

WURM, 19-02-2024 13:00 WURMng Oort room

Present Bob, Aard, Mark, Des, Wybren, Paul, Marjolein

Plenary session:

EVNcam project proposal: decision to not submit made last Fri; partners interested so want to continue preparing (White Paper on arXiv for example) and take it from there.

Annual report season upcoming, expect request for bullets and visual material soon-ish.

Bob: polishing up ORP-PILOT multi-facility CFP instance (EU notice in footers, help text); noticed that welcome text not done yet. Addressed showlog slow startup: old friend MySQL view+join = #FAIL, so rewrote as not-a-view i.e. now faster. Documentation re input/routing configuration in runjob existed as "offline" file for a long time, now made available under help button in runjob GUI; during test of recorded e-VLBI show to use forking at JIVE, not at station. Found a problem with vlbish on ccsbeta, fix available: PR or just push onto the repo [Marjo: try push and if that fails do PR]. Our map-on-the-wall "framboos" is kaputt - see @Wybren/@Paul.

Mark: spent time polishing up RADIOBLOCKS WP4 deliverables. Half-precision floating point correlation: working now, observe amp diff of ~0.01% so that should be good enough for science; remaining to check is longer FFTs, expect some problems there. MichaelJ request: code that deletes table from IDI using astropy FITS then yields other amplitudes; root cause: astropy thinks after deletion that the IDI is broken random-groups FITS file and "repairs" it into a broken IDI file, set up dev environment to implement astropy fix to teach it what a FITS-IDI file is [Des: waiting for this fix held up fringe fit patch checking by the RU group]. Noticed on DiFX mailing list a discussion on capitalisation of two-letter station codes and if and how those carry through/over between steps: there may be cases where our workflow might be subject to some issues too/still.

Wybren: our "framboos"'s SD card broken, replaced with new one, will configure it to mount ro and use a ramdisk for writable partition. More secure access to verlof-data: firewall+ssh (*). Checked if firmware on Intel NICs correlated w/ e-VLBI packet loss: no (**). EVNcalculator VM broke - virtual HDD too small. Continuing evn-monitor upgrade.

Paul: DAT issues: drive #FAIL and newest tapes seem not to work whilst old(er) do; will be ordering a new DDS4 drive today. ASTERICS website certificate issue: already static HTML but uses letsencrypt, and changes in that workflow need to be reflected for this cert but has lo prio @ASTRON. WaleedM: can has Boards in Mattermost and less Redmine? Mailing list for EVN Seminar series: pretty ugly and violating almost all GDPR rules, looking at alternative. Presented an item at (radio stars)journal club.

Aard: JunY 8-bit DBBC3 data's two's complement iso offset binary: will discuss with SvenD when JunY back from .CN. ShivaniB: R12 FRB

localisation prob, want to try delay mapping, suggested use proper fringe fit not rudimentary clock search script (***) . Generated new data for Gabor0 (N22L3) for testin' new mixed-bw normalisation scheme. GPUfxc amplitude effect also in ACs, RFI peaks higher; tested three FFT libs, consistent results; reconstructing algorithm for CPU vs GPU comparison: notice use of register for trick with temporary results.

Des: ngCASA fringe fit currently very parallel, need a join: have graph map-reduce component now; started milestone report. Bugreport db2vex handled (bug in schema), tested, pushed to production, no screams (yet). ShivaniB fringe fit: cannot do single time stamp but in principle if not asked for a rate solution, task should accept that; investigated: requires more plumbing than initially thought but sounds like the proper thing to support [Marjo agrees]

AOB:

Remember: strategy WURM next week. [Q: how to do this one?] [Marjo: possibly go over current list of topics - submit discussion points if you have'm]

(*) some options for accessing verlof-data encrypted and not to everyone were discussed, at the time SSL client certificates seem a good option as they combine encryption and authentication [several days later, now that OAuth2 authenticating against MS365 environment works possibly actually use the MS access token; verlof-data webserver code needs to be changed *anyway*]

(**) packet loss during e-VLBI: seven station internal test done using simulated data: no (or at least different) loss statistics observed. [MarkK: any form of flow control enabled on the NICs e.g. pause frames on the ethernet?]
After some discussion: try Paul's network-testing tool to see if there's anything observable in the current network - coordinate with the operators.

(***) delay (-rate?) mapping

[MarkK: this is on the CASA todo-list, if there exists code to do this could be used to base CASA task off]