

WURM, 09-05-2022 13:00 Oort room

Present Bob, Ilse, Aard, Mark, Paul, Des, Marjolein

Plenary part: because of uncertainty about people's presence in the building or participating remotely it is quite indeterminate until shortly before a WURM what the best venue for convening will be. Today Marjolein sent an email quite late with the actual location. This mechanism was approved by all so a brief mail before the WURM will be sent to announce the actual WURM setup-du-jour. (e.g. the Oort room was available two weeks in a row but won't be for the next few).

BobE: GaborO request: could ANTAB do multi-phase center files? Introduced option to handle that case. Incidentally, around the time of testing that, the archive server started to become extremely slow: CPU usage 1900% - did ANTAB editor "blow up" archive? No. Investigation reveals SQL injection attacks on public page using query taking parameters, which was hit several times / second whilst query uses temporary table (i.e. using CPU and disk space) takes ~seconds to execute. In passing noticed that root partition isn't huge and also quite full already [PaulB: new archive machine has larger root FS]. Immediate fix to prevent DoS: move script to different URL; it's not a real public page; proper solutions exist (make accessible only from internal network) but require discussion w/ operations group. Multiple Phase Centers w/ e-VLBI this week: simulated test shown to work, doubling FFT size, halving t_int: no prob. Setup files in pySCHED: discussion was done, setups now in production. BenitoM shared patches that BobC uses when making schedules, applied, so now also available in pySCHED. Did not get to work on sun warnings; hopefully next week.

Mark: received question on EVN experiment re old CASA flagging data whilst newer version wouldn't: checked and could not reproduce; expect user error after import of data. Fixing EOPs: followed up idea sparked during vlcoffee two weeks ago (SOFA libraries w/ IERS corrections): astropy uses transforms using SOFA, investigating if accurate enough given future CASA will be Python distribution incl. astropy; almacalc has hardcoded changes that do not agree with our use, do not trust casacore coordinate transforms; create test w/ two correlations (using diff EOPs), apply EOP correction, see how much difference remains. Attended ESCAPE, EHT meetings; this morning correlator specialists gathered together for ngEHT wg.

Ilse: CASA VLBI paper references: done; distribute to other authors for comments; need cross-referencing w/ CASA reference paper; plots now complete. EHT papers printing is issue; been reading them. Testing uvrange parameter started, hope to finish soon. This week: EHT party; hope to be able to test INAF data problem. Out of the blue: mail out of Berlin "do you do parallelization in CASA? We may have a different system". Weird.

Paul: fb90/PetaBuff hardware delivery expected today! Access to trantor backup machine in Wb lost; WybrenB in Wb tomorrow anyway so

will inspect. fb12 reported broken HDD, upon extraction very hot. JIVE should have an on-/off-boarding process for accounts etc. [MarjoleinV: integrate w/ ASTRON ICT forms?] [MarkK: not desirable] [PaulB: at some level it IS desirable, e.g. for user name synchronization]. Will start to work on Wiki page for listing steps/procedure [MarjoleinV: coordinate w/ YvonneK, she is in charge of new employee process].

Des: combining polarizations in fringe fit now in EHT branch, ready for verification. Currently focussing on modifications of controlDBBC (e-VLBI tomorrow), KPI discussion happening on Wed.

Aard: spent some more time on Zolochiv data, trying to make "spectra_inversion = True" work: in latest version the variable exists but isn't used anywhere, so tried to figure out what it did before and transplant that into latest version but no result. Phase cal amplitudes in sfxc output are scaled by fudge factor: need to understand where this factor comes from, checking HOPS code to find origin. Report by SumaM: get primary beam corrections but Sr missing: investigation brings back memory: beam map for Sr exists (measured in 2020) but fit routine finds wrong 0-point leading to erroneous parameter estimate [MarkK: was this before or after attenuators installed?], trying to find workaround.