

WURM, 18-07-2022 13:00 WURM

Present BobE, Aard, Des, Mark, Marjolein

Aard: got request to investigate building CASA, difmap images for ERIS; besides Singularity, docker, tried AppImage; building AppImage has a bit of O/S dependence but resulting binary should be fine for all linuxen; MacOS? [Mark: on MacOS the App /is/ an image so could be simpler] only found old recipes. [Mark: would there be a difmap brew recipe?] (Marjo, after meeting: no recipes for PGPLOT nor difmap, there is for Giza). Non-detection of high-SNR FRBs: found + fixed another issue in mixed b/w mode in combination with dedispersion mode but still no detection, maybe scattering? Creative dynamic scheduling means at time of FRB only few stations have burst not near edge of band.

Mark: ChrisP reports ParselTongue issue on MacOS where brew recipe don't work; provided workaround. HuibvL working on Boven data: break CASA weird: script to convert UVFLG to CASA not working: create outputfile with erroneous newlines, importfitsidi won't parse that output; cannot reproduce. EOP progress: VLBA uses CALC table w/ five parameters/EOP in FITS-IDI; EVN/JIVE write one EOP parameter in table header, use three; discuss w/ BobC whether EVN/JIVE should write five too (need to invent two); comparison: in both AIPS+CASA: correlate w/ old EOPs, rotate to new EOPs using appropriate tasks, subtract from data correlated with new EOPs, compare residuals: (long) E-W baseline show largest differences between AIPS and new CASA tasks, with CASA diffs being closer to 0 deg than AIPS; currently evaluates for each  $t_{int}$  (too much) AIPS uses CL table grid (once per minute, probably not enough) [Aard: recommendation is every 15s isn't it?]. PCAL table proposal to NRAO for review, no feedback, just submit to casacore, will end up in CASA at some point; had discussion at EHT meeting with IvanMV: he uses PCAL in PolConvert to find instrumental phases.

Bob: was at EVN Symposium whole week. Got mail from StefanoC: REM telescope now in maintenance, good time for AEON dev & test. Will get the new archive website online again for upcoming demo + discussion. Need to wrap up pySCHED work.

Des: re combining polarisations: use other method suggested by Mark => this produces results for single pol data [Mark: might make the choice of method configurable?]; maybe, let's see if results are correcter or usable (creating (pseudo)Stokes I from single pol data is fundamentally impossible in the first place so "correctness" may be a relative term) than first approach before offering. u,v-range parameter: doc wrong according to NRAO but is just a generic parameter; cannot build the documentation locally. Answering which station's data in which publications: 2nd attempt made after 1st attempt demonstrated some hiccups. Spent time reading+understanding IvanMV's PolConvert paper.