

ZWURM, 15-03-2021 15:00 (ZWURM through Zoom because of #COVID19 house quarantine/wk53)

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

General: the next TOG is planned for end of April 2021, can expect announcement for that. Where I asked for bulleted achievements for the annual report please also include imagery!

Ilse: Continued exploring V0 tools and specifically ADQL; found the tutorial sparse, assumes reader knows SQL language already, when up to speed will try querying EVN archive. EAS talk selection in full progress: received many good abstracts, managed to compress/squeeze in +4 or +5 talks into program. Helping with EVN minisymposium preparation. OlgaB wrote down spectral line requirements, now translating to notebook; once done - next step(s)? Meetings: JJ exec meeting (last week), several EHT (also this week), SKA science meeting this week, will be attending SKA VLBI WG meeting Thu/Fri.

Des: Initial version of fringeFIT memo for NRAO distributed for internal feedback; deadline? NRAO has one but not known at this moment. [Mark:] The memo should not be user documentation (that is already there) so need background. Spent time combining databases and thinking on normalization solutions. Created an archive interface in Python on other host -> transforming database query to HTML in Python is fine; some scripts use file system access and one Apache serving both PHP, Python req. wizardry config. Received V0 server connection details, successful queried, can continue incorporating that information.

eBob: Change of transfer priority per station i.s.o. per experiment will be installed after ftp test finish. Reported data transfer speed issue with Ir linked to fb9 - all transfer to fb9 < 300 Mbps, require network investigation. User reported backup/restore issue: user jops no write permission on out.sfxc:/data and user sfxc no access to tape; this is all intentional: sfxc writes data, jops does backups - need separate "restore" area on out.sfxc. MartinL: FranzK data called `PR\*` but for correlation / project accounting assigned EVN code `EK\*`: rename script exists but on fb7 (WSRT fb) must be able to run as different user since directly recording there, not e-shipping!

Aard: New stable sfxc installed - no complaints so far; need to point out new button "Create debug" (probably mark it "do not push this button"). Jupyterhub configuration continued: executed first notebook successfully, now waiting for certificate (service enabled for run, then disabled - can't have public service w/o https!). Found sfxc bug w/ coherent dedispersion combined with pulsargating: one station ok, two stations = correlator freeze. Mark reported sfxc2mark4 problem, investigation reveals type1 record for mixed bw baseline x2 size.

Mark: Lost Mon/Tue last week due to heater installation. CASA5 build on casadev #FAIL?! [Des:] I succeeded, will share notes (remove all

MPI options, and diffs); reason is necessary for c++ unittest creation. Experimenting with ideas for sfxc output bottleneck fixes but no improvement so far; continued this week. drBob threw curveball: mixed and non-overlapping bandwidth (eMerlins only 2 x 64 MHz, others n x 32 MHz) geodetic setup #FAIL: delay table fmt changed but not sfxc2mark4 (fixed), corr ok but HOPS still #FAIL, yielded to AardK; if type1 fix doesn't work maybe insert fake data for missing bands. Several meetings to attend this week.

Paul: Not at ASTRON today due to selfquarantine. Broken disk in fb7 looked still ok, put back in RAID, now ok. Replacement disks needed for fb1, fb9 (MartinL in the building will take care). Jupyterhub delivered, certificate request out, need firewall config still. Talk at GÉANT for T&F service throughout Europe and how VLBI can use this, mentioned that our requirements < what state-of-the-art systems deliver. cl3/4 configuration: ongoing this week; also: due to US regulations come with separate, untypeable IPMI passwords, suggest can incorporate with LDAP but documentation very old and no-one seems to know. Did selfcal on recent EVN data but looks all bogus.