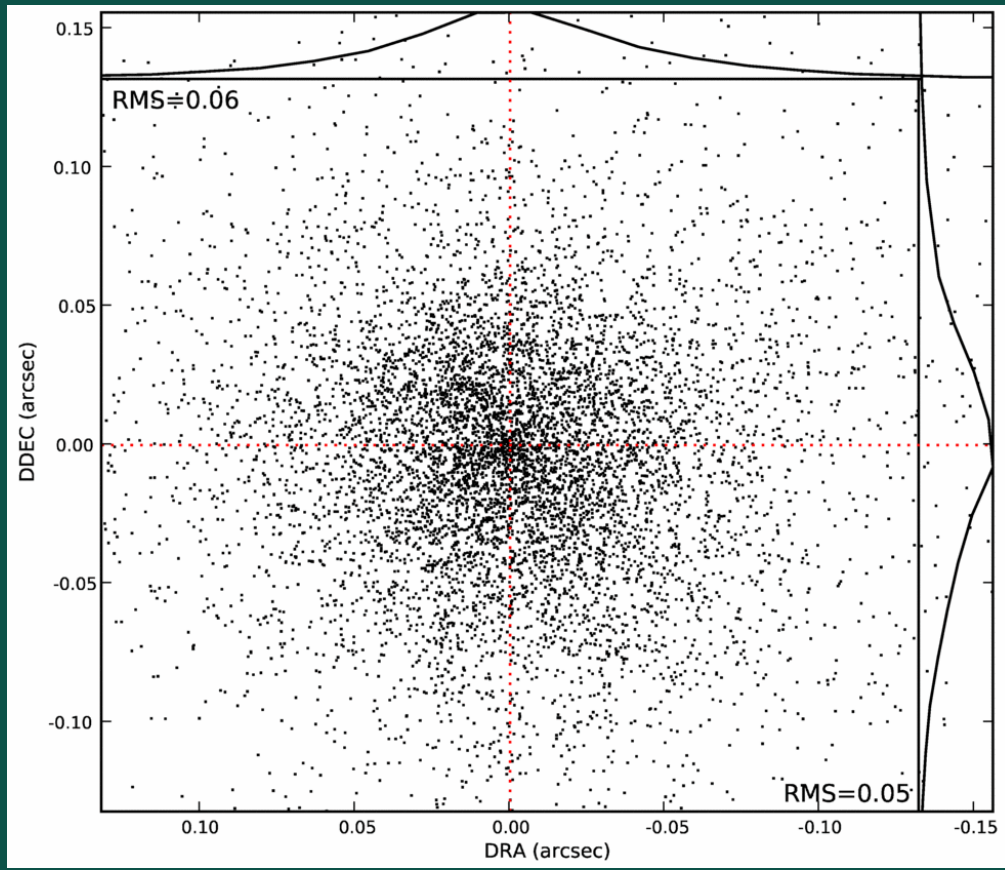
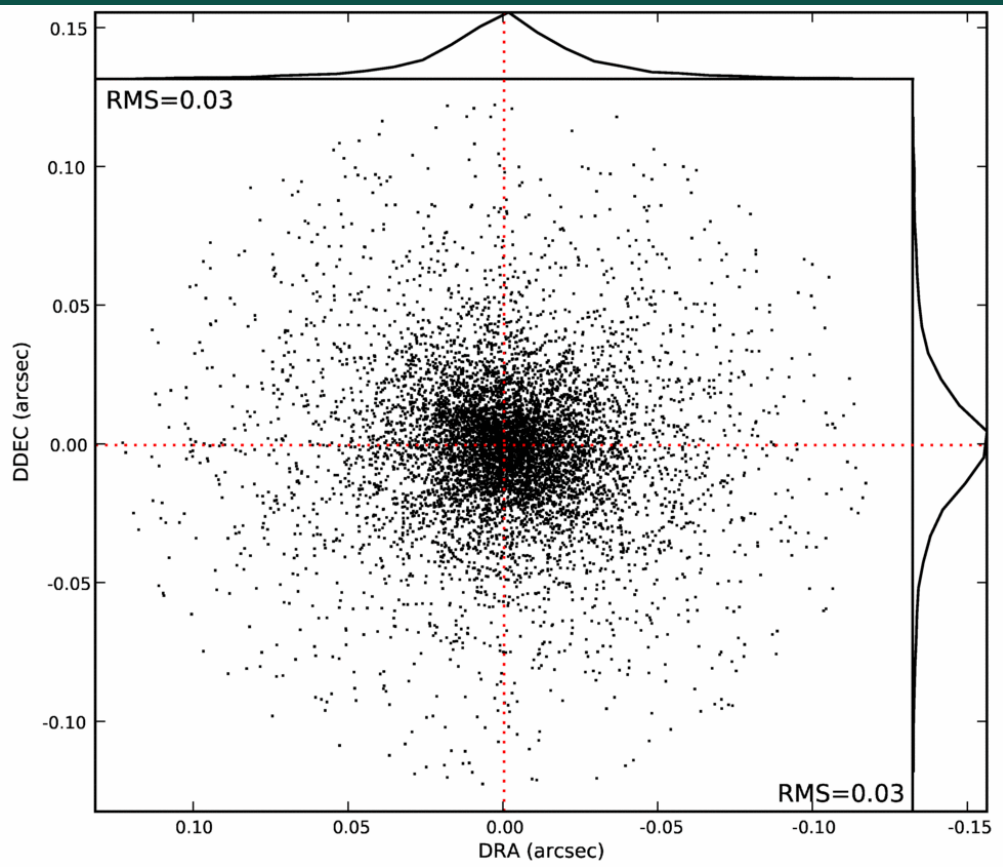
Astrometry in Astro-WISE

Astro-WISE Global Astrometry at Work

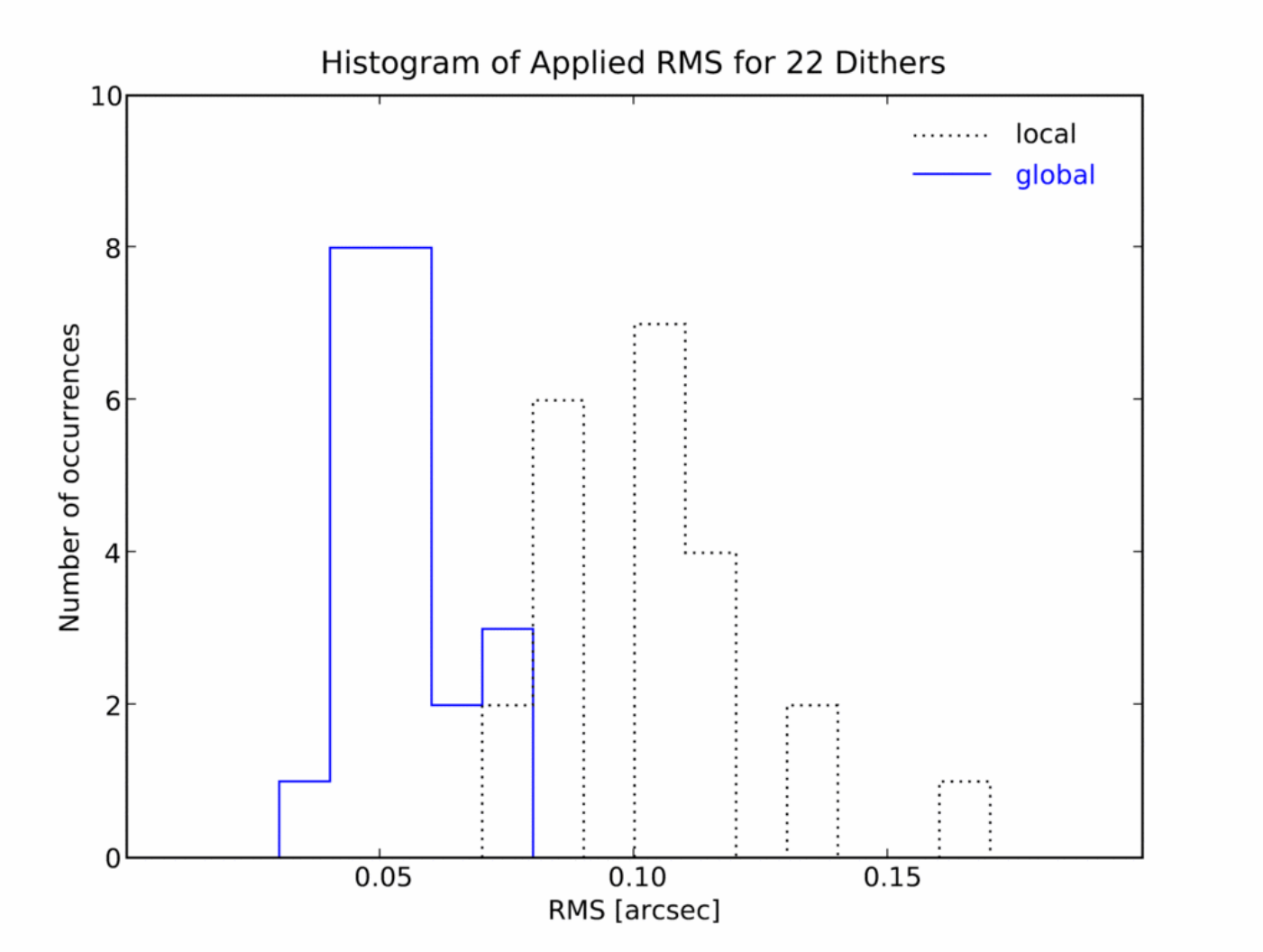


Local



Global

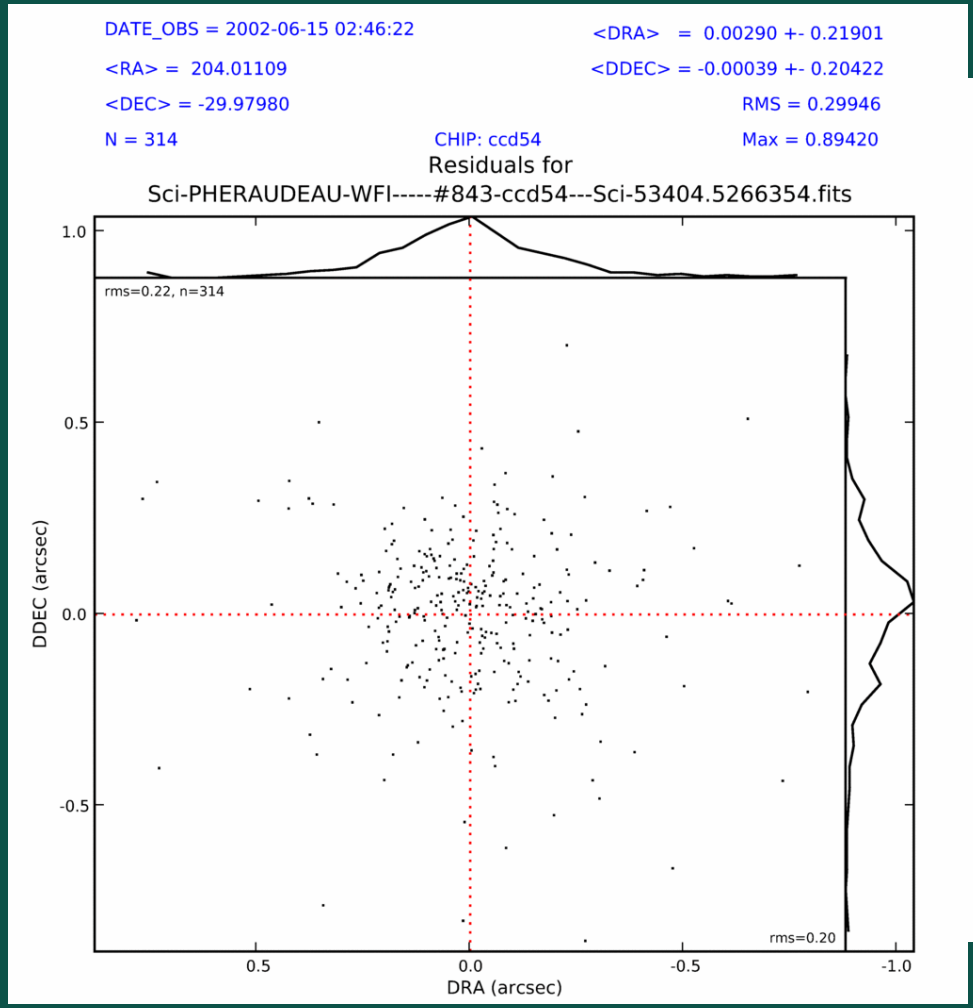
Improvement

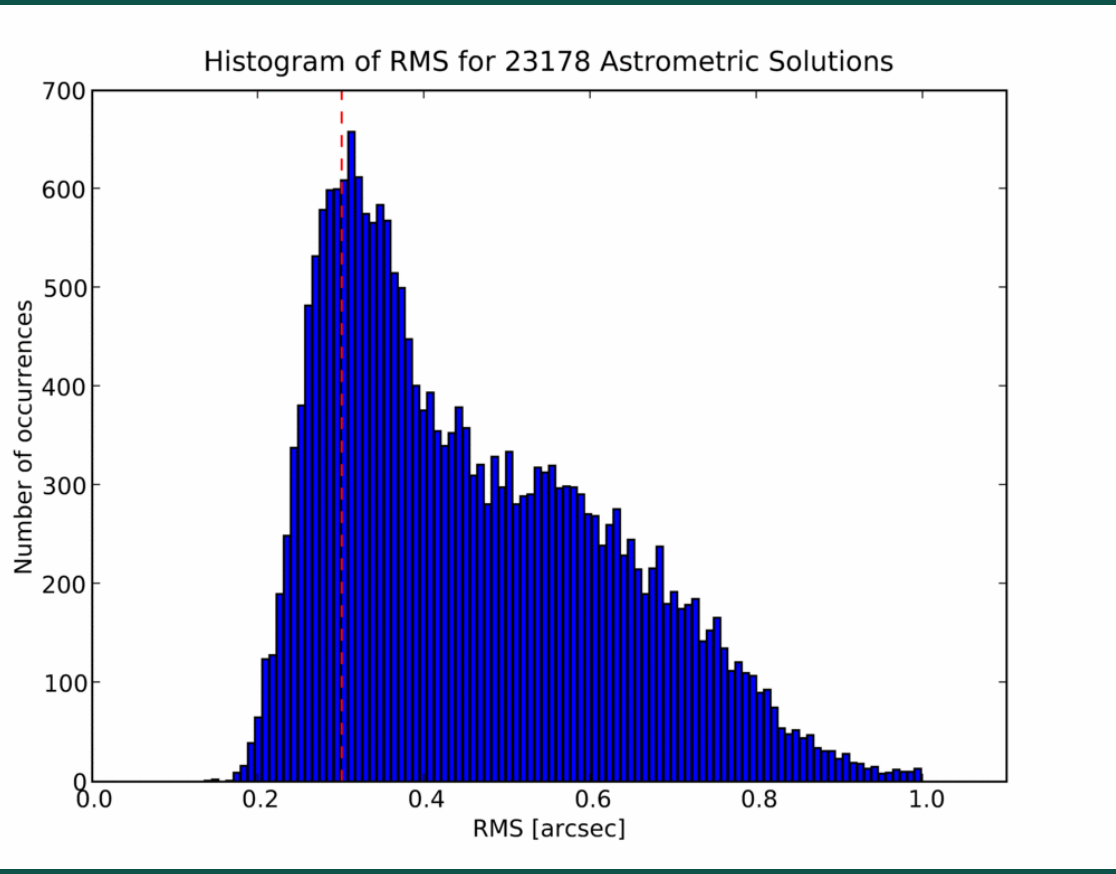


Astrometry in Astro-WISE

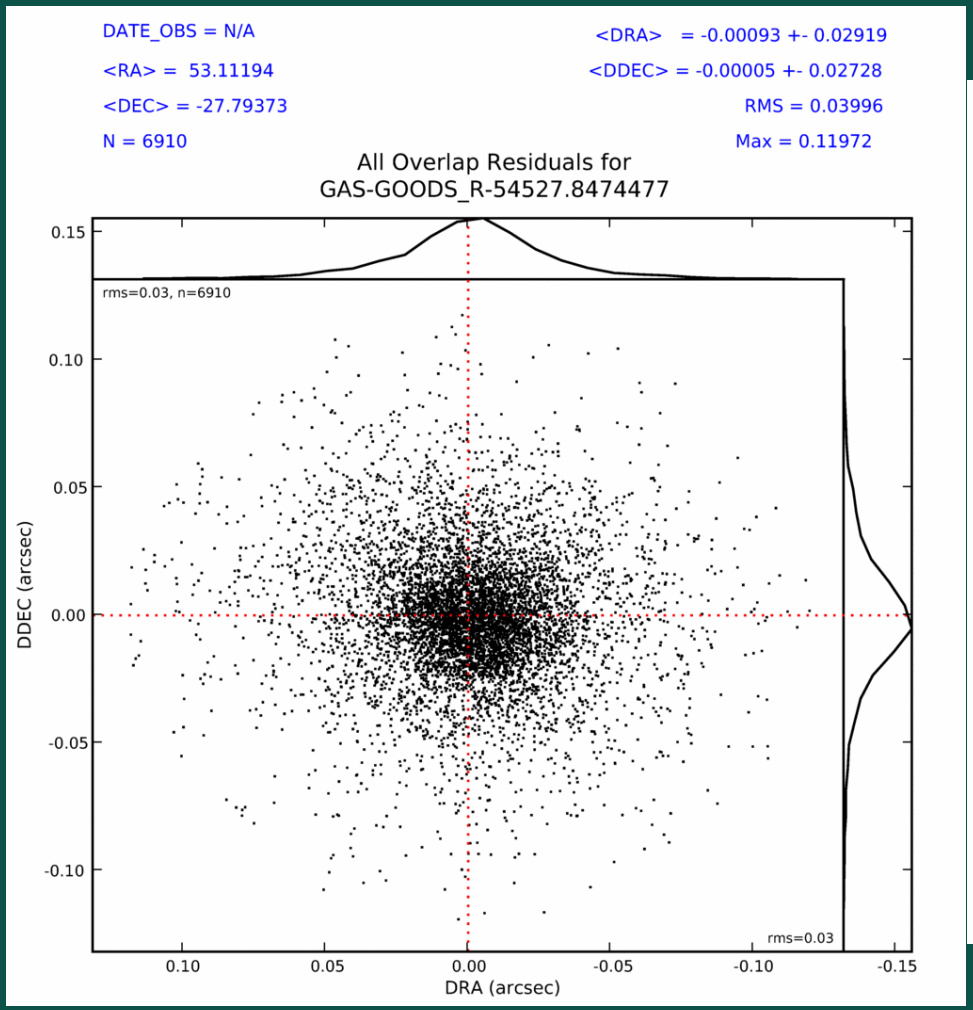
- Astrometry in AW works!
  - “bugs” in LDAC and the Python layer fixed
  - new applied inspection methods created
- Fixed focal-plane geometry
  - closely matched alt-az minimizes differences in higher order distortion
  - higher order terms can compensate, but not default (data dependent)

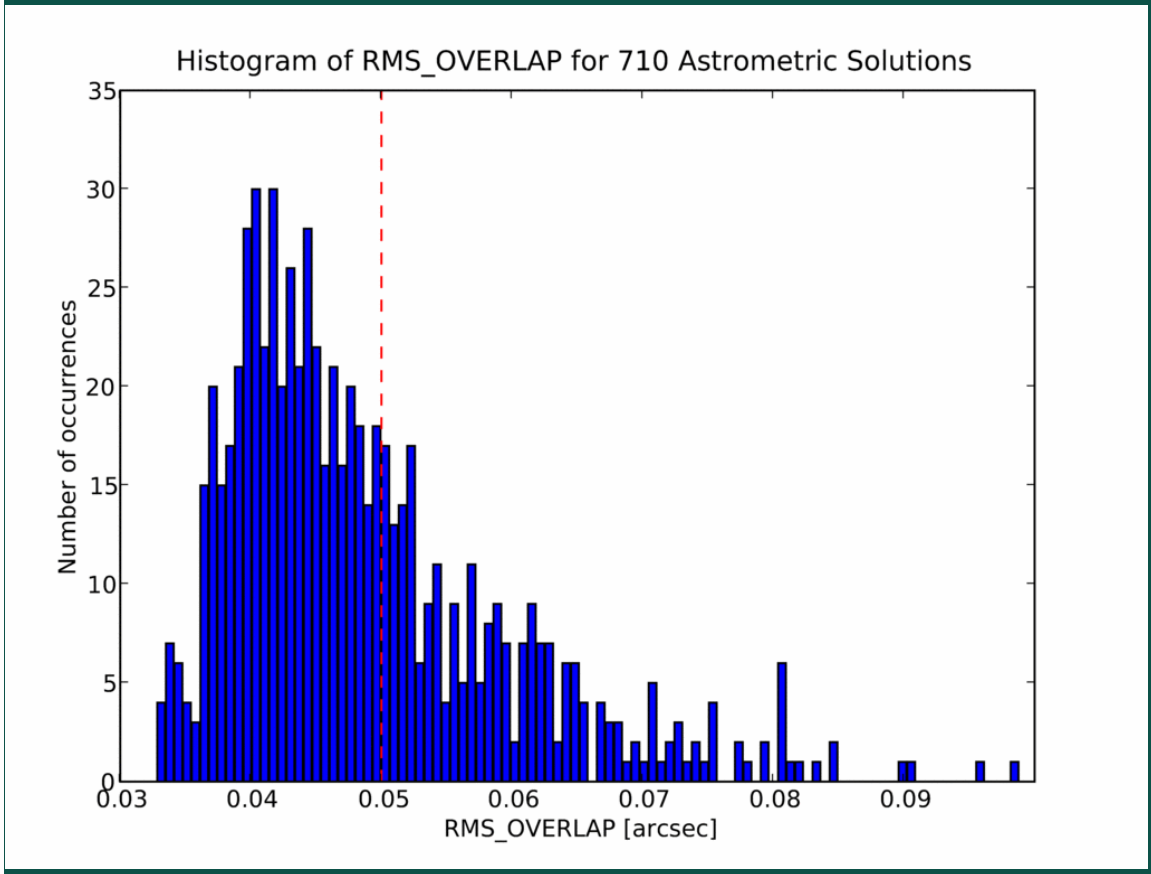
Local Astrometry





Global Astrometry



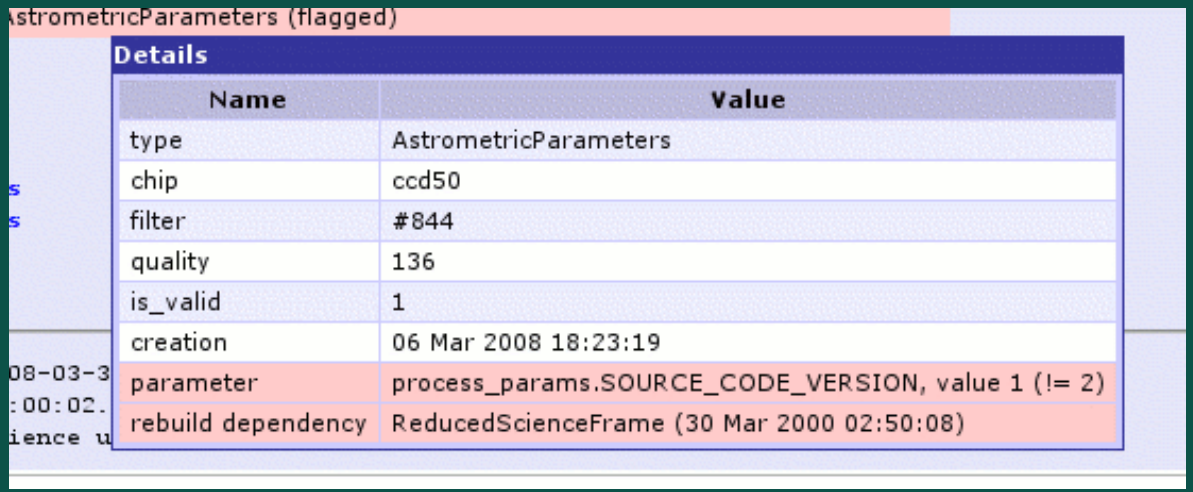


Inspections

- AstrometricParameters.inspect()
- AstrometricParameters.plot_residuals_to_usno()
- AstrometricParameters.plot_residuals_to_regrid()
- GAstrometric.inspect()
- CoaddedRegriddedFrame.plot_regrid_residuals()
- BaseFrame.inspect(compare=True)

Documentation

- On-line HOW-TOs and Manual
  - HOW-TO Derive an Astrometric Solution
  - HOW-TO Create Global Astrometric SourceLists
  - HOW-TO Derive a Global Astrometric Solution
  - HOW-TO Inspect an Astrometric Solution*
  - HOW-TO Troubleshoot an Astrometric Solution*
- Report on Astrometry in Astro-WISE

Reprocess!

- Command-line (manual)
  - AstrometricParametersTask
  - GastrometricTask
- TargetProcessor (automatic)
  - all previous versions outdated
  - use after new astrometry release is in AWBASE