5.3.2 MC Validation

Kenichi Hatakeyama (Rockefeller U.)
for Jet Task Force

Simulation Meeting, August 12, 2004

Outline:

- Dijet Balancing in 5.3.2 Pythia Dijet MC
- Single Track Analysis (from D. Ambrose)

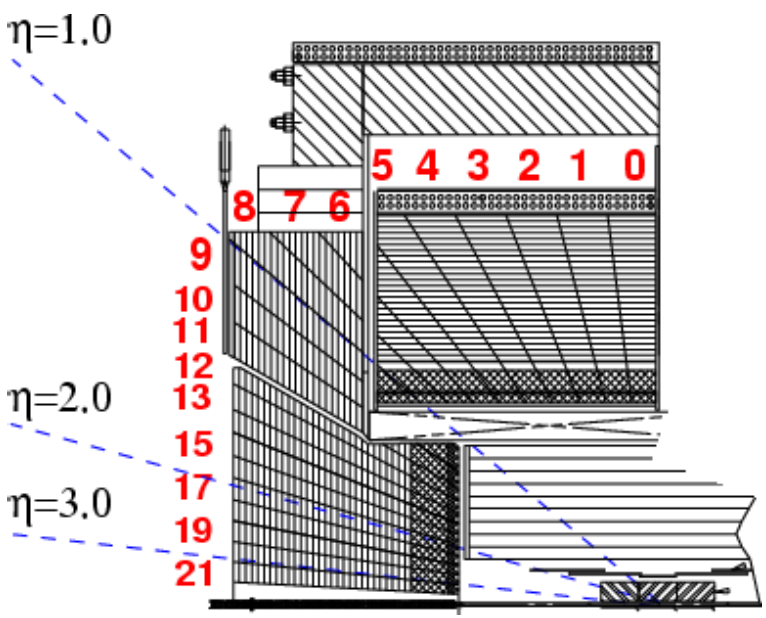
Summary of GFLASH tuning

New for 5.3.0

- new plug parameterization
- tower-based corrections for towers 10-11

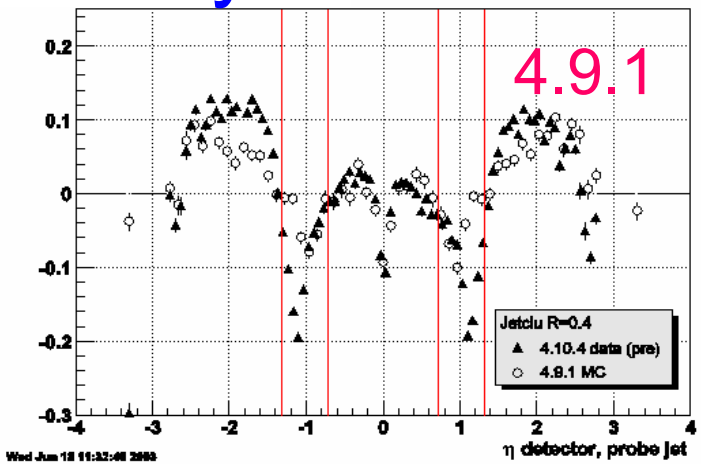
New for 5.3.1

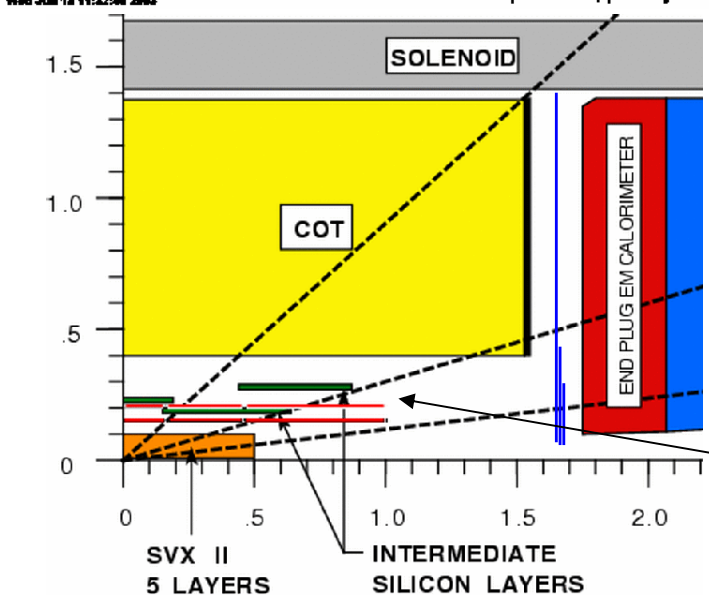
- fiducial volume contour cut on energy spots at 30˚/90˚ cracks and CHA/WHA gaps
- asymmetric energy spot scaling for towers 7-8

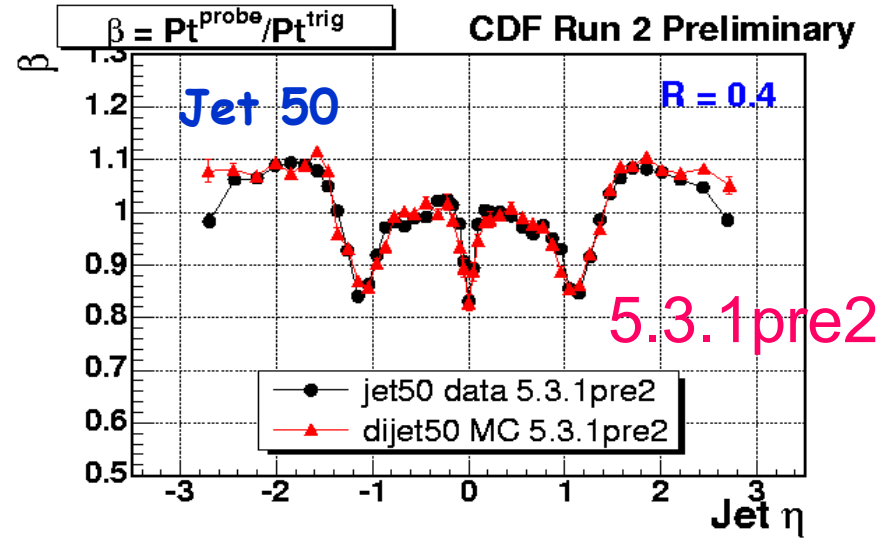


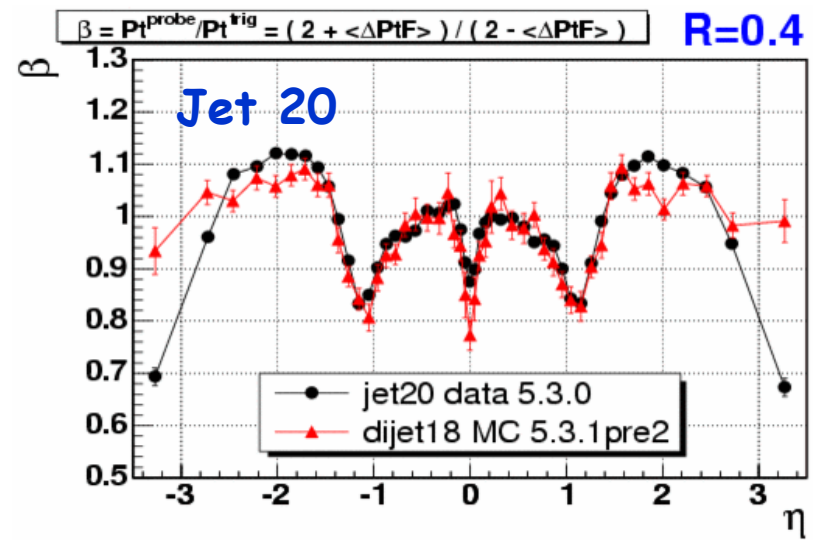
Dijet balancing

history







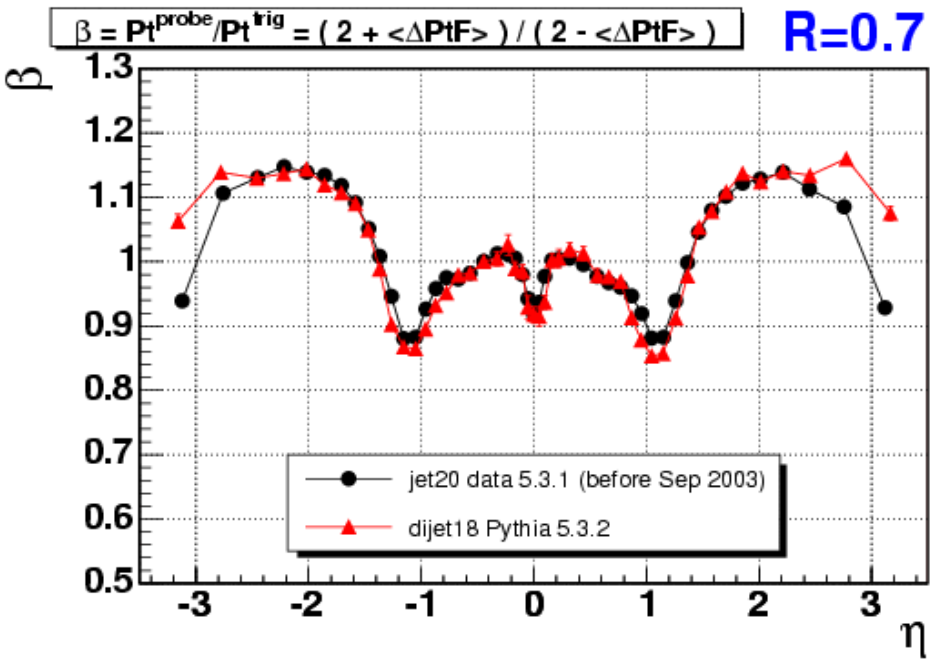


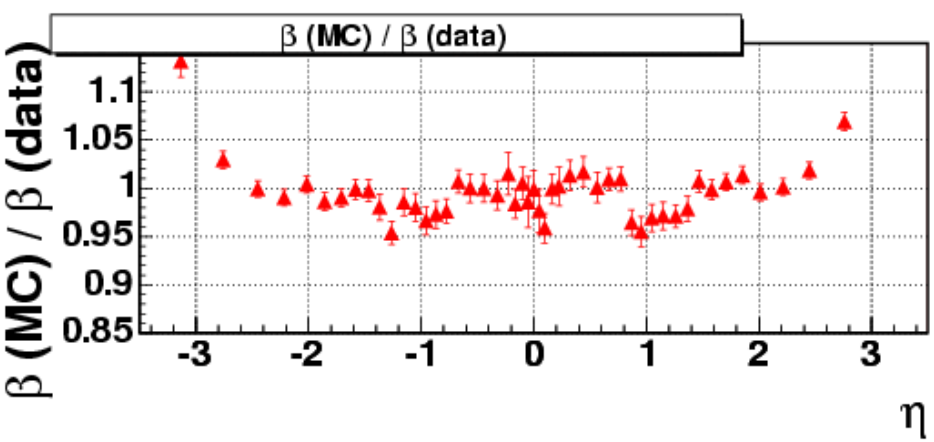
The outer silicon phantom layer (z: 45-100cm) deactivated after 5.3.1pre2

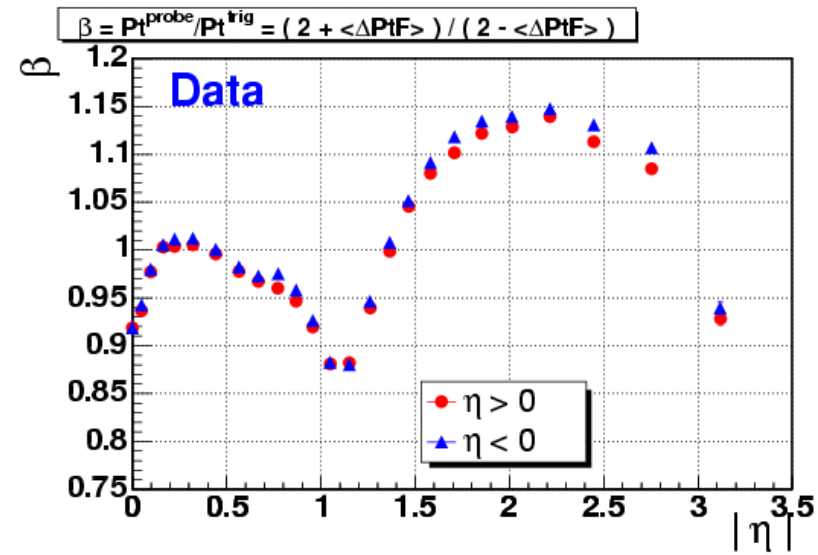
Checked in single track studies

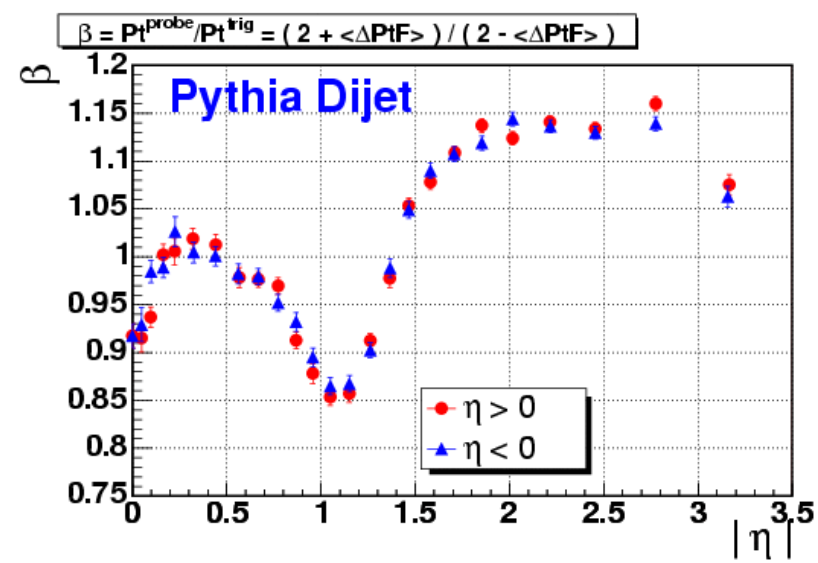
Dijet balancing

Jet20 data vs Pythia
Dijet18 MC (5.3.2), R=0.7



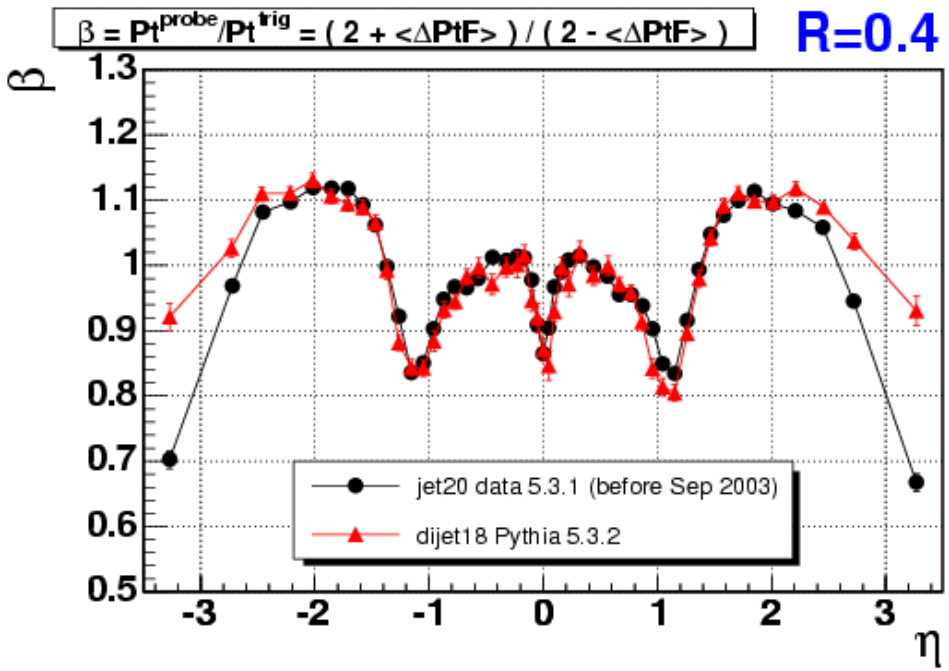


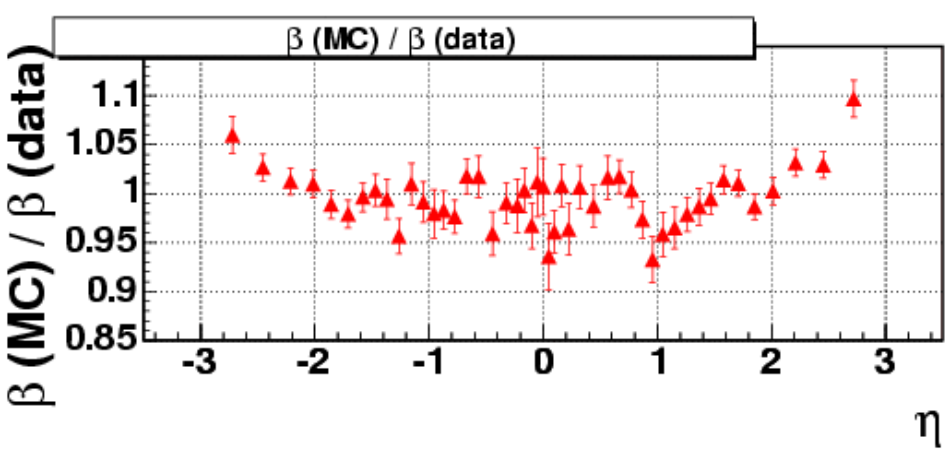


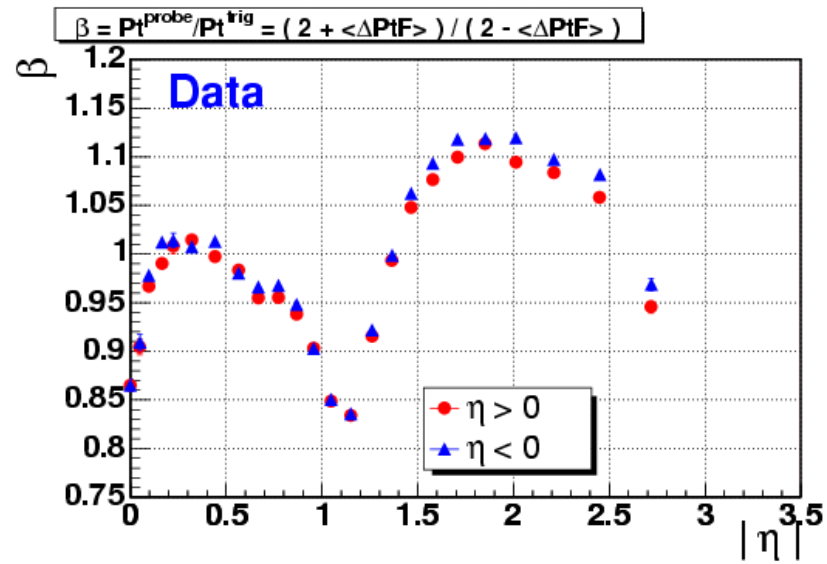


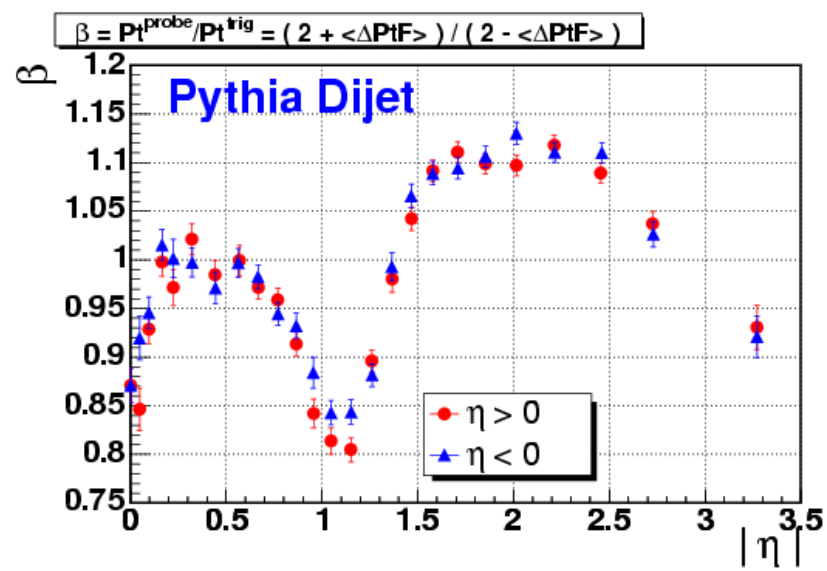
Dijet balancing

Jet20 data vs Pythia
Dijet18 MC (5.3.2), R=0.4



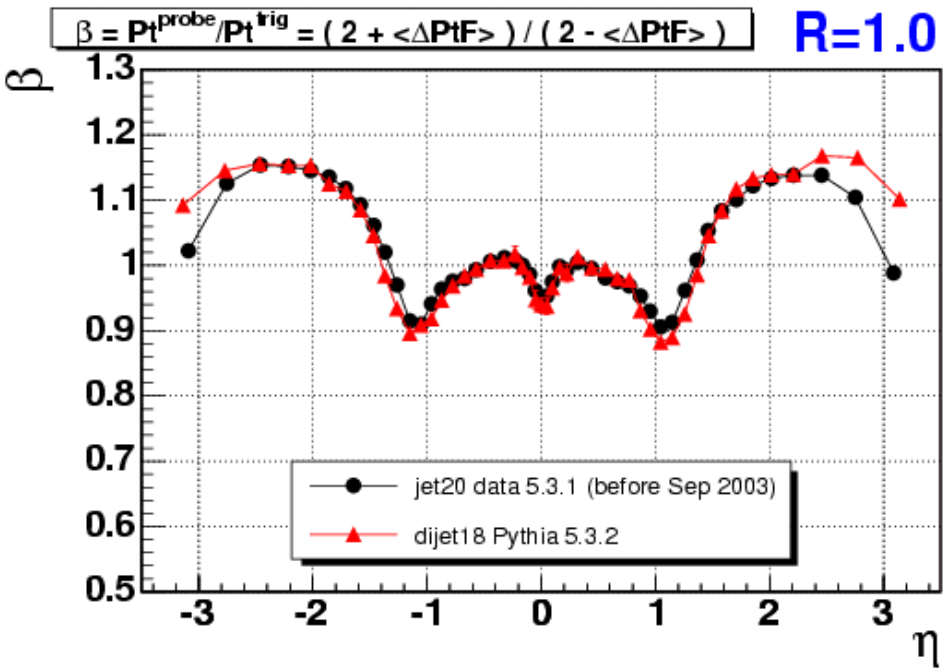


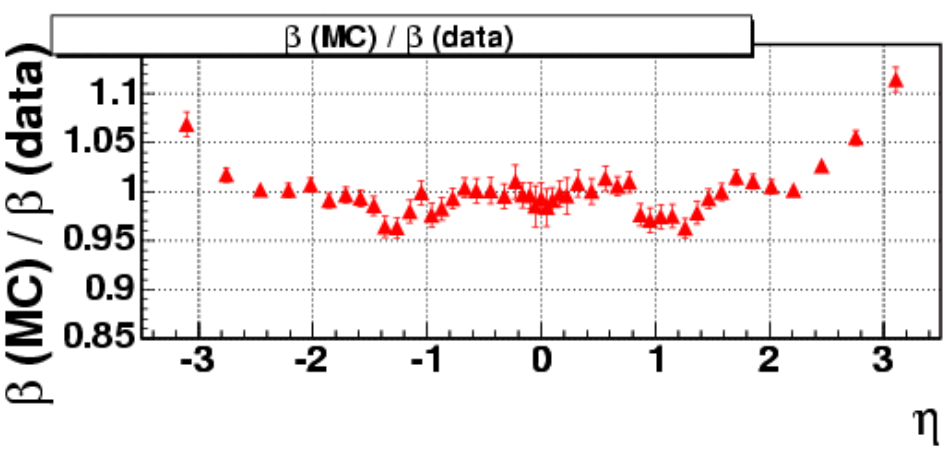


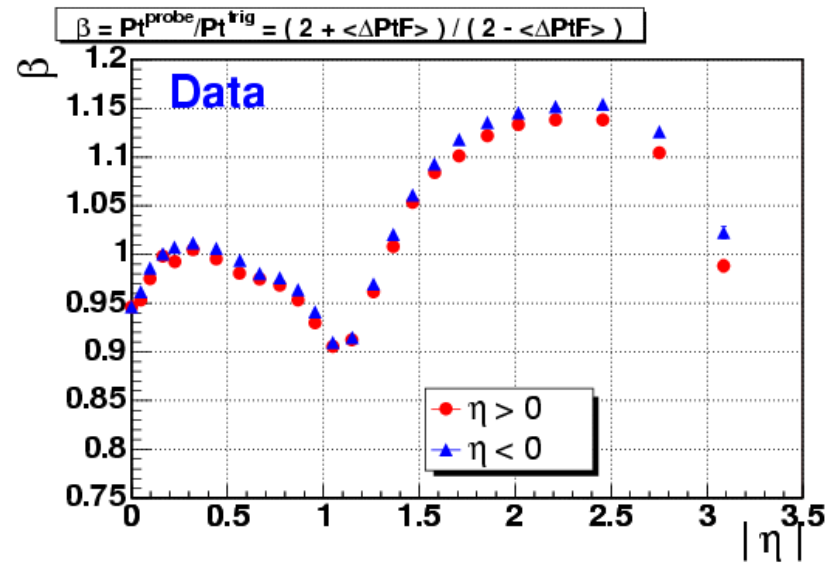


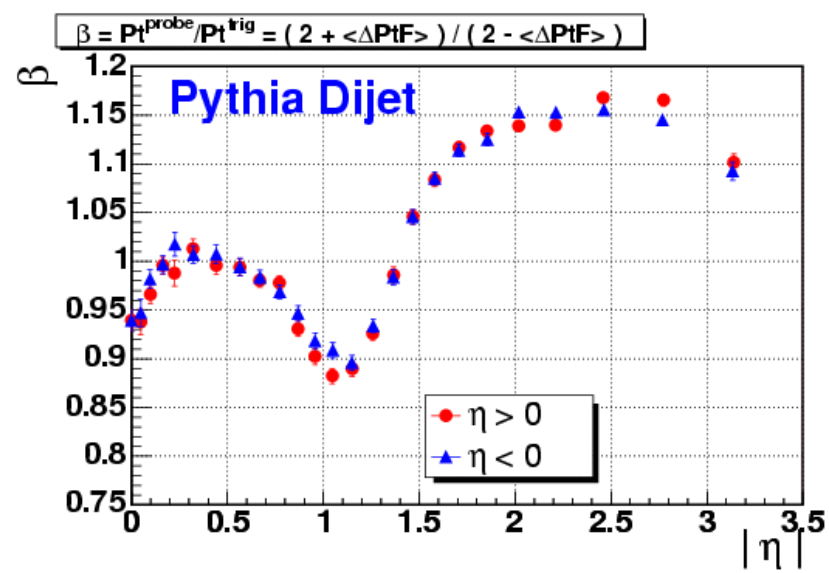
Dijet Balancing

Jet20 data vs Pythia Dijet18 MC (5.3.2), R=1.0



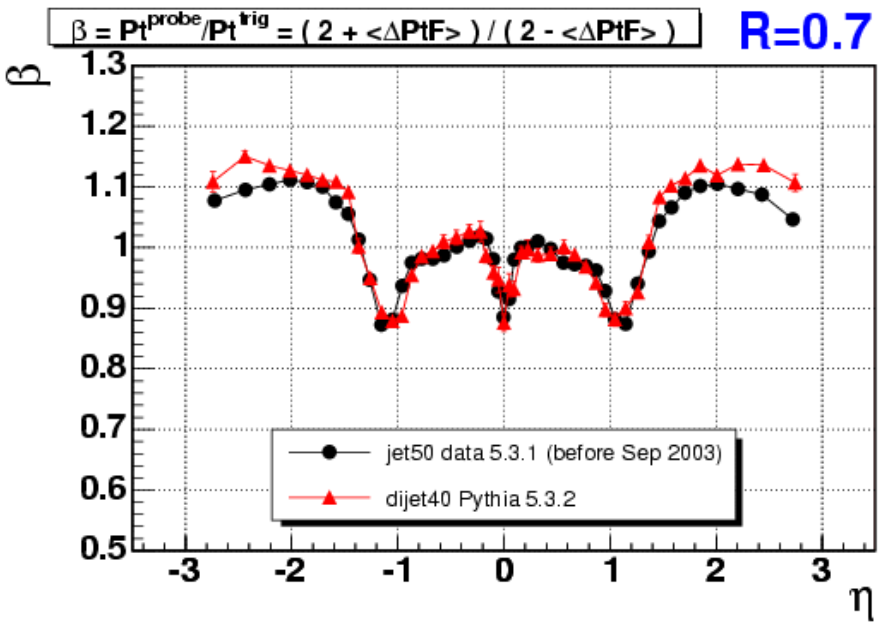


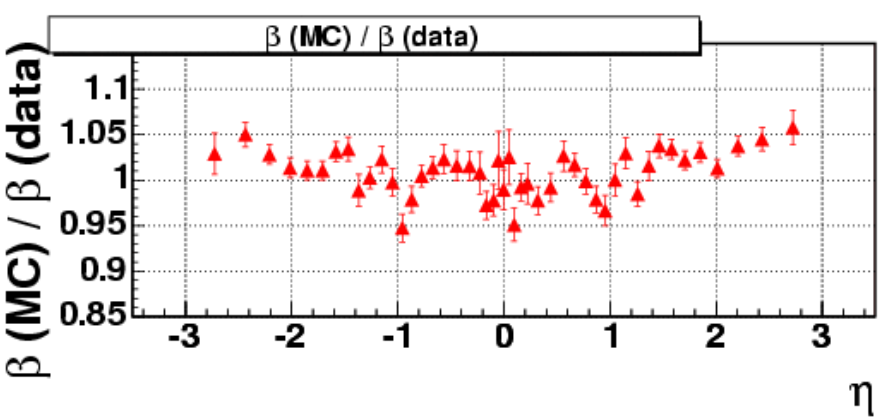


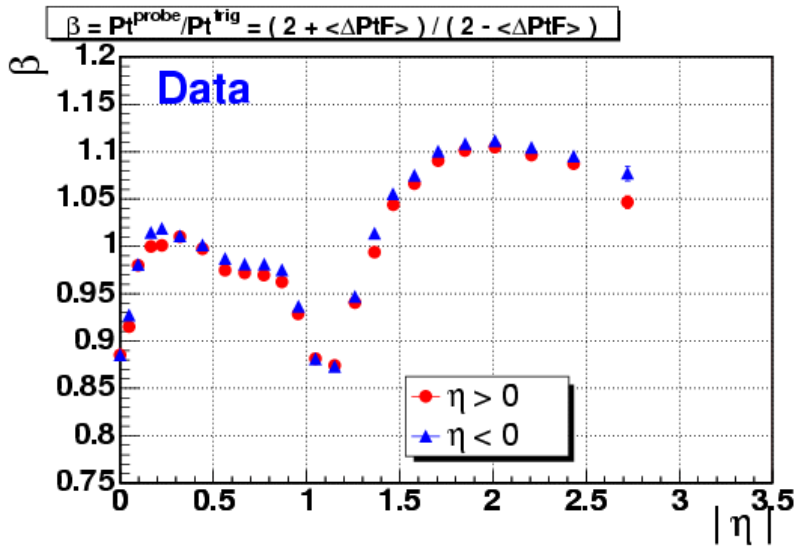


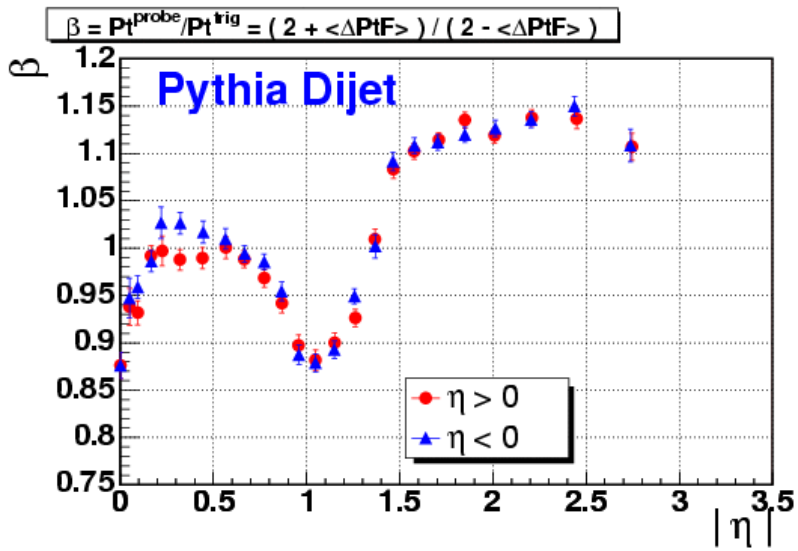
Dijet balancing

Jet50 data vs Pythia
Dijet40 MC (5.3.2), R=0.7



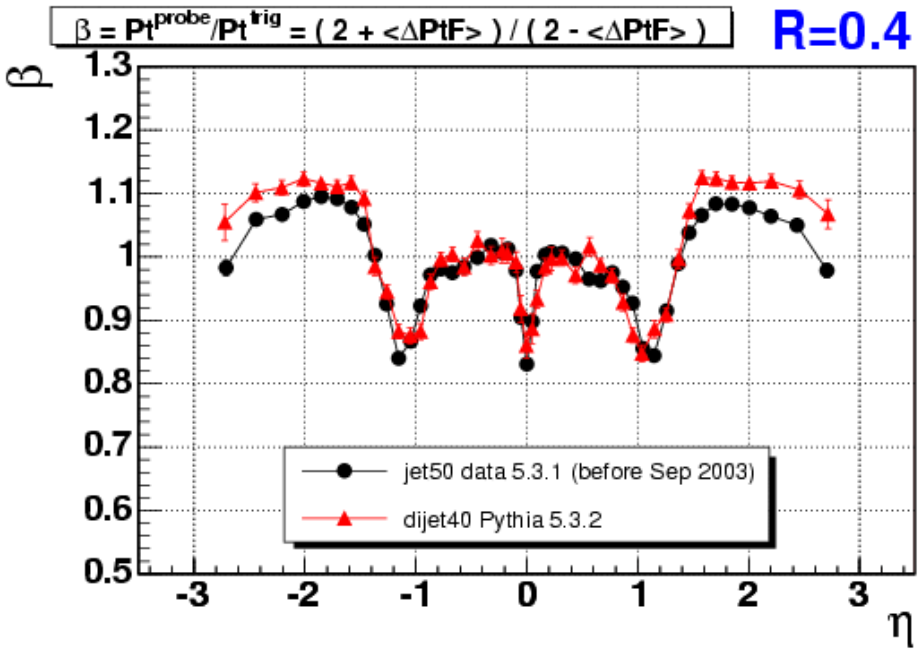


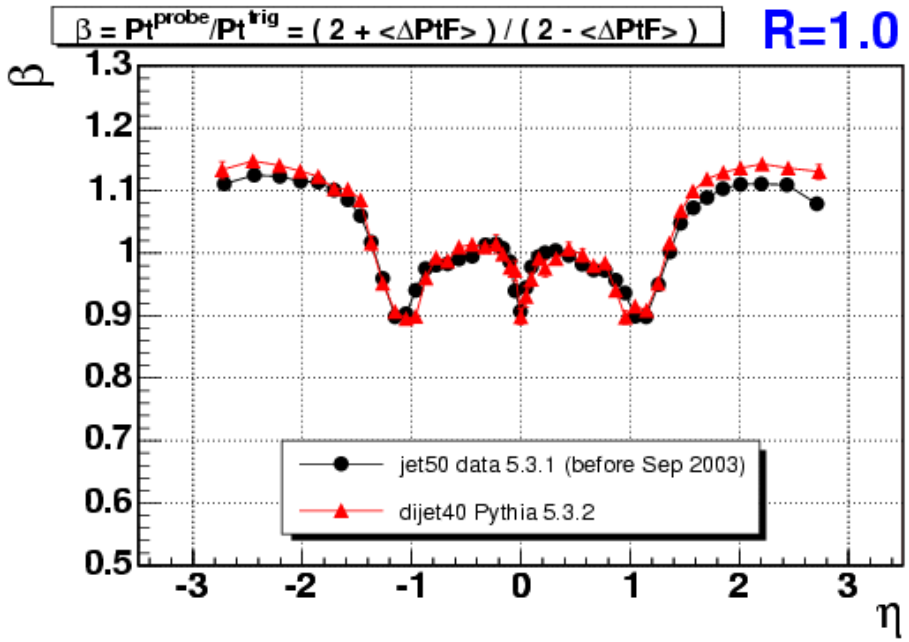


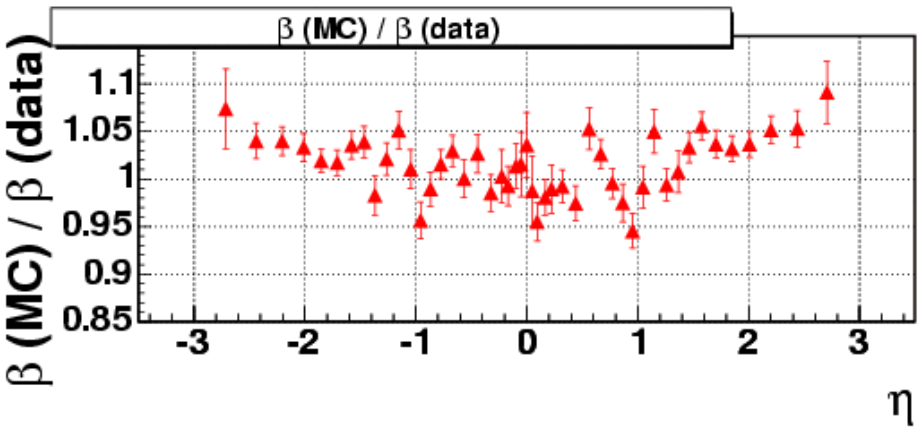


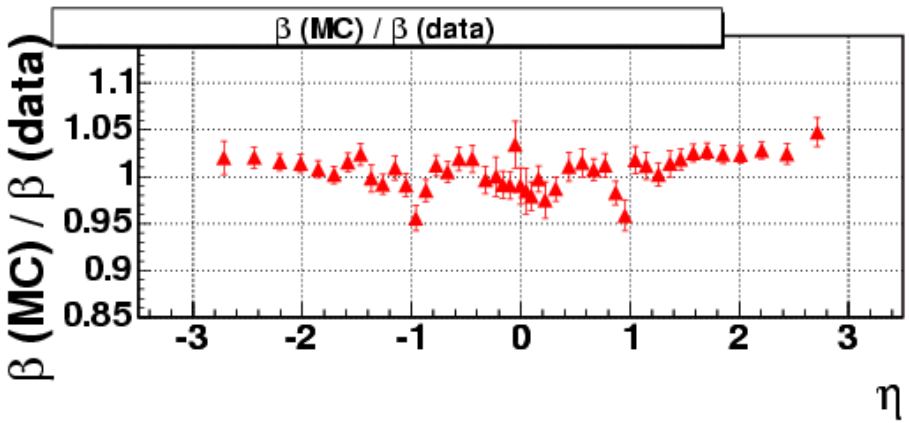
Dijet balancing

Jet50 data vs Pythia Dijet40 MC (5.3.2), R=0.4 & 1.0



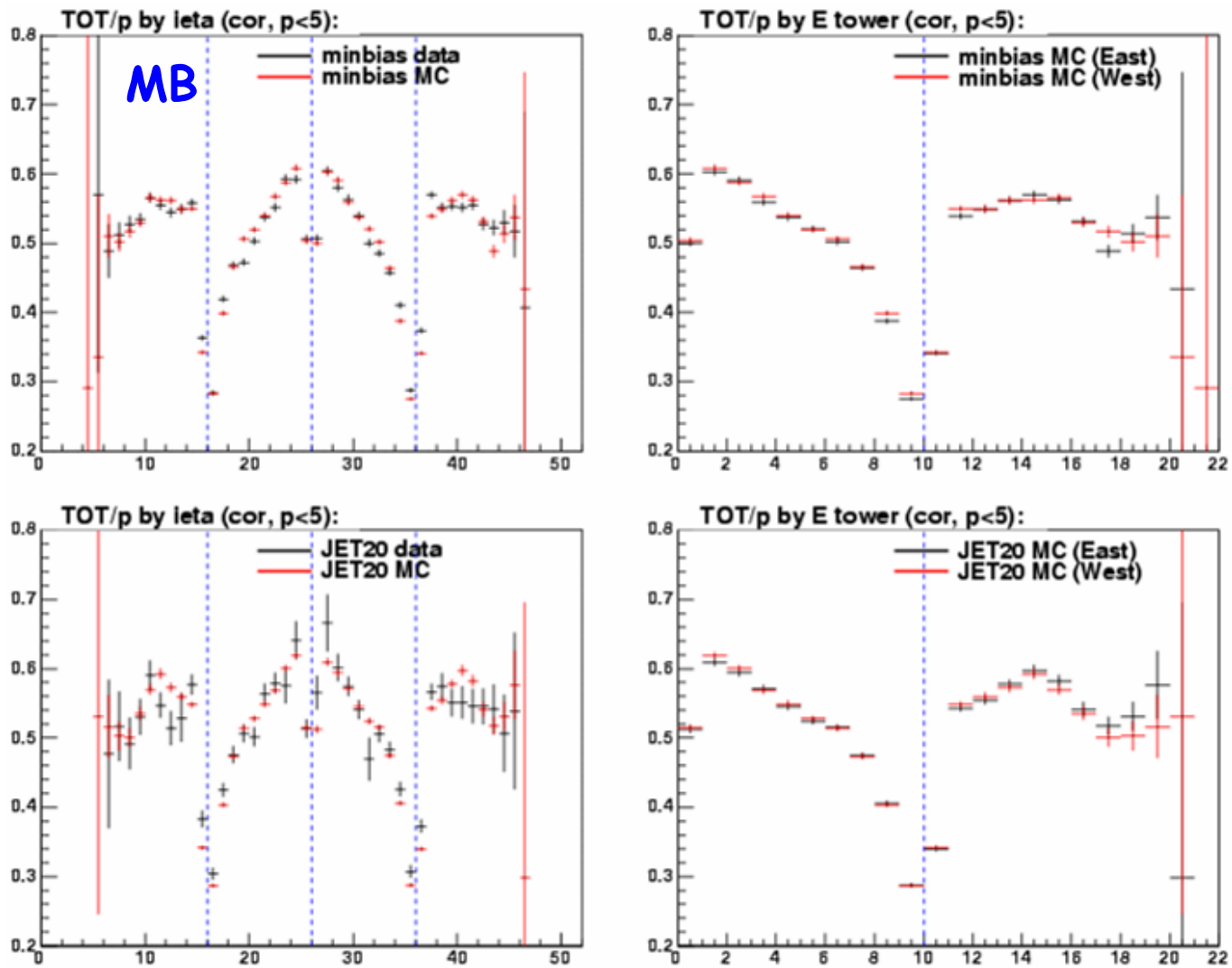






Single track analysis

E/p: data vs MC



Except for the MB data, only 1 million events are used in these plots.

Jet20 data / dijet18 MC