GFLASH Validation on ECAL CMS

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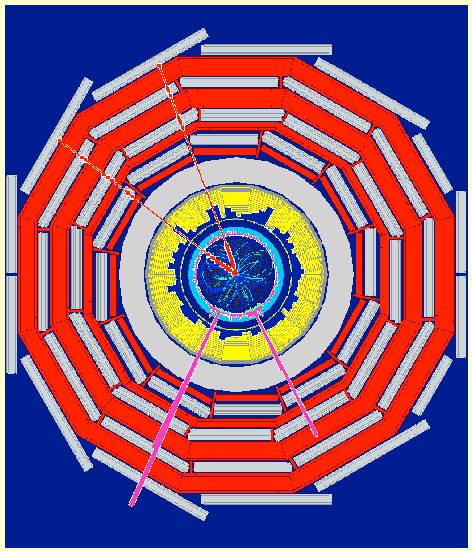
CMS GFLASH Meeting
March 05, 2007



GFLASH Validation in ECAL

We are validating GFLASH in CMSSW 120 with GEANT4 in CMSSW 110.

The event samples were generated using single particle gun

- I am aware of the current version of CMSSW 130 (pre4)
  yet there are some problem when trying to run the oval validation
  (I am investigating the problem)

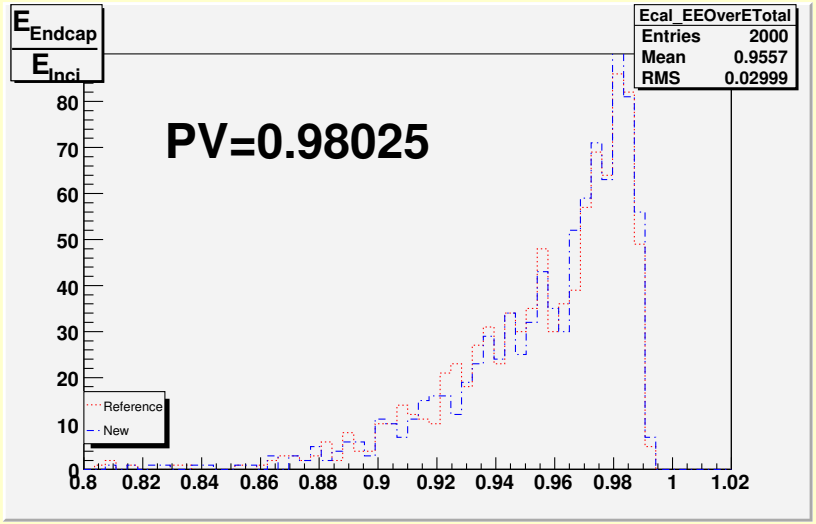
- No significant changes of CMSSW 110 compared to CMSSW 120 in ECAL

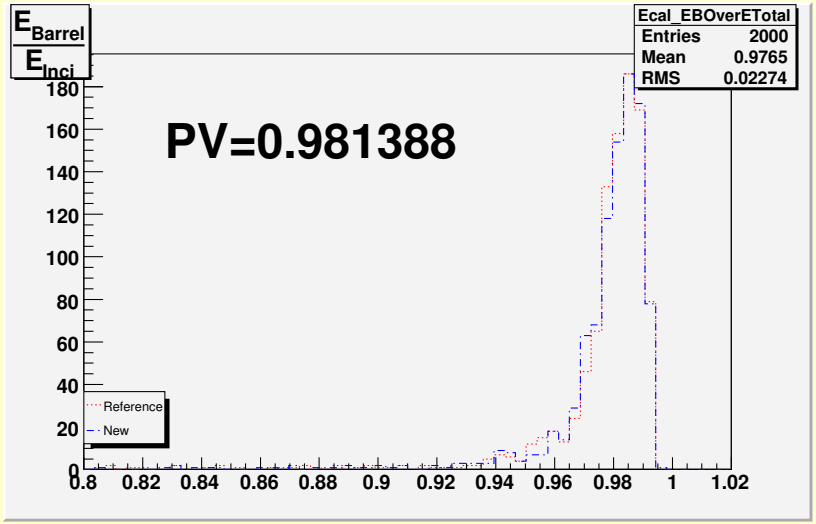
- The histograms structure:
  30 GeV γ (2000 events)
  400 GeV γ (200 events)
  60 GeV π (2000 events)

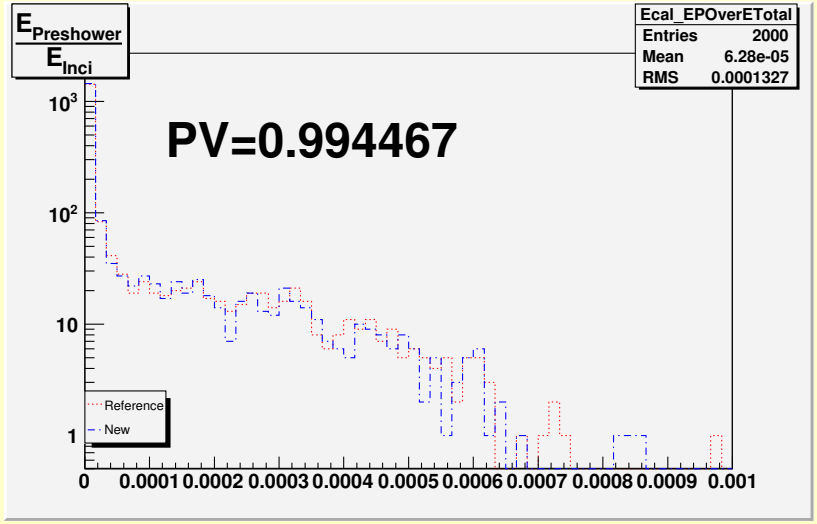
- We plan to do the GFLASH validation in CMSSW 130,
  add the KS fit and increase the event samples

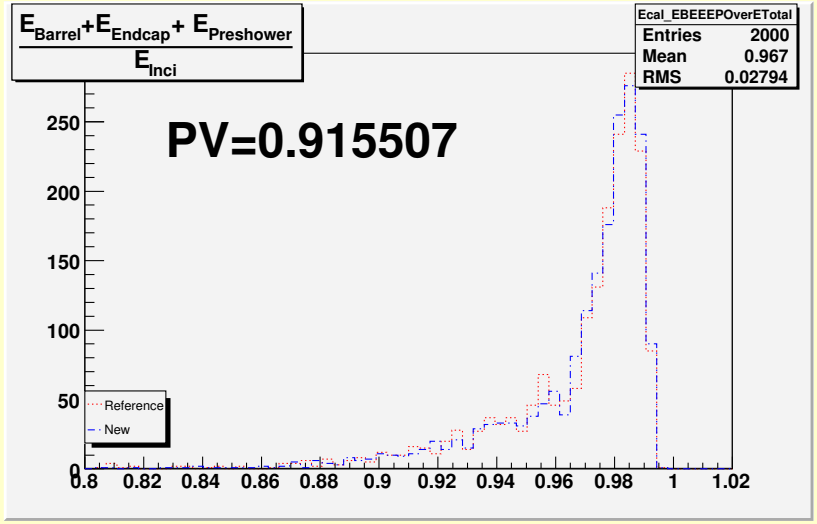
30 GeV E_γ ratio in Endcap, Barrel, Preshower, and E+B+P

CMSSW 120 (new) Vs CMSSW 110 (reference)









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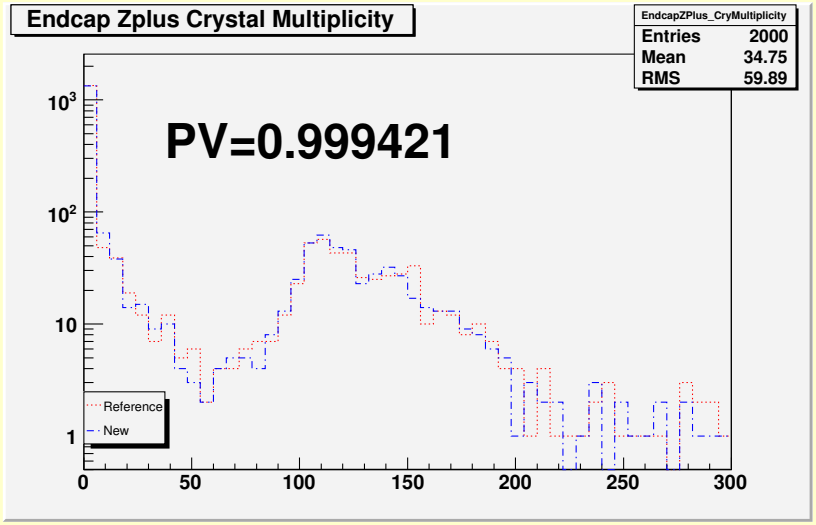
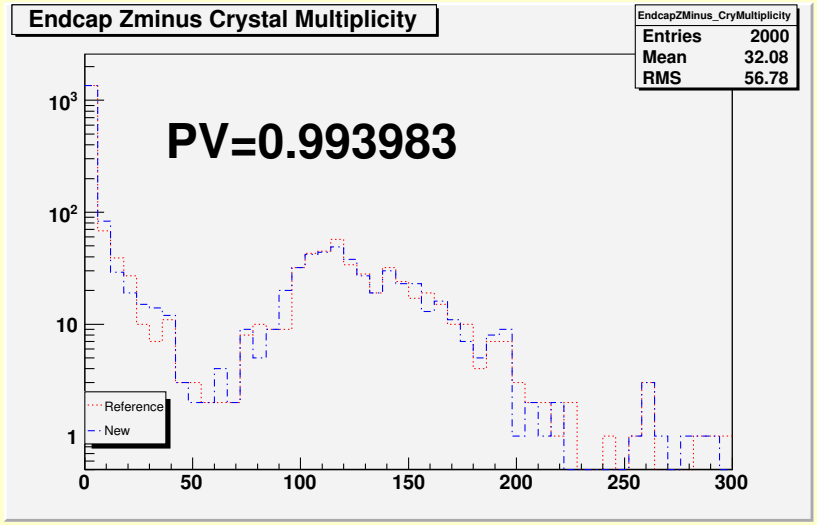
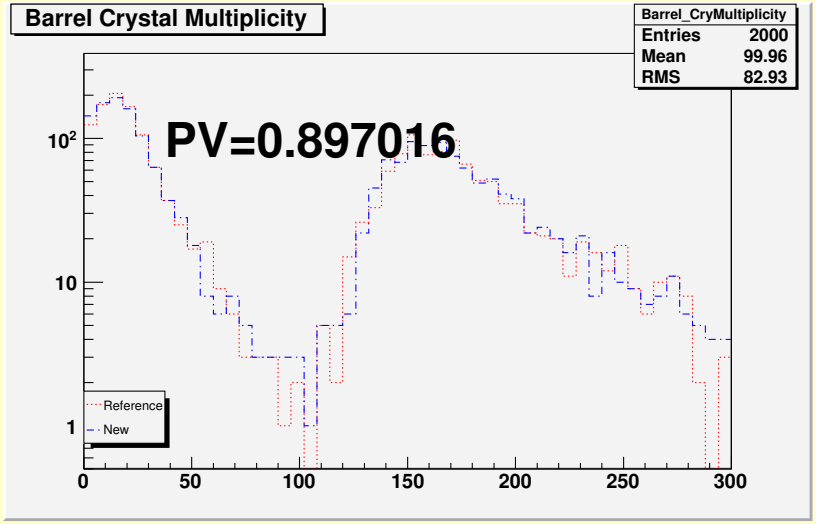
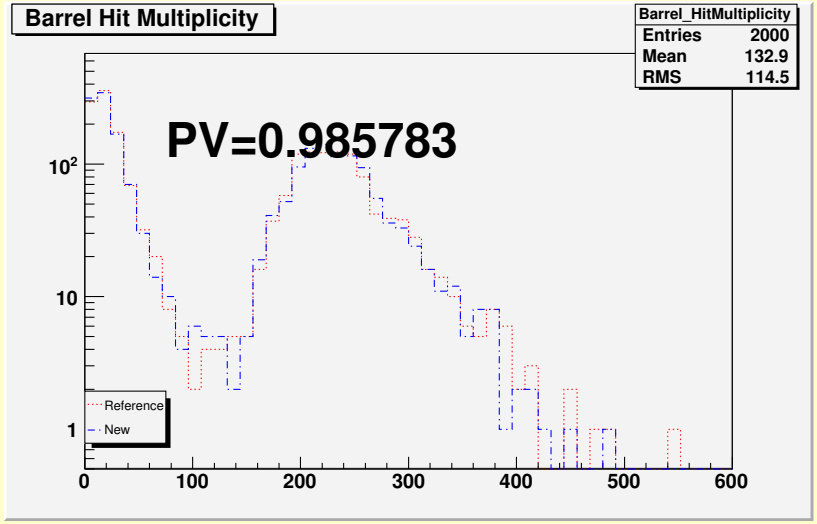
30 GeV γ Crystal Multiplicity

CMSSW 120 (new) Vs CMSSW 110 (reference)



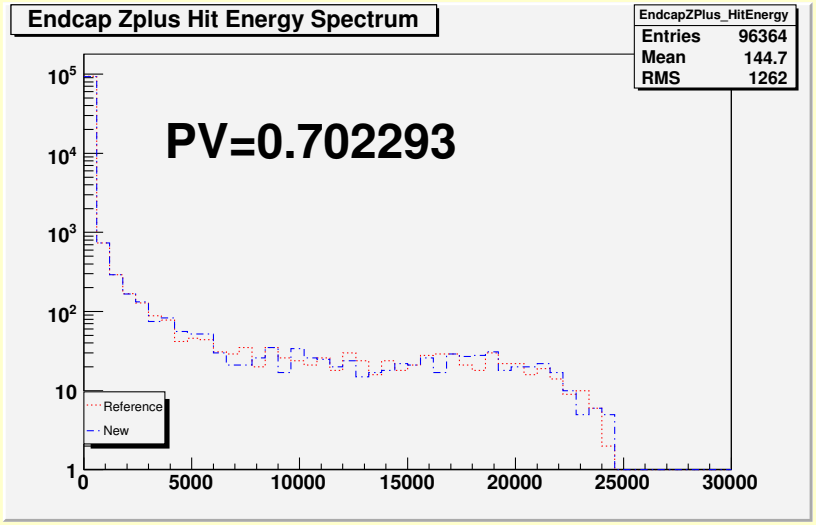


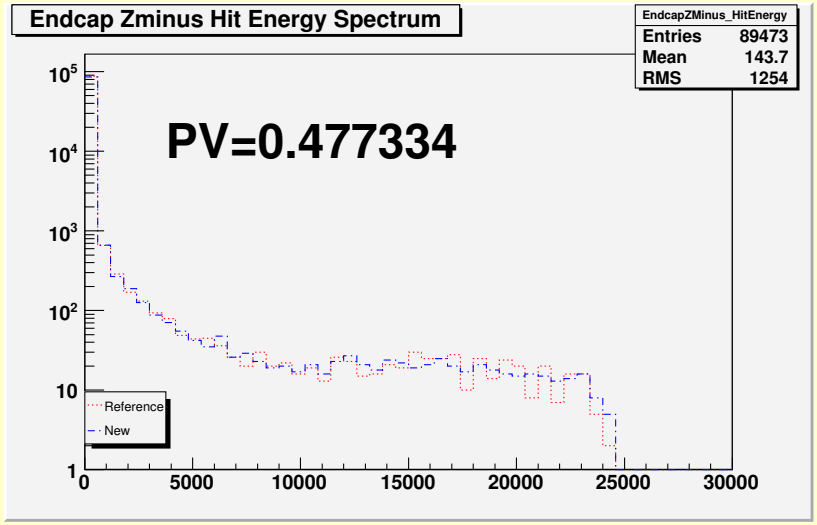


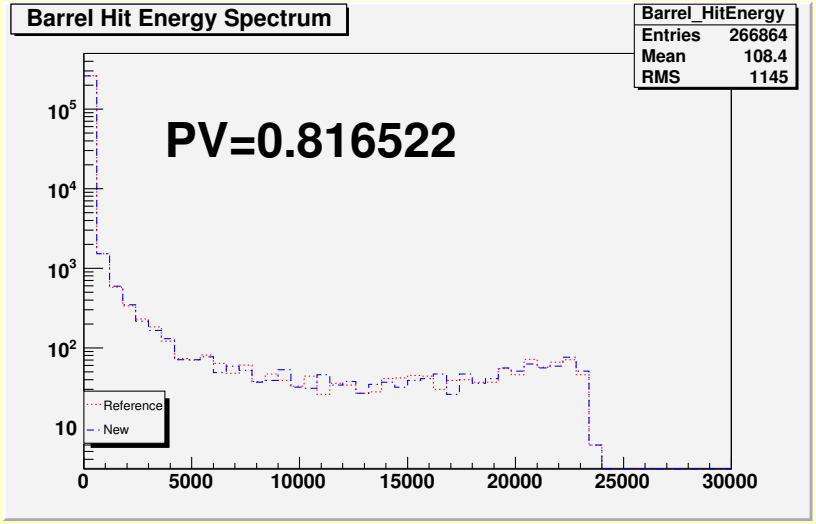


30 GeV γ Hit Energy Spectrum in Endcap and Barrel

CMSSW 120 (new) Vs CMSSW 110 (reference)

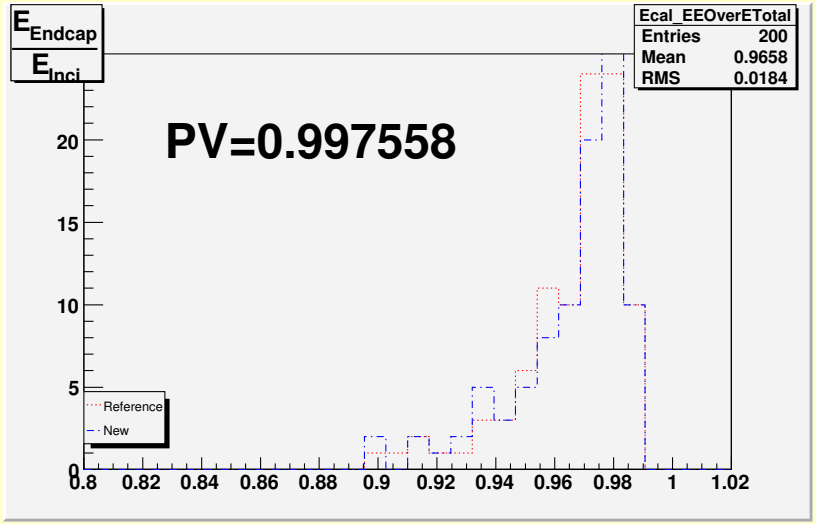


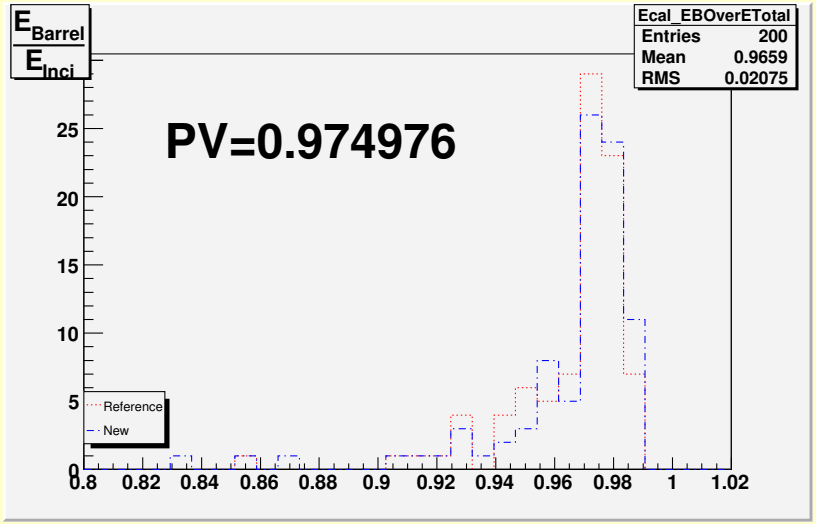


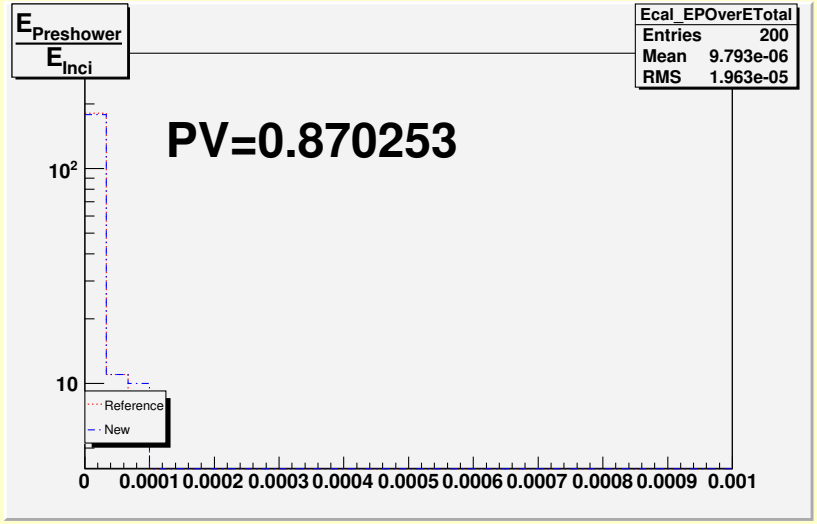


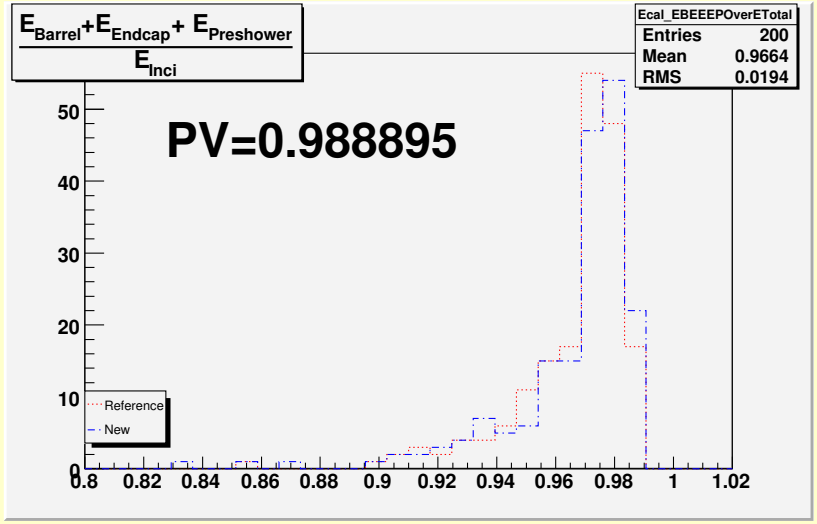
400 GeV E_γ ratio in Endcap, Barrel, Preshower, and E+B+P

CMSSW 120 (new) Vs CMSSW 110 (reference)



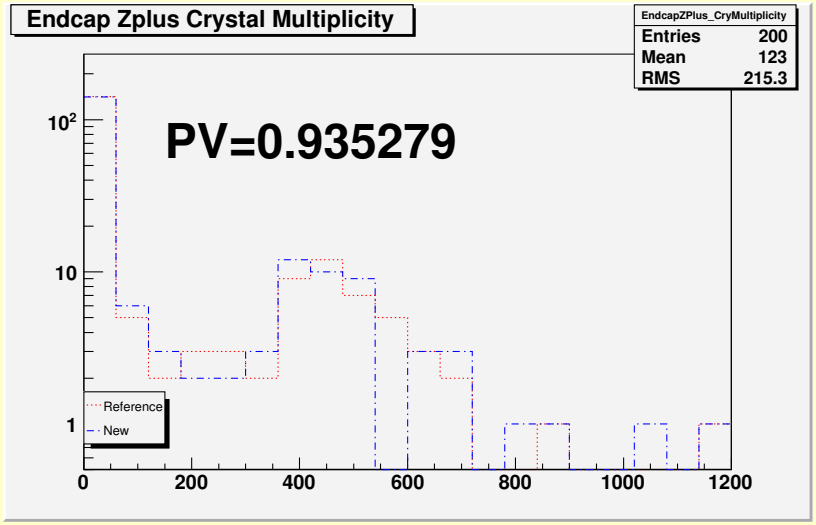


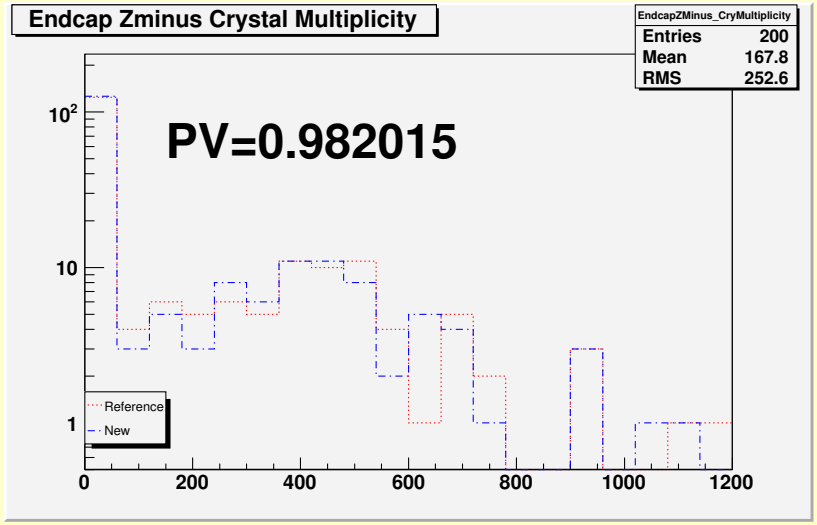


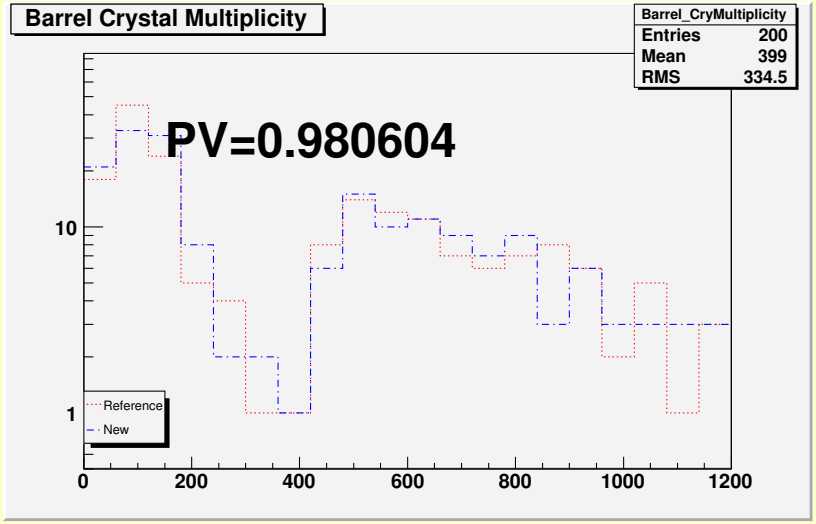


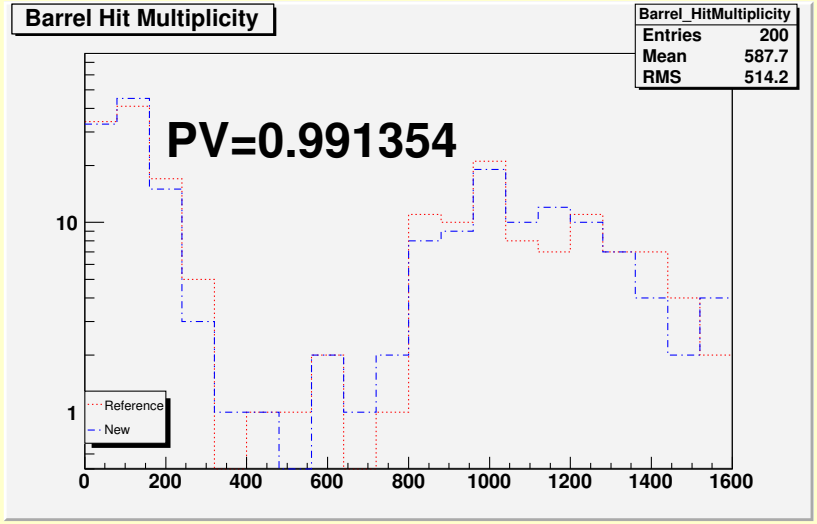
400 GeV γ Crystal Multiplicity

CMSSW 120 (new) Vs CMSSW 110 (reference)









400 GeV γ Hit Energy Spectrum in Endcap and Barrel

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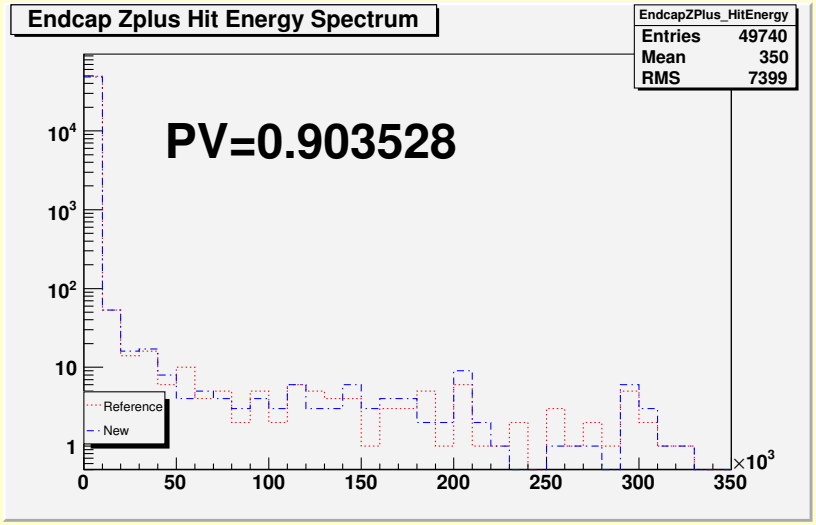
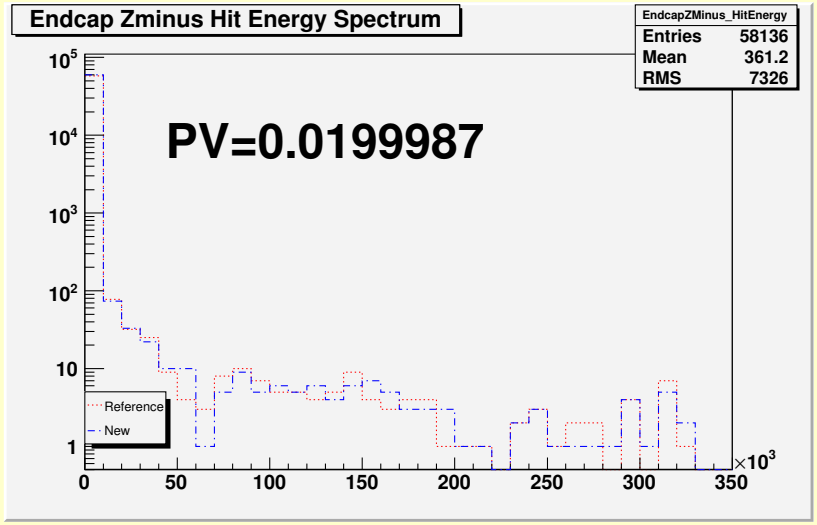
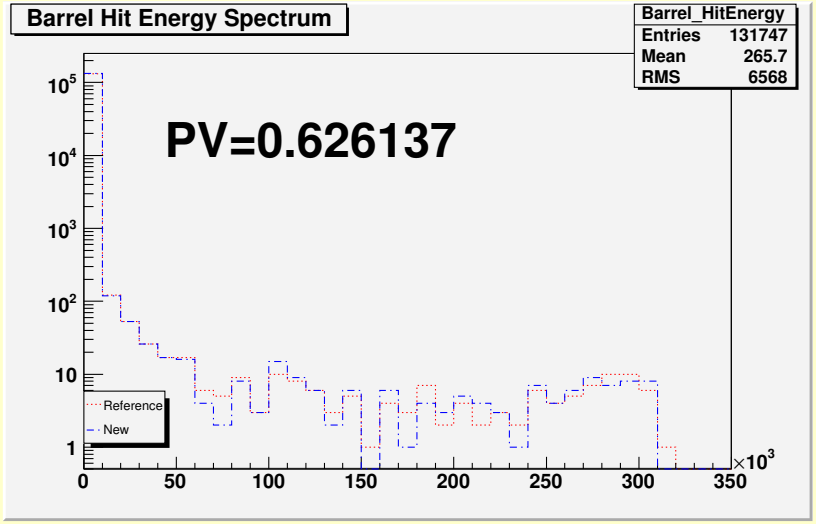
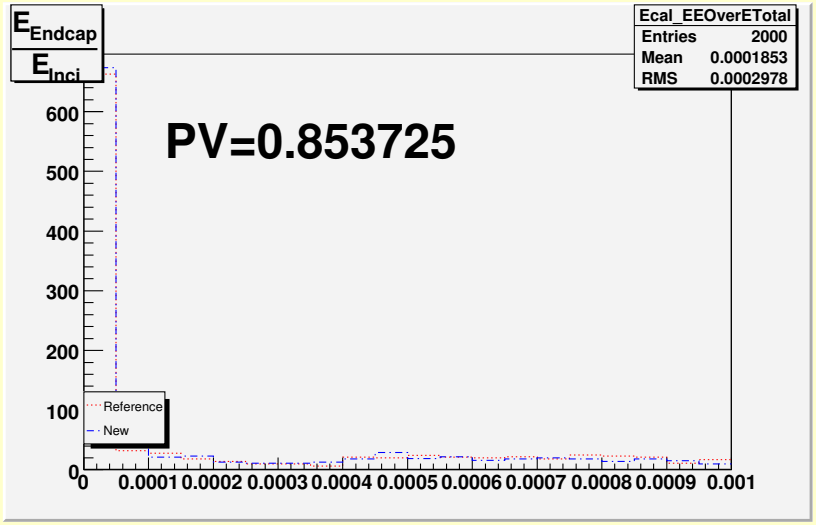


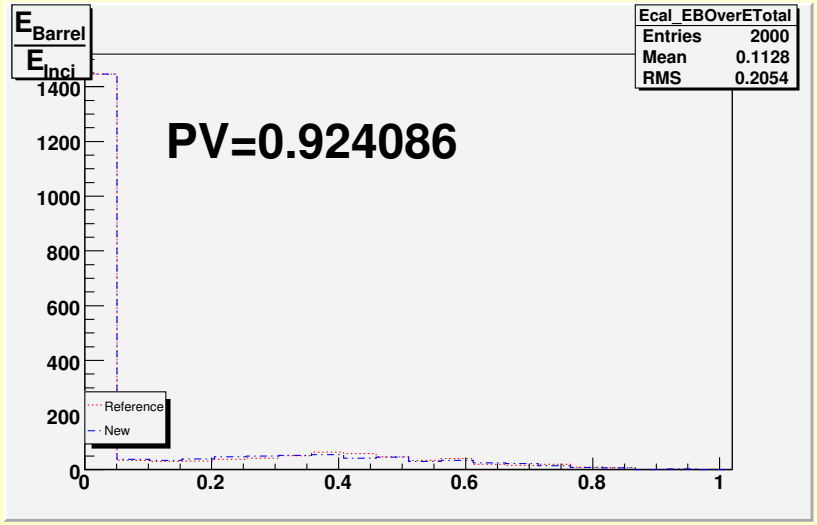


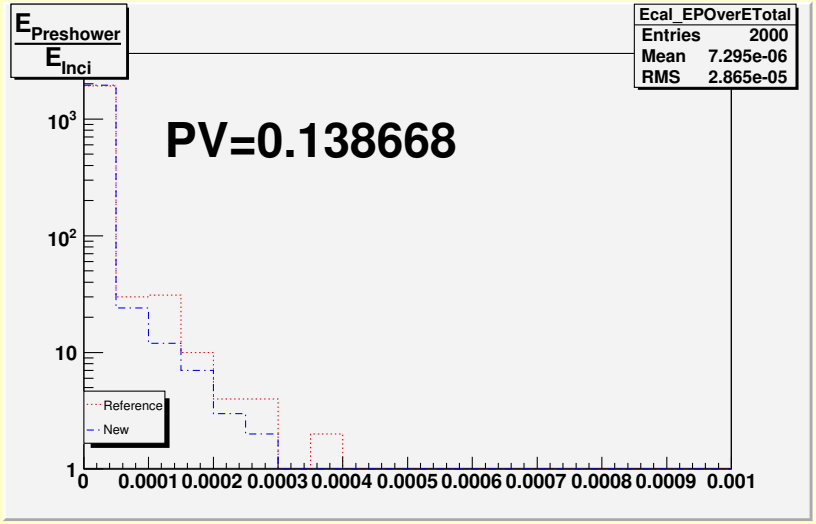


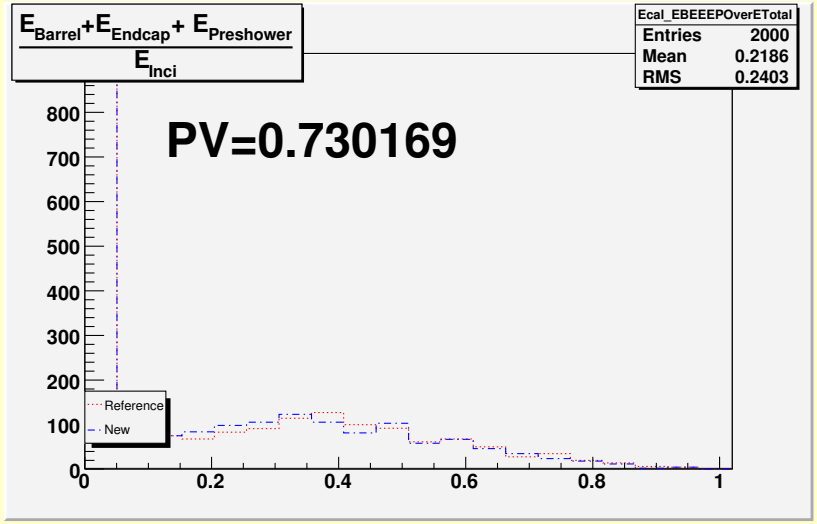
60 GeV E_π ratio in Endcap, Barrel, Preshower, and E+B+P

CMSSW 120 (new) Vs CMSSW 110 (reference)









60 GeV π Crystal Multiplicity

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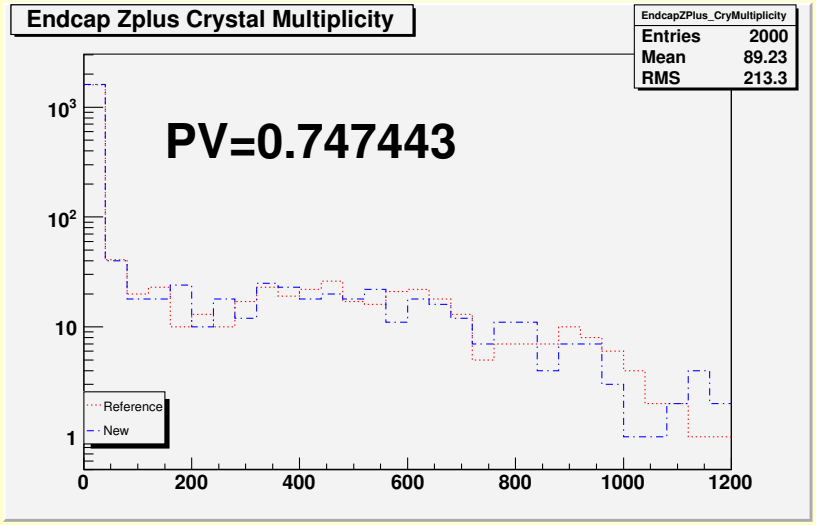

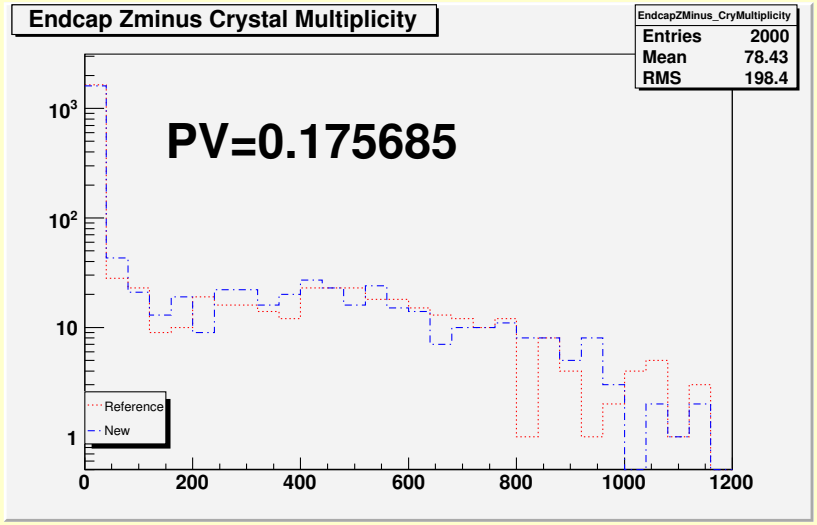

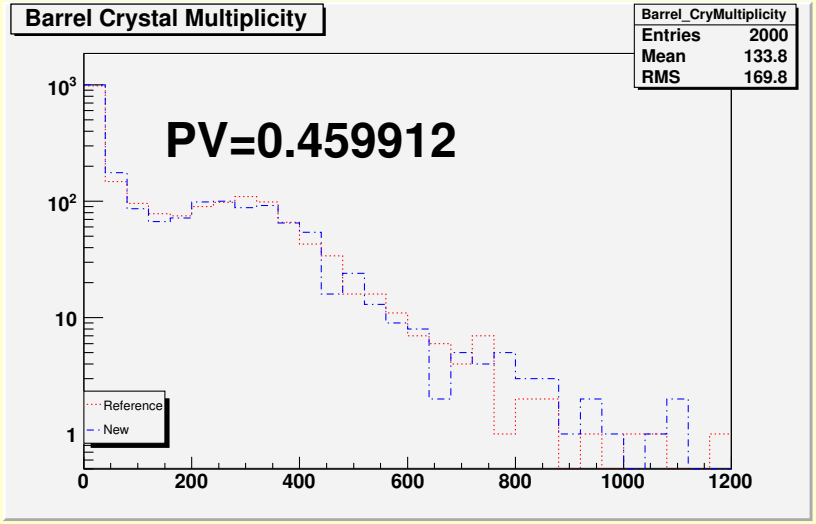

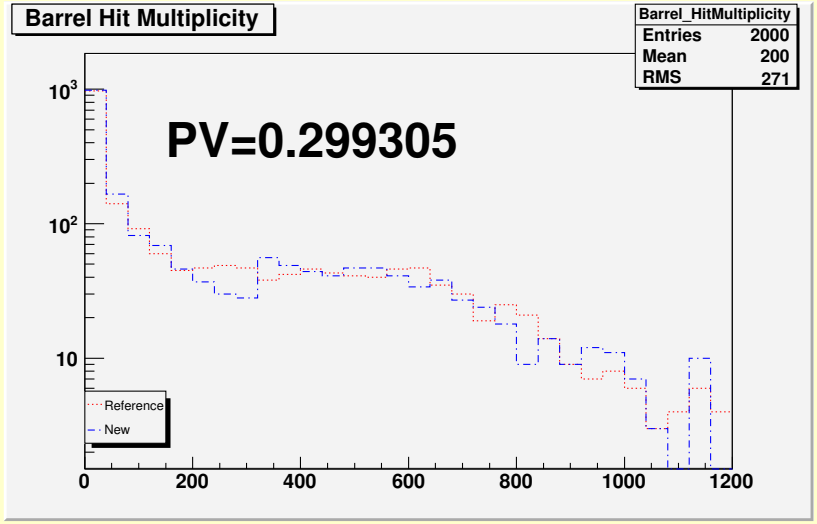

60 GeV π Hit Energy Spectrum in Endcap and Barrel

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