

Internal JIVE BlackHoleCam meeting

Date: 21 July 2016, 11:00 in Arpad's office

Subject: pipeline WP

Present: Arpad Szomoru, Des Small, Mark Kettenis, Ilse van Bommel

The second step of the fringe fitting calibration has been tested by Des and works well. This concerns the correction of delays as a function of frequency after initial correction for the overall delay, i.e. the solutions for the phase reference source in a typical VLBI experiment. This result has been submitted as a Daily Image.

Des is working on using the CASA solver in the Python prototype, but this seems very impractical. He suggests that if there is no CASA solver available, we could provide a wrapper for the Python solver to use in the C++ version. He will look into existing solvers in CASA.

There is a step-plan for the team in Nijmegen to start testing the fringe fitter. Daan van Rossum has finalized the casa-dev environment that is needed for this. Ilse has provided some basic steps to get them started using the scripts from Des.

Mark has a routine that can apply the solutions for phase and delays. For the rates he is waiting on NRAO to implement the proper table support. The apply step is not the same as in AIPS, and discussions on the specifics are ongoing with George in NRAO.

Actions

18: considering another dataset, ask dr Bob?

22: Mark will ask George if he is OK with publishing this list on a wiki

23: in progress. This document will need to go into the CASA Plone documentation server when fringecal is implemented.

31,32: JIRA tickets awaiting action from George

33: it might be easier to do this in the C++ version directly

ID	Description	Owner	Ref.	Due
4	Write note on motivation for solver	Des	151019	
6	Write report on verification with AIPS (deliverable)	Ilse	151019	
12	Test multiband delay correction	Des	151214	Done
18	Process EVN data with CASA	Mark & Des	160115	
22	Put up CASA to-do on the SKA-NL/BHC wiki	Mark	160404	
23	Write up phase model for CASA calibration	Des/Mark	160404	
24	Improve delay and rate application	Mark	160404	Done
27	Include verification test without EF station	Des/Ilse	160512	
28	Plan telecon with NRAO	Ilse	160620	
29	Attend EHT software WG telecon	Ilse	160620	Done
30	Discuss testing environment in Nijmegen	Ilse	160620	Done
31	Definition of gain curve in CASA	Mark	160620	
32	Implement apply Tsys for MS	Mark	160620	
33	Migrate fringecal prototype to new solver	Des	160620	TBD
34	Implement multi-band delay in fringecal	Des	160620	Done

35	NRAO: List of minimum parameters for fringecal	Ilse	160609	
36	NRAO: Define CASA XML template for fringecal	Ilse/Des	160609	
37	NRAO: Verification C++ fringecal against AIPS	Ilse/Des	160609	
38	NRAO: Benchmark fringecal	TBD	160609	

Next meeting: TBD after summer leave