# Update on On-going DA studies

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# Results retrieve: old style

Old Style:

-results from boinc assimilator go to /afs/cern.ch/user/b/boinc/scratch0/boinc/"study_name"/

-you have to run run_results that:

- read from sixdeskenv all the infos(study_name, dir, seed, tunes, amp, turns, angle, ..)
- create the dir structure sd/track/study_name/seed/kind/tunes/amps/turns/angle/
  ( EX: 1/simul/62.31_60.32/14_16/e6/80/)
- copy file from boinc dir to newly created local dir, changing name from something like:
  sd_sixt33_540_1.4_4D_err__1__s__62.31_60.32__8_10__6__45_1_sixvf_boinc60
  to fort.10 and compressing it to fort.10.gz
- remove file from boinc dir and do other things I don't really care at present

Then you have your local copy of data and you can run your post-processing (either old version run_join/run_post/run_awk or my .py)

These is not so practical if you have various (>100) job to retrieve: each time you have to go through all the "space parameter" of the job and see if there are new available jobs.

# Results retrieve: new style

My new approach is conceptually easier:
-look on boinc dir for new files that are:
    -mine (checking owner label)
    -have in the name some flag I'm looking for (study parameters):
        sd_sixt33_540_1.4_4D_err__1__s__62.31_60.32__8_10__6__45_1_sixvf_boinc60
-guess all the other parameters from the name and add the file to a sqlite db (sixt33_4D_err.bd) only if not already there
-delete file on boinc (disabled for the moment for testing purpose)

For doing this I added some class to sixdeskdir.py with extended functionality (more details offline to interest people)

Pro:
- save space on personal afs (no need for replicated afs structure)
- more integrated with my post processing
- can be added to a cron job for automatic retrieve data when available
- lot faster (actually I'm surprised…):
    for my std  study: (15 beam int, 12 angles, 8 initial amps, 17 angle ->~25k files) ~5min vs ~7h

Cons:
- some options not implemented yet (like the plots produced by run_post)
- not ready for production release yet (need debugging)
-maybe other I don't see…