ZWURM, 30-11-2020 14:00 (ZWURM through Zoom because of #COVID19 house quarantaine/wk38)

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

Des: Spent most time on CASA; MichaelJ reported problem linked to heuristic for determining how many integrations present in period -> need new heuristic; fixed for case w/ too many Spectral Windows (SPWs), package to MichaelJ for testing; solution for the T\_sys problem rounding up today then send to GeorgeM. Des mentions that a few persons in his household are not feeling very well and are looking for the thermometer.

Ilse: EAS special session was accepted this morning! Last week spent lot time on EHT ombudspanel discussions, some leftovers this week and then send to board. Attended RadioNet board meeting; presented on training events, listened to science highlights with some really nice ones. CASA User Committee final review of the report; after that need to look for replacement on CUC - does not have to be JIVE staff but VLBI knowledge is important. The lessons learned from the workshop document: what to do with it? Discuss with secretary to publish on intranet, share with ASTRON and LOFAR since the latter will have to do something similar next year. What to do with the tech issues found during the workshop? [Mark: compare to requirements document, if something missing add it, otherwise if bug file CASA bug report]; the Mattermost instance is still being used by one or two people to communicate - attendees have been alerted that ~ half December the Mattermost will be shut down. Will start working on presentation for the RadioCameraInitiative. Attendance of the VO workshop early next year: if someone from ASTRON/JIVE will attend, happy to join (BenitoM and ZsoltP already on list). Will be (re)starting notebookversioning research and OlgaB's spectral line notebook.

Aard: ESCAPE WP3 onboarding presentation given, follow-up paper still needs to be written. Found out that the metadata file in the gitlab has been changed; will have to adapt to new standard. Migrating CASA plotcal to CASA6 is a trainwreck - one of the C++ libs linked to Py2, so cannot import in Py3 environment, could be done with mini-Python install and os.system() wrapping [Aard, Mark, Har in follow-up after ZWURM: forget this line of attack, write plotcal functionality in pure Python+matplotlib = free integration w/ Jupyter, try to make look&feel like official plotcal]. Need to do operator expectation management: "system is so sloooow" - turns out 2 Gbps exp w/ Mark5 in the loop = max 700 Mbps = take long time. DrBob reported problem(s), amongst which scan\_check reporting different values than data actually is for Tr (HarroV not cc'ed on message), probably only 1 VSI cable connected in 4 Gbps WASTRO shared risk obs - Tr data may be lost.

Paul: SURFnet8 test results analysed, vetted by DrBob and reported to SURFnet – network quite resilient! SSL certificates expire every yr % 5, most servers done except ldap0/1. Want to do 0/S upgrade at the same time. Prepared new servers, so only name swap necessary –

in theory. During changeover need to disable replication - change pw, but pw works on both old & new systems, this is a Debian bug (fixed in dev, not prod O/S), took lot of time to find and work around. New openIdap uses `ldapmodify` to (re)configure everything \*except\* the server name, this took a lot of time to fix. Then could not log in to flexbuffs -> ca-cert installed month ago but ns(l)cd needs restart before it sees the new certificate. Went through redmine and check all IPs if log in ok or not, find out manually if init or sysctl script to restart which nscd or nslcd - took a lot of time. Hampered by fail2ban if too many failed logins. Certificates on cl0/1 refreshed. Some specific flavour of sfxc nodes missed, fixed this morning. ldap0 reported on Friday to work intermittently - ran out of open file descriptors, unknown yet why. Fixed up db0 maintenance of last week (create new swap partition). Finished 31DEC19 AIPS migration on archive. Received quotes for Jupyterhub server (single/dual CPU options for same #-of-cores) - maybe that sfxc-o13 and sfxc-o14 can be returned to sfxc (now demo Jupyterhub and monitoring system). VO server arrived; will be @ASTRON this Wed, installing/configuring it and meet with KlaasS and JulianK about ASTRON network migration. JIVE invited to participate in small Data Transmission Node (DTN) experiment by SURF (100+ Gbps file transfers using NVME storage and 100+Gbps n/w). Will attend SALF conference. Spent quite some time on SKA documents, not just finding documents for Szomoru report but due to +20 dishes at MeerKAT, rack space planning as delivered by SaDT now worthless; asked to reinvestigate/ reorganize rack space planning. BenitoM's planobs "dash" application might require "enterprise dash" with a proper enterprise price tag keep on investigating lighttpd+fastcgi [Mark: reverse proxying].

eBob: MartinL reports broken disk pack, tried "recover", then pack really slow and weights ~ 1/8. Compute time to transfer disks to flexbuff: 48d. Next idea: put disks in Mark6 disk pack when MartinL next in @Dwingeloo; when in Dwingeloo inserted pack in 5A (was in 5C) -> issue fixed. BenitoM reports pySCHED issue: Ef plotted in scan where not expected (slewing); digging through code: SCHED behaves as intended - if t\_slew > t\_scan don't have station in scan, unless slew > 15deg: cable wrap related [PaulB: tries to avoid cable wrap between each target/calibrator]. ANTAB editor documentation done; DhanyaN uses ANTABeditor on multimode data - not implemented before (because of lack of data); now there are two exps, will implement multi-mode editing.

Mark: WP3 onboarding presentation — 3p white paper needs to be written, proposal 1/2 Mark, 1/2 Aard. Provided a bit of input to ADASS BoF paper but KatharinaL already did most. One casa workshop participant still active on Mattermost: VGOS data reduction/calibration w/ casa: VGOS linear pol means: flagging one pol can't do parallactic angle correction; advise: skip stage in VLBI calibration and hope fringefit can still detect fringes. Have working prototype of per-scan interpolation for MichaelJ; will send package to MichaelJ and submit to GeorgeM for review. Will spend time verifying casa tickets don't drop between the cracks.