmark against
- Make *pip* installable

