



INFN Emulsion Scanning LAB Report

Mercedes Paniccia

LAB Equipment Status

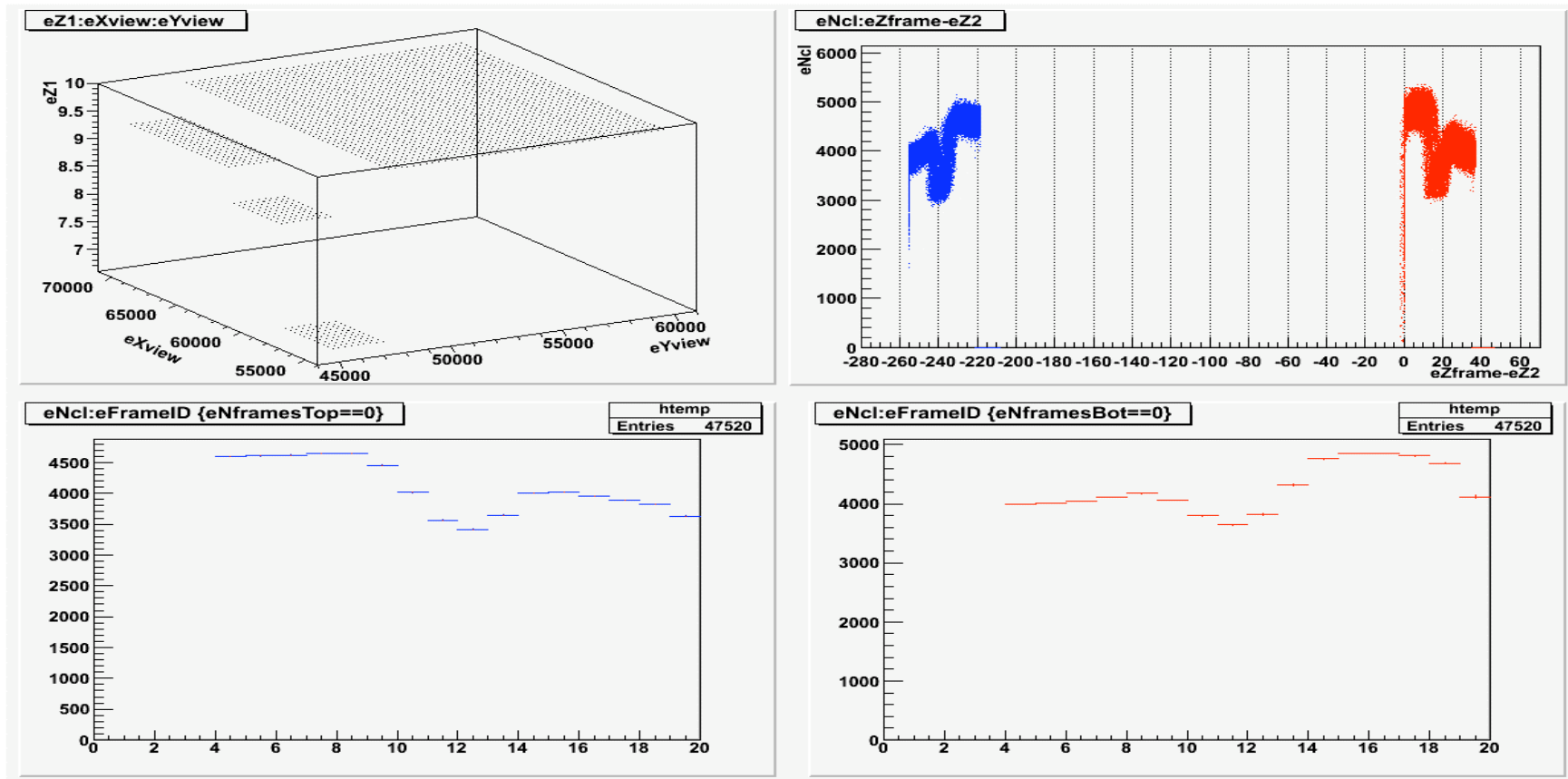


- Air conditioning system up & running
- MIC1: waiting for new motor board & UMI controller
- **MIC2: efficiency just measured**
- Plate Changer: installed on MIC2, waiting for software and new plate supports

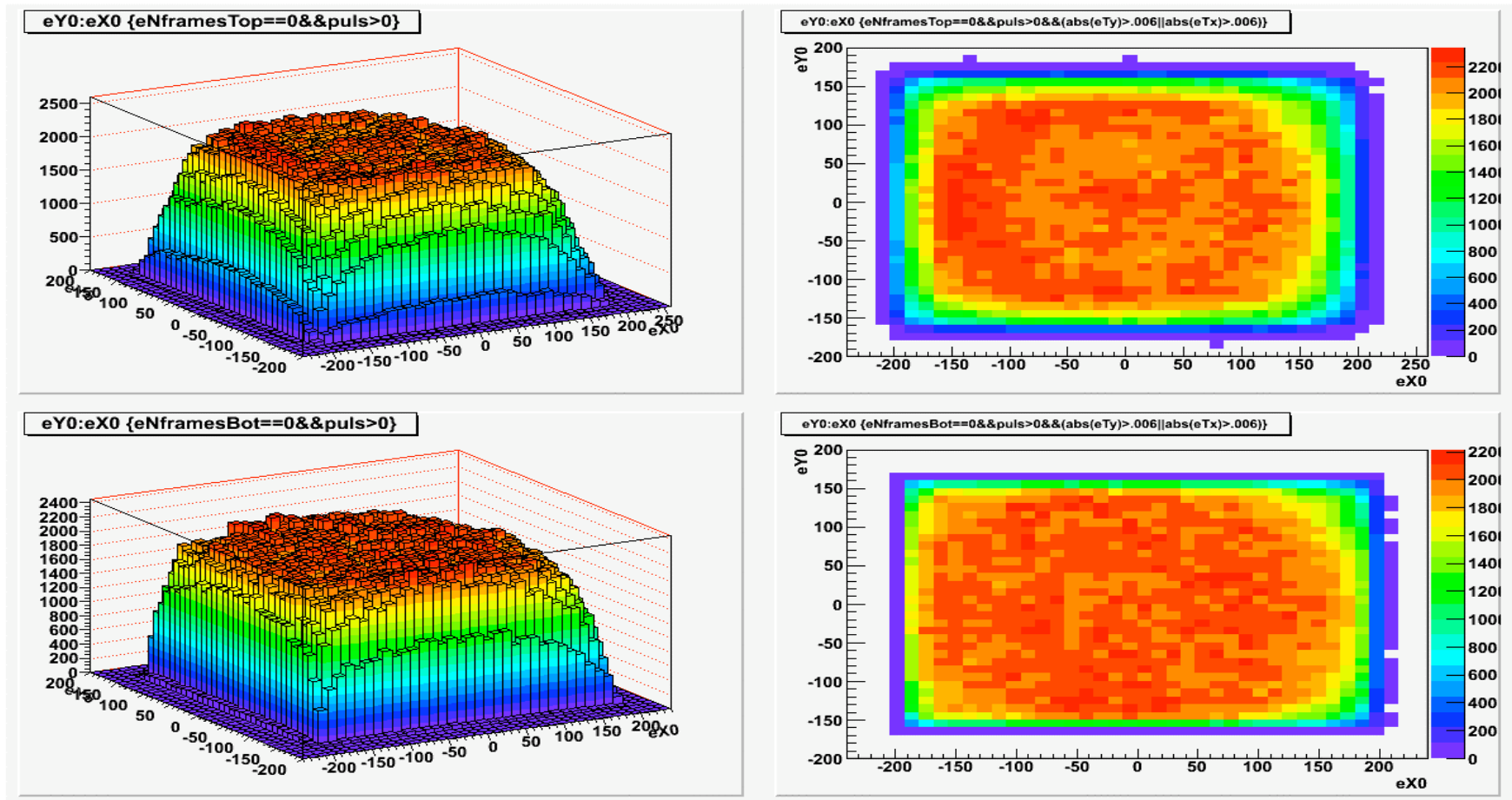
MIC2 efficiency measurement

- Plates TB 25/07/2007 R 25 to 32
 - Top/bottom layer thickness: 47 μm
 - Base thickness: 210 μm
- Scanning area: 1.5x1.5 cm² @ plate center
- Filter Equalization Images => Fedra method
- SmartTracker Max slope= 0.8 rad

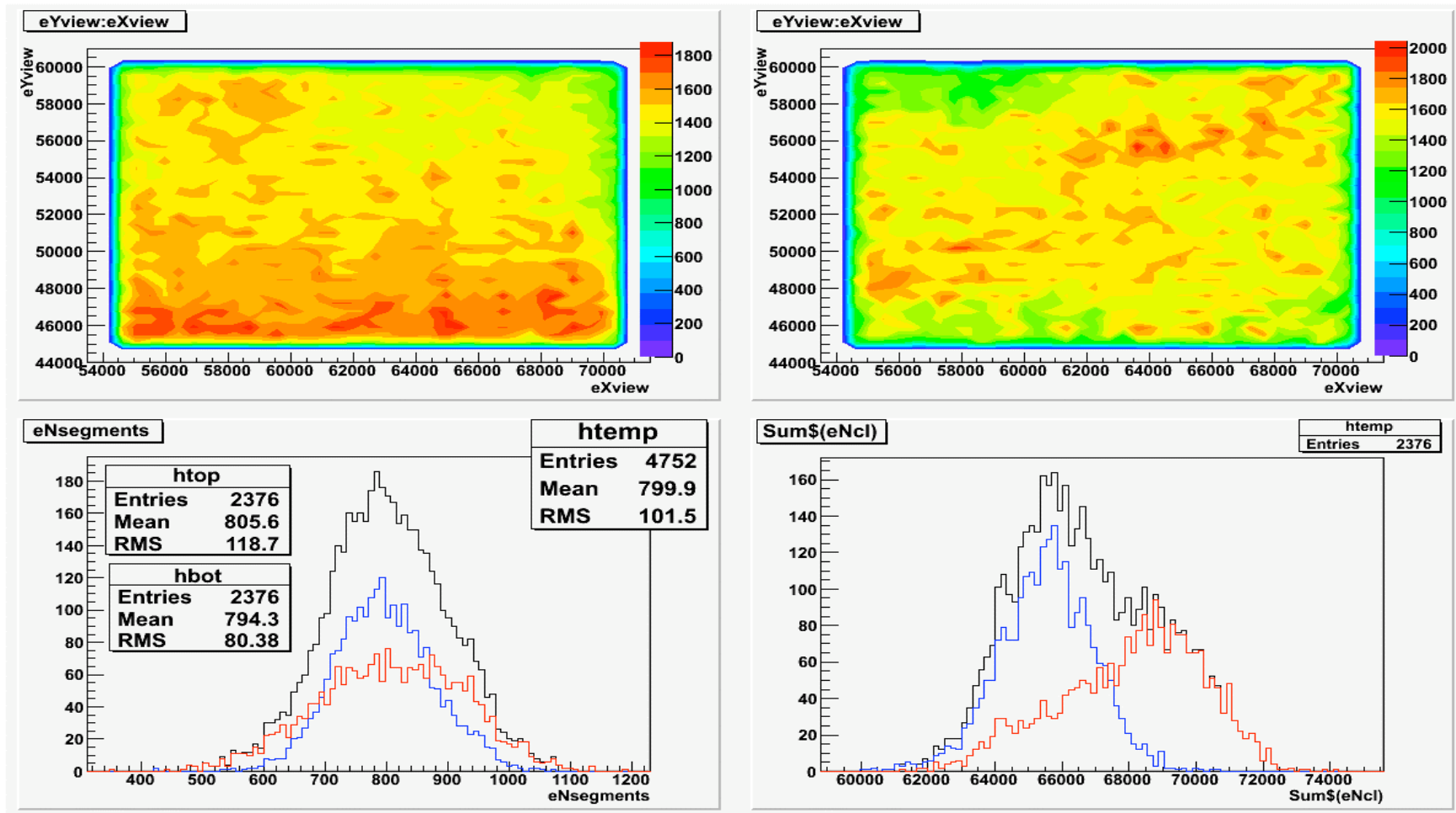
Raw data check I



Raw data check II



Raw data check III



Linked data check:

Signal selection:
 $N_{\text{grains}} > 14 + 5 \cdot \chi^2$

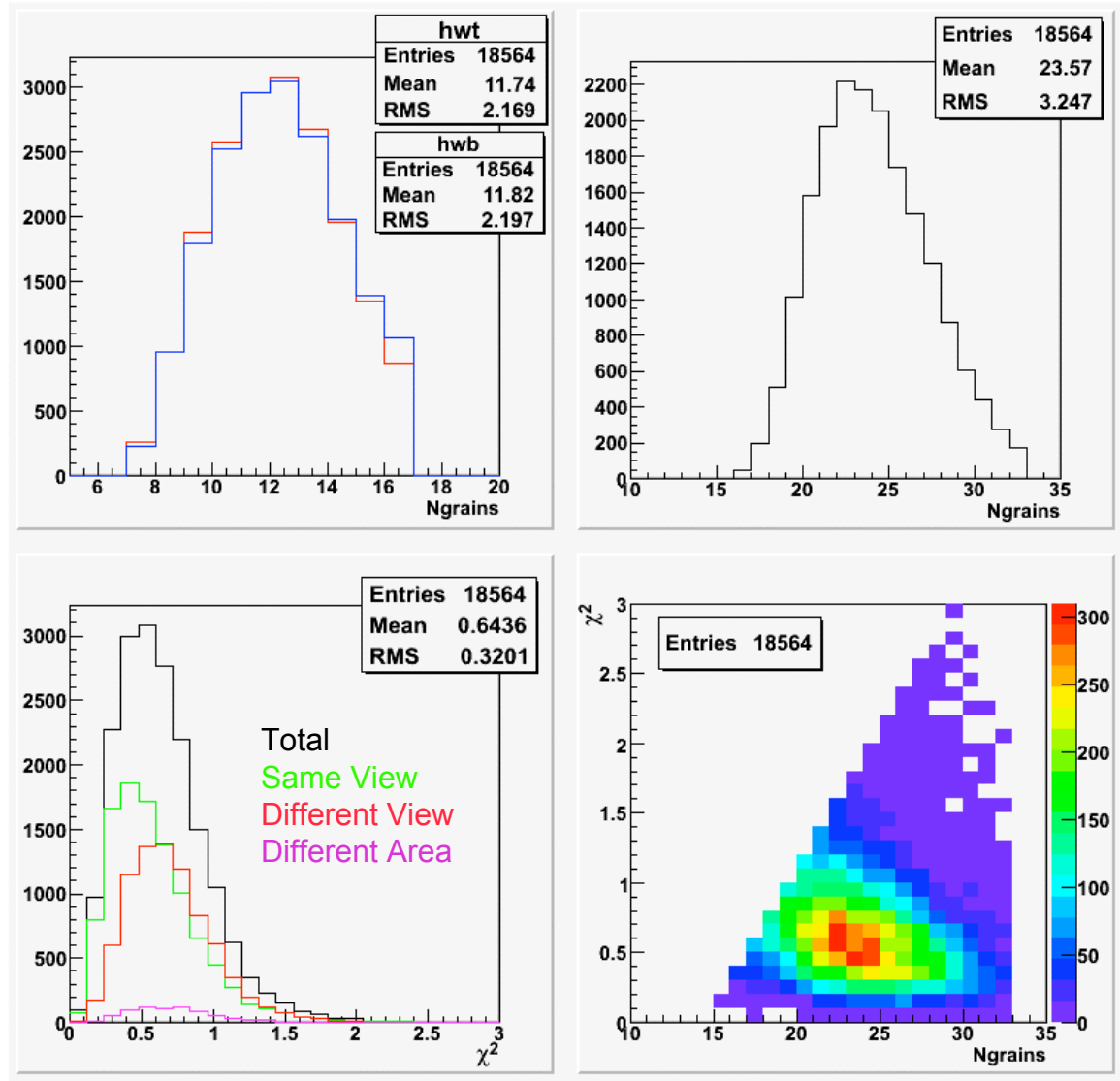
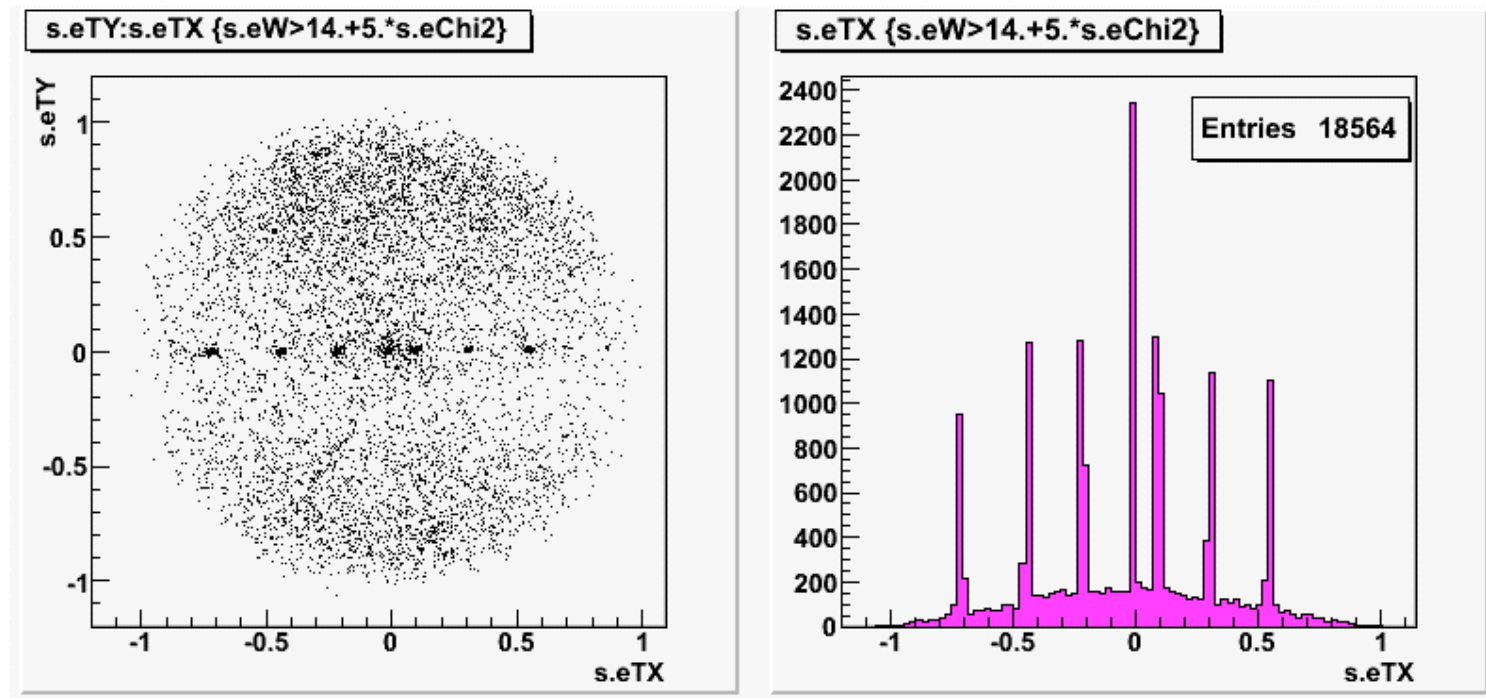


Plate 25

Basetracks angular distribution:



Microtrack angular resolution

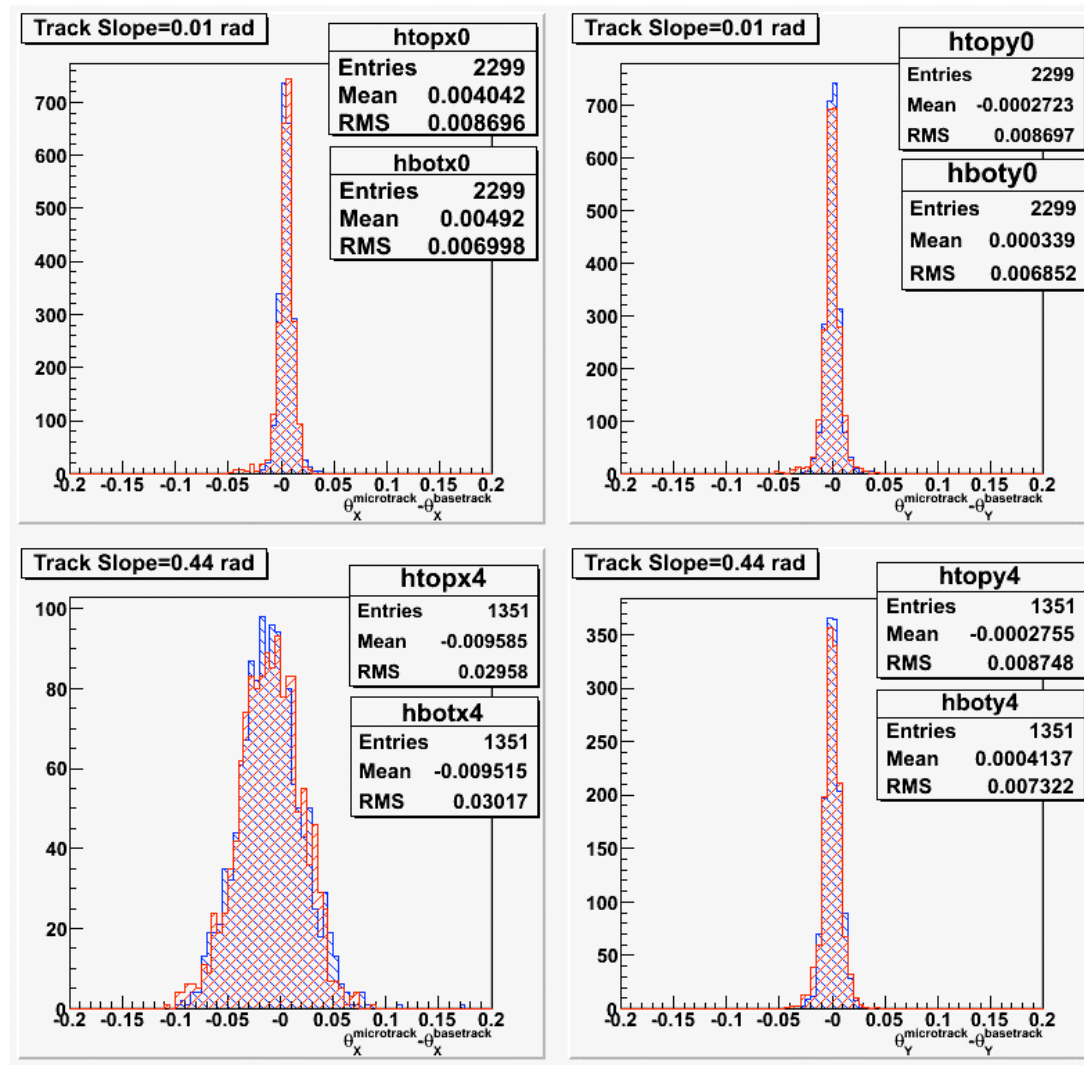


Plate 25

Basetracks Ngrains vs Slope I

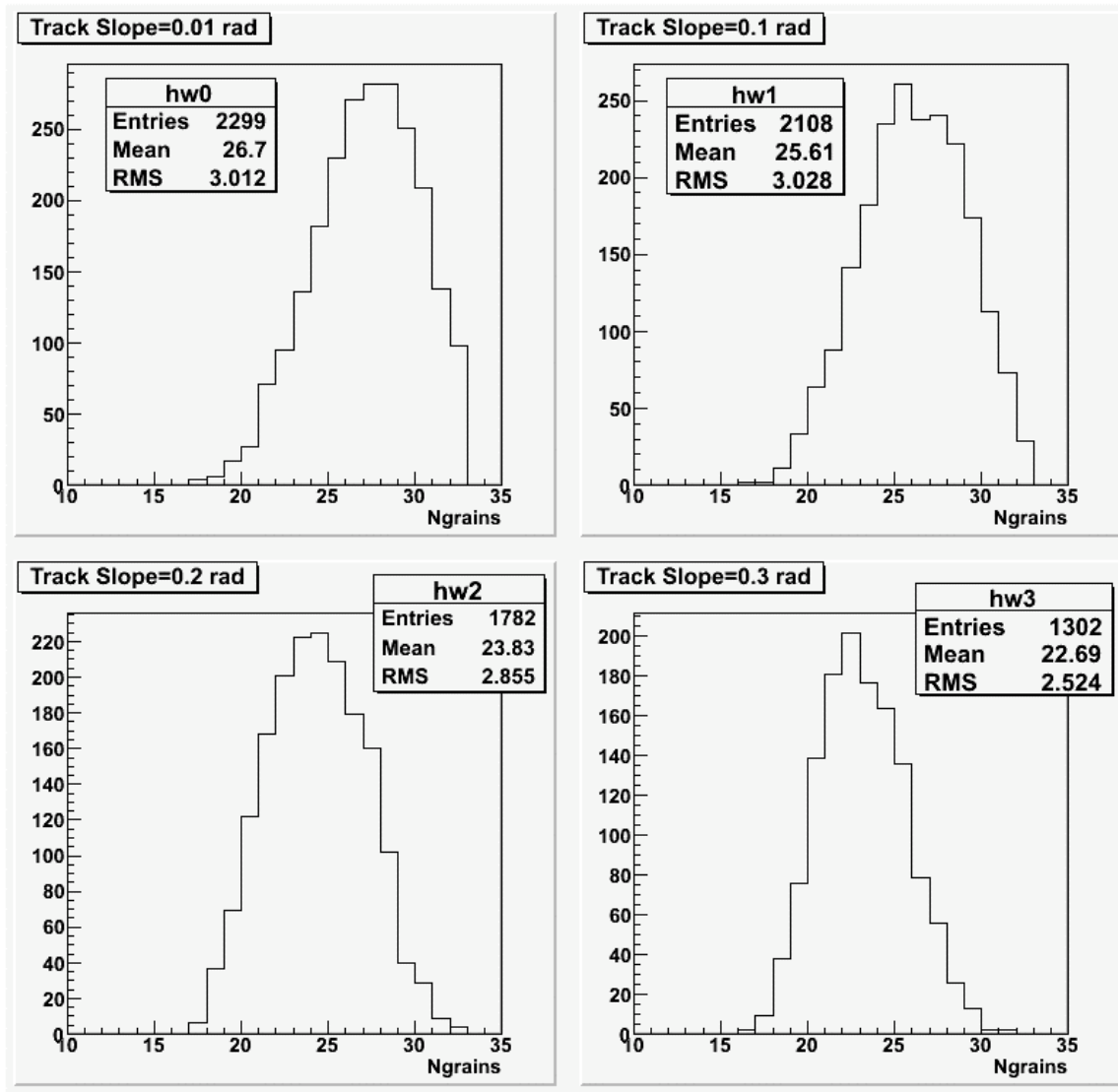


Plate 25

Basetracks Ngrains vs Slope II

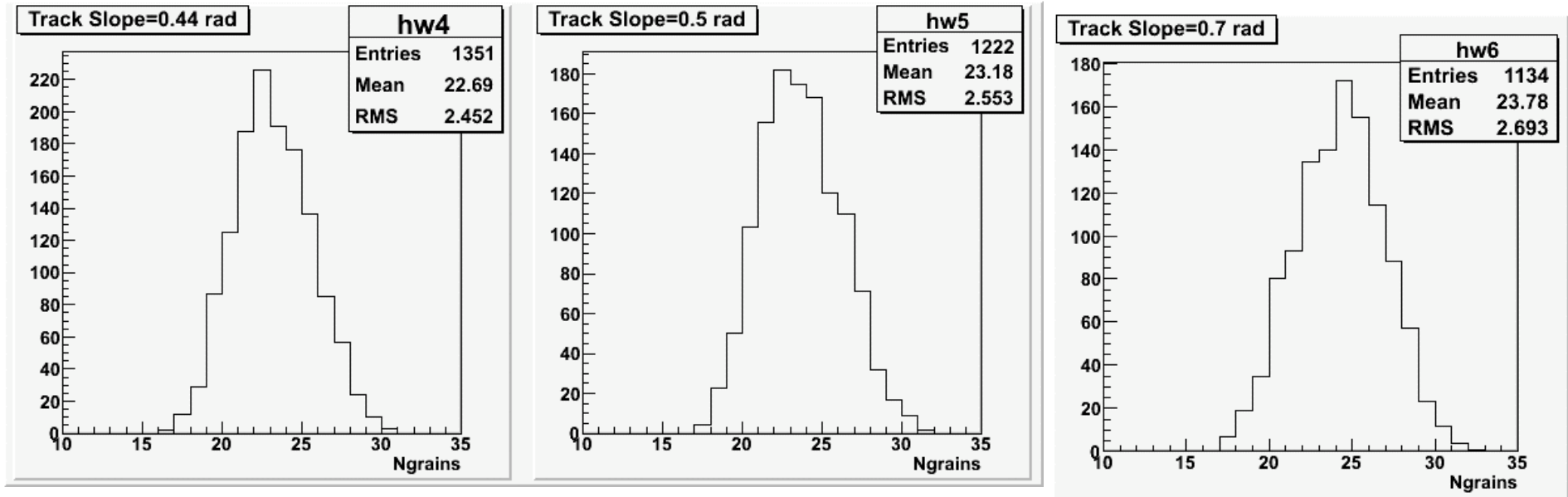


Plate 25

Basetracks $\langle N_{\text{grains}} \rangle$ vs Slope

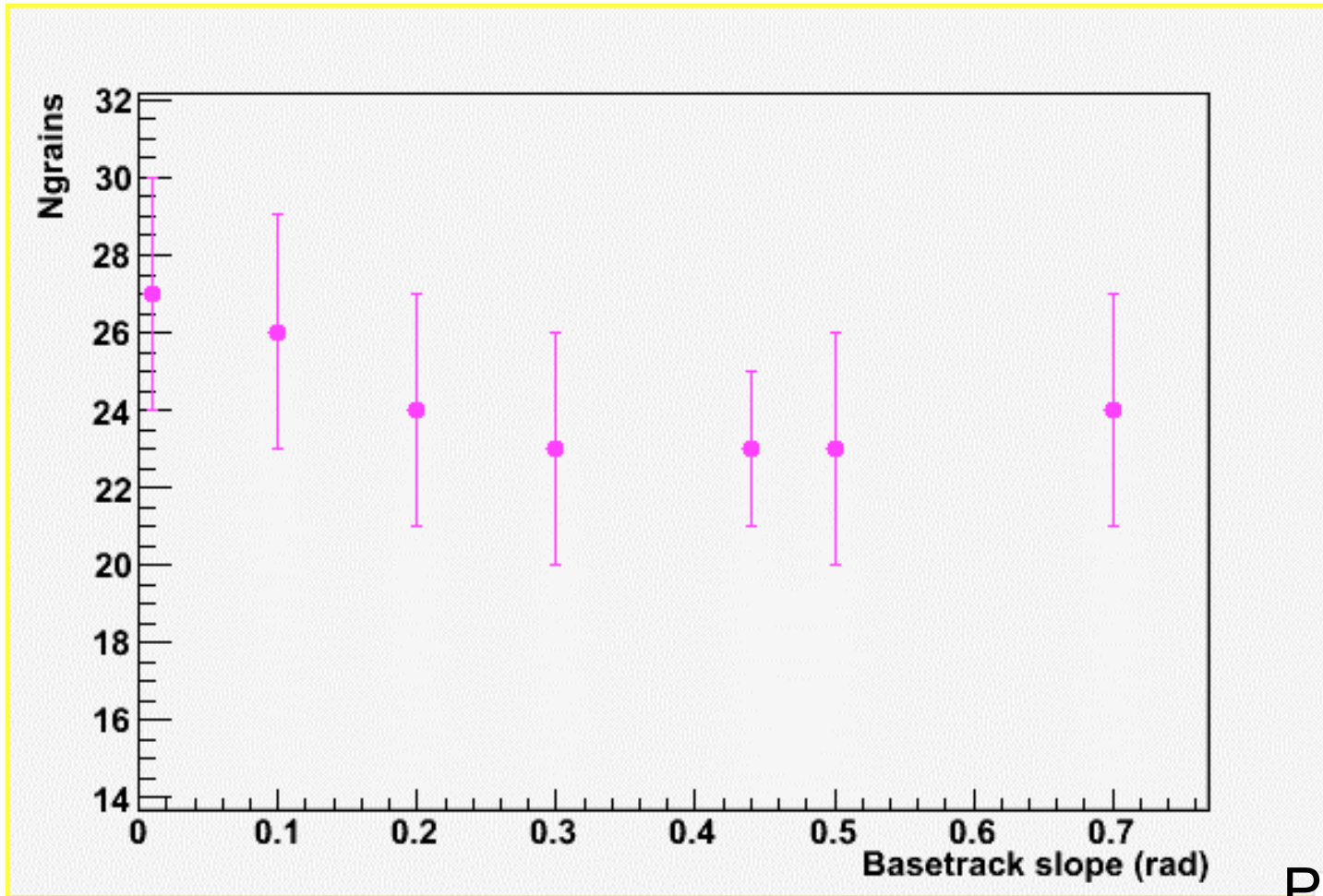
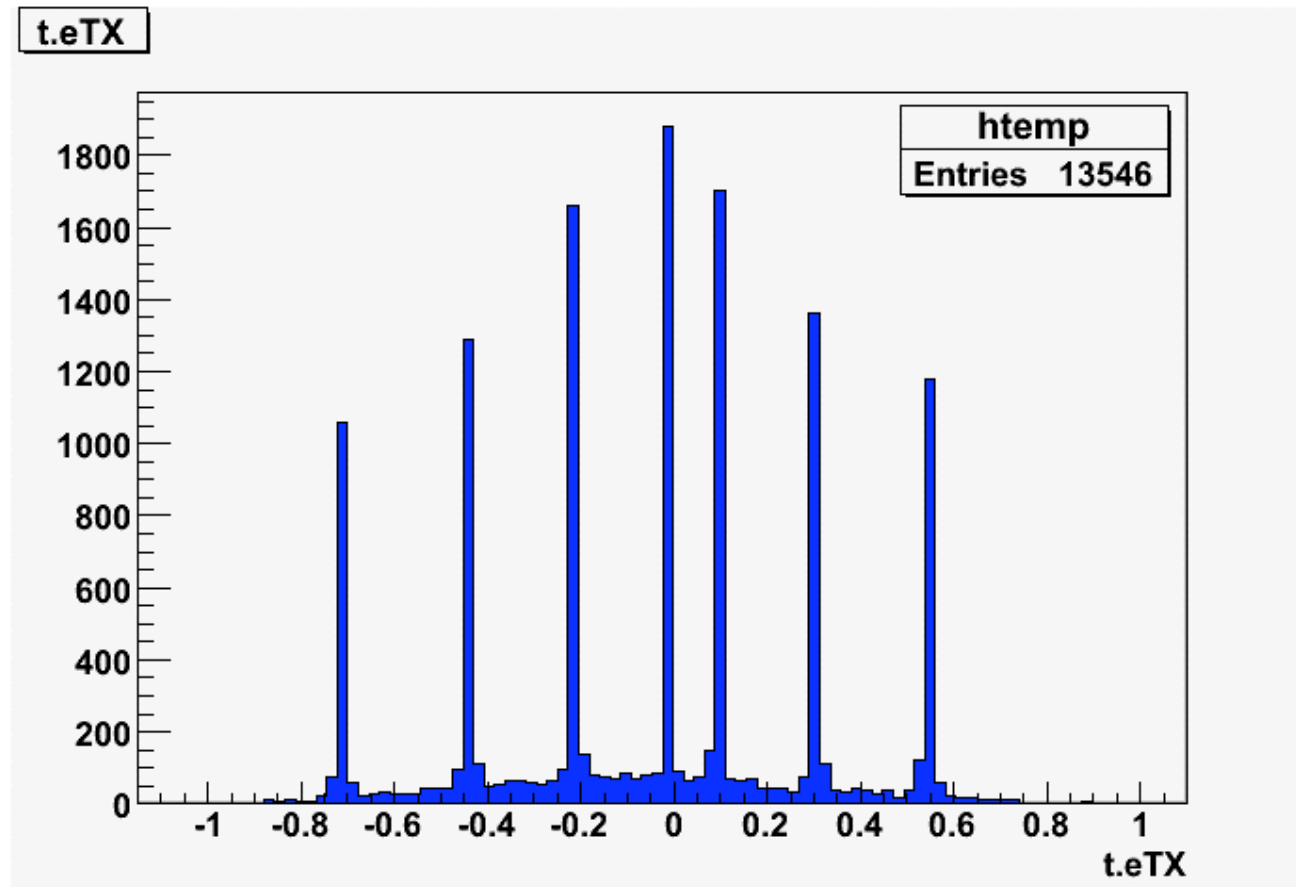
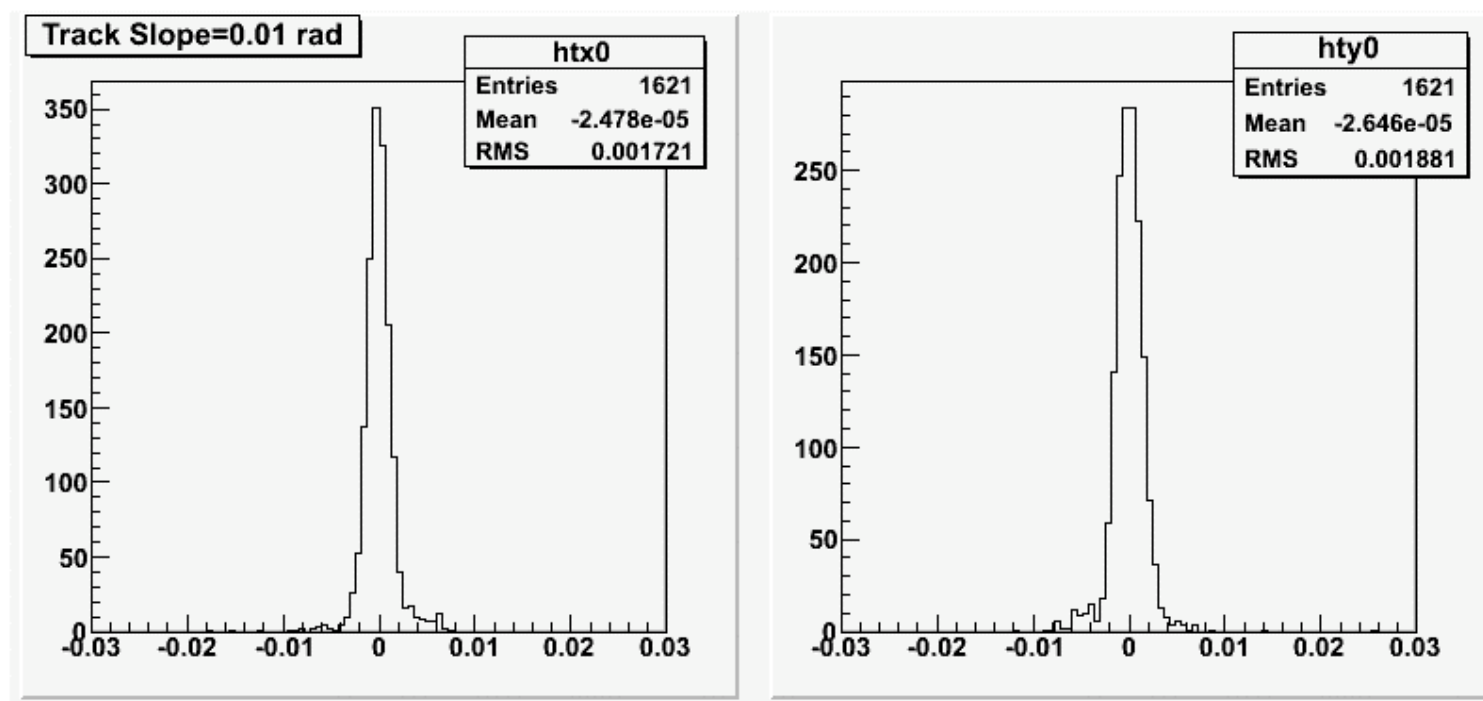


Plate 25

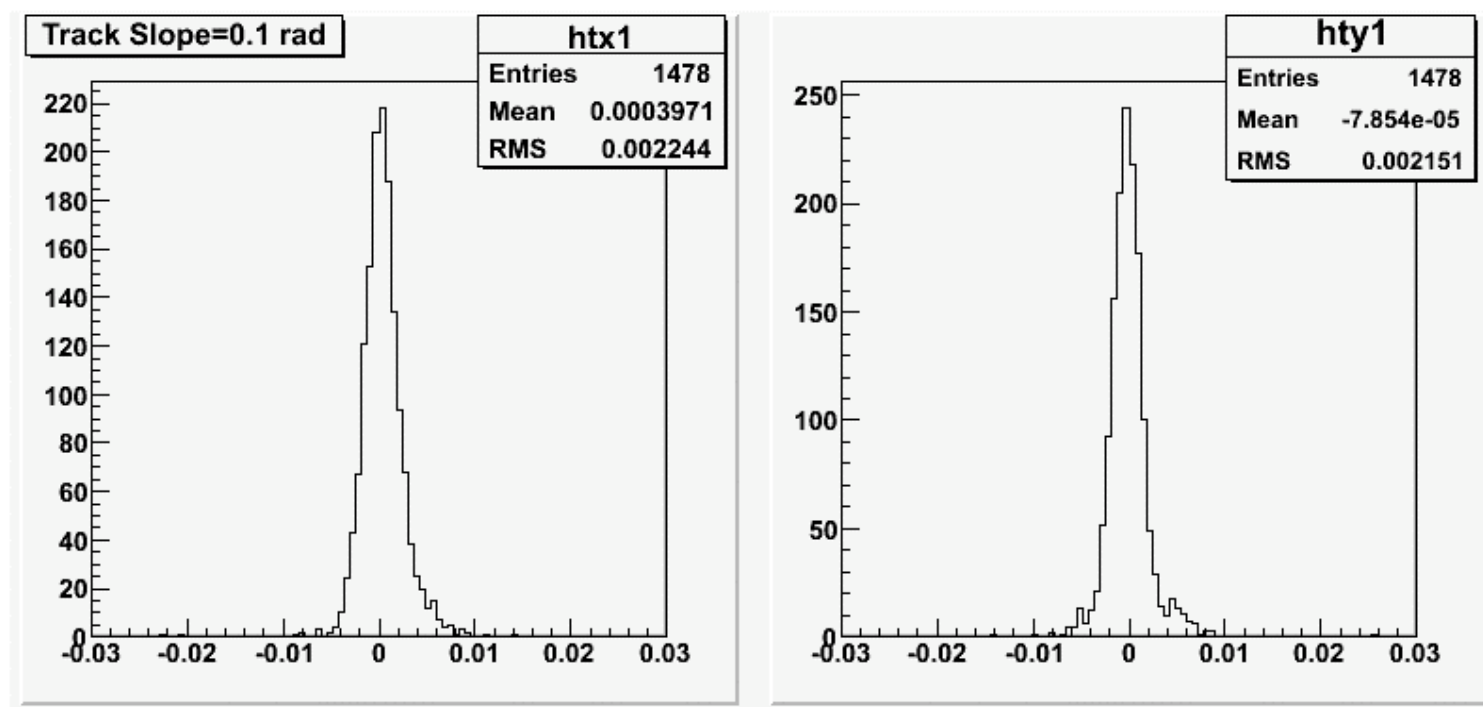
Tracks slopes



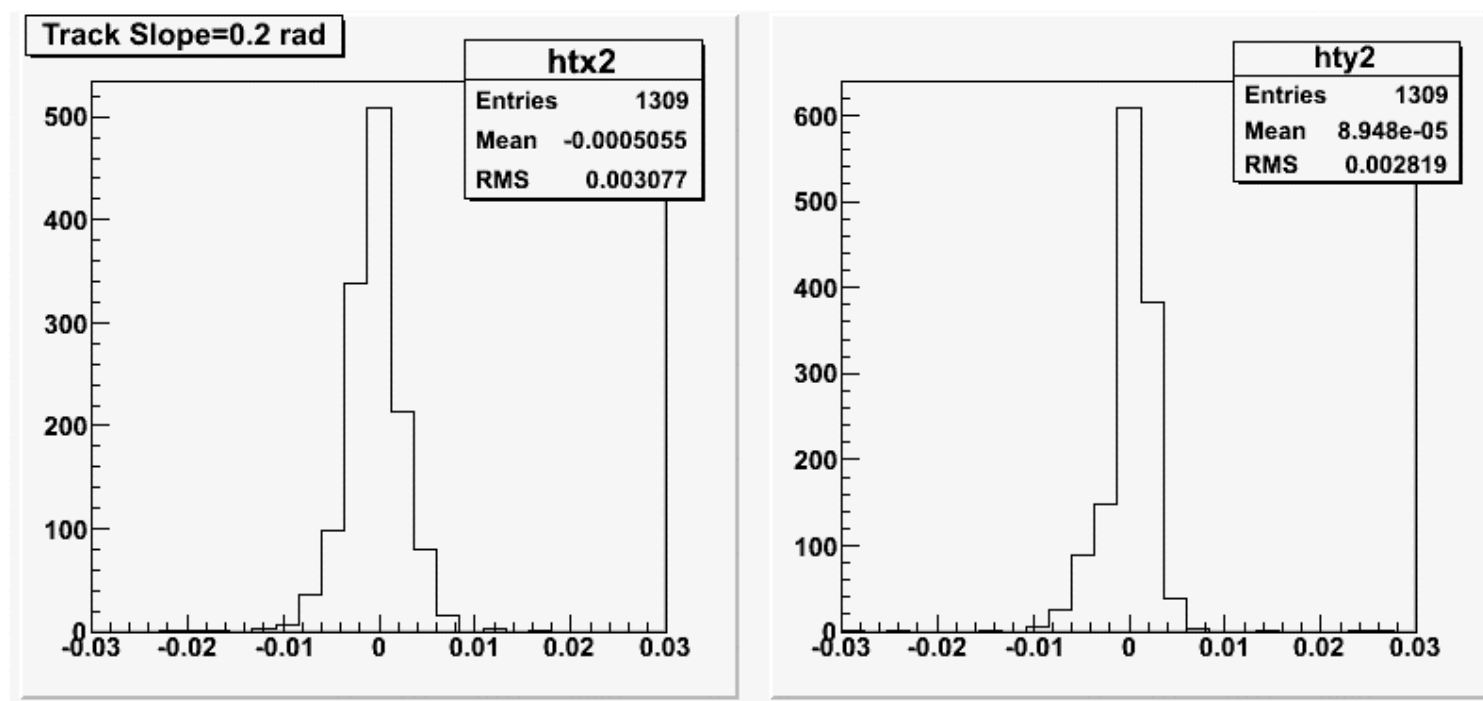
Basetrack angular resolution



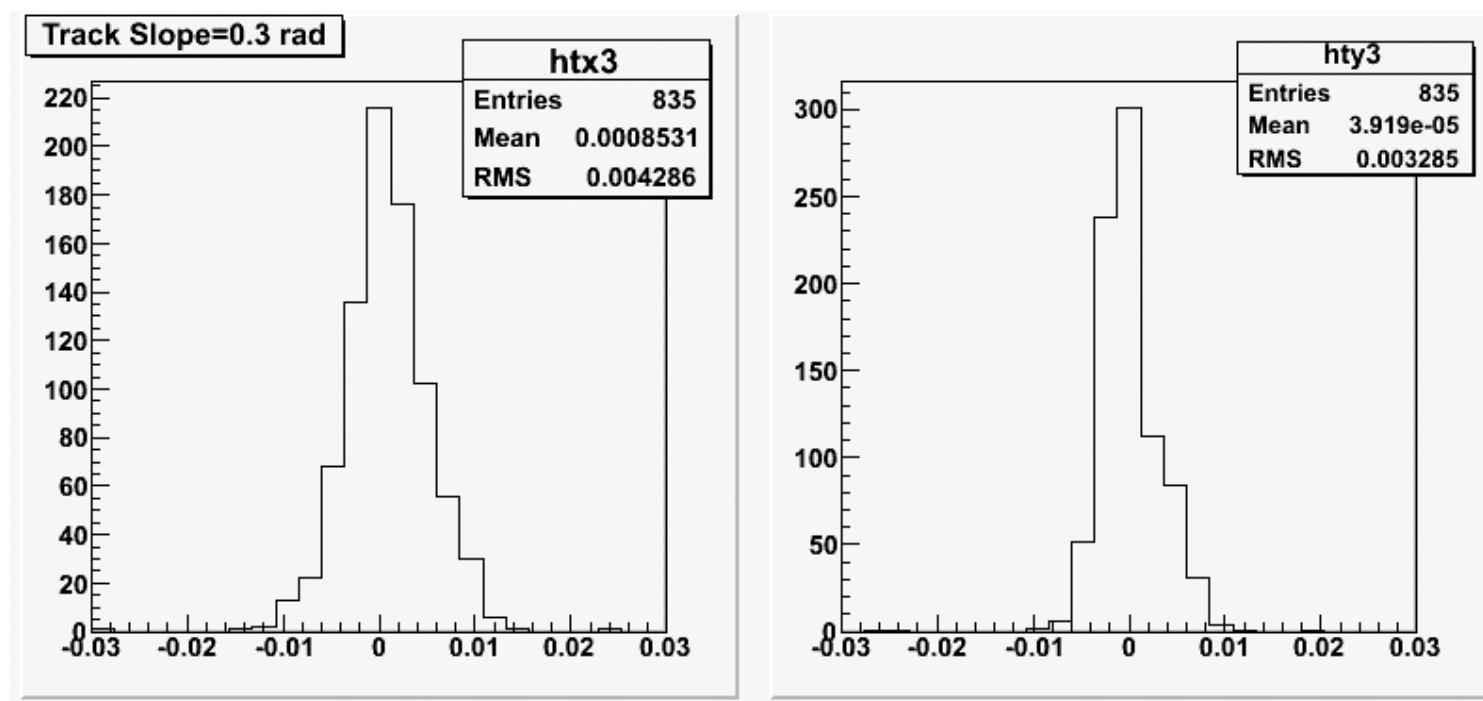
Basetrack angular resolution



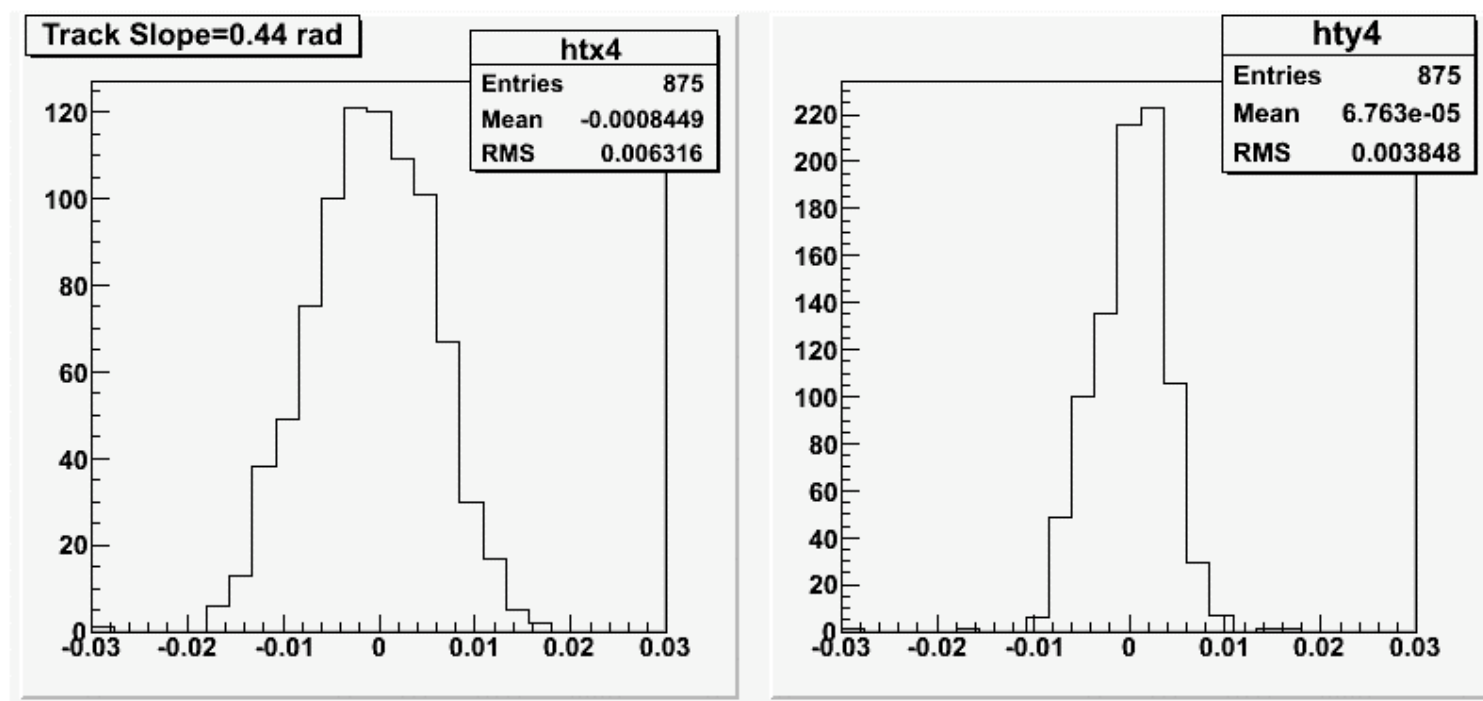
Basetrack angular resolution



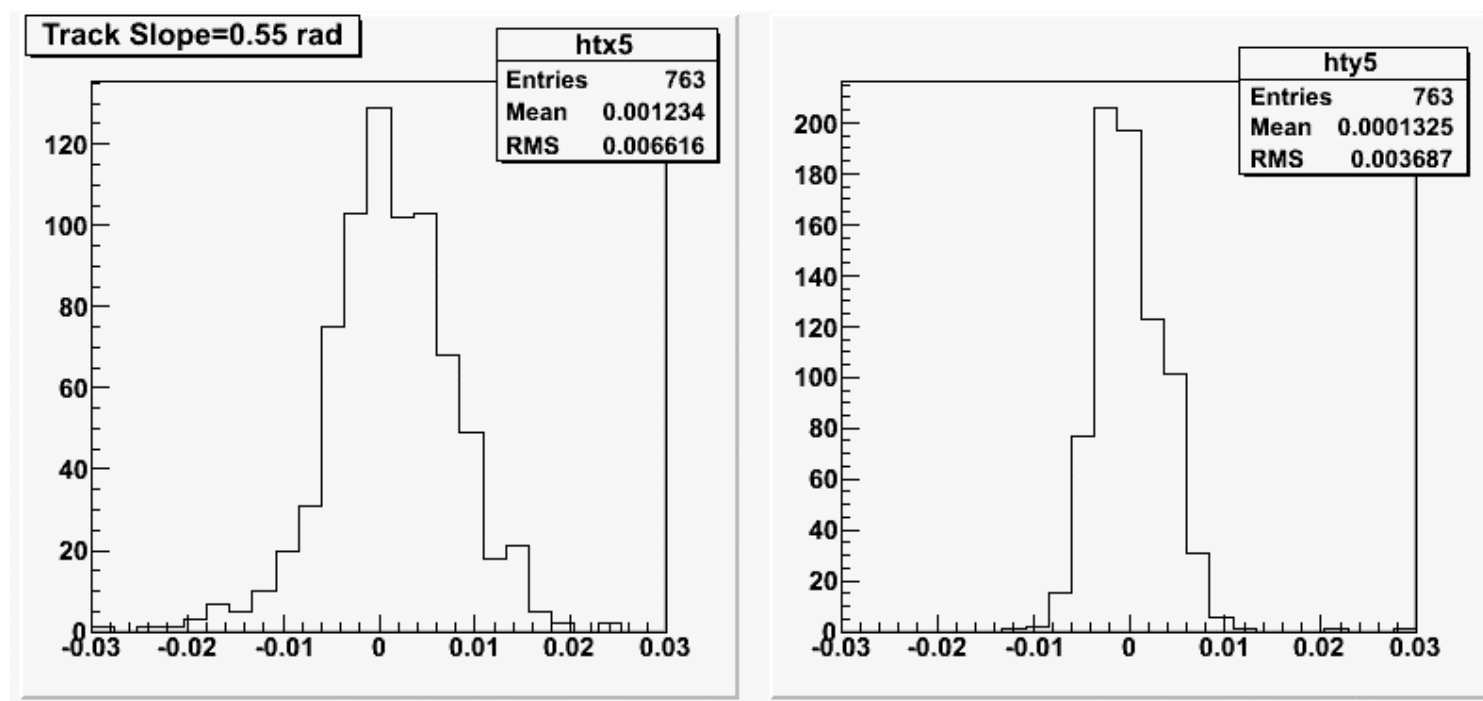
Basetrack angular resolution



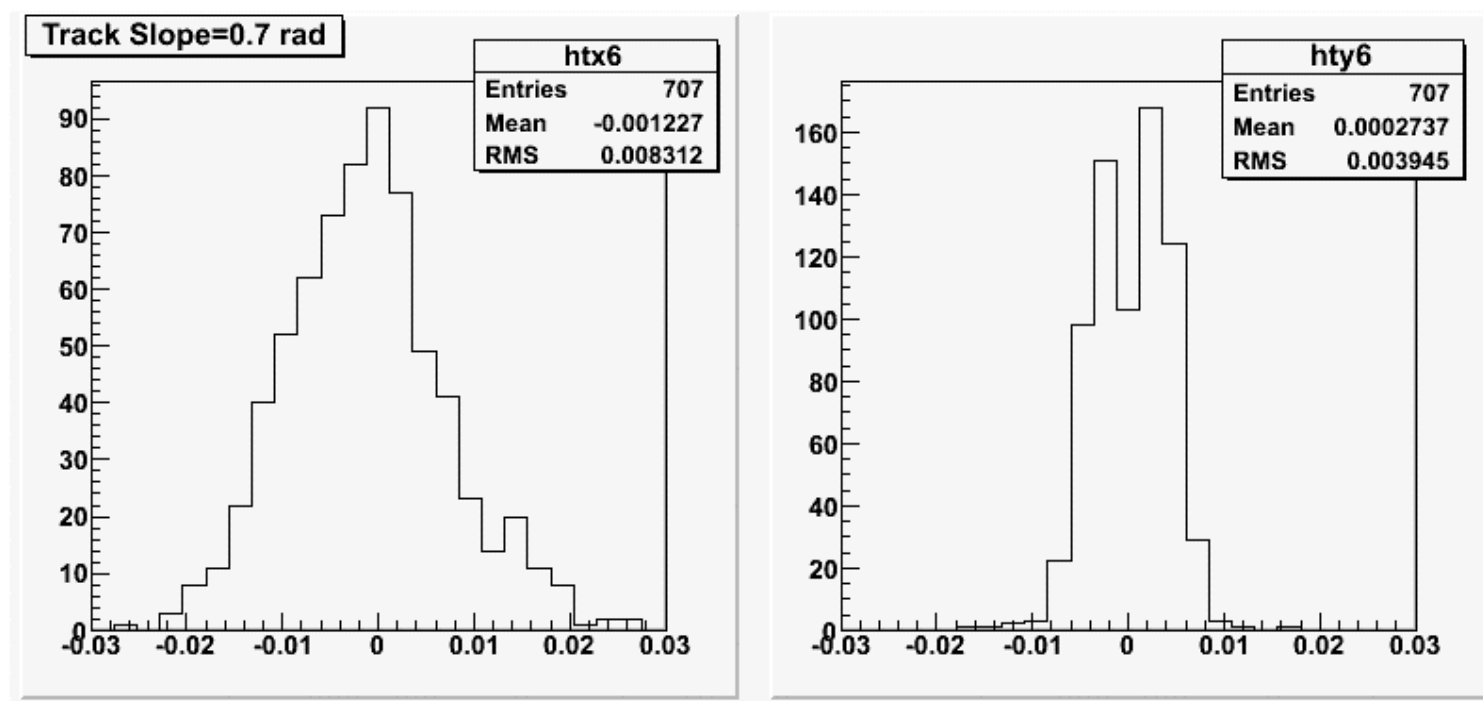
Basetrack angular resolution



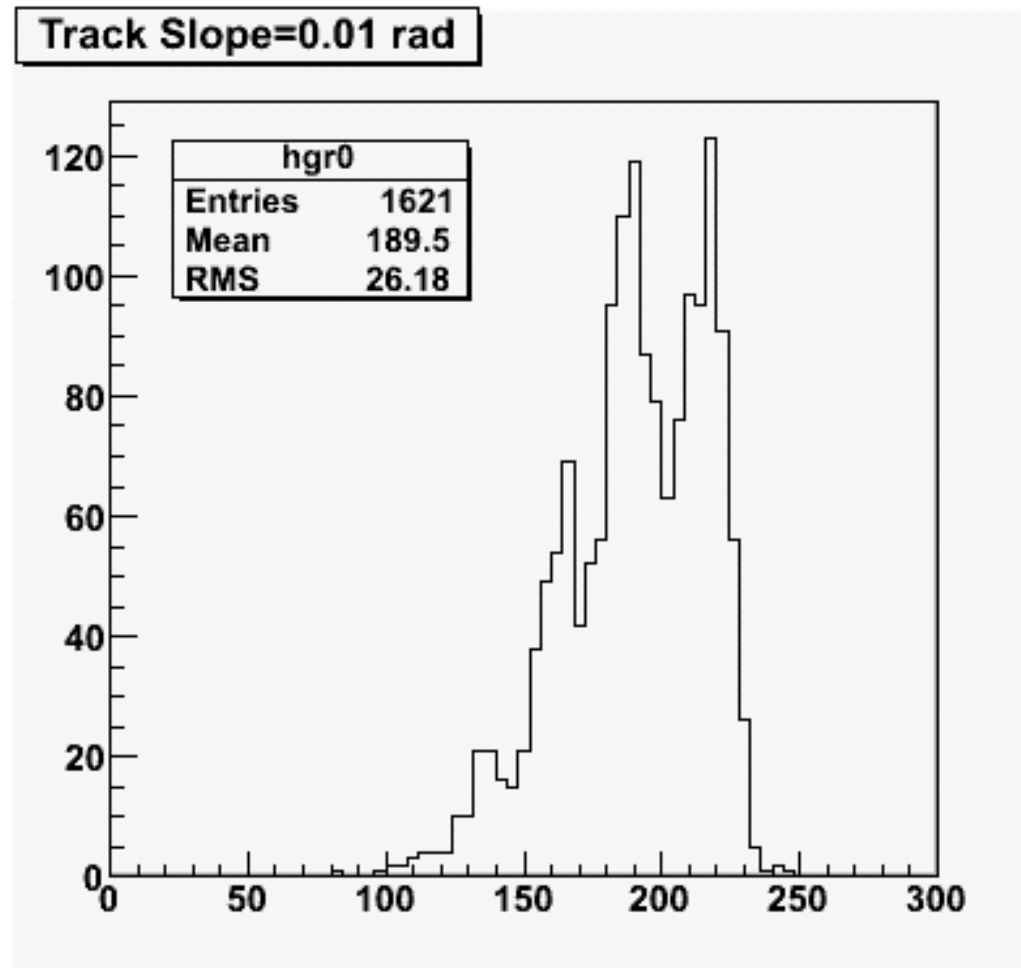
Basetrack angular resolution



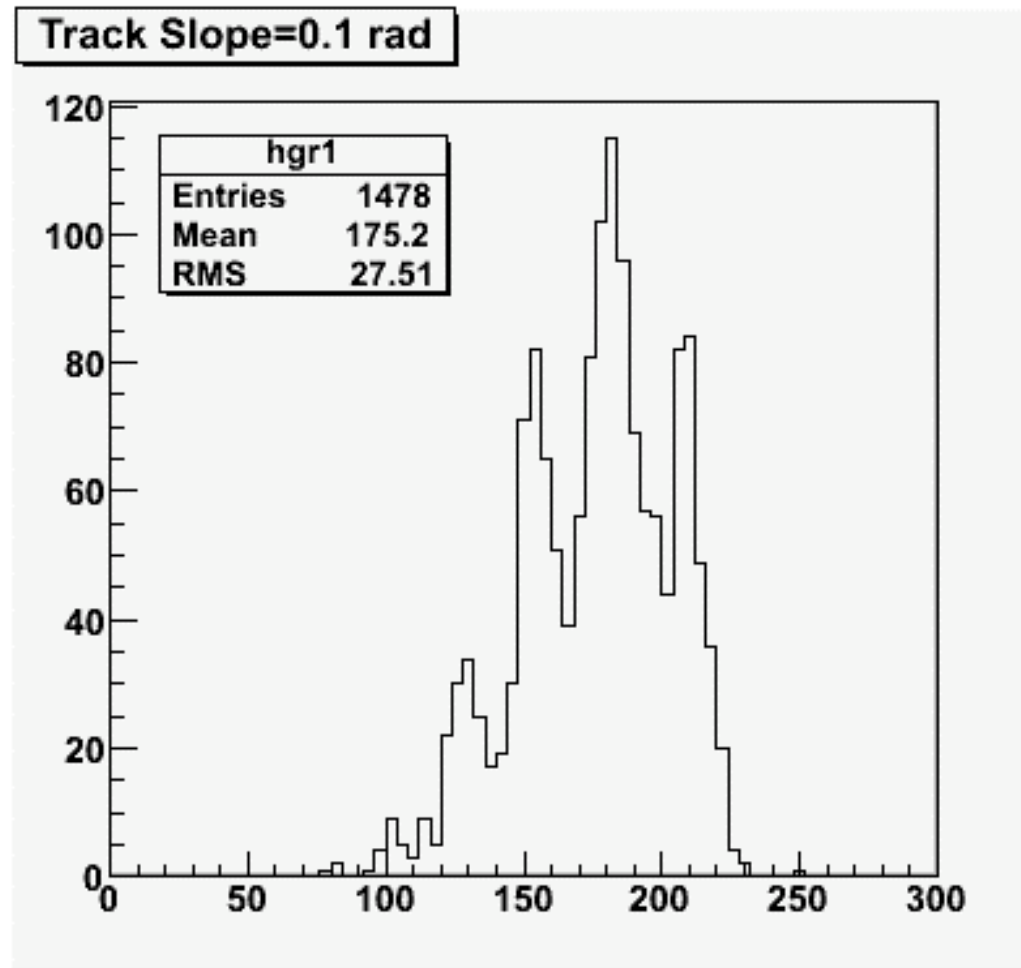
Basetrack angular resolution



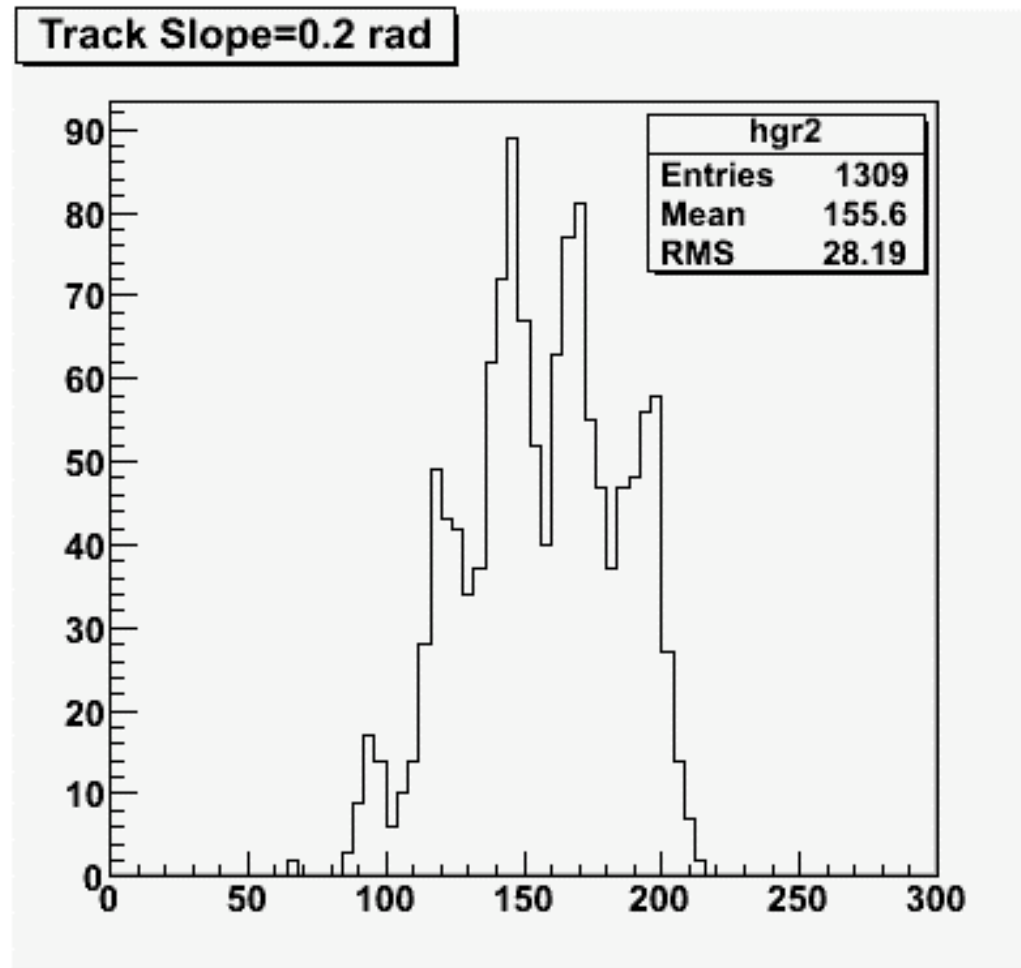
Tracks Ngrains vs slope



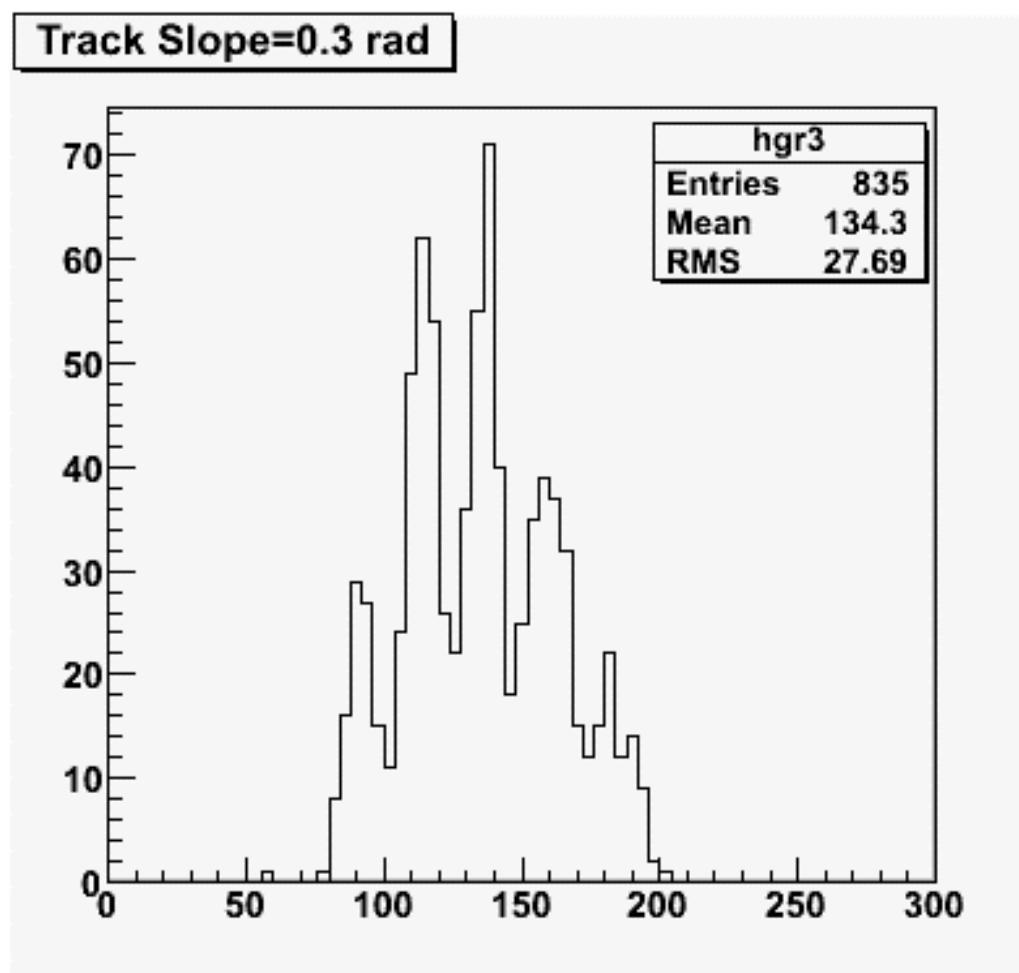
Tracks Ngrains vs slope



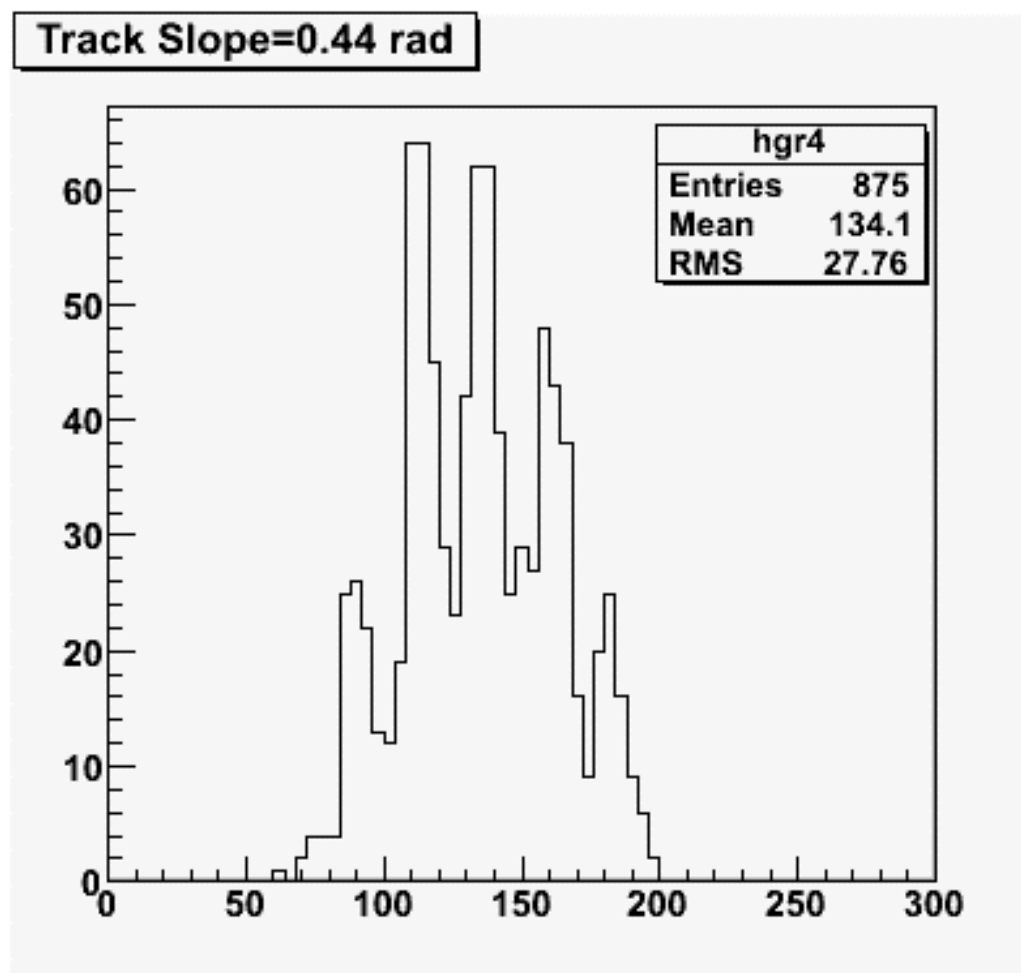
Tracks Ngrains vs slope



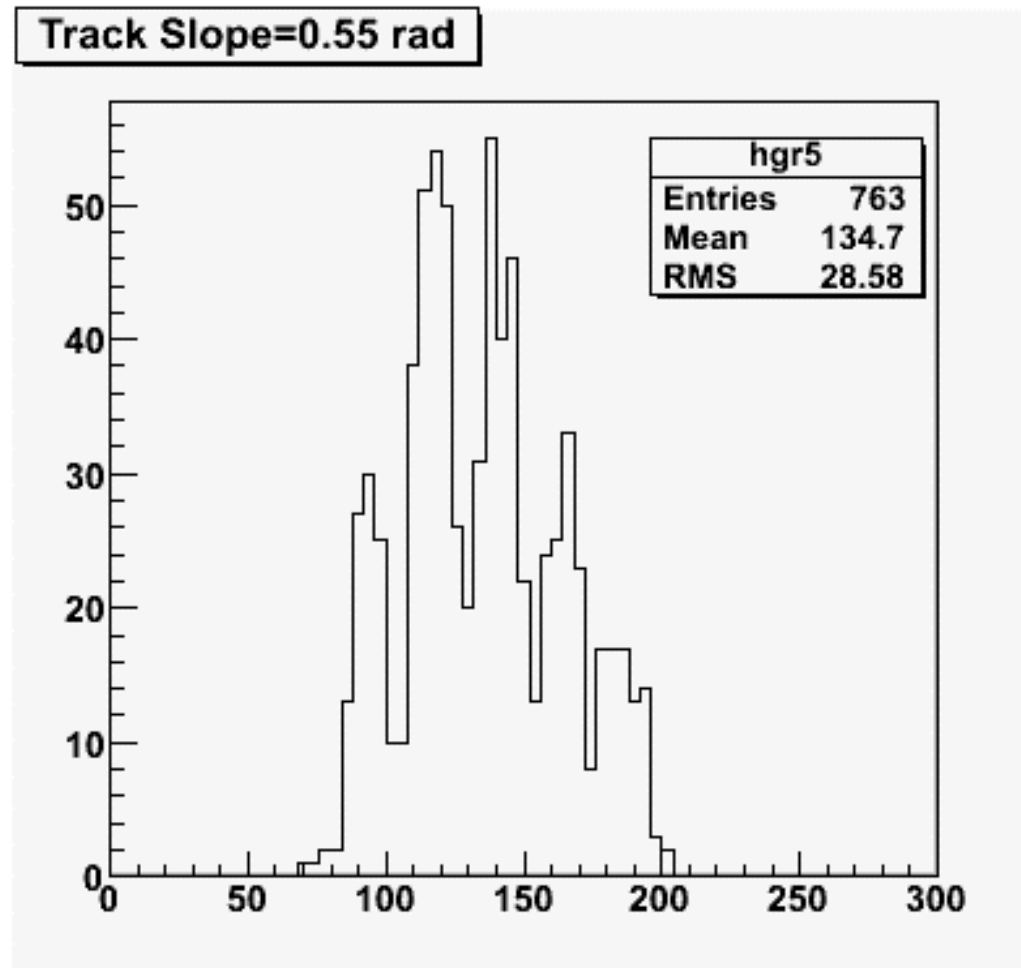
Tracks Ngrains vs slope



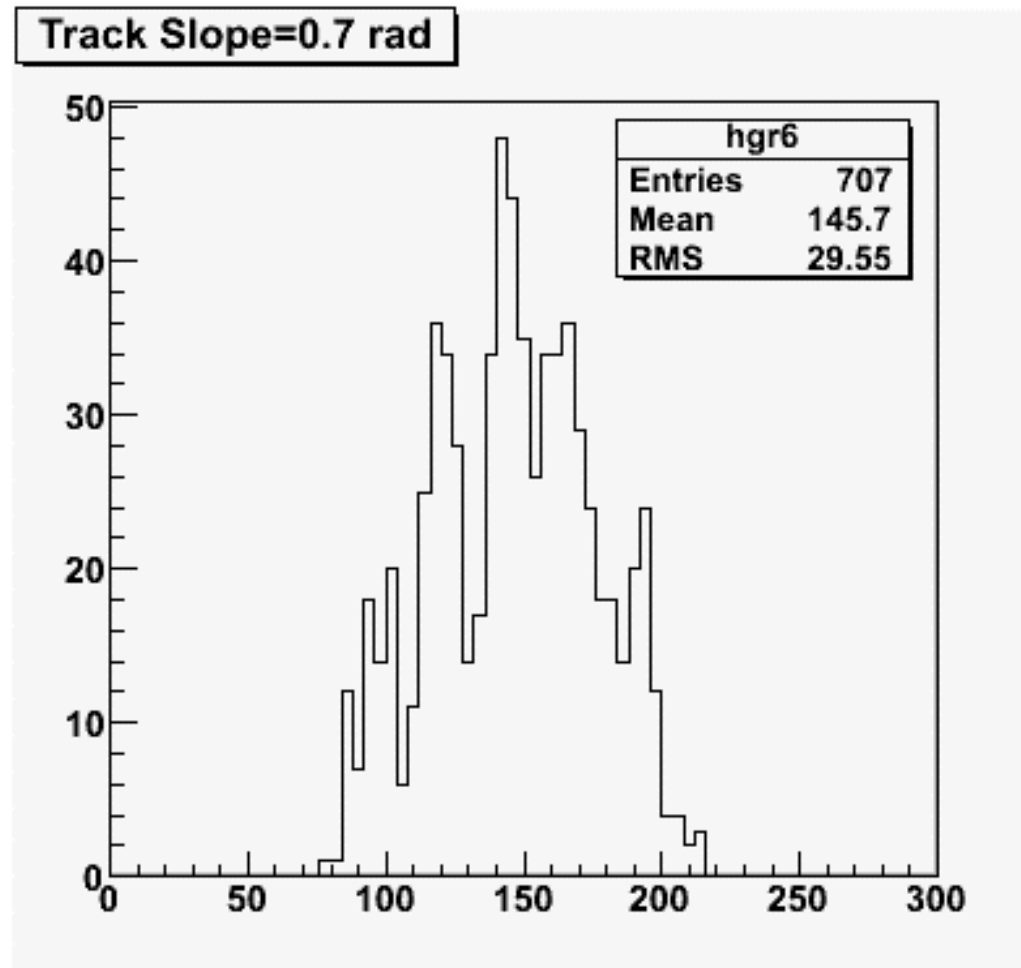
Tracks Ngrains vs slope



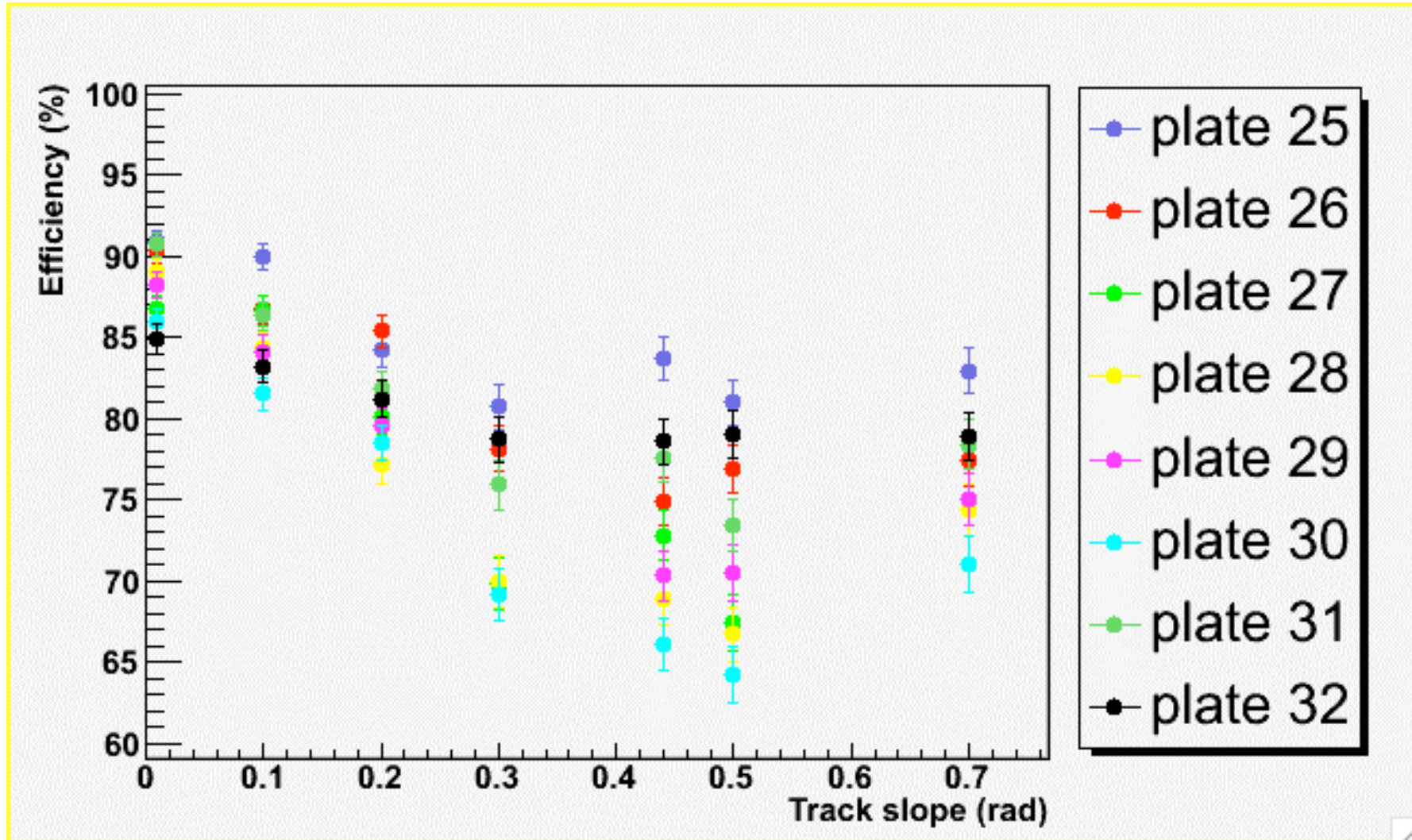
Tracks Ngrains vs slope



Tracks Ngrains vs slope



Efficiency vs track slope (per plate)



Efficiency vs track slope

