The Level 3 Tau Tool

... or how to see bugs somewhere else

Yann Coadou

Department of Radiation Sciences (ISV)

Uppsala University, Sweden

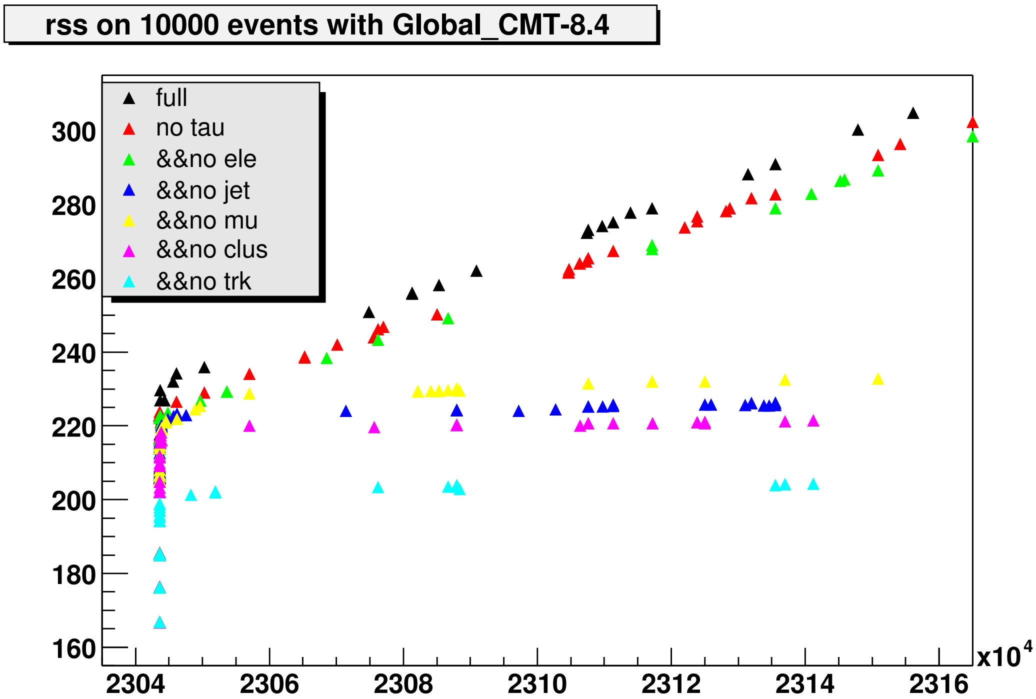
Level3 filtering group meeting

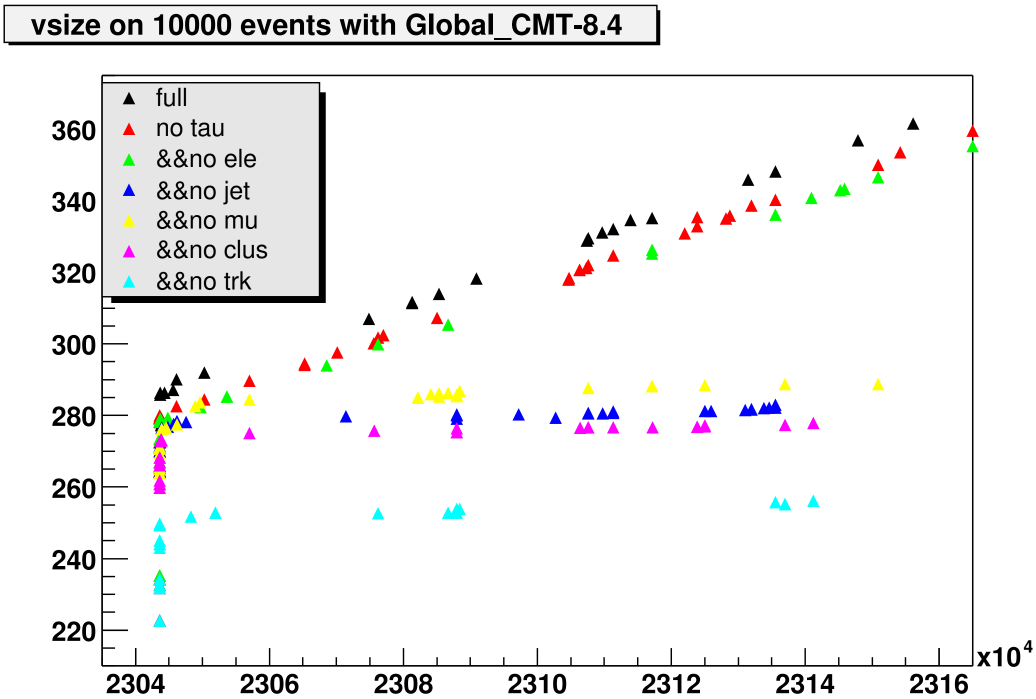
23rd October 2002

Testing memory consumption

- Took run 165757, 10000 events, Global_CMT-8.40
- Ran `d0trigsim` with `-l3only` option
- Removed `l3fanalyze` $\Rightarrow$ closer to online
- Otherwise default p12.04.00 build 7
- Extract event number and memory information from `D0TrigSim_x.log` (rss and vsize)
- Ran first the full trigger list
- Ran again after removing the tau tool definition and all corresponding filters in the trigger list
- Did the same when also removing the electron tools, the jet tools, muons, cal clustering, and finally tracking.
- At that point the trigger list contains the unpackers' definitions and all trigger bits originally present, but only with either no filter or MarkAndPass or PreScale

rss and vsize

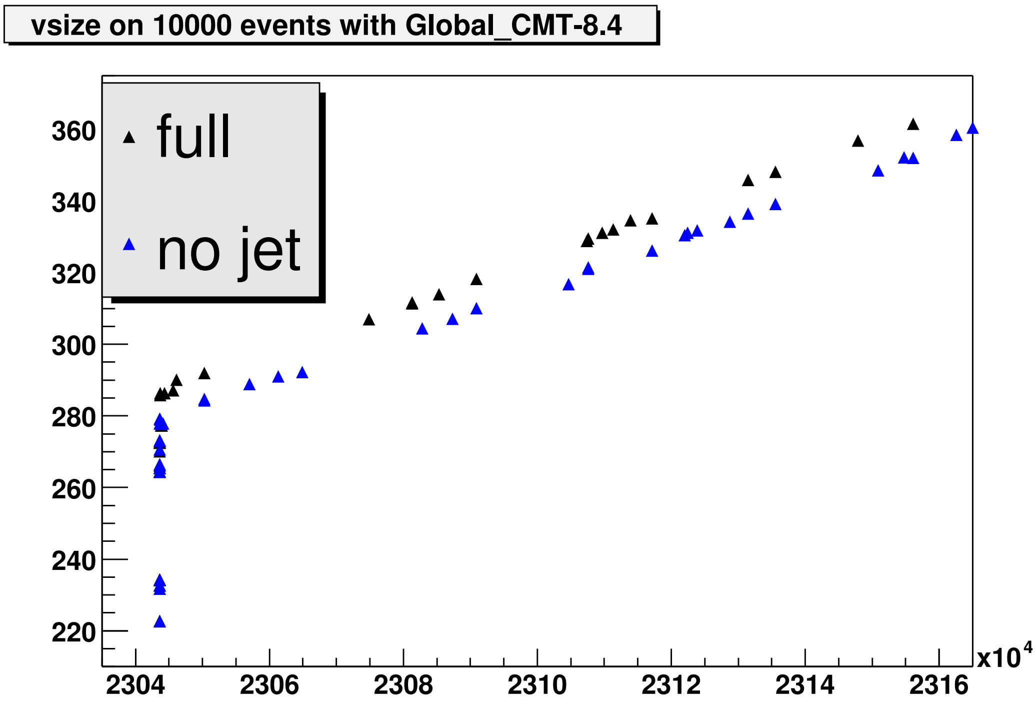




- Apparently a leak due to the jet tool...

One more test

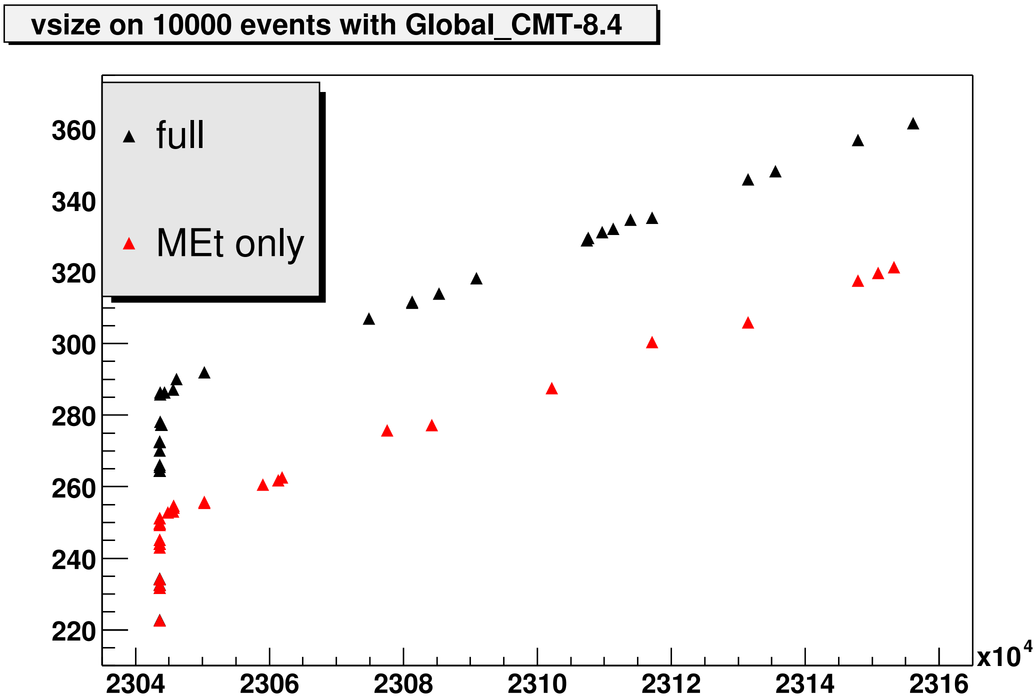
- Just in case, ran again when removing only the jet tools and filters:



- Still leaking!!! $\Rightarrow$ coming from cal unpacker or clustering

Testing the unpacker

- Partially possible by running L3 missing ET filter



- Leak!!! ⇒ My guess is a problem in the unpacker
- a quick look at the code in `l3tCalUnpTool` reveals several `new` statements with no corresponding `delete`: could be the problem.