

ZWURM, 07-09-2020 13:00 (WURM through Zoom because of #COVID19 house quarantine/wk26)

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

eBob: almost all proposal tool change requests handled, except total data rate dependence on observing band. Spent time on migrating DrBob's setini procedures into pySCHED catalogs (manually). Might be possible to automate more but will remain manual until this is done through catalog updates in stead of setini.

Des: working on C++; code delayed due to running into difficulties with the language. Will spend time attending the provenance workshop this week. Remaining time will be spent on overlooked MichaelJ fringeFit problem reported over summer.

Aard: merge of dedispersion branch triggered issue in multiple scan correlation: no detection in scan 2 and following. Traced to first frame being repeated in datastream - trips up correlator. [MarkK: this is self inflicted: needed for proper handling of window overlap]. Sub-us integrations for filterbank output: removed checks that didn't make sense, replaced with checks that are useful; channel offsets are now rounded to nearest sample instead of integer multiple of us; works from correlation point of view, only filterbank output crashes.

Paul: "planobs" VM (replace EVN calculator) up and running. fb2 reported HDD temp of 153C; also other disk broken. MartinL replaced faulty disk, no sign of (excessive) heating. Requested certificates for jrm, planobs, mattermost - now all from same supplier, might enable certificate pinning. Request others to migrate databases to db1 server; regular backup working, need to get SQL backup configured. code.jive.eu: should it be open for everyone? Will also take some holiday this week.

Mark: during holiday the CASA/casacore discussion on regex change continued; gaincurve work blocked on this; would be best if GvD reverted this commit as it really breaks backwards compatibility. MichaelJ found an oversight in correlation-independent flagging. pre-holiday attended CDS meeting on representing visibilities in IVOA ObsCore; there seems to be a lot of agreement between our and CDS approach. Will attend provenance workshop too.

Ilse: Q: plotting on casadev - /scratch full. Any chance of deleting some data? A: not really! Need storage for important reference datasets [Action Paul/Harro: expand casadev storage and turn into RAID; current /scratch is Just One Disk so disk broken = all data lost!]. Found that fringeFitter very strict: if scan does not have any of the refants execution stops (despite maybe detection possible). This is unexpected for AIPS user. Discussion: require expectation management for ex-AIPS users; CASA has a model and fringeFit should "do what the other tools do". Possibly having tool to check for any scans not having a refant from the list would already help. Also useful to break scans into groups (maybe

manually) and run fringeFit on those groups. Q: using MarkK's append_tsys in notebook terminates notebook kernel – can look into this?

Harro: problem report by DrBob if unequal scan duration per station in VEX file: sometimes first station to participate in a scan does not represent full length of scan -> j2ms2 finds data outside scan boundary -> exception+data not written to MS. Trial fix by updating scan start/end with global min/max across all stations participating in scan.