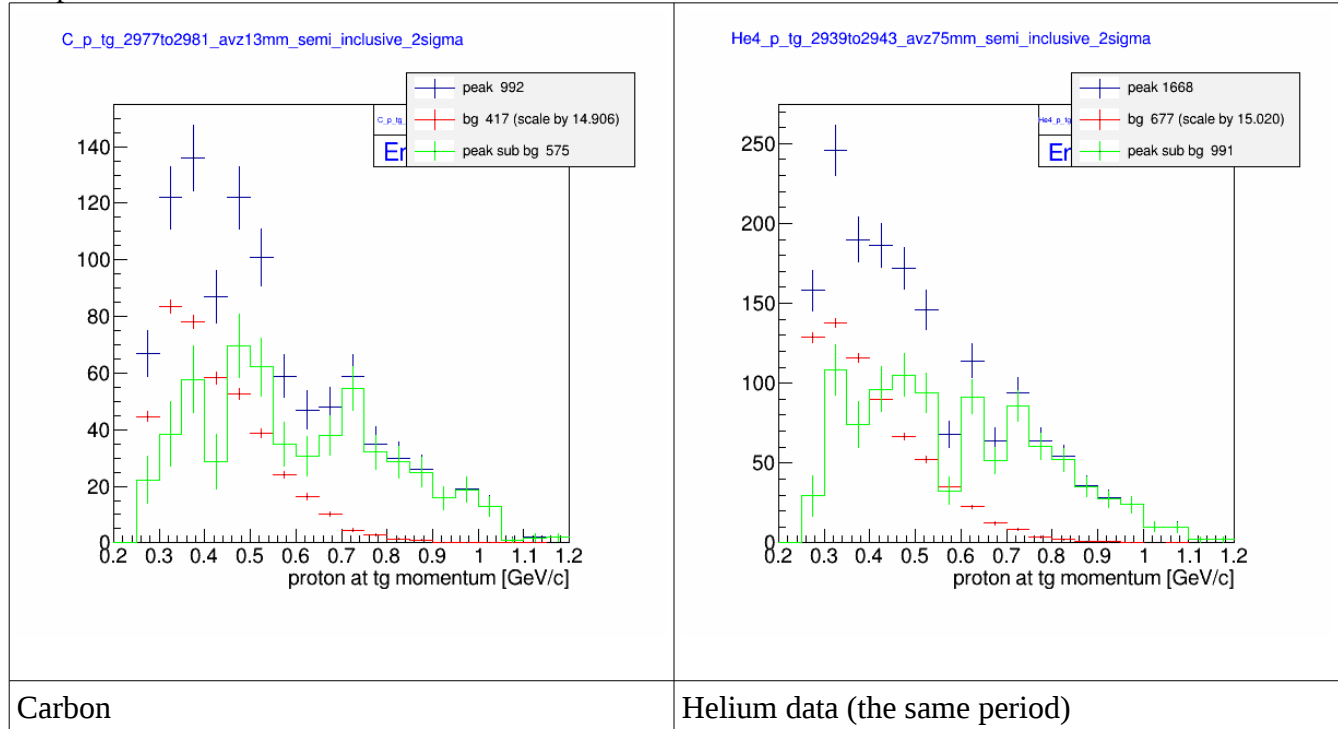


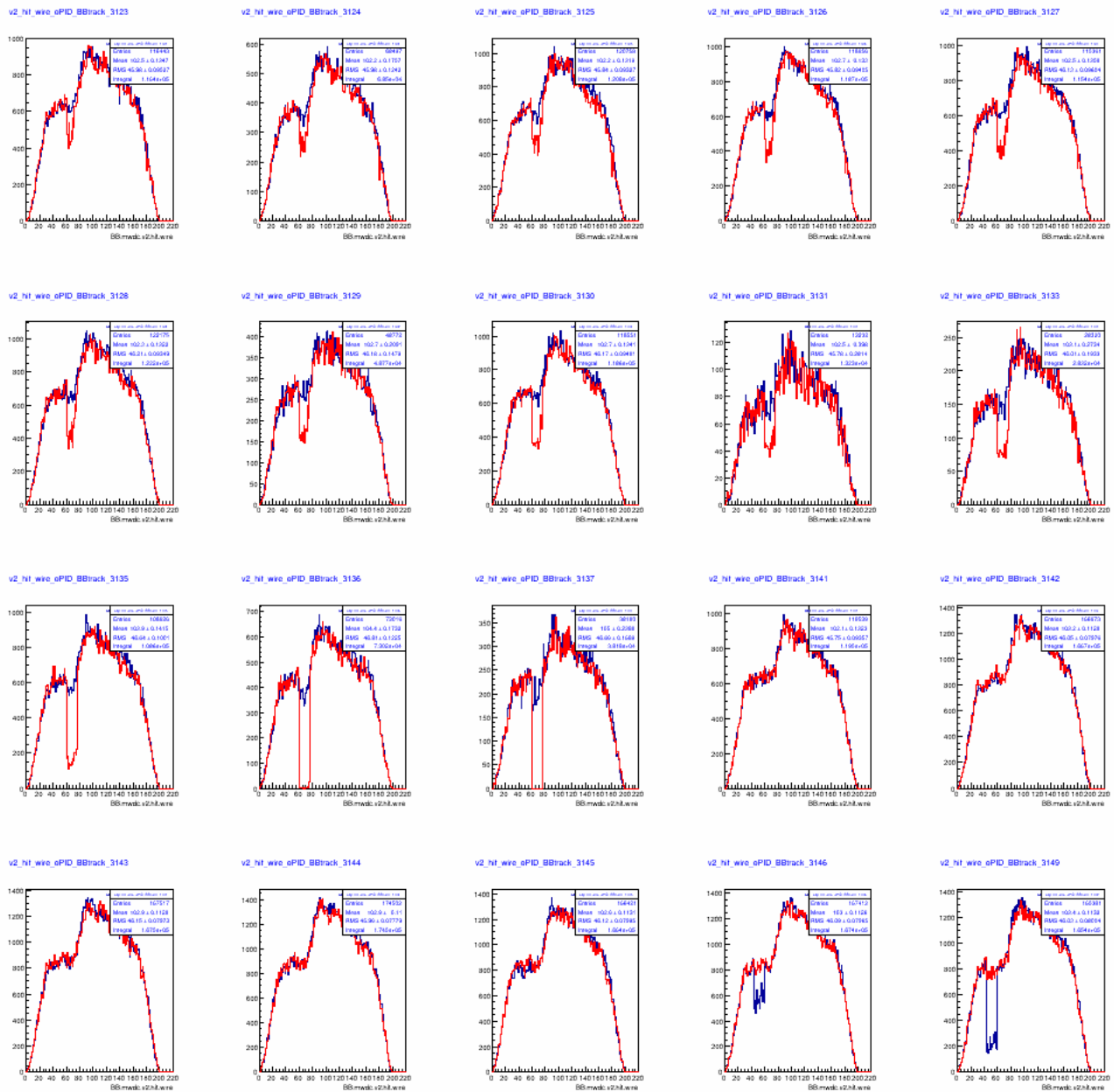
Report: Searching for the reason of momentum dip at 0.4 and 0.6 GeV/c

the problem:



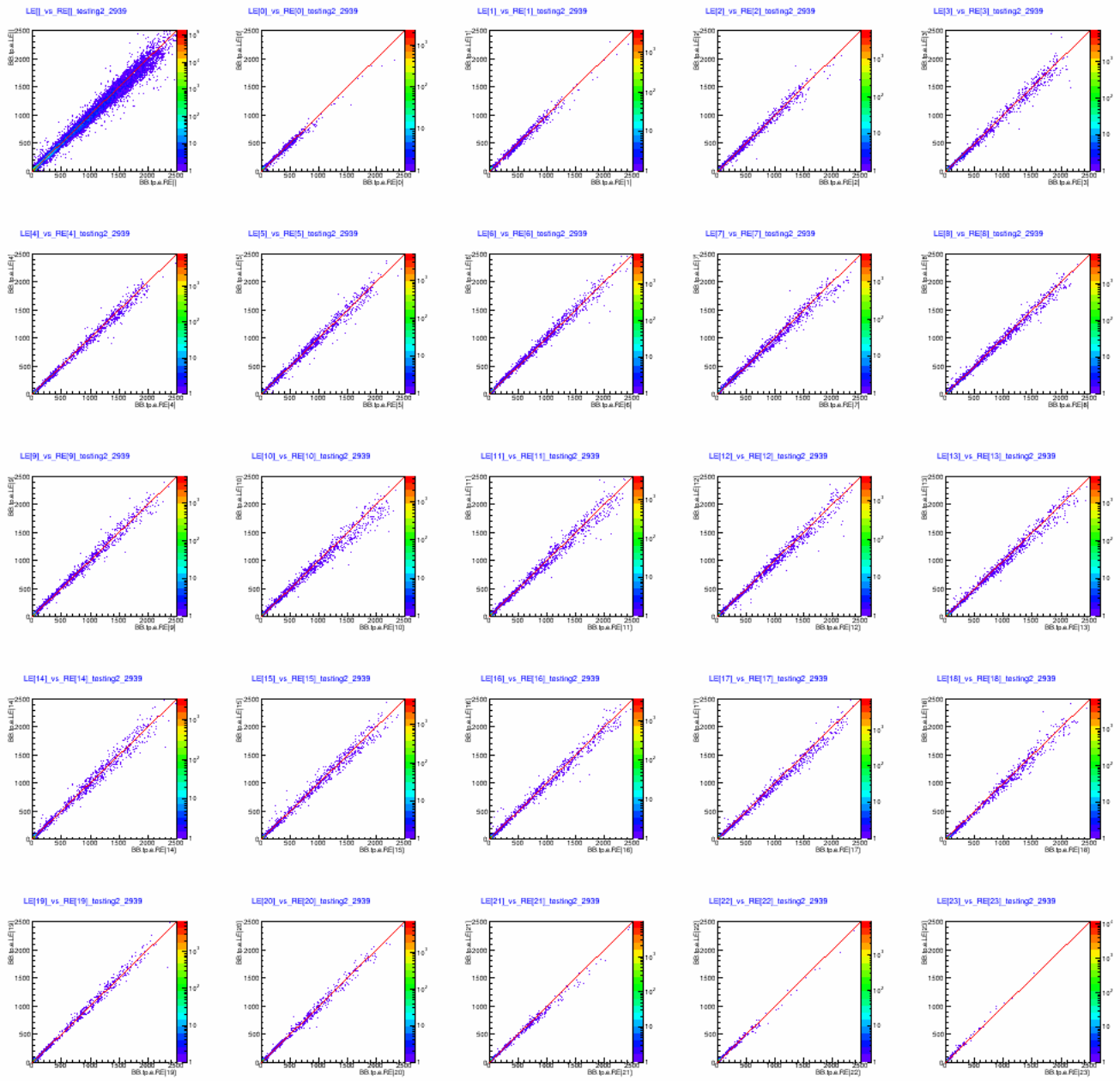
We check both raw data of the whole period and found some possible costs of the problem.

1. in 1/7 of the data kin 12, one section of v2 MWDC are missing. (page 2)
2. For trigger plane E, the LE and RE gain are not correctly set. But the $E_{dep} = \sqrt{LE \cdot RE}$ vs momentum are corrected.
3. The proton PID I use are in the E vs p graph. But If separate into bar hit seem to have the problem with the highest momentum of each bar not within the PID.

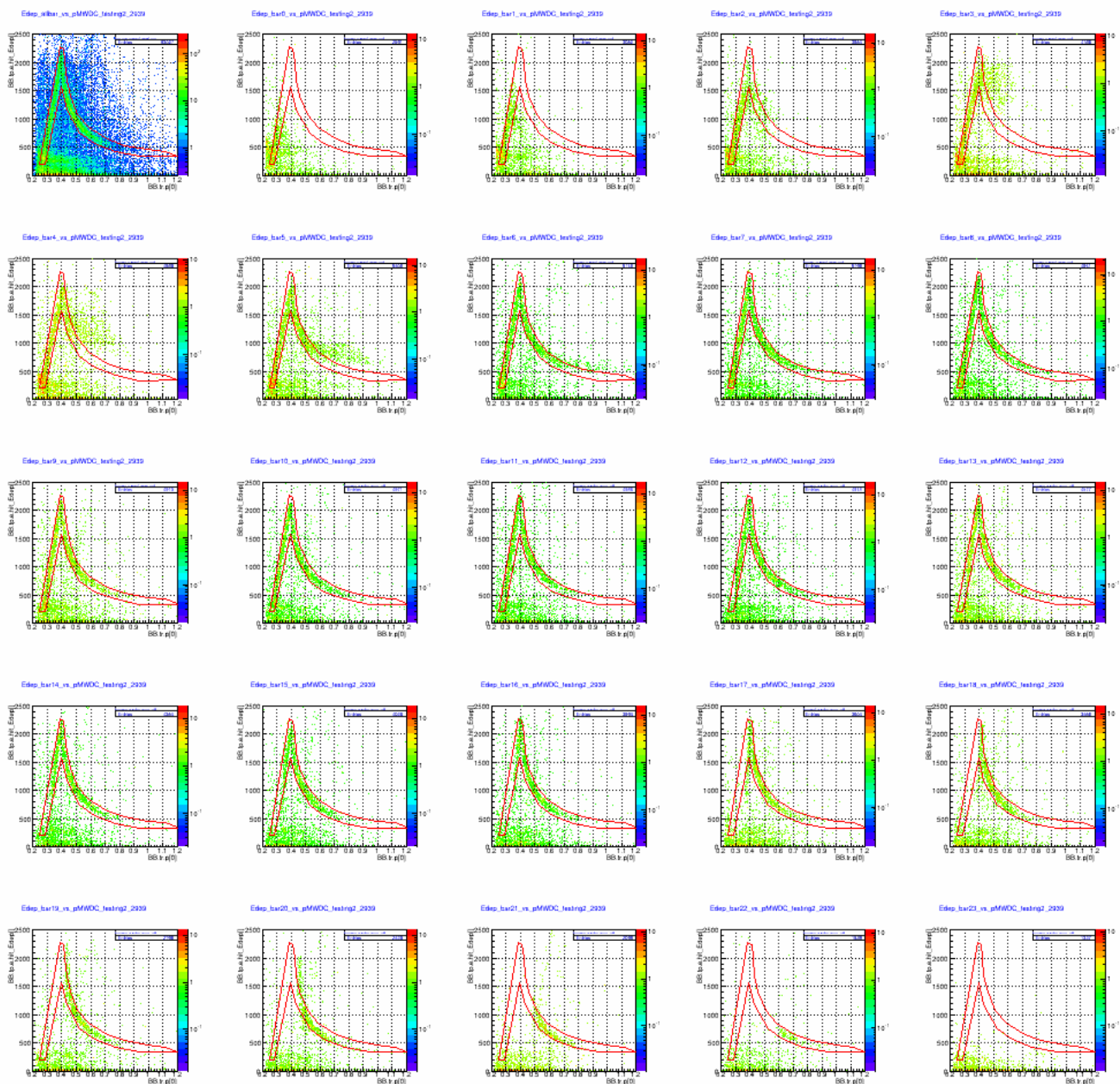


F1: The v_2 (blue) and v_{2p} (Red) for run 3123 to 3149

The run 3123-3137 and 3146,3149 have problem and should first be separate out from the non-problem set.

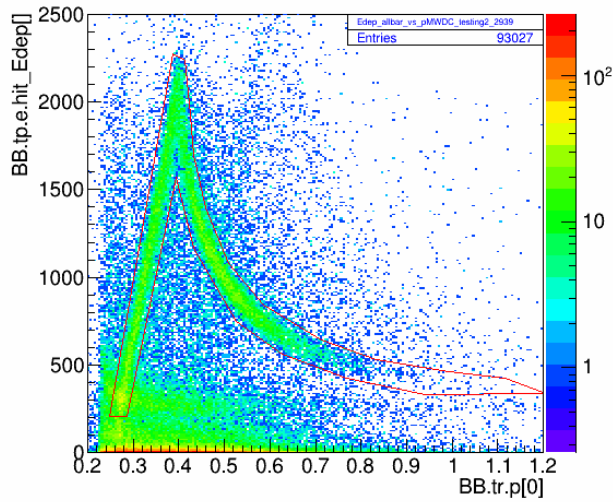


F2. The value of $LE(y)$ vs $RE(x)$ for each bar after correction.



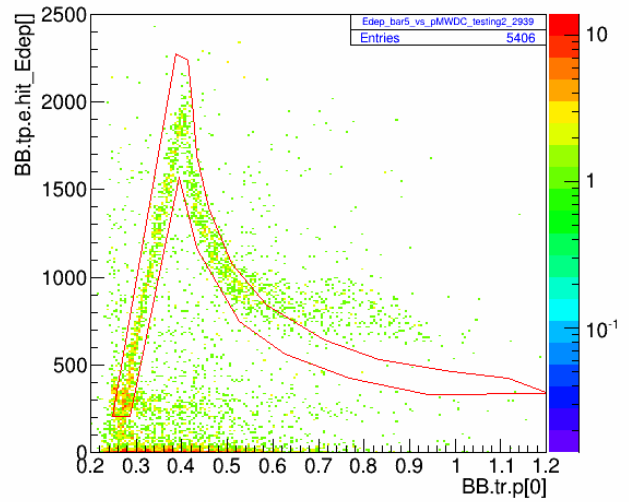
F3. The $E_{dep} = \sqrt{LE \cdot RE}$ vs momentum at wire chamber per bar most data are falling within the graphic of E vs p as $pPID$ but not all.

Edep_allbar_vs_pMWDC_testing2_2939



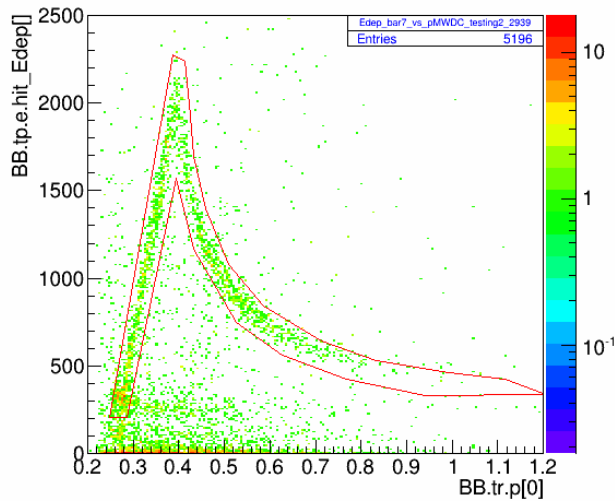
F3.1
All hit in E plane

Edep_bar5_vs_pMWDC_testing2_2939



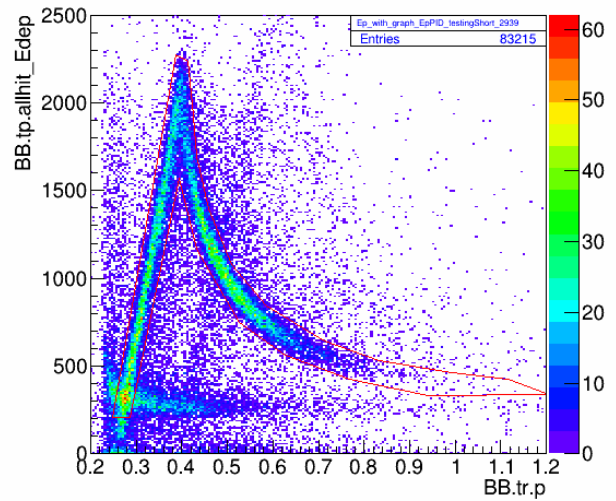
F3.5
Bar #5
This bar have the problem with momentum higher than $p > 0.6$ and $Edep \sim 1000$ which is not within the graphic cut

Edep_bar7_vs_pMWDC_testing2_2939



F3.7
Bar #7
The sample of the bar that don't have the problem with PID

Ep_with_graph_EpPID_testingShort_2939



F4.
The all hit in E plane with the track and the hit are already matching.