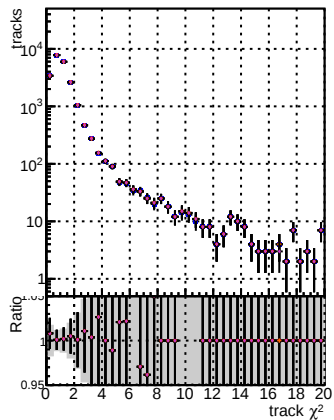
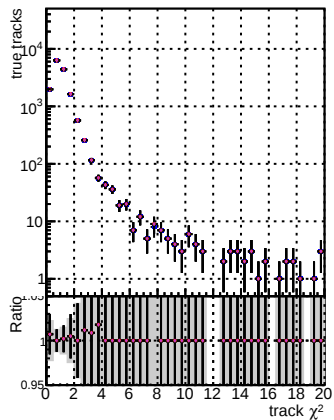


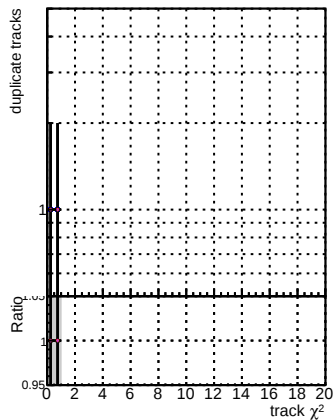
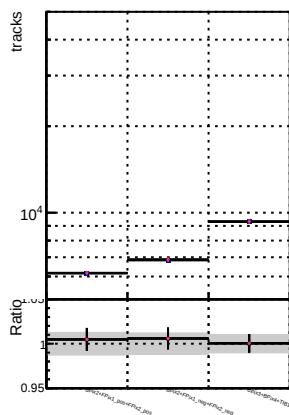
N of reco track vs normalized  $\chi^2$



N of associated (recoToSim) tracks vs normalized  $\chi^2$



N of associated (recoToSim) looper tracks vs normalized  $\chi^2$

[illegible]

The figure consists of two vertically stacked panels sharing a common x-axis labeled 'true tracks' with values 10<sup>3</sup>, 10<sup>4</sup>, and 10<sup>5</sup>. The top panel's y-axis is labeled 'Ratio' on a logarithmic scale from 10<sup>3</sup> to 10<sup>4</sup>. It shows data points (black dots with vertical error bars) and a solid black line representing the estimated ratio. The bottom panel's y-axis is labeled 'Ratio' on a linear scale from 0.95 to 1.05. It shows the same data points and error bars, but with a shaded gray region representing the uncertainty interval around the ratio. The data points in both panels are clustered around a ratio of 1.0, indicating that the estimated tracks are close to the true tracks.

Figure 1 consists of two panels. The top panel, labeled 'fake tracks', shows the ratio of fake tracks to total tracks on a logarithmic scale. The y-axis ranges from  $10^3$  to  $10^4$ . The x-axis represents the number of tracks, with labels at 100, 200, 300, 400, 500, 600, 700, 800, 900, and 1000. Data points are shown as blue circles with vertical error bars. A shaded gray region represents the uncertainty. The bottom panel, labeled 'Ratio', shows the ratio of total tracks to total tracks on a linear scale. The y-axis ranges from 0.95 to 1.05. The x-axis is the same as the top panel. Data points are shown as blue circles with vertical error bars. A shaded gray region represents the uncertainty.