Internal JIVE BlackHoleCam meeting

Date: 24 October 2016, 11:00 in Arpad's office
Subject: pipeline WP
Present: Arpad Szomoru, Des Small, Mark Kettenis, Ilse van Bemmel

Ilse attended the CALIM2016 meeting and spoke to Jeff and George about the progress. During the meeting the most interesting presentation was from Tammo Jan Dijkema, who is working on a calibration strategy for LOFAR that mimics dispersive delay fitting. He has been introduced to Des and there will be more discussion on this.

Tammo Jan is also the go-to person for casacore issues, and has been asked to provide input on the use of the current LSQ solver. He will assist Des with this.

The EHT people in Nijmegen have started to play with the new CASA tools in their own casa developer environment. They first had to export their data to MS format, which was a major hurdle. Some issues they raised were known, but they also found some new problems. Mark is looking into this and will forward some of the issues to Dirk Petry for improving the *importfitsidi* routine. The Nijmegen team offered to provide GMVA data, at least a few scans, and we now have EHT 2015 data in FITS-IDI format as well.

The current *fringecal* has been renamed "demonstrator", with some wrapping of the scripts Des will have a genuine prototype ready by the end of this week. It should require no more editing of scripts. We discussed further robustness testing of the prototype, as Mark immediately ran into problems with processing an NME. Ilse will write a testplan for this and contact support scientists to get involved in the detailed testing. The testing will be done fully in the CASA framework to exercise the other components as well. Tests should at least include: multiple EVN frequencies, multi-band delays, both solving and applying fringe solutions, and mm-VLBI datasets.

Actions
4: merged with 23
18, 27: will become part of the testplan
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
35-38: await porting to C++

ID	Description	Owner	Ref.	Due
4	Write note on motivation for solver	Des	151019	Done
6	Write report on verification with AIPS (deliverable)	Ilse	151019	
18	Process EVN data with CASA	Mark & Des	160115	Testplan
23	Write up phase model for CASA calibration	Des/Mark	160404	
27	Include verification test without EF station	Des/Ilse	160512	Testplan
31	Definition of gain curve in CASA	Mark	160620	
32	Implement apply Tsys for MS	Mark	160620	
35	List of minimum parameters for fringecal	Ilse	160609	
36	Define CASA XML template for fringecal	Ilse/Des	160609	
37	Verification C++ fringecal against AIPS	Ilse/Des	160609	
38	Benchmark fringecal	TBD	160609	

40	Find existing CASA solver and test if useful	Des	160928	Ongoing
41	Get in touch with Nijmegen about test status	Ilse	160928	Done
42	Write testplan	Ilse	161024	Ongoing
43	Contact support sciencetist for assistance w. testing	Ilse/Arpad	161024	

Next meeting: 21 November 2016