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A Brief Look at Post-Shutdown Data

Top Properties Meeting

11th March 2004

Data

- Post-shutdown skims, Nefertiti top_analyzed
  (Top group samples + one CSskim)

skim	events	in GR only	GR rejected
EM_RECO_EFF	121486	113805	7681
MUQCD	221180	207740	13440
MU_RECO_EFF	61653	57898	3755
CSskim_EMMU	153657	140011	13646
DIEM_EXTRALOOSE	224623	207456	17167
EMQCD	888284	832703	55581

Event selection

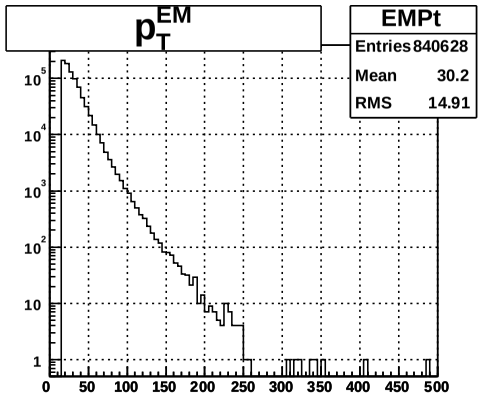
- Basicaly no cuts introduced
- Run List: Taken (updated) Tobi's Good Run List $\langle 162458, 180956 \rangle$.
- Then combined Database Bad Run List for $\langle 180956, 189907 \rangle$ and excluded all runs with bad LBN runs presented at ADM last week.
- Original Tobi's good run list: 1112 runs
- I checked for the same period of good runs with the same definition and got 1171 – updated database? (59 runs difference)
- Cuts only for leading–subleading jet ϕ study:

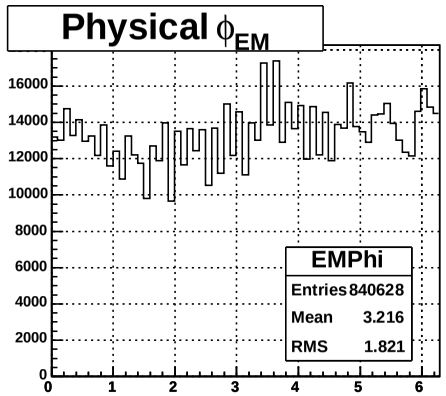
$n_{\text{jets}} \geq 2$, $\Delta\phi > 2.9$, ej_met$< 0.5\, p_T^{\text{jet}}$ leading

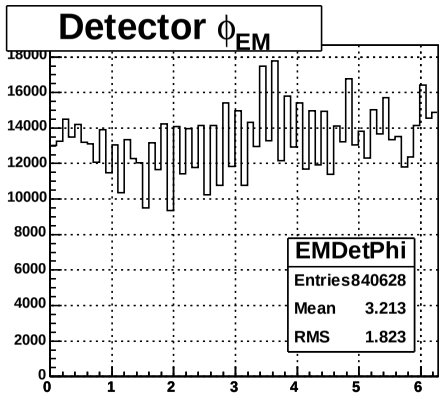
What I have looked at

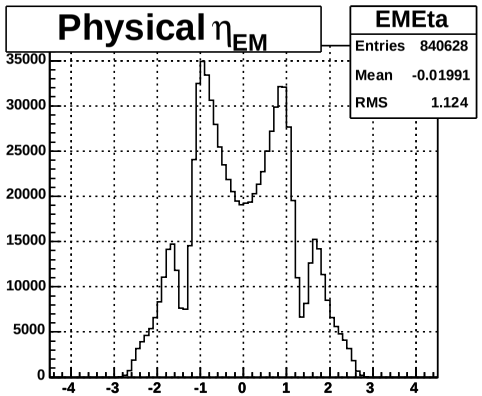
- Multiplicities (jet, EM, μ)
- p_T, ϕ and η (physical & detector) distributions
- Missing E_T, METx, METy ...
- For jets and EMs: $\phi \times \eta$ plane
- For jets treated separatly leading and subleading ϕ and η spectra.

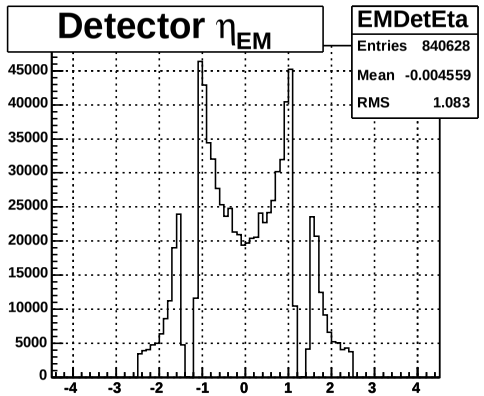
Some EMs facts, EMQCD skim

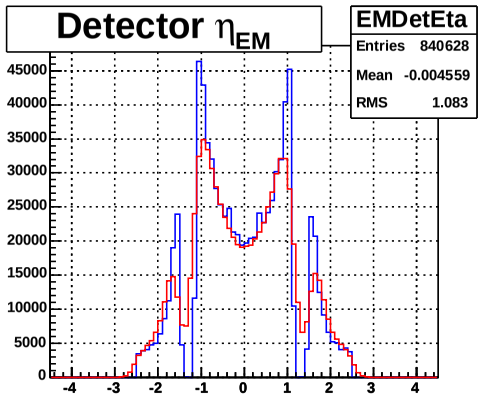




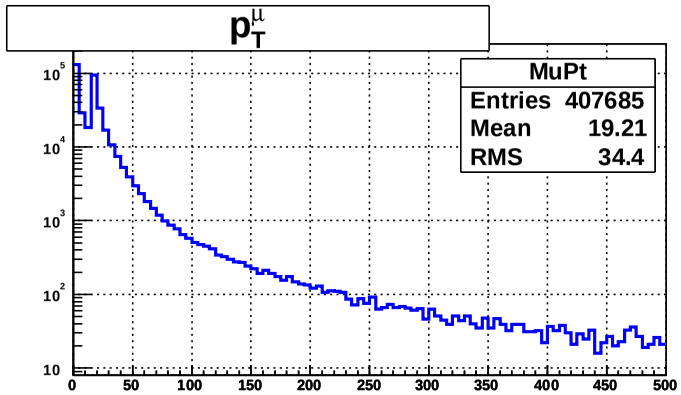


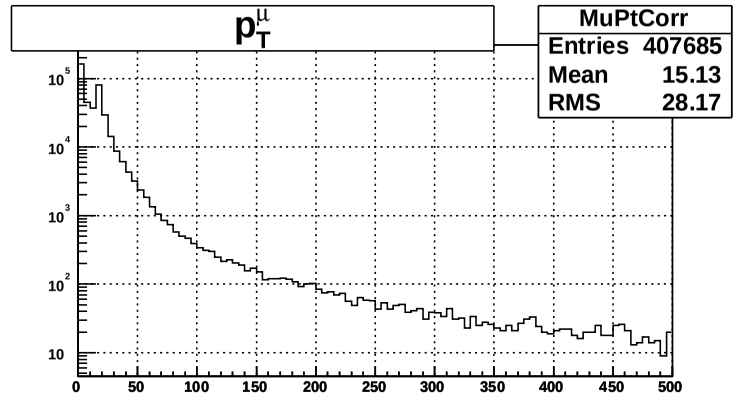


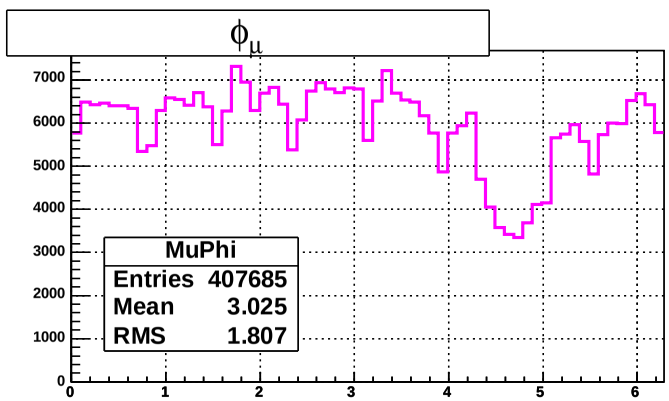


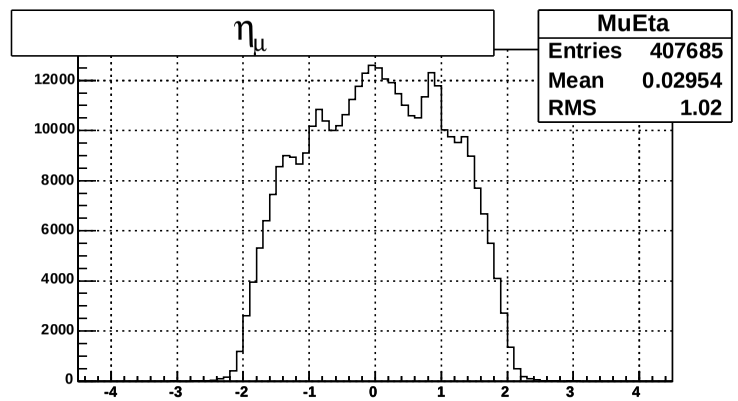


Muons p_T, ϕ, η – MUQCD skim

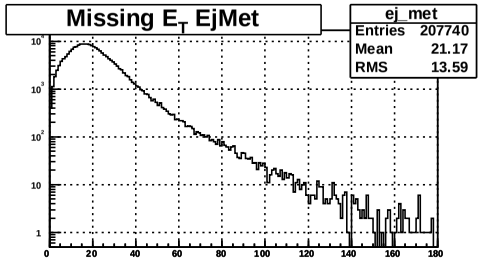


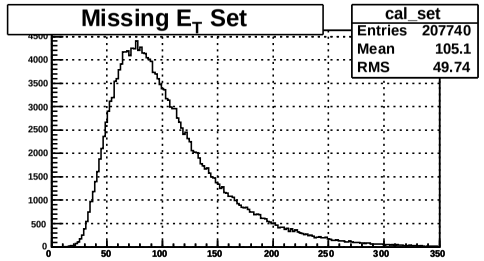


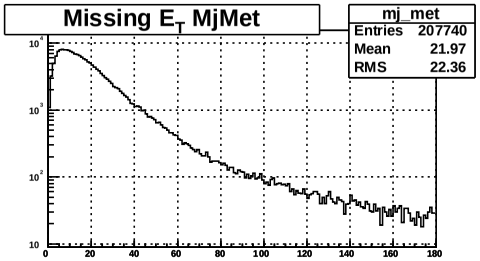


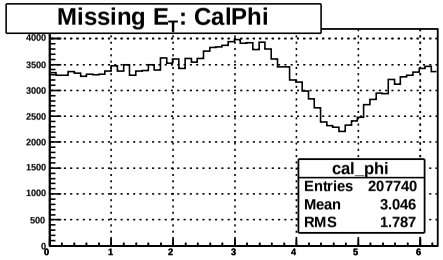


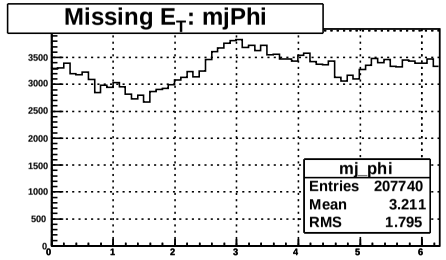
Missing E_T – MUQCD skim

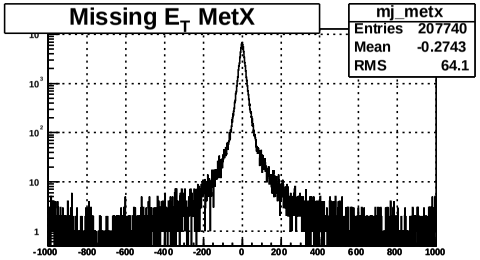


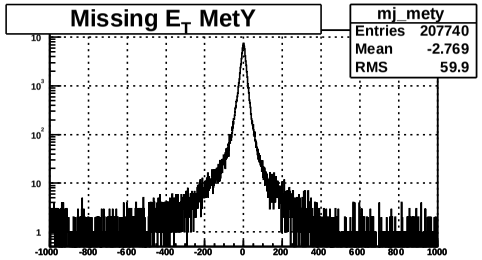


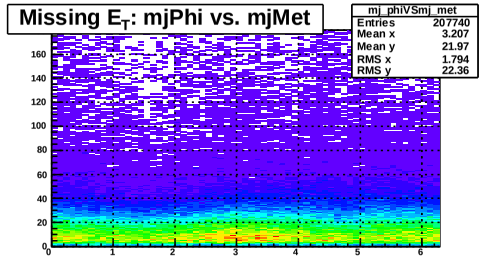


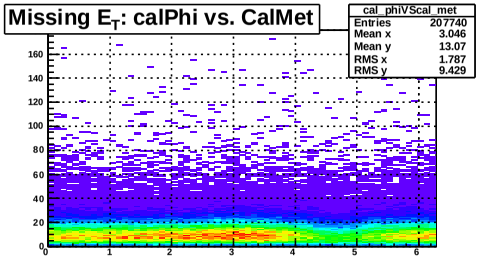




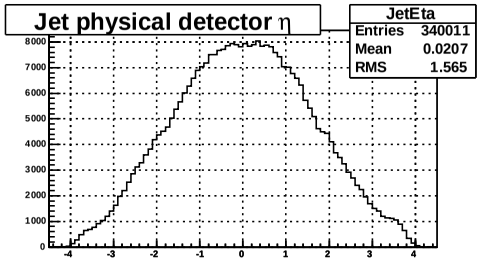


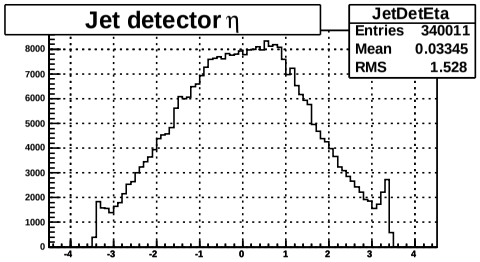


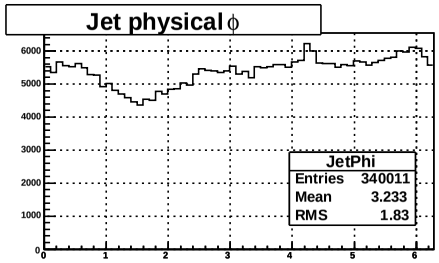


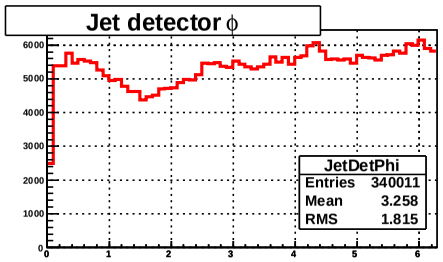


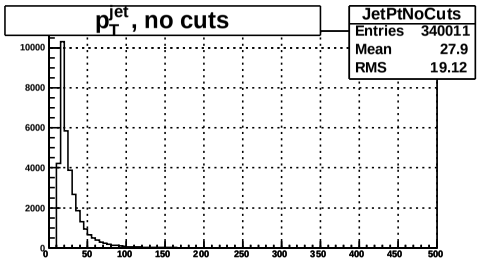
Jets, MUQCD skim

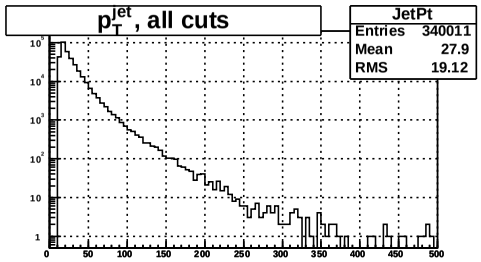


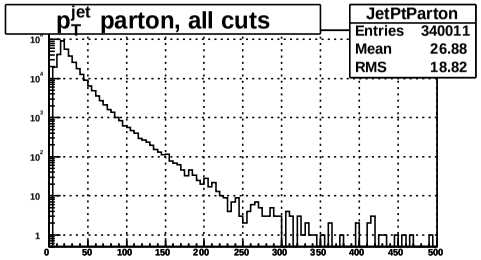


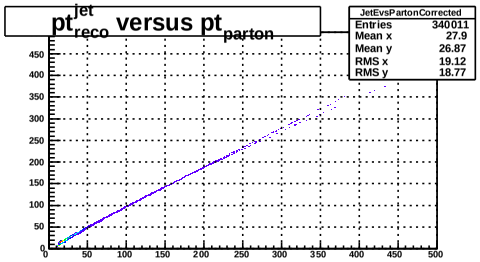




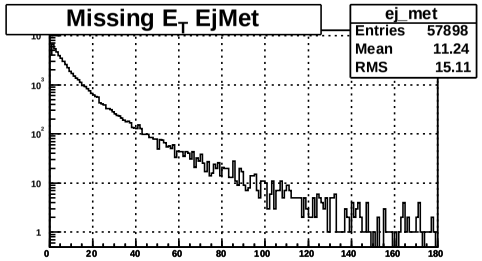


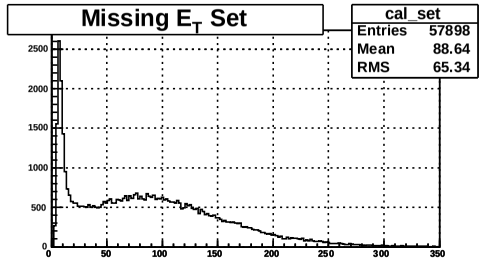


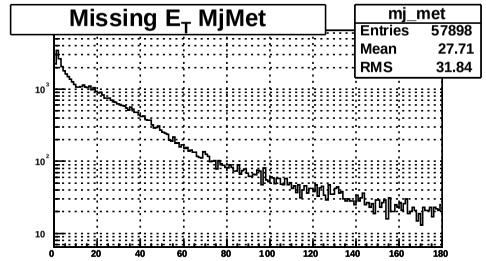


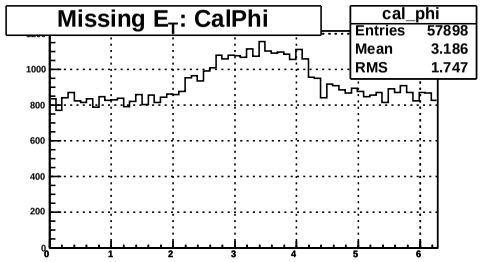


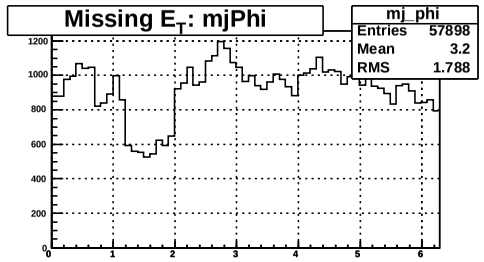
Missing E_T – MU_RECO_EFF skim

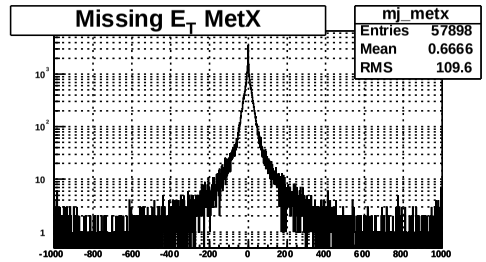


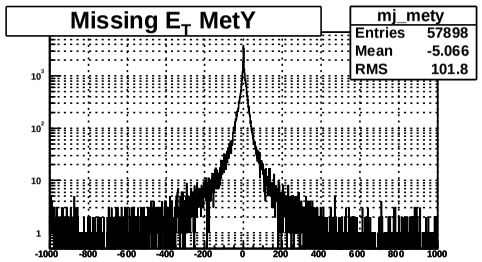


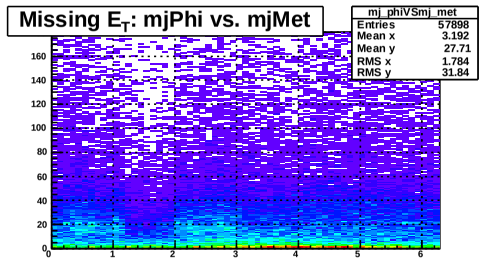


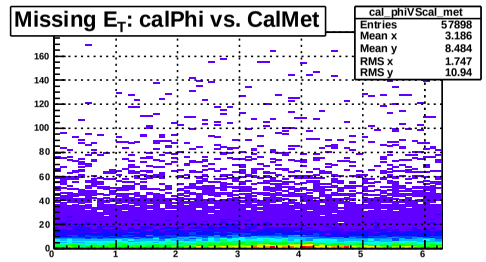




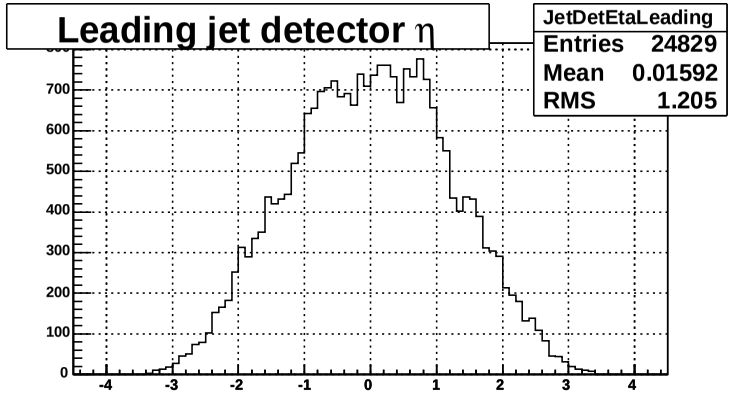


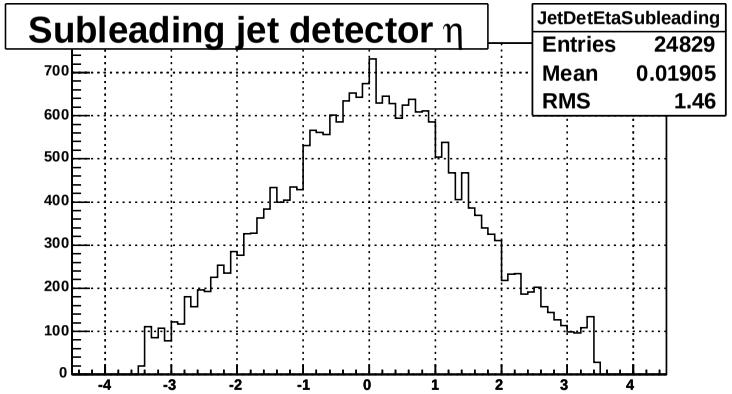


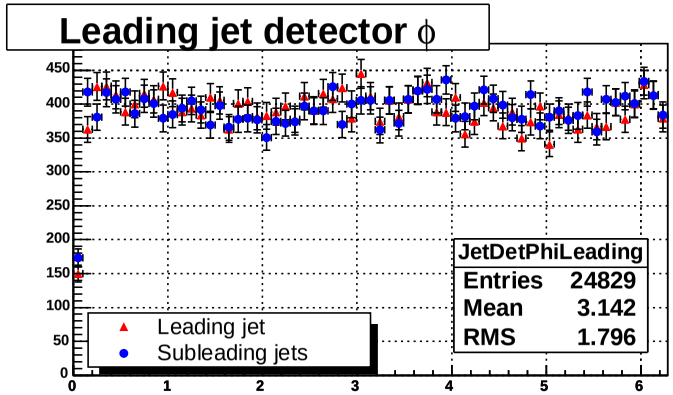




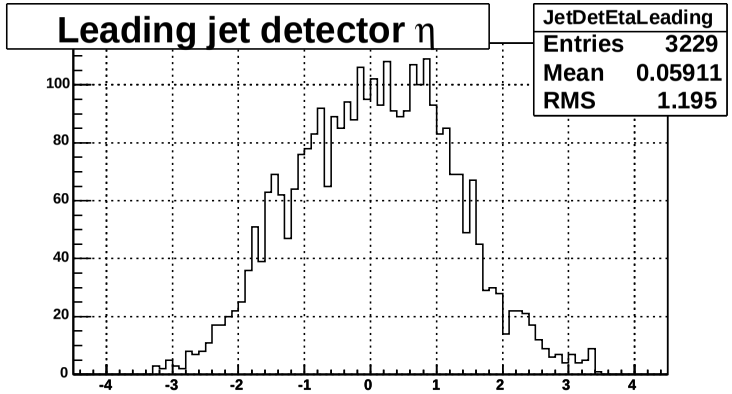
Jet ϕ study, EMQCD skim

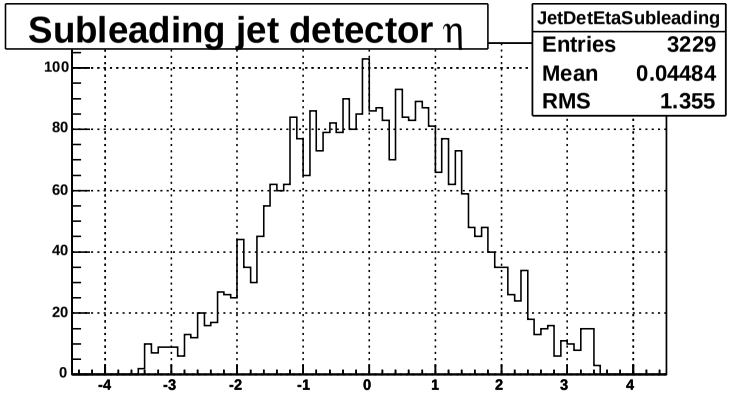


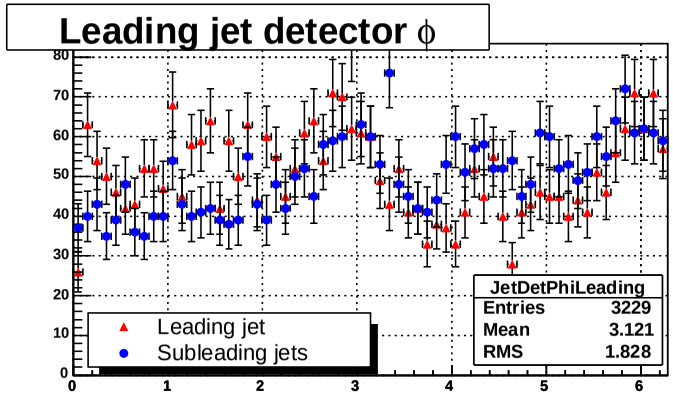




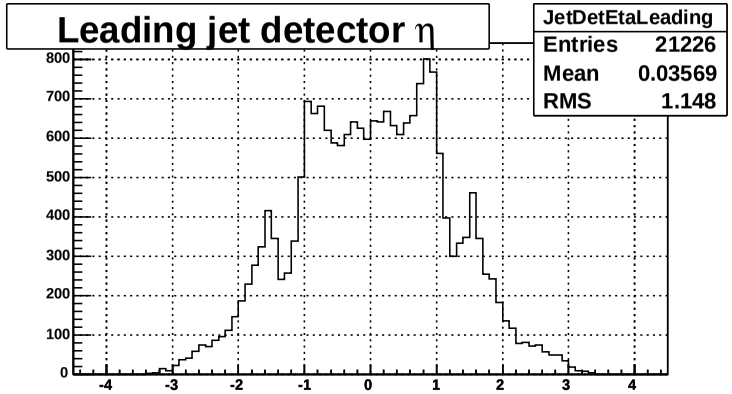
Jet ϕ study, MU_RECO_EFF skim

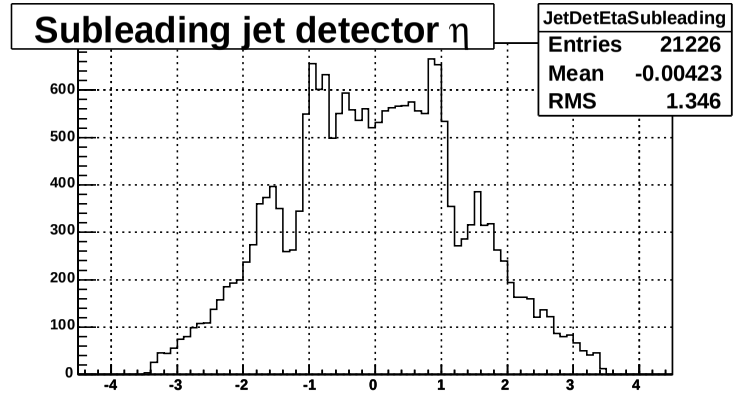


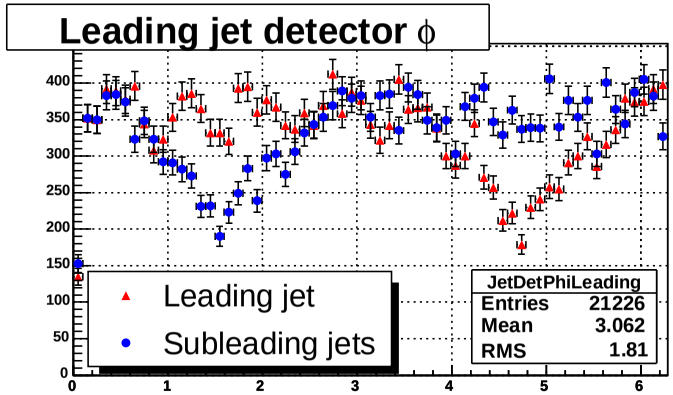




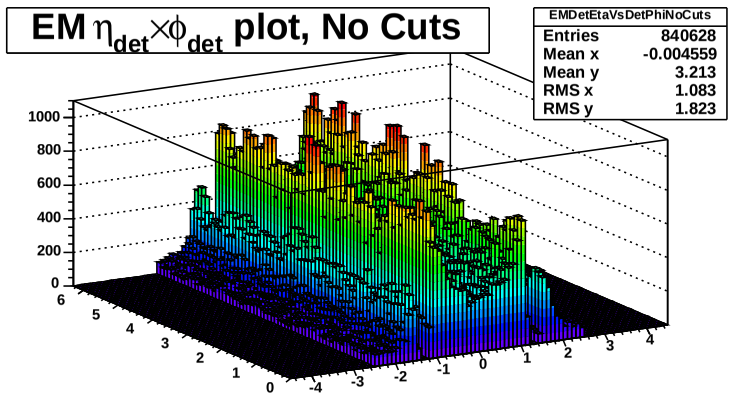
Jet ϕ study, CSskim_EMMU

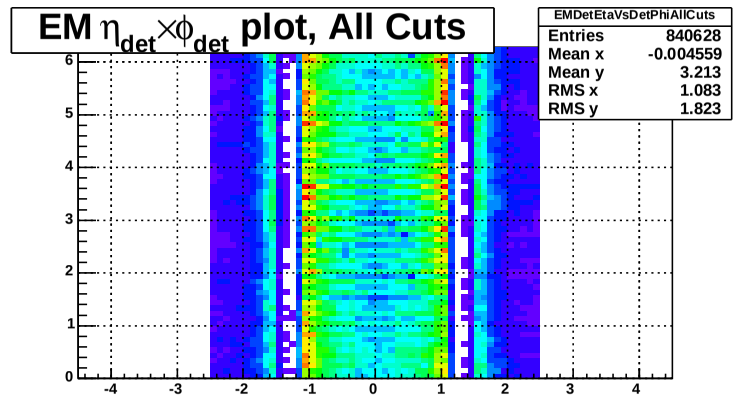


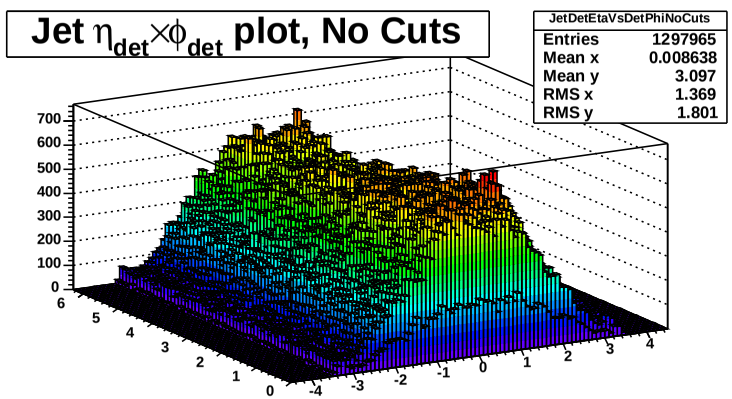


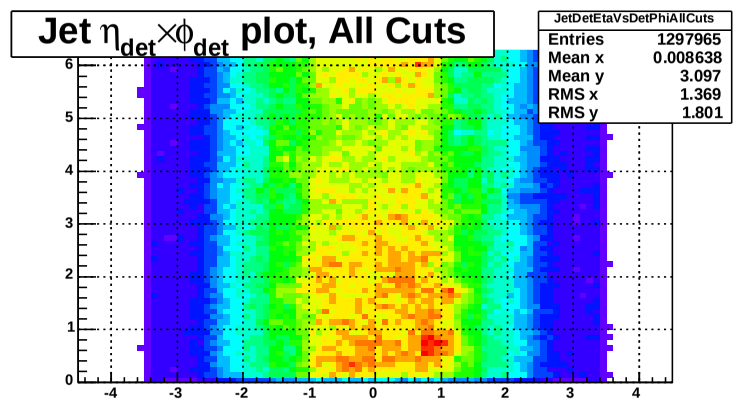


$\eta \times \phi$ plot – warm region for jets?, EMQCD skim

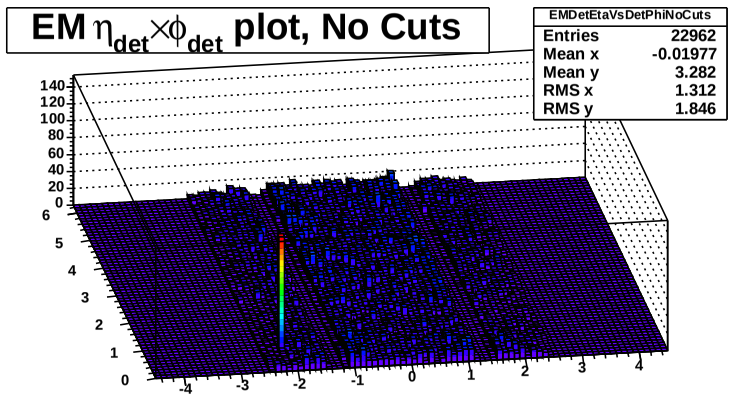


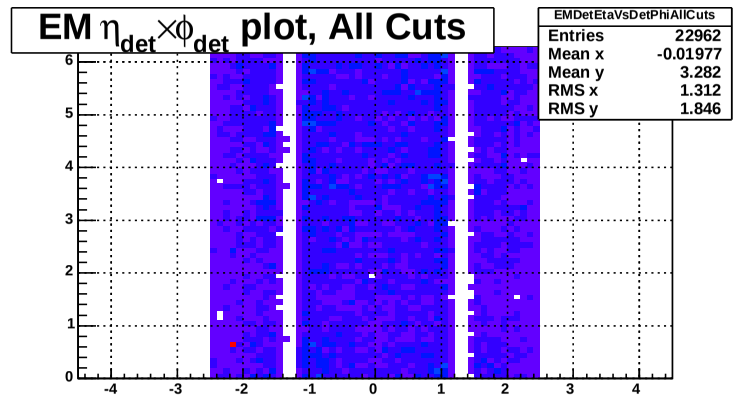


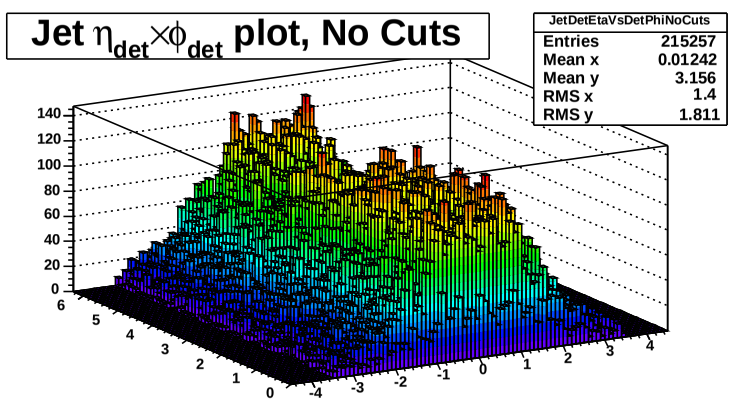


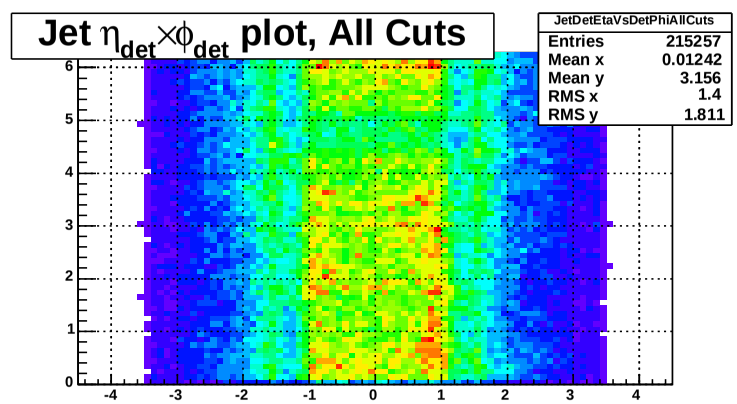


Spike in $\eta \times \phi$ plot – EM and jets, EMMU skim









Observations

- High p_T muons? Not understand ϕ spectra?
- Spike in EM $\eta \times \phi = (-2.2, 0.6)$ CSskim EMMU: **Run 187180** (138 such events, 3 from other runs)
- What was already found (see ADM) around were runs 187177, 187178, 188155 (CSskim-2EMhighpt)
- This run wasn't in bad runs in online database $\Rightarrow$ bad run candidate:)
- You're welcomed to see jpgs at **http://www-d0.fnal.gov/~kvita/plots/index.html** !:)
- Plan: directly compare Moriond and Post-shutdown histograms, more data for CSskim, tune cuts
- Thanks to: Emmanuel Busato for his `gStyle->SetPalette(1);` to Saša Kupčo for his cuts, audience for listening:)