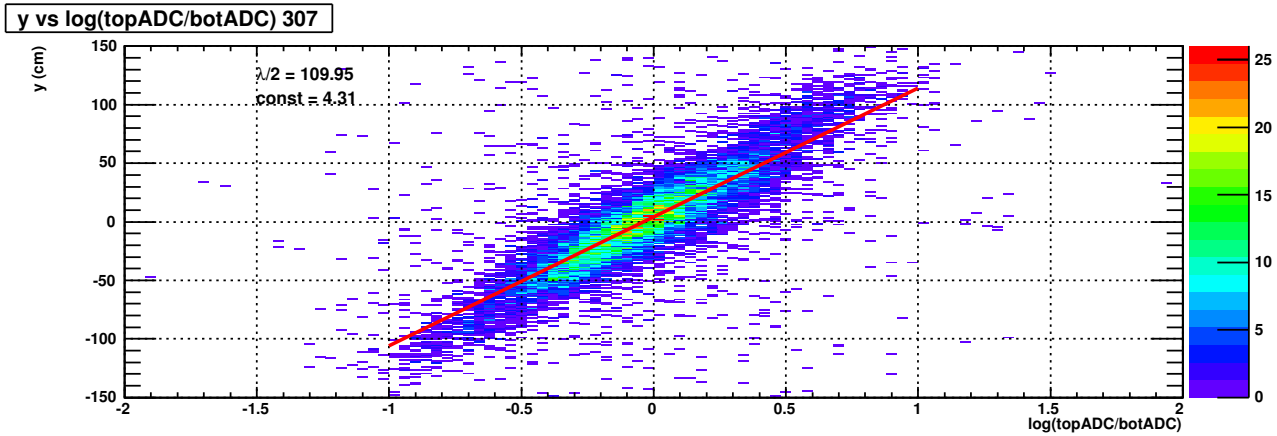
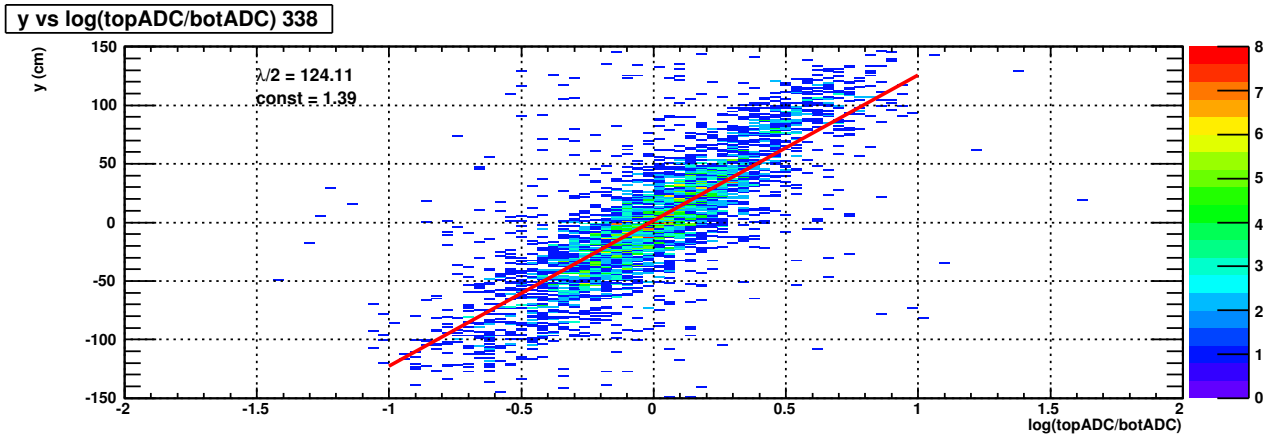
What is new now in compare with Nov.1 presentation?

- apply the attenuation coefficients calculated for each bar
- reduce the random background requiring that the bottom - top time difference to be consistent with the track position
- compare the thin target vs NuMI data
- combine data over several bars with $\sigma < 0.35$ ns

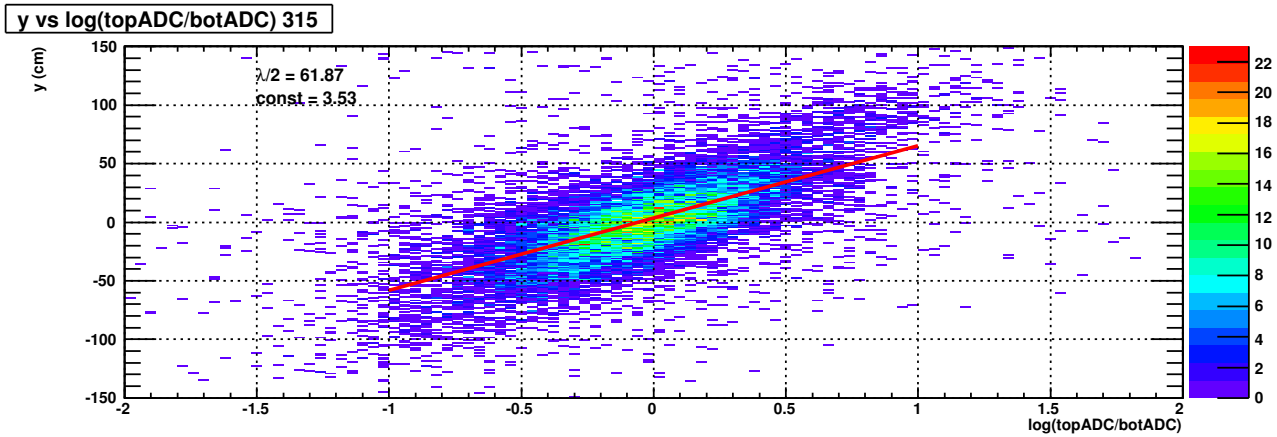
attenuation length, bars 307, 338

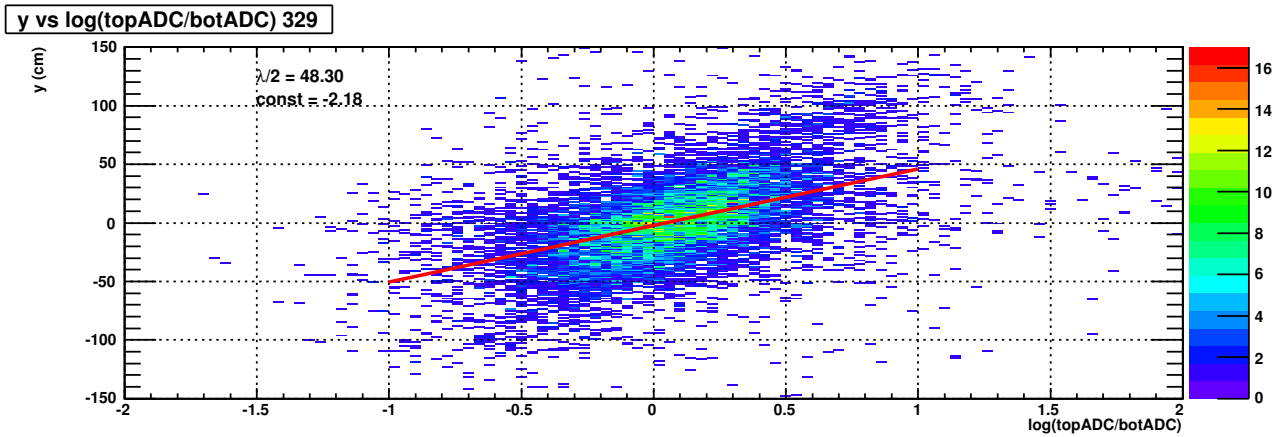




The attenuation half-length calculation for bars 307 and 338. Red line in plots is the likelihood fit. The plots indicate that the fit is distorted due to background. These bars are most narrowest.

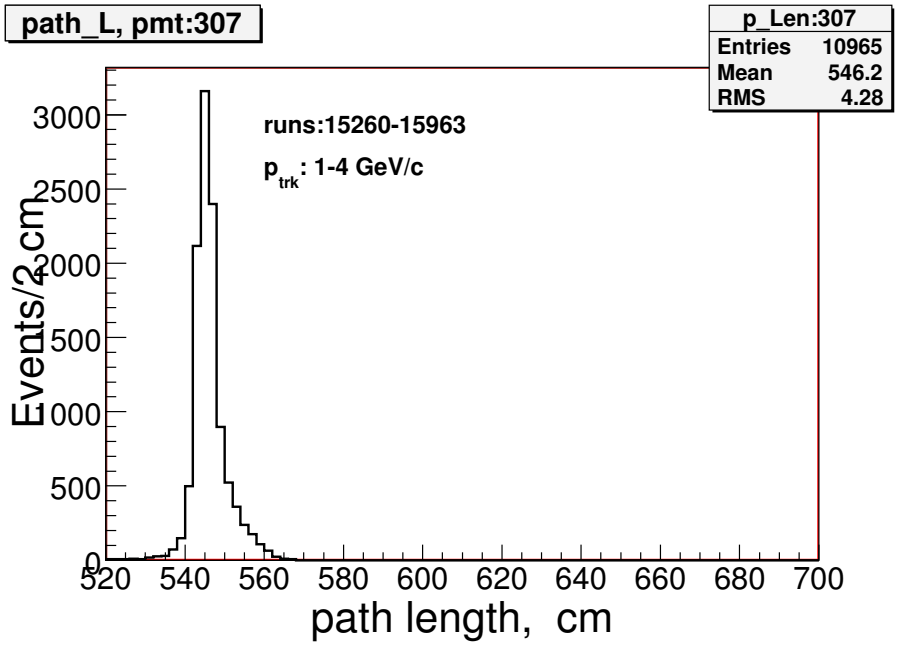
attenuation length, bars 315, 329

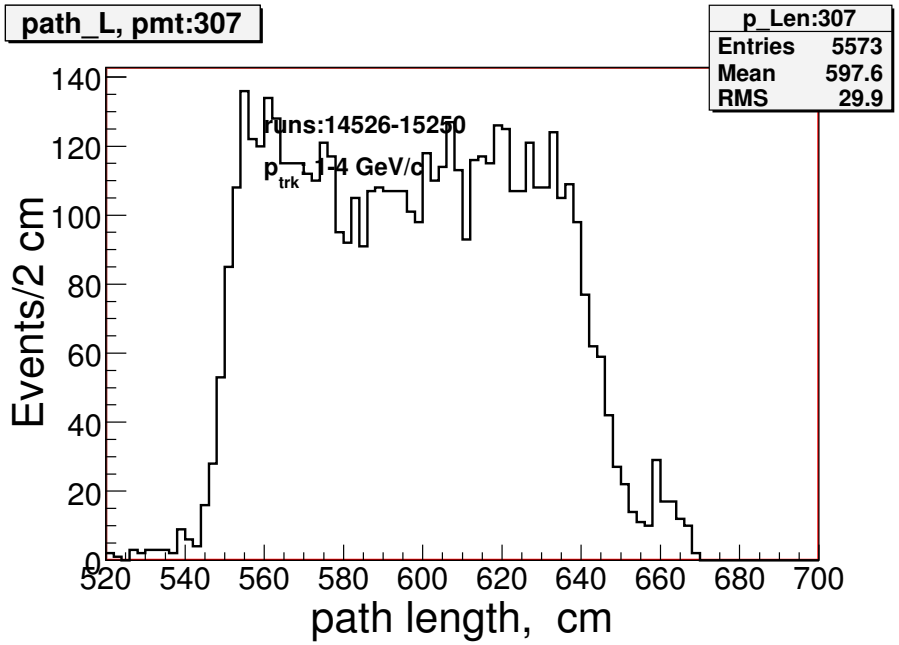




The attenuation half-length calculation for bars 307 and 338. Red line in plots is the likelihood fit. The plots indicate that the fit is distorted due to background. These bars are most widest.

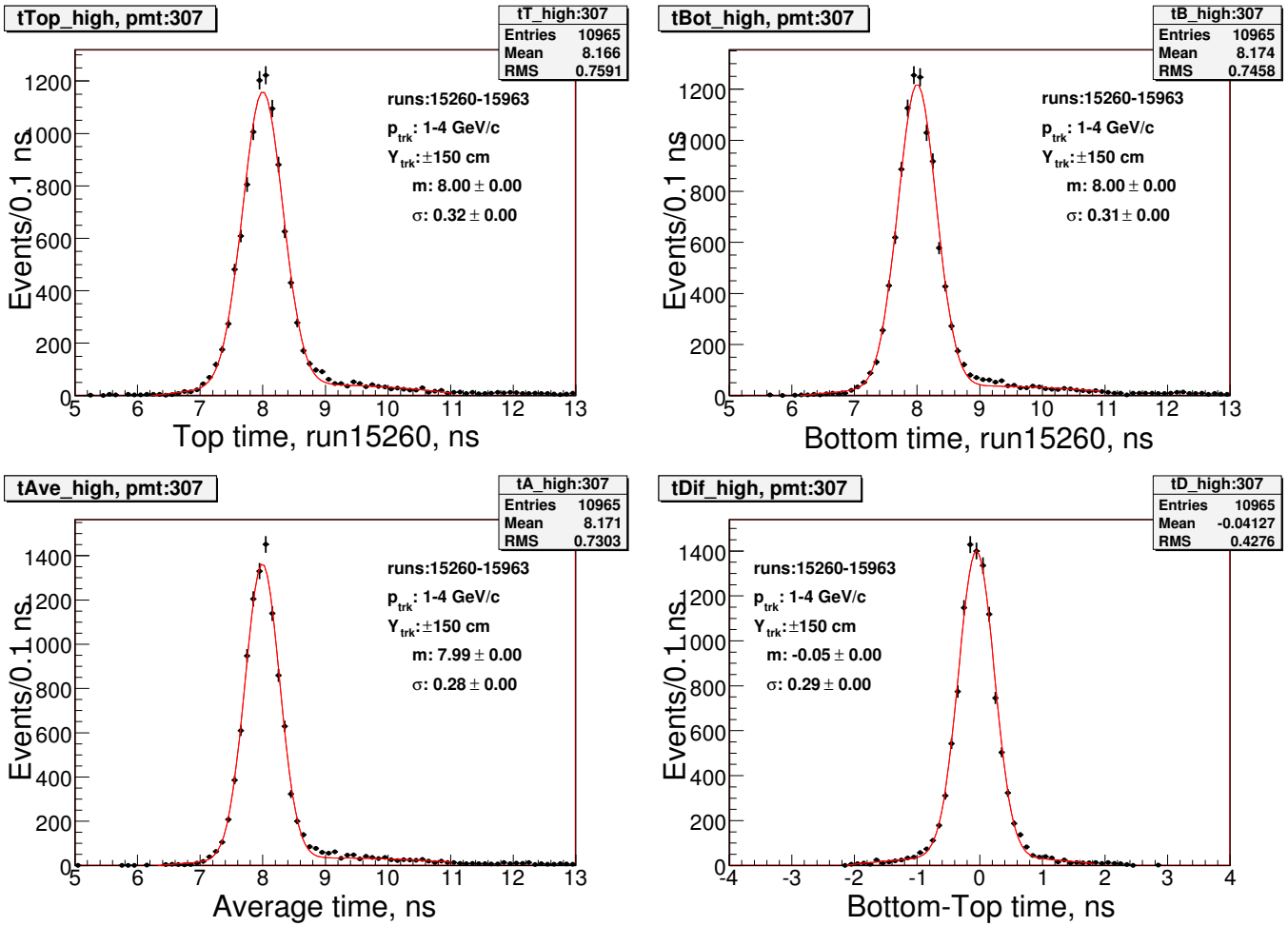
particles path length





The particles path length from the vertex up to the ToF bar: left plot - thin target, right - NuMI target data.

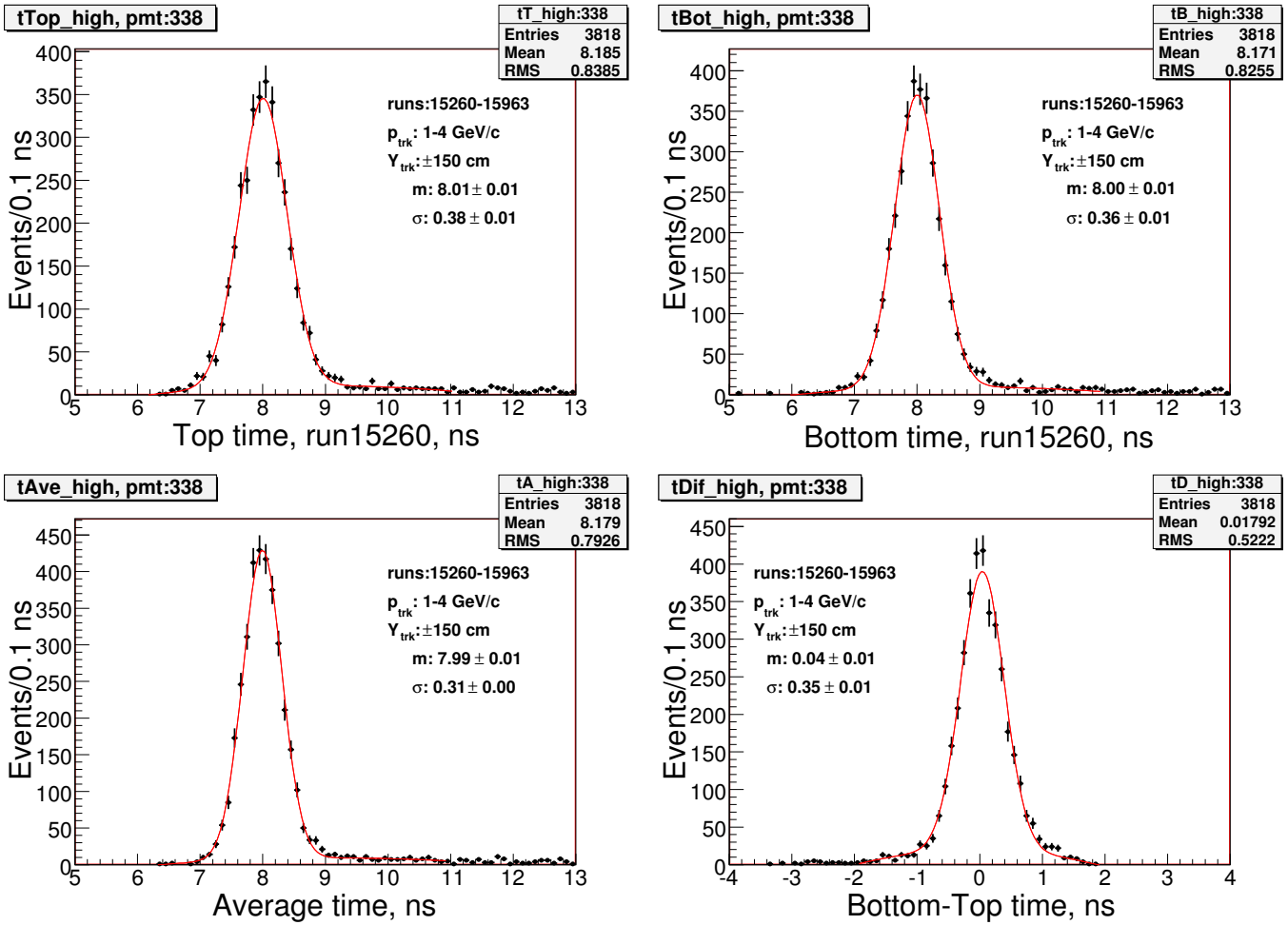
bar 307, thin target, 120 GeV/c



The ToF bar with best time resolution on East side. Targets: Carbon, Bismuth, Beryllium.

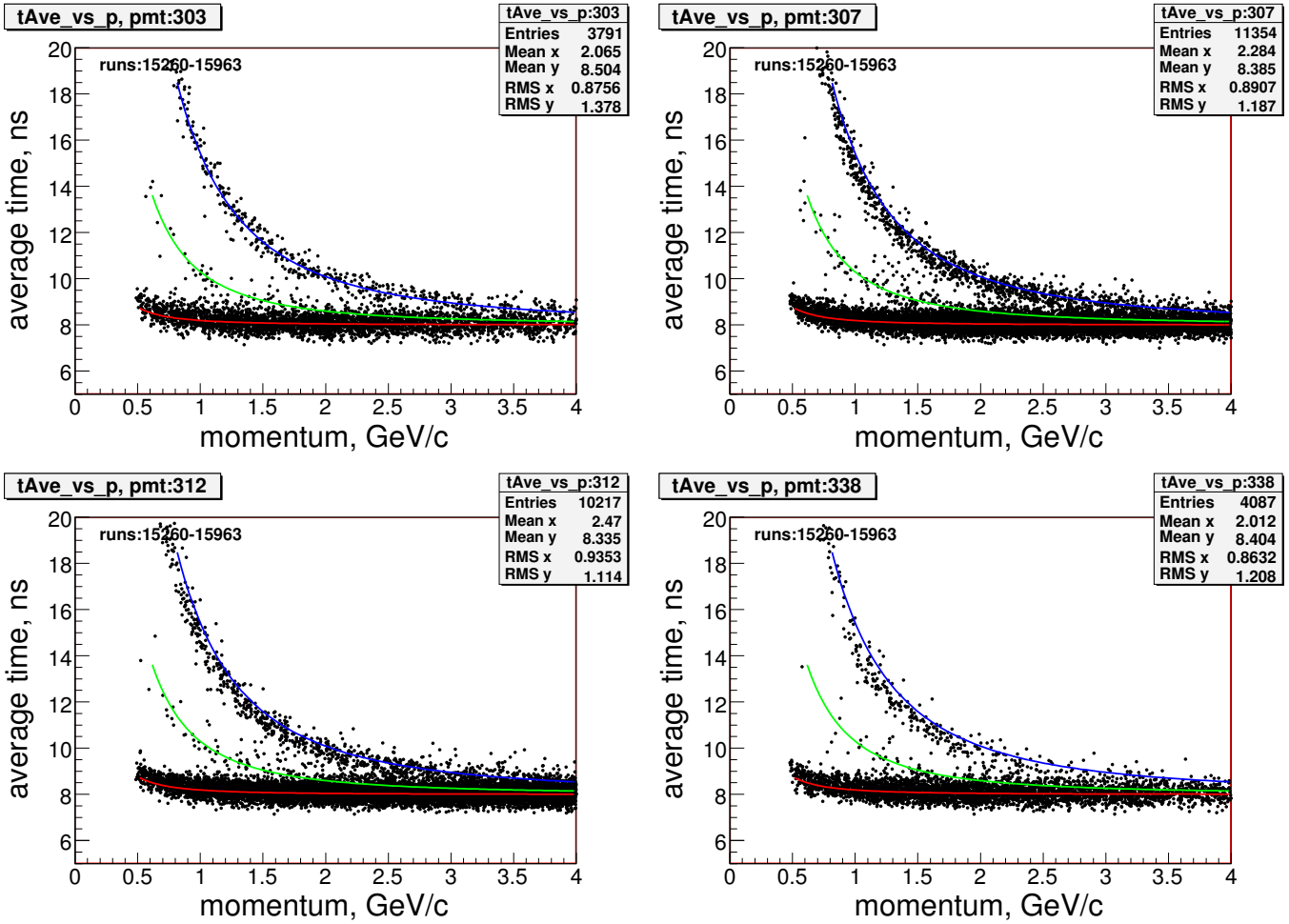
Momentum: 120 GeV/c

bar 338, thin target, 120 GeV/c



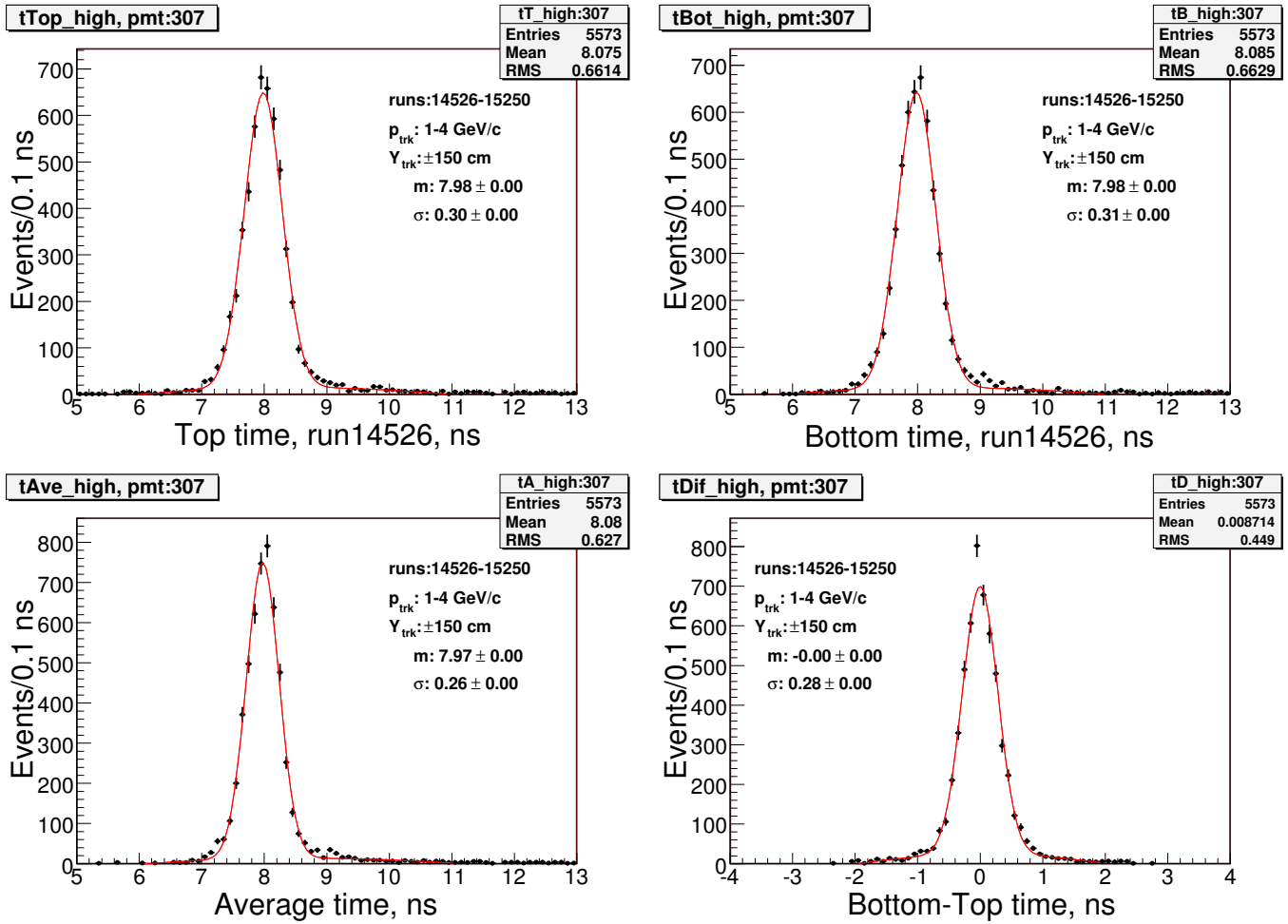
The ToF bar from West side. Targets: Carbon, Bismuth, Beryllium. Momentum: 120 GeV/c

thin target, 120 GeV/c, time vs momentum



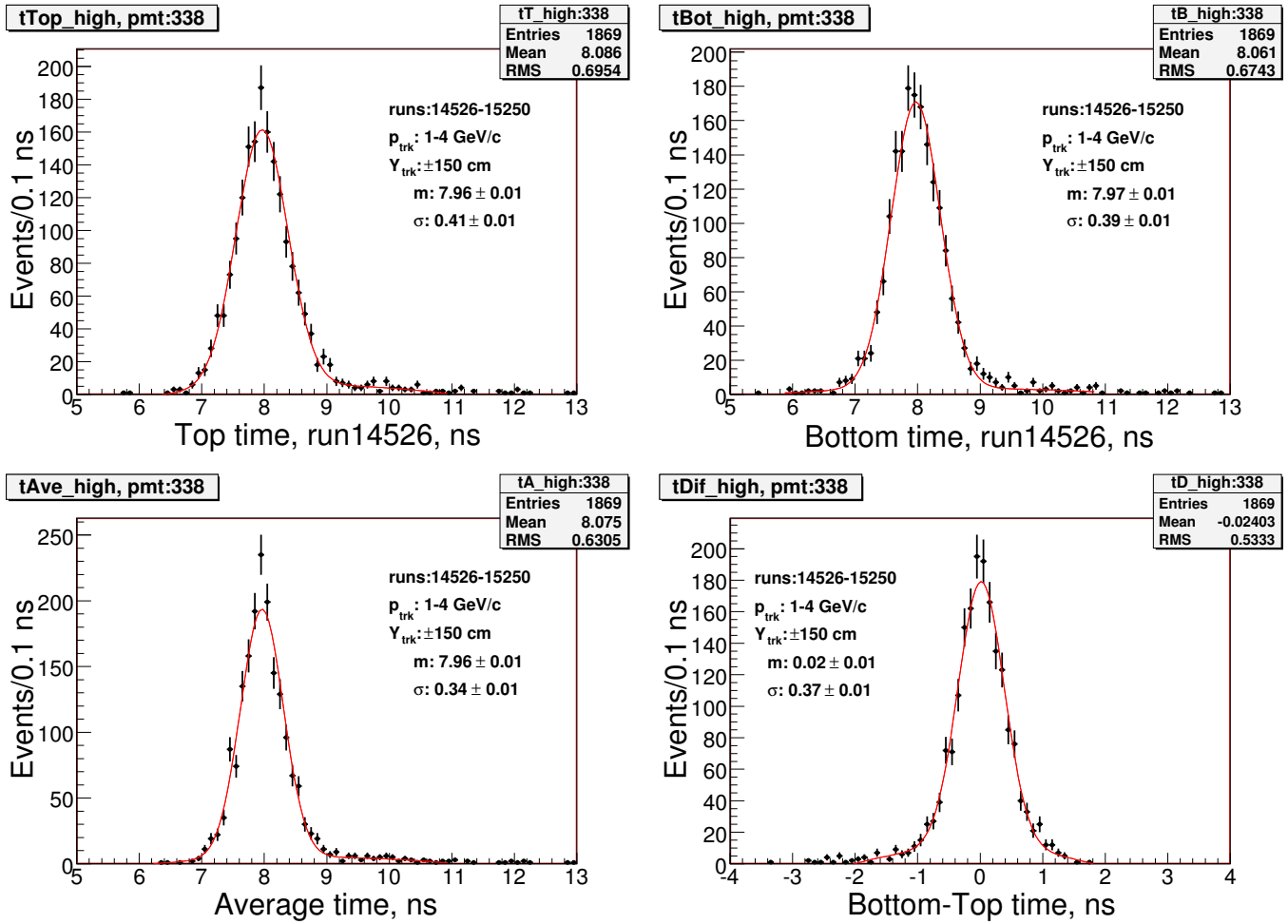
The ToF time vs track momentum. Targets: Carbon, Bismuth, Beryllium. Momentum: 120 GeV/c. Red curve represents pions, green - kaons, blue - protons.

bar 307, NuMI target, 120 GeV/c



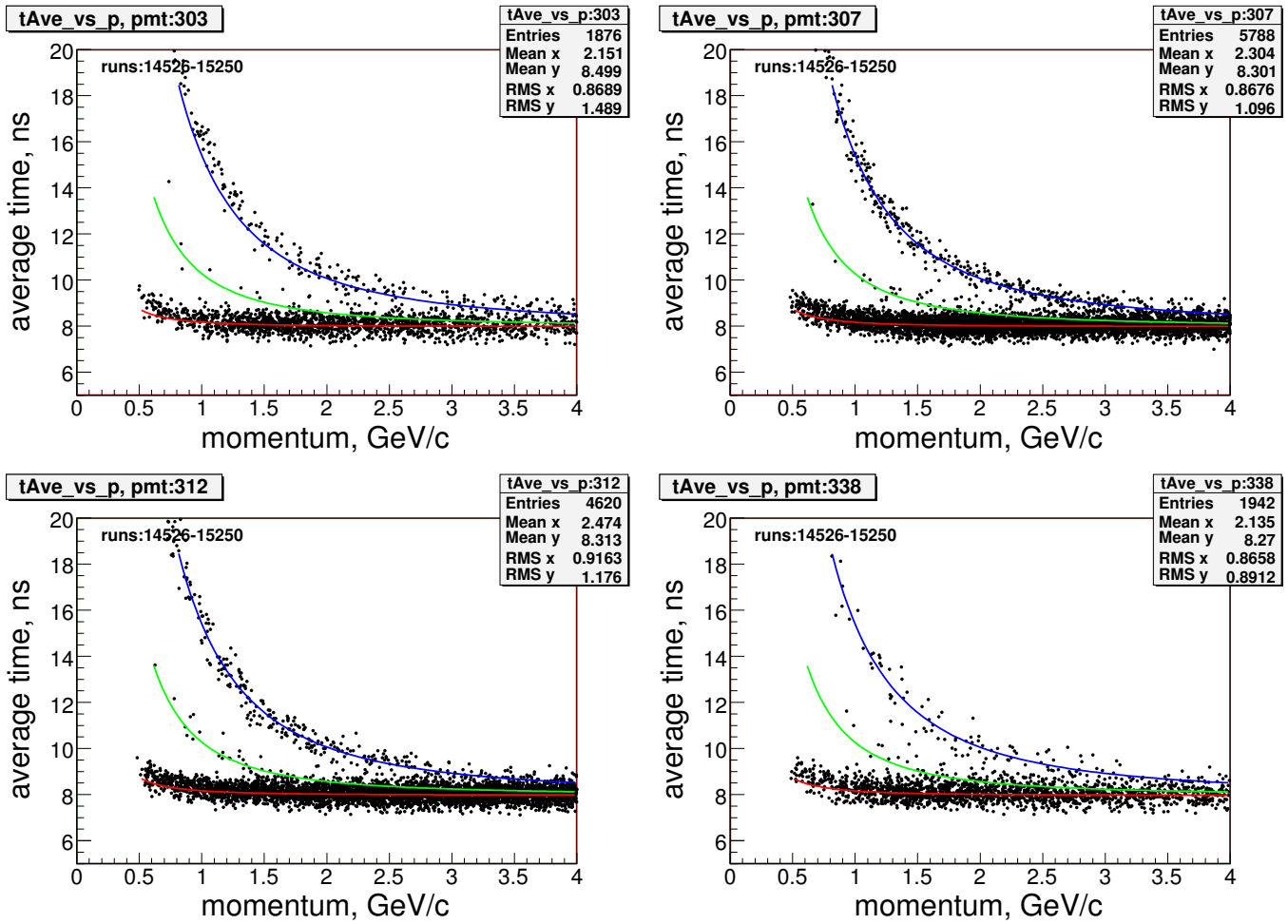
The ToF bar with best time resolution from East side. Target: NuMI. Momentum: 120 GeV/c

bar 338, NuMI target, 120 GeV/c



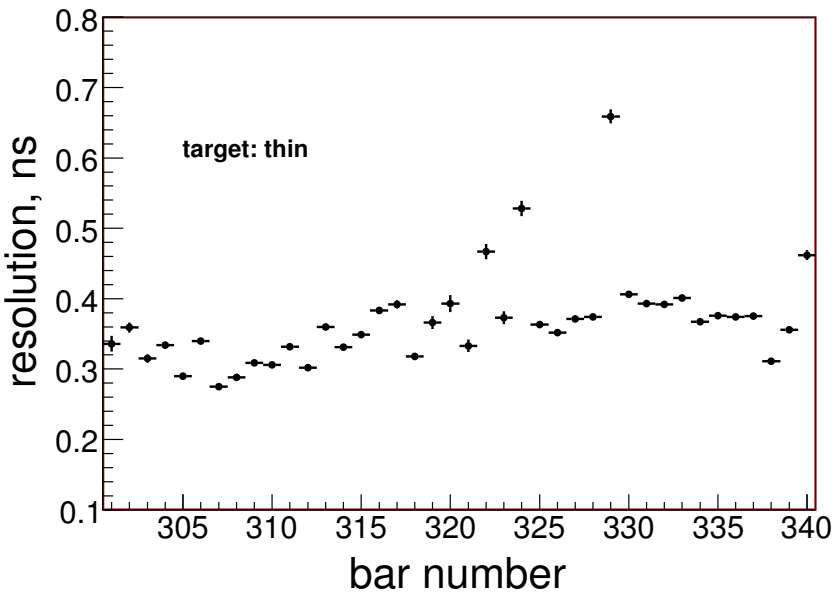
The ToF bar with best time resolution from West side. Target: NuMI. Momentum: 120 GeV/c

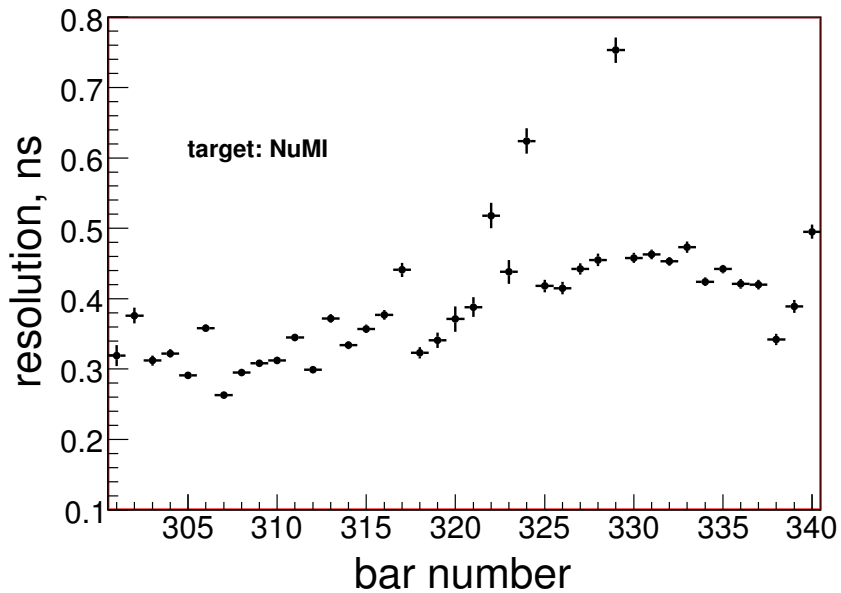
NuMI target, 120 GeV/c, time vs momentum



The ToF time vs track momentum. Target: NuMI. Momentum: 120 GeV/c. Red curve represents pions, green - kaons, blue - protons.

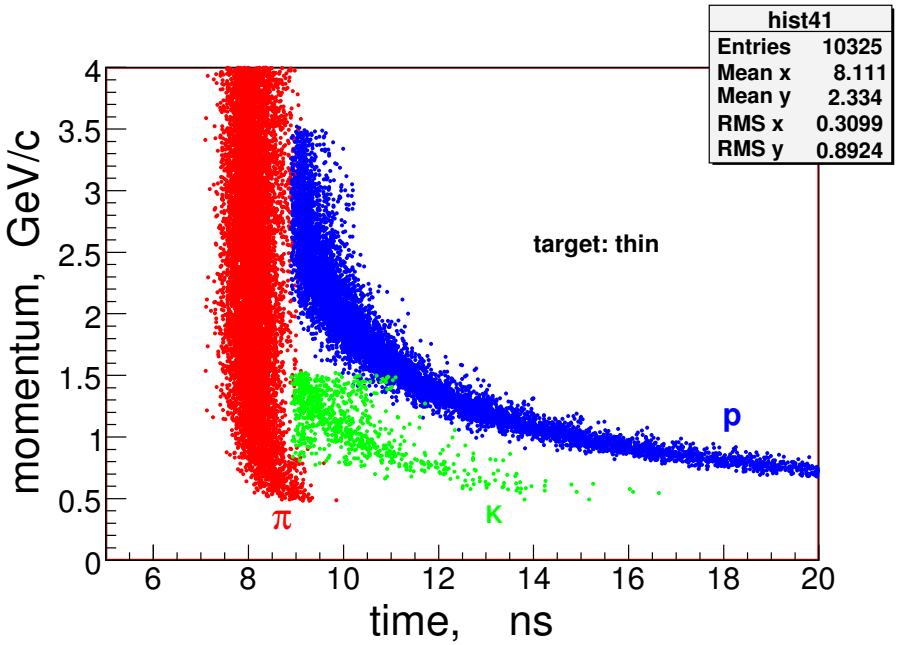
time resolution vs bar number

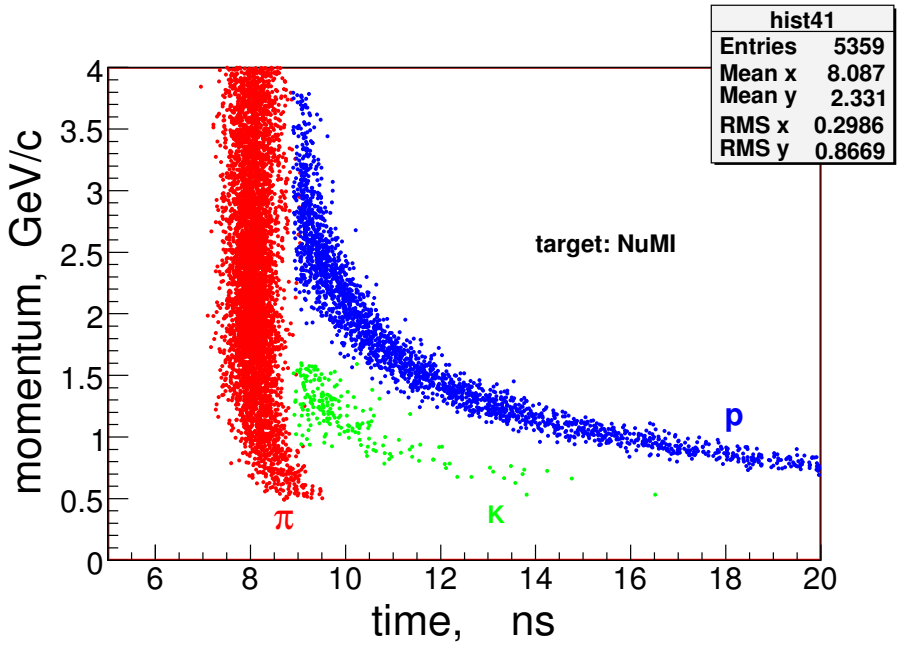




Time resolution vs the bar number: left plot - thin target, right - NuMI target data.

time vs momentum dependence, combined data





The ToF time vs momentum distributions: left plot - thin target, right - NuMI target data. Data on plots were combined over several bars with $\sigma < 0.35$ ns: 14 for left and 9 - for right.