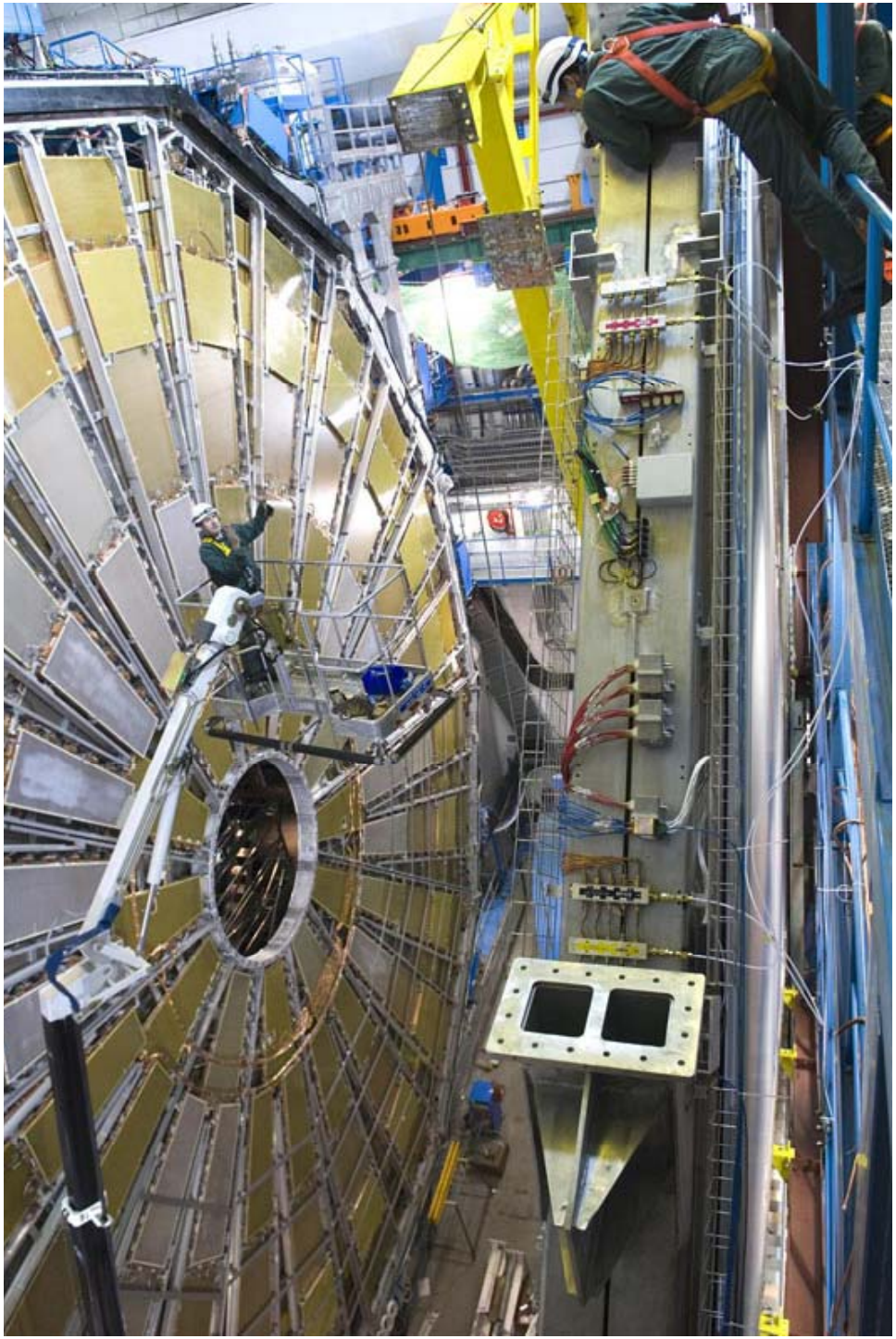


Trigger Validation 14.0.0.1 cache

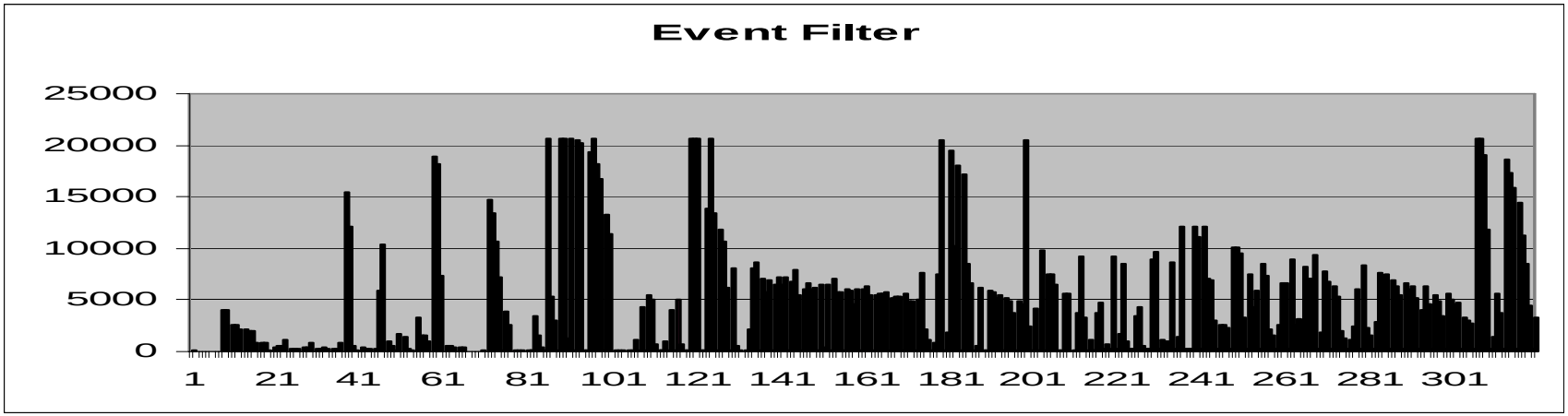
Ricardo Gonçalo (RHUL) on behalf of several people

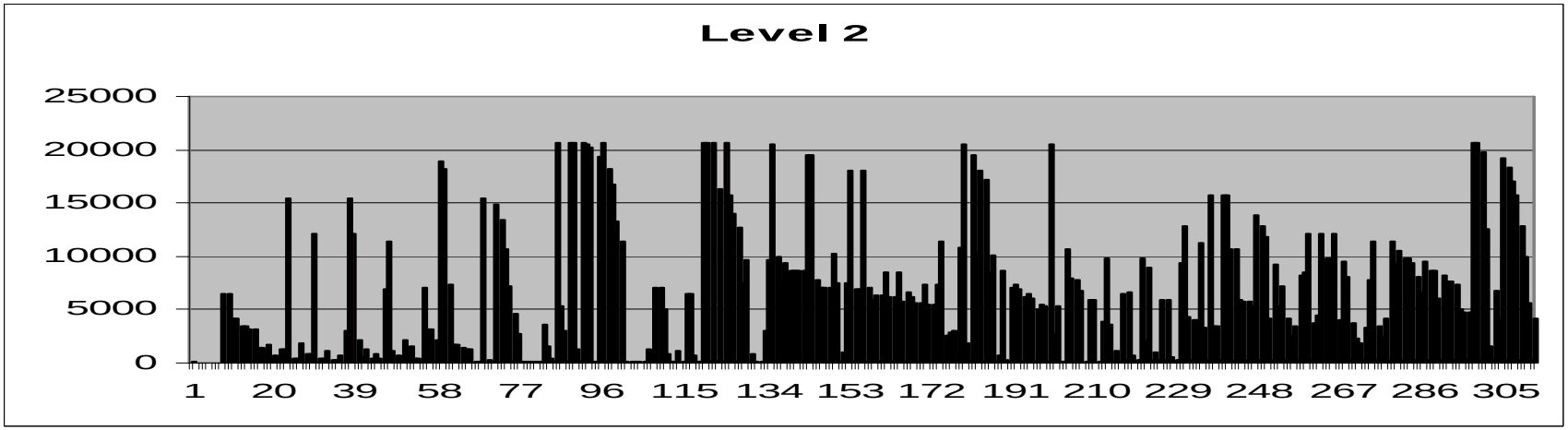
Physics Validation – April 29, 2008

- Far too much memory being used in Atlas: from offline reconstruction and trigger
  - Reco+trigger 2.8Gb
  - Reco (no trigger) 2.2Gb
  - Trigger (no reco) 1.2Gb
- Still managed to rescue 20k top events from successful production jobs

- Some slices had a look at the top files:
  - L1 muons: ongoing
  - EF muons: all OK, including L1 – see later
  - Taus: all OK
  - Bjet:
    - No L2 eta and phi information: known problem solved in TrigEventTPCnv-00-00-22
  - Electrons: ongoing
    - Possible problem in EF efficiency
    - false alarm in truth info

- Top events from 14.0.0.1 (~20k events) with trigger information: valid1.005200.T1_McAtNlo_Jimmy.recon.AOD.e322_s412_r402_tid021650





EF muons (Michela Biglietti)

13.0.40.2 (~45k events)
valid1_misal1_mc12_V1.005200.T1_McAtNlo_Jimmy.recon.v13004002

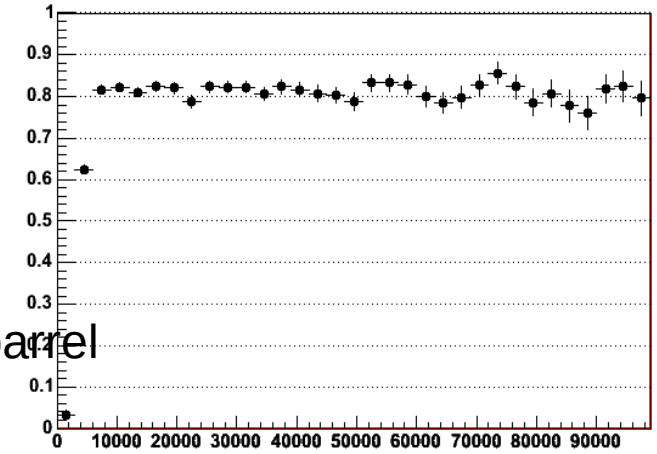
14.0.0.1 (~20k events)
valid1.005200.T1_McAtNlo_Jimmy.recon.AOD.e322_s412_r402_tid021650

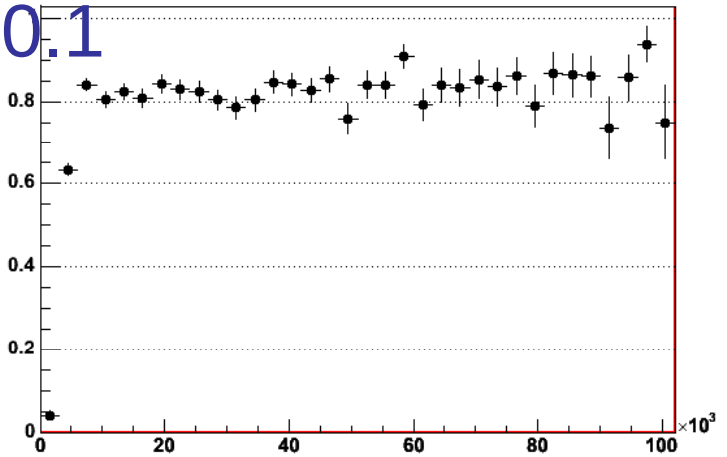
In the following :
slides 2,3,4,5,6 → Efficiencies as a function of p_T and eta (for HLT, wrt previous level)
slide 7 → EF resolutions as a function of p_T

13.0.40.2

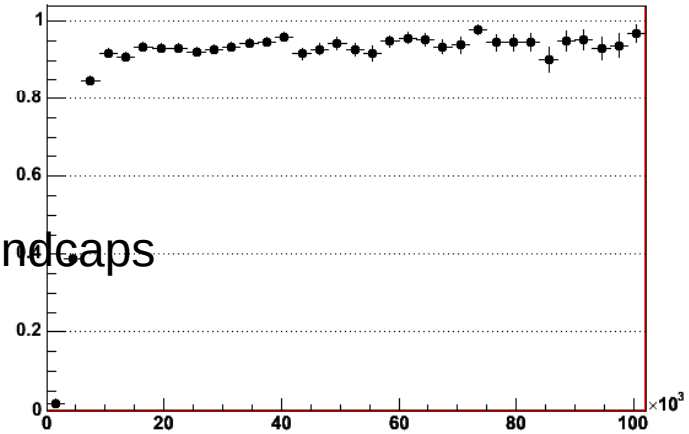
14.0.0.1

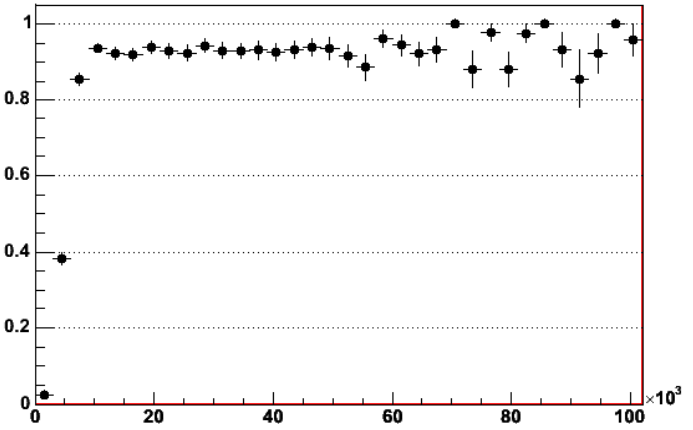
L1 eff vs pt barrel



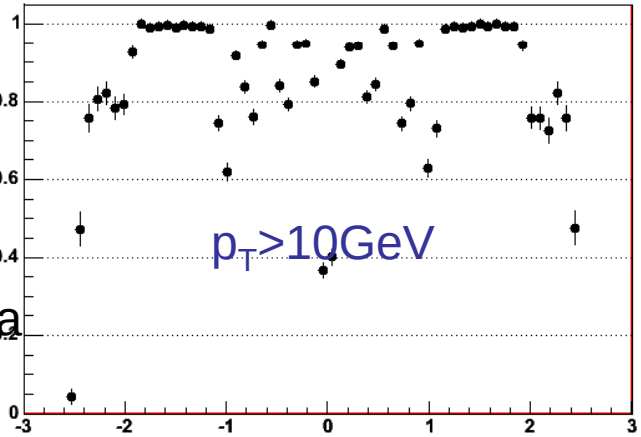


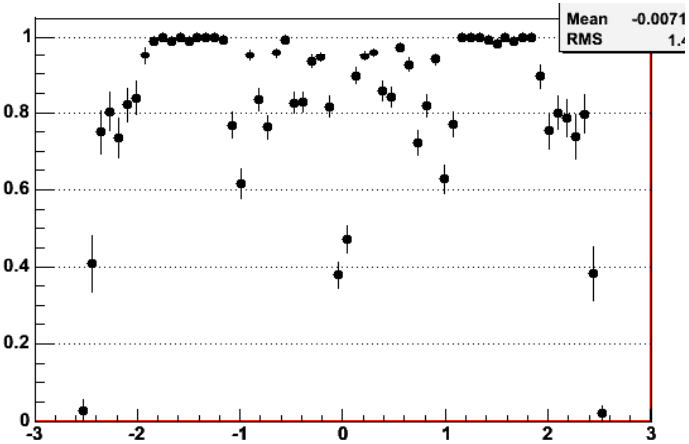
L1 eff vs pt endcaps





L1 eta eff vs eta





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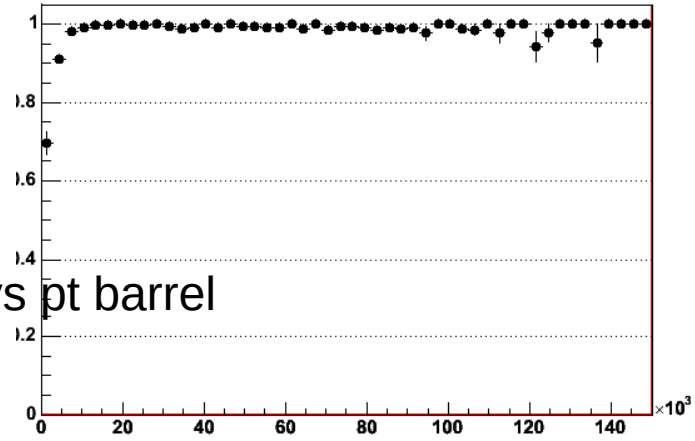
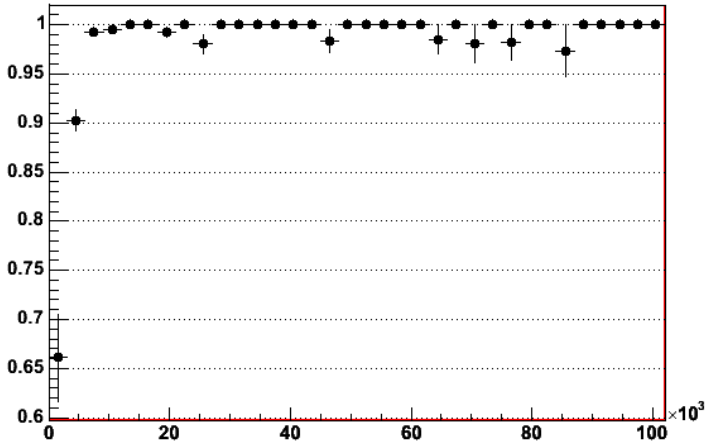
13.0.40.2

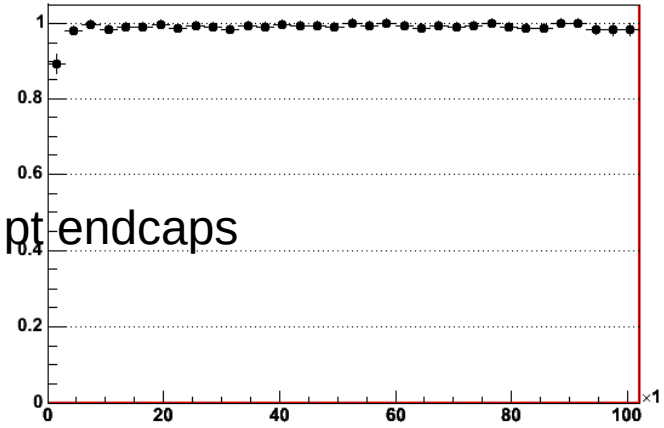
14.0.0.1

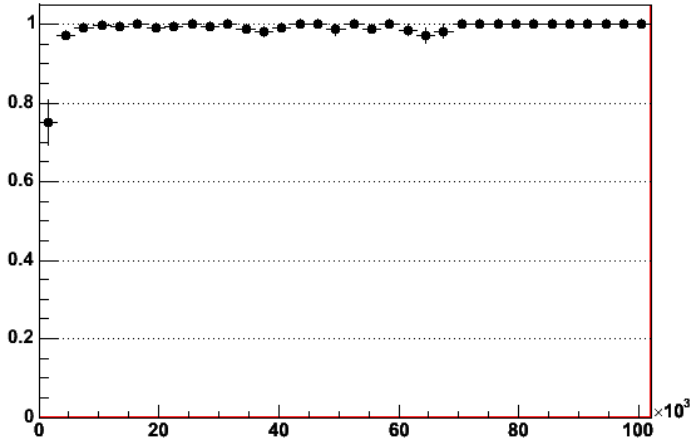
mufast eff vs pt barrel





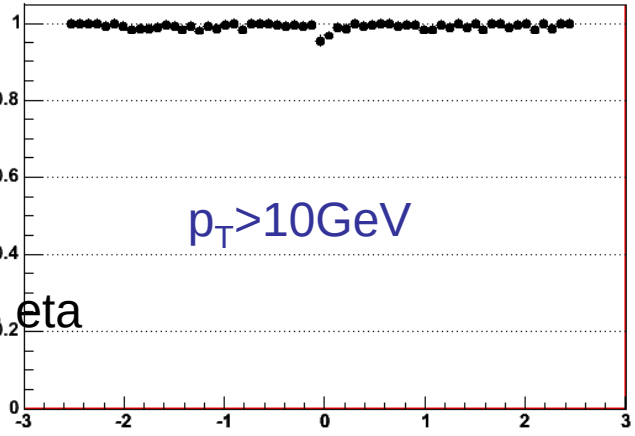
mufast eff vs pt endcaps

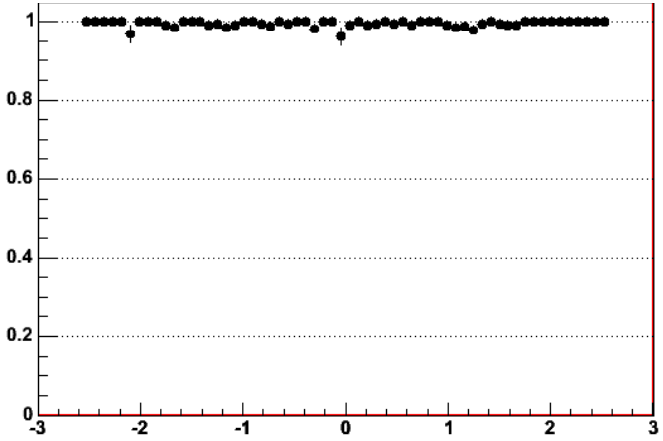




mufast eta eff vs eta

p_T>10GeV



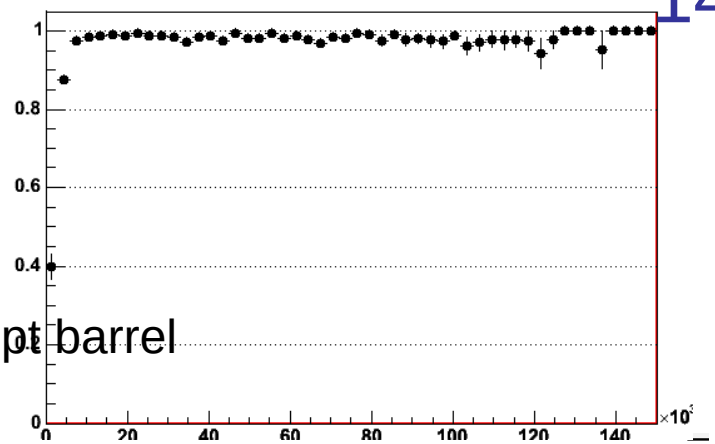


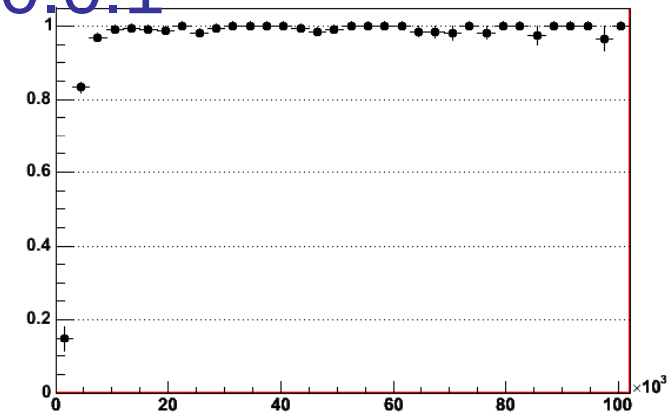
dation

13.0.40.2

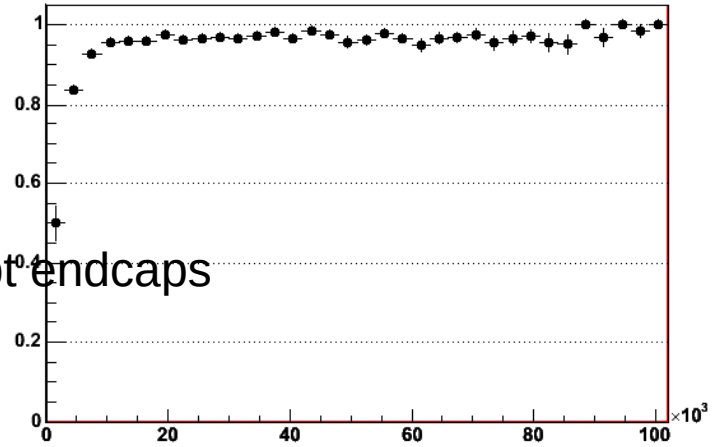
14.0.0.1

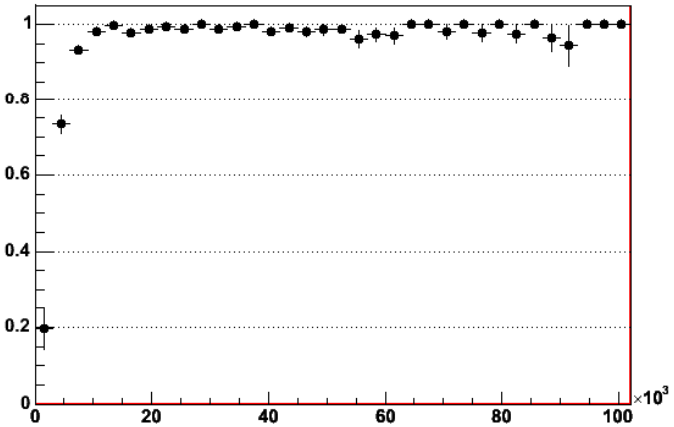
mucomb eff vs pt barrel



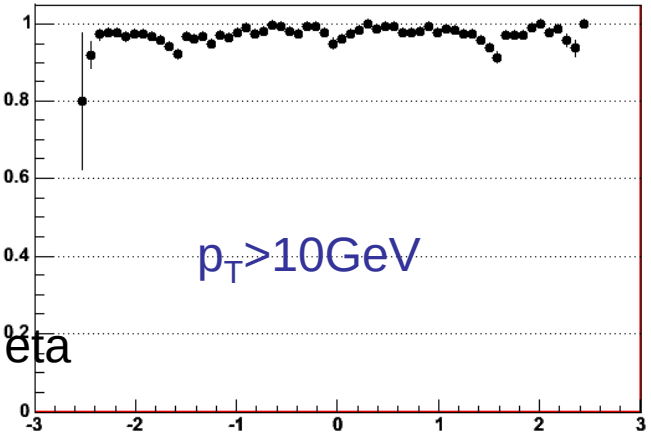


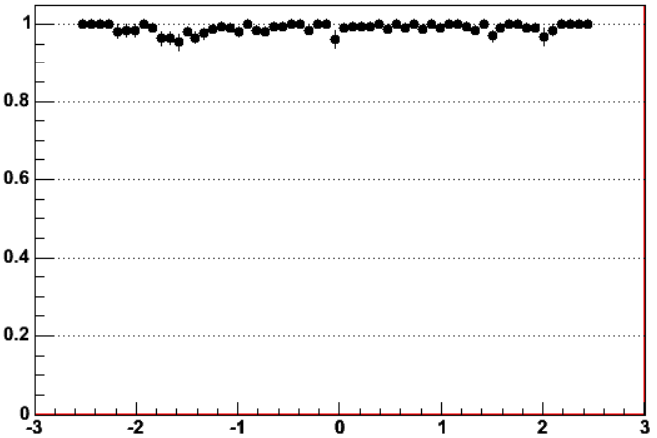
mucomb eff vs pt endcaps





mucomb eta eff vs eta

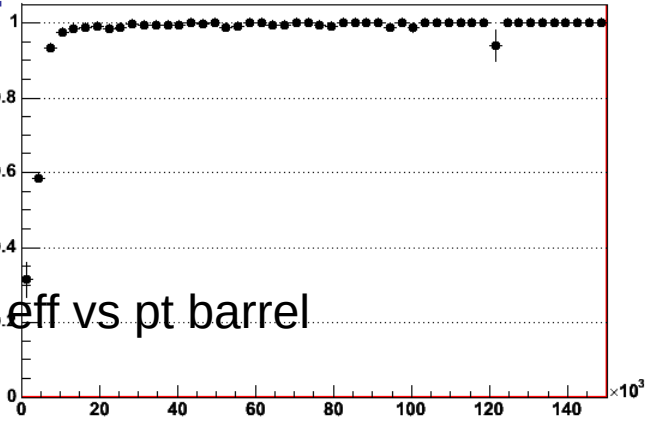


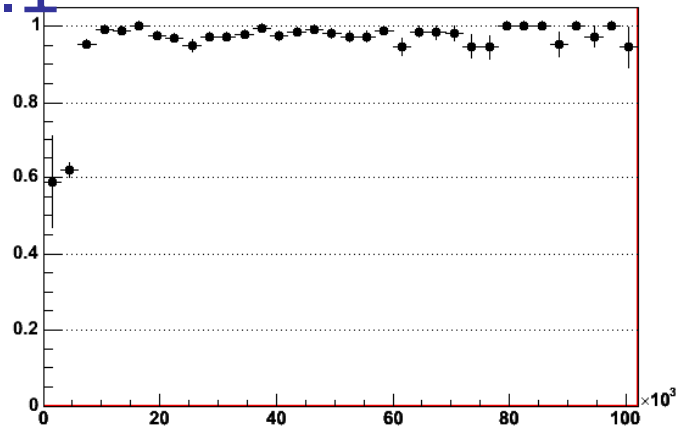


13.0.40.2

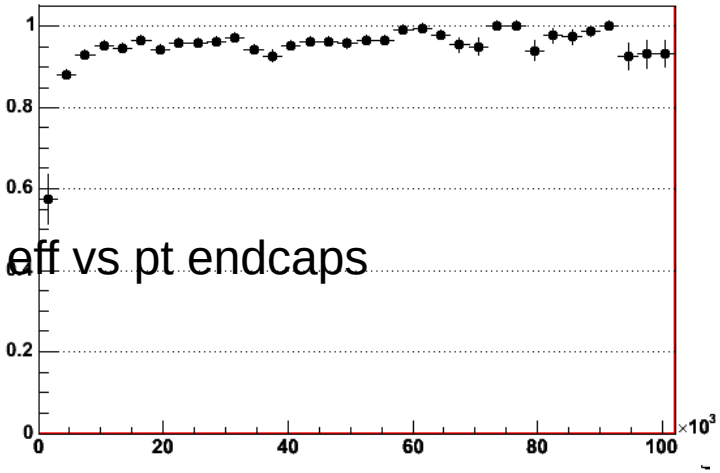
14.0.0.1

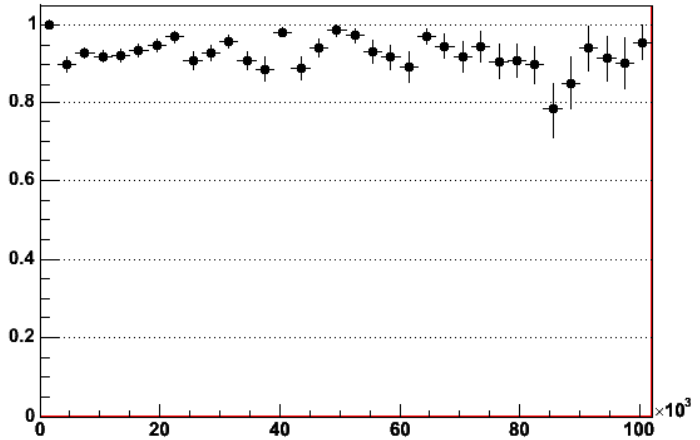
EF muidSA eff vs pt barrel



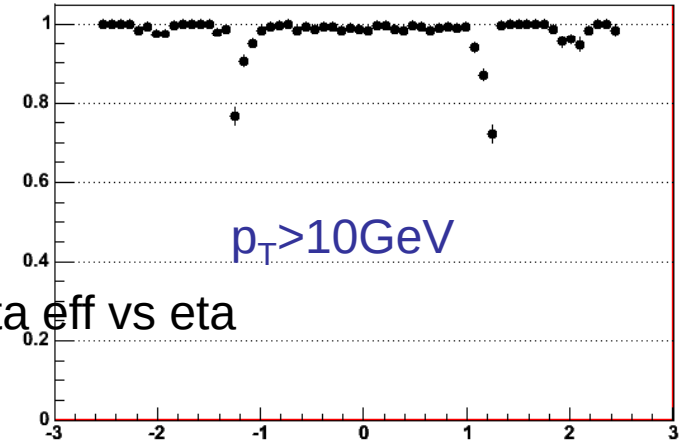


EF muidSA eff vs pt endcaps

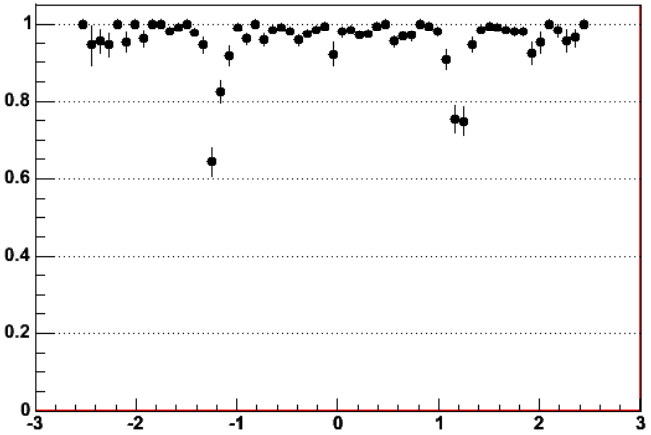




EF muidSA eta eff vs eta



p_T>10GeV



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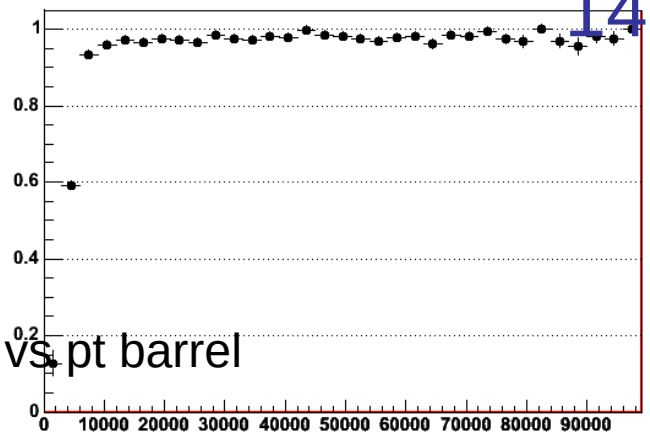
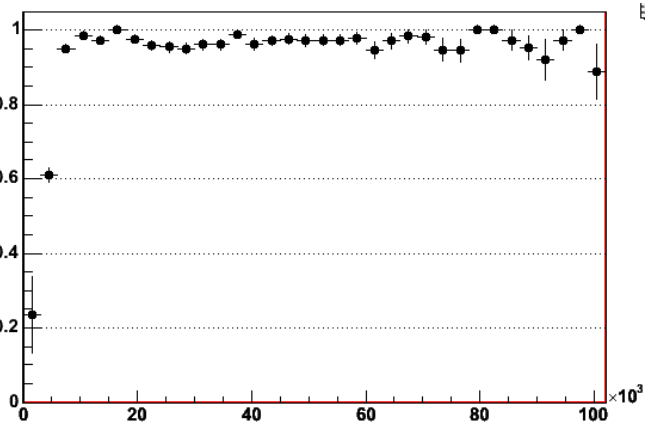
13.0.40.2

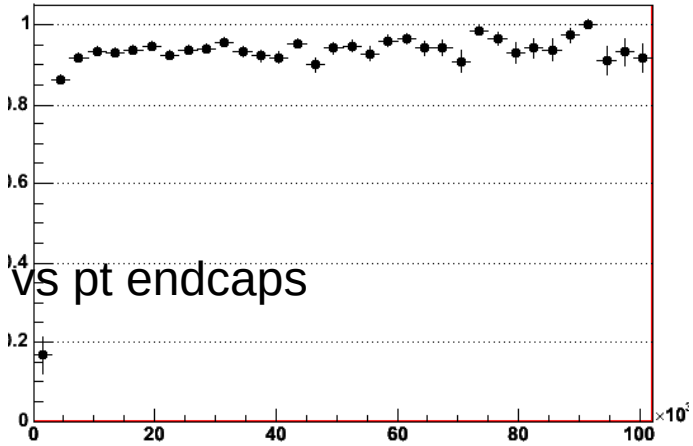
14.0.0.1

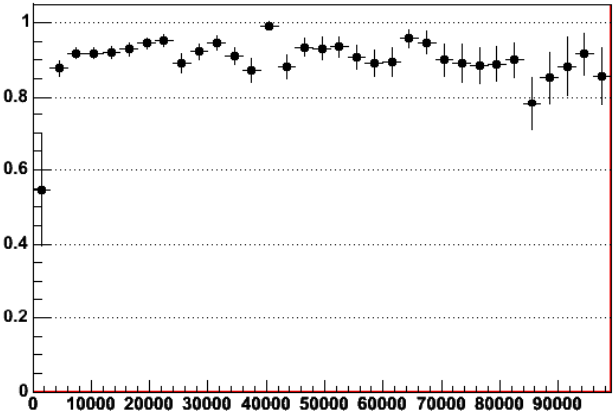
EF muidCB eff vs pt barrel





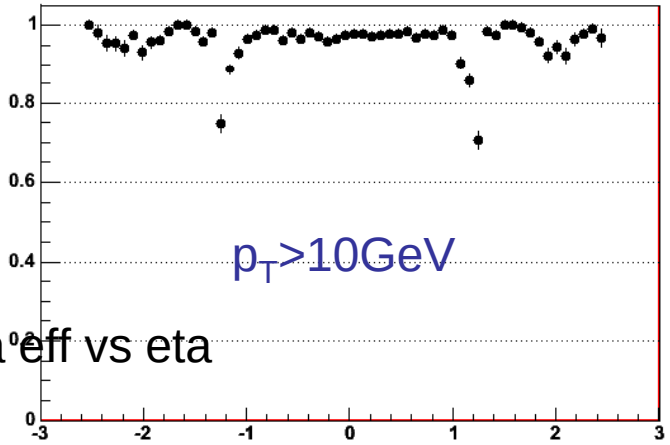
EF muidCB eff vs pt endcaps

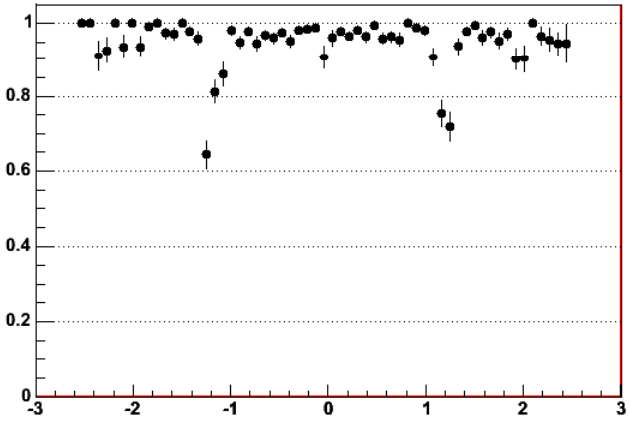




EF muidCB eta eff vs eta

p_T>10GeV





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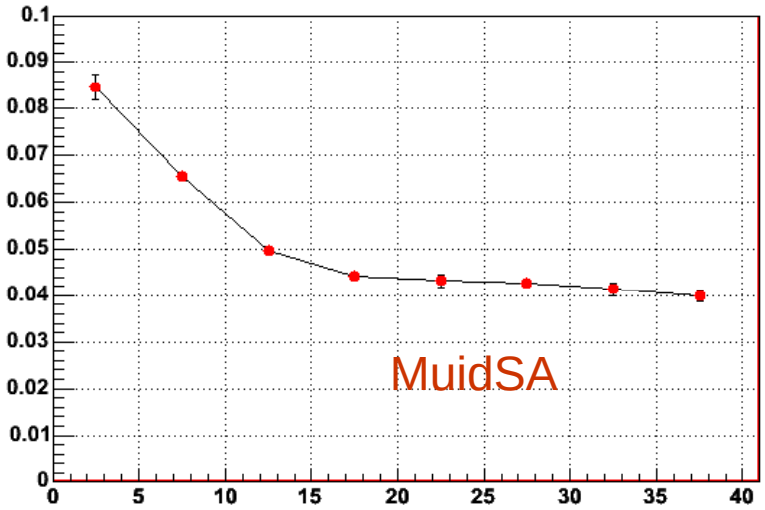
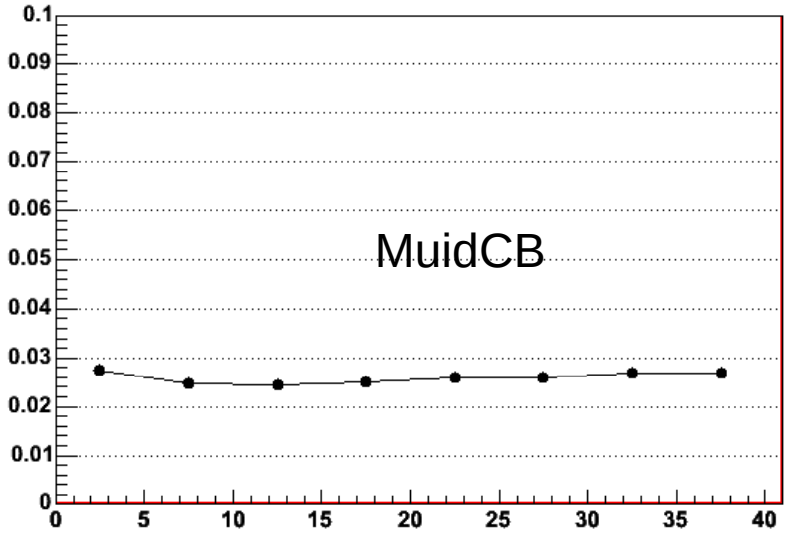
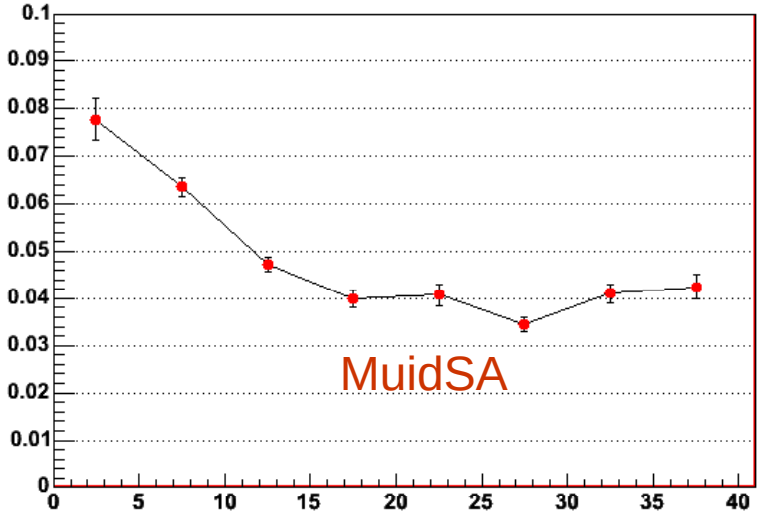
Muon EF p_T resolution vs p_T

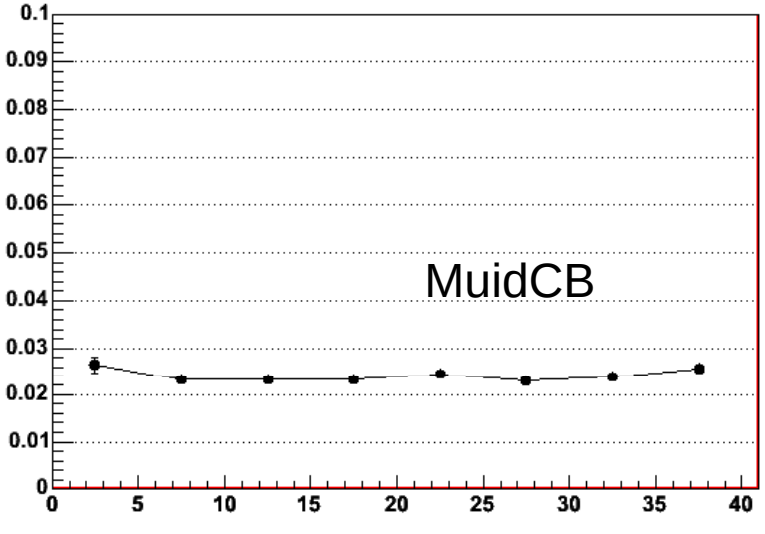
13.0.40.2





14.0.0.1





Release 14.0.0.1

- Some validation work still ongoing
  - Waiting for feedback from remaining slices
- Muons look ok
  - Except for efficiency drop in L1 for eta>2