

ECSV Discussion

31 July 2012, 10am in room 317

Attendees:

Claire Chandler, Barry Clark, Vivek Dhawan, Eric Greisen, Miller Goss, Jeff Kern, Cornelia Lang, Ann Mao, Minnie Mao, Betsy Mills, Amy Mioduszewski, Emmanuel Momjian, Steve Myers, Kristina Nyland, Nurur Rahman, Nirupam Roy, Juergen Ott, Frazer Owen, Michael Rupen, Deb Shepherd, Ken Sowinski, Ravi Subramanya, Urvashi R.V., Gustaaf van Moorsel, Kathryn Weil, Joan Wrobel

Minutes:

Correlator and general system health (Ken, Michael)

- We had a failure on Friday where several station boards required re-booting on 2 racks (5 boards over both racks). The fact that it was isolated to 2 racks suggests a failure in the crossbar boards but this is not verified. We are keeping our eyes open.
- There has been an upgrade to the Correlator Back End (CBE) this morning. This buys us a recirculation factor of 256 (max possible).
- We are holding off on Correlator Configuration Mapper (CM) changes until mid-Aug when Sonja Vrcic (DRAO) gets back from travels.
- There was another phased array test last week. There was actual phasing and transferring of the phasing from one source to another and this worked well – GOOD progress. Turning on and off the phasing didn't work. This problem is being followed up.
- Barry is still working on wide-band phasing.
- 3-bit testing:
 - We are still roughly in the same boat as we have been with reliability being the primary problem. We are tracking down the issues, finding new ones.
 - A new problem came up last week: when running wide-band 3-bit SBs sequentially, the 2nd one always fails.
 - We are focusing on gathering data about how robust and reliable the system is. We will be taking 3-bit data every day this week and next to track down problems.
- Note: Bob Sault will be here 20 Aug to 19 Sep. and he will be working on EVLA commissioning.
- Jeremy Lim will be here soon to work on 3-bit commissioning.
- Two new low-frequency receivers and dipole goes up next week to collect more data.

Software status, including CASA (Jeff, Juergen, Steve)

- CASA – a new test version of CASA will come out soon. This incorporates changes in the binding between python and C++ - a big change.

- We have postponed the update to the OPT until Thursday – after proposal deadline.
 - Betsy and Joanna testing the new version.
- The Pipeline is being updated to work in CASA 3.4 – when ready for wider-testing Claire will let people know so they can begin testing.

This Friday will be Cornelia Lang's last day – a summary of what she has done in her work as a RSRO with Betsy is below (Betsy will be here until the end of August):

- Science:
 - Betsy and Cornelia had a RSRO project in Dec/Jan – K and Ka-band suite of line and continuum, different resolutions and channel numbers.
 - They have also had a day-time galactic center program in January – a summary of the preliminary results were presented by Betsy at the Wed lunch talk last week.
 - The datasets have inspired a number of additional proposals (VLA & ALMA) including a DDT time for additional VLA data.
- RSRO commissioning:
 - Natalie, Cornelia's grad student, ran datasets through the 3.3 versions of the pipeline – they got good results and are very pleased with the outcome.
 - Betsy tested Nirupam's TUNE tool, editing Juergen's spectral line guide, and wrote an example for the spectral line observation setup (given to Juergen and posted).
 - Their science data were observed when the sub-reflector rotation trick was not turned on. The gain curves that correct this situation will be tested by Betsy this month if the gain curves are made available by Bryan.
 - They have done some testing of the 3-bit gain curves, comparing calibration solutions between the 3-bit and 8-bit stream in CASA. This compares well with the AIPS-derived solutions.
 - Cornelia has been working on switched power application in CASA, taking over from what Stuart Corder did to apply switched power in CASA. She has had good progress using Rick's 8-bit flux-density run. Cornelia will write up her results, combined with what Stuart did, in the next month, working with Betsy to complete this task.
 - Note: we still need a way to filter errant switched power data in CASA.
 - Supported the Chautauqua series (gave a lecture that was very well received), summer school tutorials, and VLA tours.
- Our thanks to Cornelia and Betsy for their useful contributions to EVLA commissioning.

FY13 Program Operating Plan (POP) commissioning and operations goals

- Deb presented slides that summarized the draft POP milestones for FY13.

- Several comments were made that were very useful for determining what level of service should be offered (and when).
- Joan mentioned that we do not explicitly call out polarization commissioning of 8-bit data. With the upcoming G2 cloud interaction with Sgr A*, there will almost certainly be high frequency polarization proposals.