

# CASA, VLBI & DiFX

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# importfitsidi

- Task that reads FITS-IDI
  - Automatically imports TSYS, WX
- Reduced scary warnings because FITS-IDI emitted by DiFX doesn't meet FITS standard
- Now handles data with a single band
- Now imports FLAG table
- **WARNING:** Concatenation of data sets is buggy!

# accor

- Flexible data selection (AIPS ACCOR & ACSCCL)
  - see VLBA Scientific Memo #37)
- Applies digital corrections for VLBA DiFX correlate

# fringe fit

- Dispersive fringe-fitting implemented
  - Expected in CASA 5.7/6.1
- Wide-band fringe-fitting under development
  - May appear in CASA 5.8/6.2
  - Also improves multi-band fits for EHT setup

# Gain Curves

- VLA: voltage(za), VLBI: power(el)
- New tool for importing gain curves from FITS-IDI
  - Still implemented as re-fitting the voltage gain
- Proper support in importfitsidi in design phase
  - Add support for new table in MS
  - Add support for power gain curves
  - Do coordinate transformation upon import

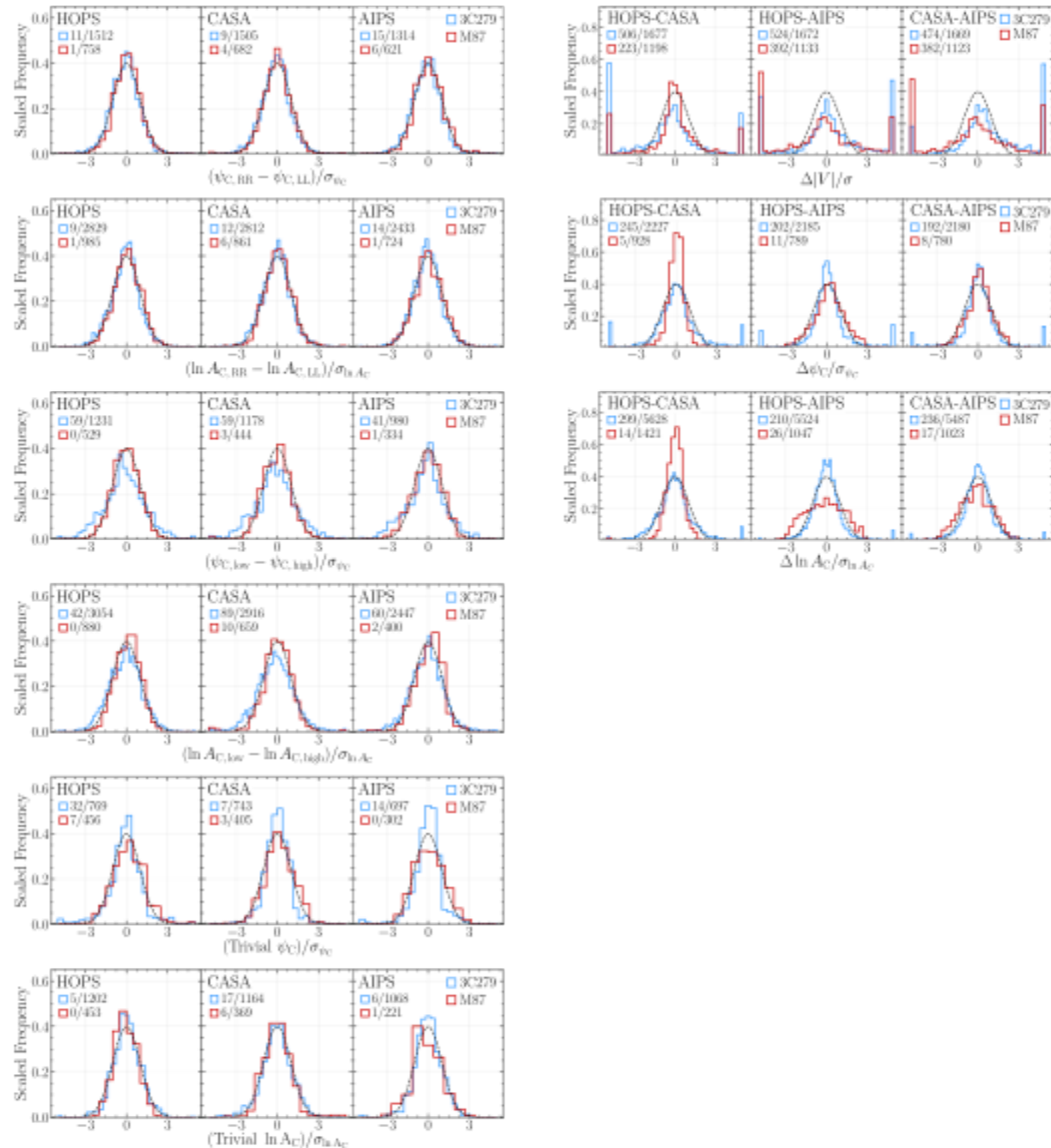
# EOPs

- VLBA test memo #69: “Inappropriate EOP on the VLBA Correlator”
- AIPS task CLCOR with EOPS option
  - Correction based on difference in rotation matrix
- Recommended step, especially for astrometry
- Implemented for CASA in Python
  - Still some discrepancies

EHT



# HOPS, AIPS & CASA





# rPICARD

- pipeline for high-frequency VLBI that uses CASA
- Michael Janßen, Radboud University Nijmegen
- *Astronomy & Astrophysics*, Volume 626, id.A75, 20 pp.