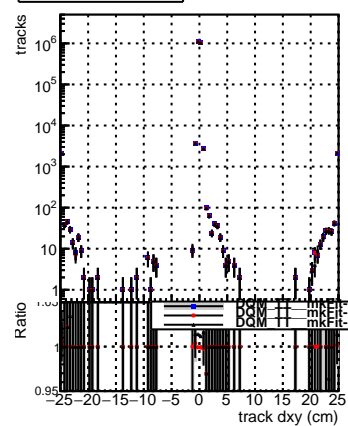
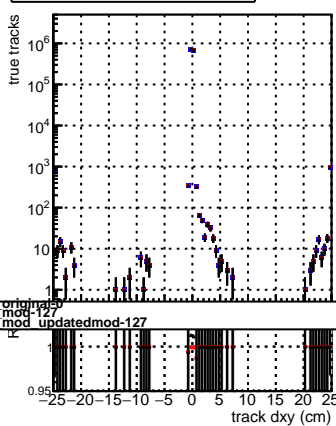


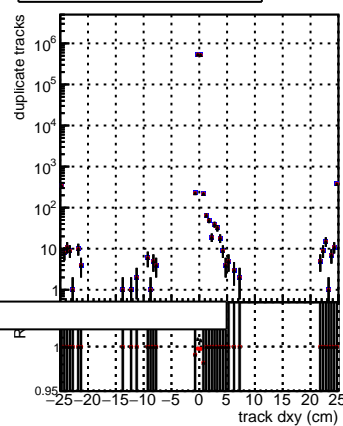
### N of reco track vs dxy



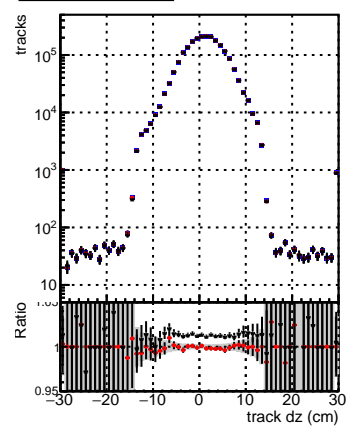
N of associated (recoToSim) tracks vs dxy



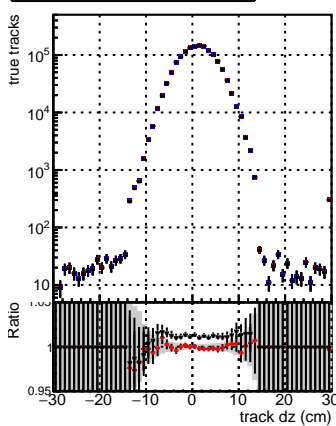
N of associated (recoToSim) looper tracks vs dxy



## N of reco track vs dz



N of associated (recoToSim) tracks vs dz



The figure consists of two vertically stacked panels sharing a common x-axis labeled 'track dz (cm)' ranging from -30 to 30. The top panel is labeled 'fake tracks' on the y-axis, which is on a logarithmic scale from  $10^2$  to  $10^5$ . It shows a distribution of data points (black dots) with a Gaussian fit (red line) centered at 0 cm. The bottom panel is labeled 'Ratio' on the y-axis, which is on a linear scale from 0.95 to 1.05. It shows a black line representing the ratio of tracks, which fluctuates around a red horizontal line at 1.0. Vertical dashed lines are present at approximately  $\pm 15$  cm in both panels.

N of associated (recoToSim) looper tracks vs dz

