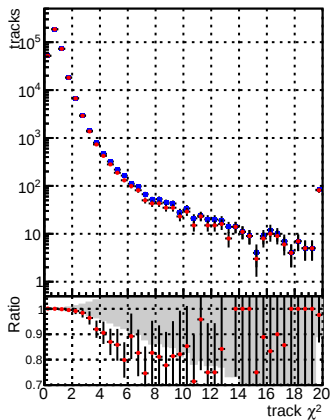


N of reco track vs normalized  $\chi^2$



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

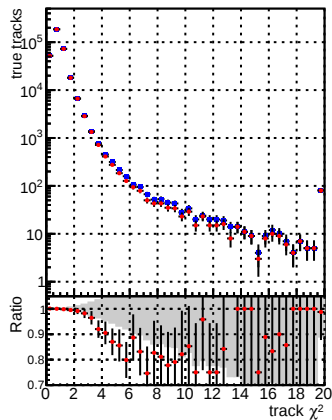
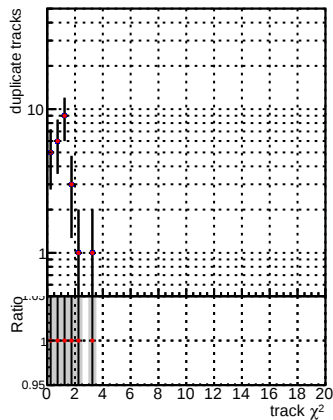


Figure 1 consists of two panels sharing a common x-axis labeled 'track  $\chi^2$ ' ranging from 0 to 20. The top panel's y-axis is labeled 'fake tracks' on a logarithmic scale from  $10^0$  to  $10^3$ . It shows data points with error bars for four categories: black dots, red dots, blue dots, and grey dots. The bottom panel's y-axis is labeled 'Ratio' on a linear scale from 0.8 to 1.0. It shows the same data points with error bars, where the ratio generally decreases as  $\chi^2$  increases. A horizontal line is drawn at Ratio = 1.0 in both panels.

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



N of reco track vs. s

