ZWURM, 15-06-2020  14:00 (WURM through Zoom because of #COVID19 house quarantaine/wk15)

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

Mark: Investigating 8 Gbps correlation speed: indeed quite slow. Bottleneck seems to be on flexbuff. Having two stations on one flexbuff does not help although unlikely to explain the current drop in performance. Received mail from JackR: CASA amplitude calibration wrong by order(s) of magnitude?! Checked code for correctness (it passes) but ANTAB file contains both nominal and actual Tsys values: some code use one, other code the other. Not sure if this is hand-crafted (supp.sci. error) or antab-editor created (bug in code); will contact supp.sci. Gaincurve code in CASA finished, now thinking about how to test correctness.

Paul: Backup server new certificate installed at all clients; all backups now running ok for quite some time. Sent a certificate signing request to MarkL (ICT) for signing by SURFnet for our code.jive.nl machine. The cl0/cl1 VM cluster hosts were rebooted w/o downtime (migrate all VMs to one, reboot other, move all VMs to other, reboot one). Still done outside office hours since may fail. cl0/cl1 are approaching memory limit if all VMs hosted on one machine. Request to upgrade services.jive.nl from 14.04 to something newer, possibly 20.04 (install server already set up). Ticket for input from users to comment on what needs to be available is live. ZFS scrubs the disks monthly to check for errors: fb8 + marcopolo have disks w/ errors; marcopolo has one pool with two disks having potential issues – need replacement soon (two disk #FAIL = total data loss on that pool).

Des: Installed new extra Ziggo equipment for improved WiFi. Definitely improved to a usable connection. Been working on database scripts; want to move to Py3. Supporting Py2+Py3 is very difficult since Py3 is bad enough by itself. The dispersive fringe fitter is IN the next CASA release [Mark: in fact all we wanted to have in this release is IN!] although when that release is/will happen is not sure yet. Will start re-fringe fit on VGOS data for final RadioNet RINGS deliverable (no BRAND data available; VGOS data was accepted as suitable replacement). Continuing investigating of wide-band fringe fit. Found that not everything from the production database schema was migrated to production; will contact operators when it's ok to migrate – must be done well before next week's e-VLBI.

Ilse: BPMN flow charts for processing and calibrating almost finished: pretty good for overview of the process. Next step will be imaging. Experimenting with AOFlagger + WSClean that Aard has provided in our CASA Jupyter image. Will investigate bandpass calibration in Jupyter notebook since on other data set showed some issues whilst worked fine on original data set: need to understand why. The EAS is gaining momentum, some logistics work due to small changes in program. Version control schemes for Jupyter notebooks is on hold waiting for our gitea installation.

Aard: Operators claim SFXC crashes increasing. Investigation reveals possible link to flexbuf14; errors appear from scans including station whose data is on this fb. Trying to reproduce has failed so far. [PaulB: network link seems stable, no errors and log file(s) do not seem to contain any hints]. Integrated AOFlagger and WSClean into CASA image; home built but packages are available and might be used in future image builds. Trying to get archive plugin to start a Jupyter kernel but documentation is abysmal.

Bob: BobC request for change in NorthStar about max number of pages to upload; code found and change in progress. Server applet got the mime type for document wrong (text/plain i.s.o. text/html) serving to user. Copying applet from test environment to production resolved this issue (i.e. no understanding of why this happens/happened). Mark merged SCHED 11.6 into our master branch (mostly catalog updates), will appear in pySCHED later, as new release. Benito updated the README.md which also triggered a new update. BobC requested "jexp" change to do with release date handling; it was implemented but reverted after finding out that the change did not handle release dates in the future according to how it was done previously. Proposal database made accessible w/ help from PaulB and ReinoudXXX (ASTRON). Hope to be able to finish VEX2/data stream support in runjob this week.