

ZWURM, 11-05-2020 14:00 (WURM through Zoom because of #COVID19 house quarantine/wk10)

Present eBob, Mark, Paul, Ilse, Des, Aard, Harro

eBob: Merged setini sections in pySCHED catalogues; feedback/suggestions from Marcote and Boven for plots. Campbell mentions vbs_rm is slow, even when executing in parallel on > 1 flexbuffs: speed ~10TB/hour deleted (~3Gbps per 6 flexbuffs). Investigating a reported ER047A archiving problem: not all FITS files end up archived (still available on eee, fortunately). Likely a staging issue where the move-from-staging-area script kicks in before the copy from eee to staging area has completed. Will continue work on relative timing of starting recorded e-VLBI and correlation.

Ilse: Besides holiday working on notebook verification. Noticed that plot strategy can influence results (diagnostics?). Working on EHT Diversity climate survey. Received a CASA plotcal issue where it crashes on multiband fringe fit results. Will try to reproduce locally before eventually assigning someone else. EAS activity: received few abstracts to review, got notified of deadline after deadline.

Paul: Visited Dwingeloo and Westerbork to pick up 17 hard disks and install in trantor off-site disk backup. Now has 1/8 PB available. Reviewing an IEEE WhiteRabbit paper. Announced SURFNet migration of Onsala link to 100 Gbps this Thursday. Working on observing schedule for EB081; a VLA proposal was submitted. The broken disk in flexbuff14 was replaced with a 10 TB disk which turns out to be Shingled Magnetic Recording (SMR) disk - took ~1 week to resilver the pool.

Aard: Built debug mode into SFXC: send signal, dump state in JSON in /tmp. Special mode in manager node to dump state of all other nodes? [Side discussion: probably unwanted, too many other things have to work - better have smart dump connecting tooling, linking state of multiple processes] [Other side discussion: make file name unique such that multiple dumps can be traced to host, node and process]. Noticed Singularity problem on eee-dev - can not start singularity shells anymore? Received paper from summer student of 2018; paper may even be finished before summer. Migrating Mark's scripts into docker image and working on Jupyterlab frontend.

Des: Besides holiday worked on paper database; only 80 papers seem findable by EVN project. Zsolt's manually compiled list (source: annual reports) lot longer, but papers typically only mention the use of EVN data. Will plod on using perl-python string mongering. Had wideband fringe fit epiphany, tested in Python now working on C++ implementation and trying it.

Mark: Attended several virtual IVOA interop sessions last week. Interesting mix of high-level and in-depth detail discussions. RadioAstronomy into the VO session did not give much news; promoted the FRB use case. Special Interest Group (SIG) for RA telecon(s)

should be coming up. A python VO server was demonstrated but it only works with Oracle. Provenance is being worked on a lot, some take it very seriously. CASA requirements document now in phase of prioritizing - asked NRAO (VLBA) and JIVE staff. Created ParselTongue packages for the new Ubuntu LTS (worked in one attempt). Continued work on gaincurve in MS. Contacted by Andre Offringa: two FFT libraries in casacore: fftpack and fftw. Desire to remove fftpack but importfitsidi uses cosine transform from fftpack. Andre offered to write c++ cosine transform using fftw. Will test if available.