

Internal JIVE BlackHoleCam meeting

Date: 16 November 2015, 11:00 in Arpad's office

Subject: pipeline WP, simulations WP

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

General news

We had a very productive meeting with Bill Cotton. Some good answers were provided, but also some issues are still open. Most notably the definition of signal to noise in the fringe detection requires more attention.

Fringe fitting development

The comparison between AIPS and CASA is ongoing. There were immediately two issues to solve: the units that AIPS plots are not the same as stored in the tables. Des has looked into this and we will stick to the units in the tables, which are more generic. Another problem is encountered in AIPS: for a single IF the delay rate and phase rate have different values, depending on whether all the IF's are included in the FRING run, or just the single one.

Mark comments that care should be taken to flag the data properly. End channels can cause problems in the fit and should always be flagged. Also bad data should be flagged. This is currently not done properly and could explain the issue with the single vs multiple IF fitting in FRING.

Data processing in CASA

Performance of CASA is still an issue, writing tables in a MS is very slow. In the discussion with Bill it became obvious that we should think carefully about the performance of fringe fitting in CASA, and ensure that this can be parallelized.

Simulations work

The South Africans are working on tropospheric simulations, but we haven't had a chance to test their simulations in AIPS or CASA yet. Ilse will try to get some off of them for verification and testing.

Pim Schellart is now committed to working on a monitoring and control interface for the next EHT run. This includes metadata that we need for the calibration. He will no longer be available for simulation work.

Actions:

ID	Description	Owner	Ref.	Due
1	Compare minimization tasks	Des	150914	done
2	Inform Remo about views on meta data standardization	Ilse	150914	done
3	Inform Remo about data format and request FITS-IDI output for 2015 run	Ilse	150914	done
4	Write note on motivation for solver	Des	151019	
5	Compare prototype results to AIPS output	Des & Ilse	151019	
6	Write report on comparison with AIPS	Des & Ilse	151019	
7	Contact NRAO CASA dev with suggestions for improvement of CASA VLBI data processing	Mark	151019	
8	Coordinate visit of Bill Cotton	Mark & Ilse	151019	done
9	Inquire about imager studies for LOFAR	Ilse	151019	
10	Contact Heino about status of MeqTree development	Ilse	151019	done
11	Get simulations from RSA team	Ilse	151116	done

Next meeting: December 14th, 13:00