

Net Scanback Events

Using Emulsion Momentum estimates as information to confirm / reject candidate vertices

Bruce has 18 events possibly located in Net SB set

Presented here are emulsion momentum estimates for 10 of the 18 events

The correlation between the emulsion and spectrometer momenta can be used to decide if a one / two-track event is truly located (along with other information)

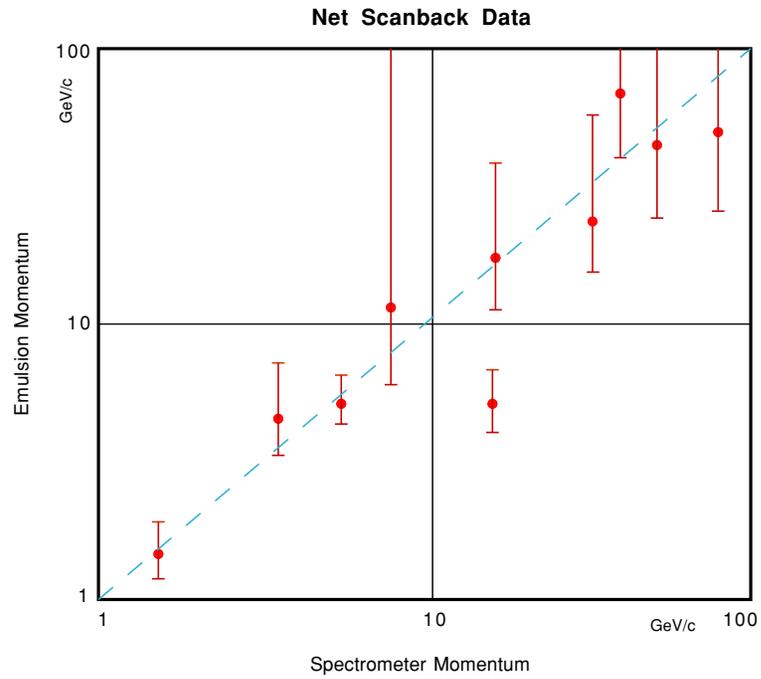


Figure 1. Comparison of momenta measured for each track in the emulsion (using scattering) and the spectrometer (using the magnet). The error in the spectrometer momenta is not shown but $\delta p/p \sim 15\%$. The poorly correlated track is from event 3067_23440, track 381-12103. The emulsion measurement is 3.4σ low.

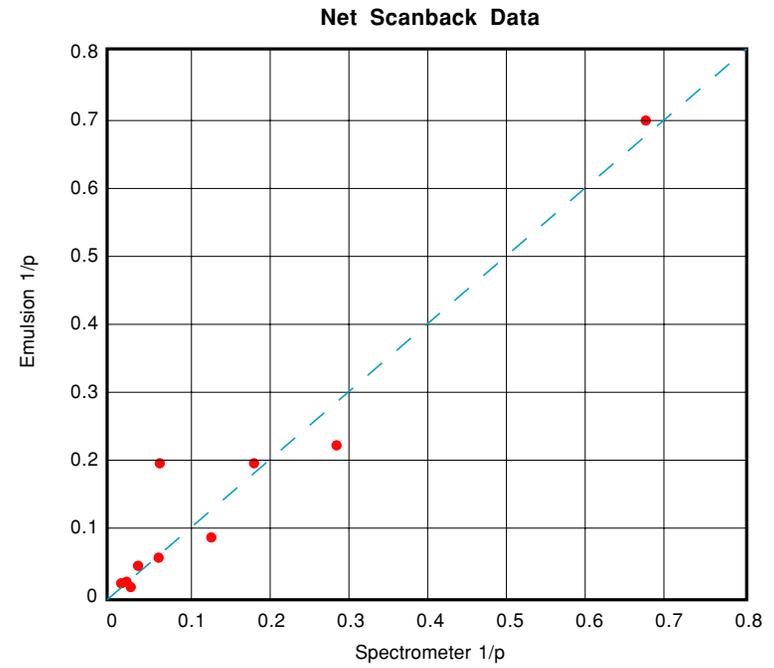


Figure 2. Comparison of $1/p$ of the same tracks as in Fig. 1.

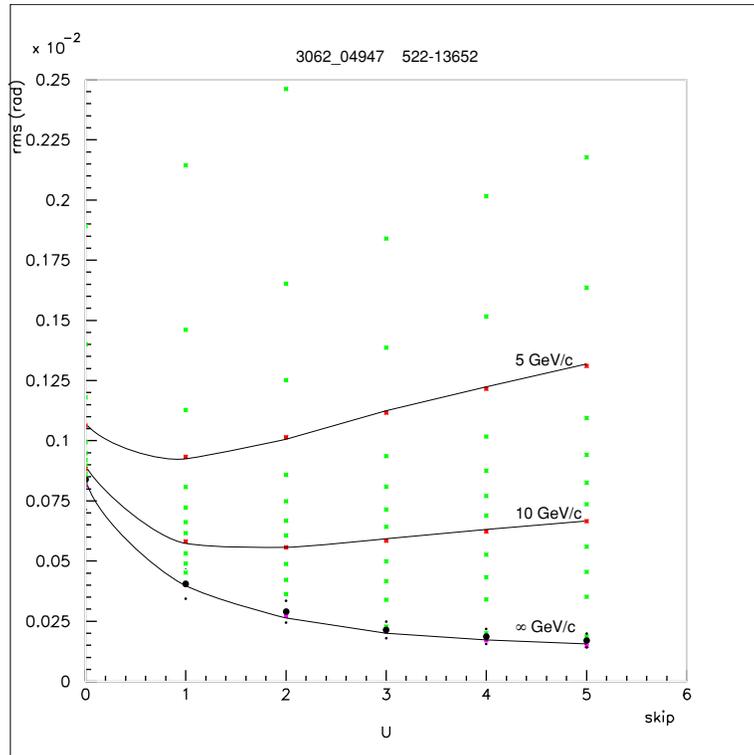


Figure 3. The scattering analysis of track 522-13652 in event 3062_04947 is shown. The resulting fit of the data (black dots) yields 70.2 GeV/c (1σ bounds : 41 - 248 GeV/c). There were 36 measurements used from the Net SB data.