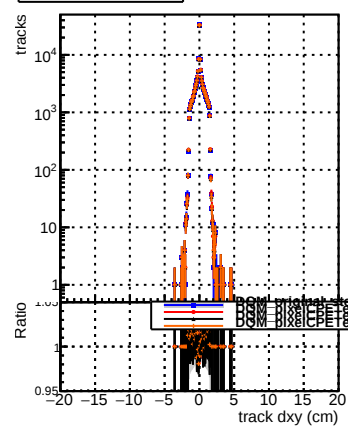


N of reco track vs dxy



N of associated (recoToSim) tracks vs dxy

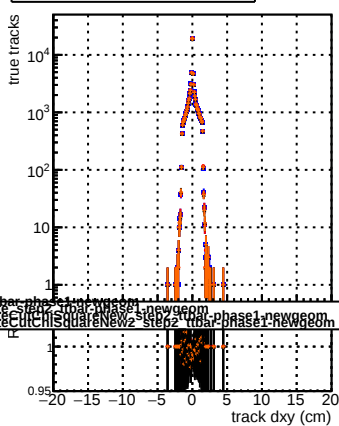
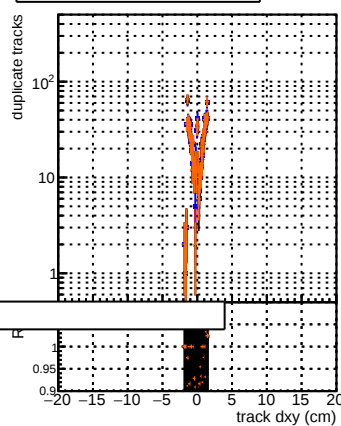
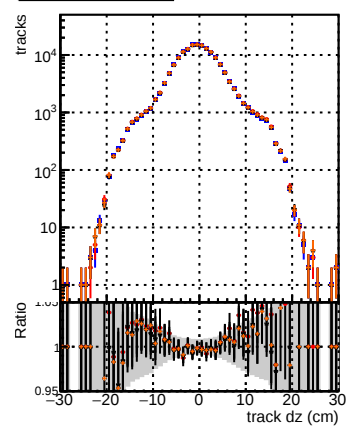


Figure 10 consists of two vertically stacked plots. The top plot shows the distribution of fake tracks as a function of track  $d_{xy}$  (cm). The y-axis is labeled 'fake tracks' and is on a logarithmic scale from 1 to  $10^4$ . The x-axis is labeled 'track  $d_{xy}$  (cm)' and ranges from -20 to 20. The data points, represented by red squares and blue circles, show a sharp peak at  $d_{xy} = 0$  with a maximum value of approximately  $10^4$ . The bottom plot shows the fraction of fake tracks as a function of track  $d_{xy}$  (cm). The y-axis is labeled 'f' and ranges from 0.95 to 1.05. The x-axis is the same as the top plot. The data points, represented by red squares and blue circles, show a sharp peak at  $d_{xy} = 0$  with a maximum value of approximately 1.05.

N of associated (recoToSim) looper tracks vs dxy



N of reco track vs dz



N of associated (recoToSim) tracks vs dz

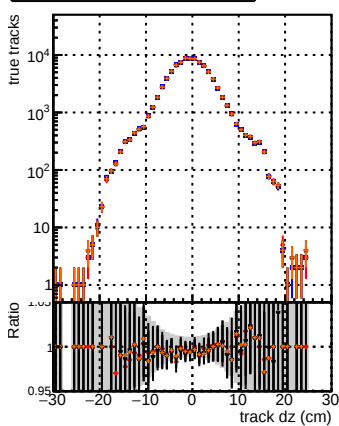


Figure 1 consists of two vertically stacked plots sharing a common x-axis labeled 'track dz (cm)' ranging from -30 to 30. The top plot's y-axis is labeled 'fake tracks' on a logarithmic scale from 1 to  $10^4$ . It shows data points (red squares) and a fitted curve (black line) that peaks at  $10^4$  near  $dz = 0$  and decreases to about  $10^2$  at  $dz = \pm 20$ . The bottom plot's y-axis is labeled 'Ratio' on a linear scale from 0.95 to 1.05. It shows the same data points and fitted curve, which is flat at 1.0 for  $|dz| < 10$  and rises to about 1.05 for  $|dz| > 10$ . Vertical grey shaded regions are present in the bottom plot for  $|dz| > 10$ .

N of associated (recoToSim) looper tracks vs dz

