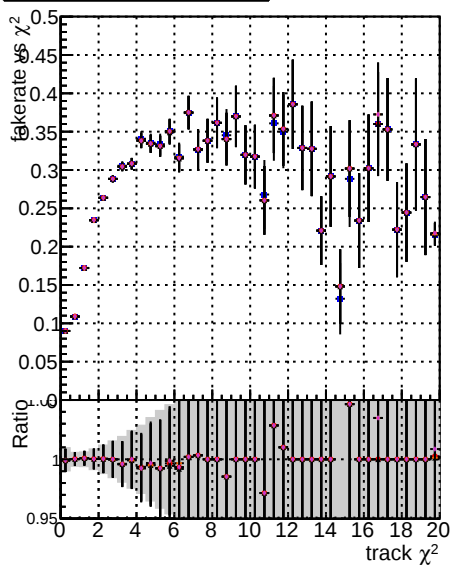
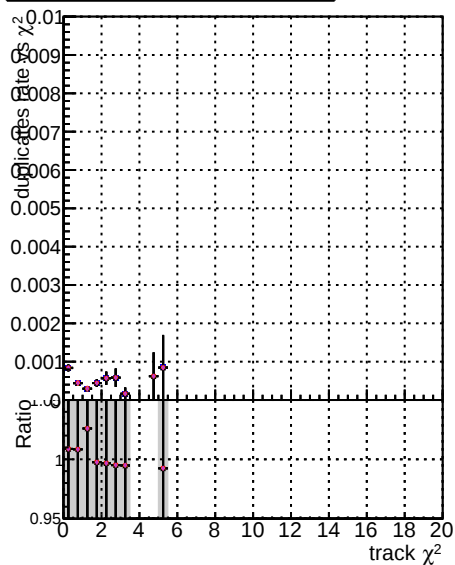


Fake rate vs normalized χ^2



Duplicates Rate vs normalized χ^2



Pileup rate vs normalized χ^2

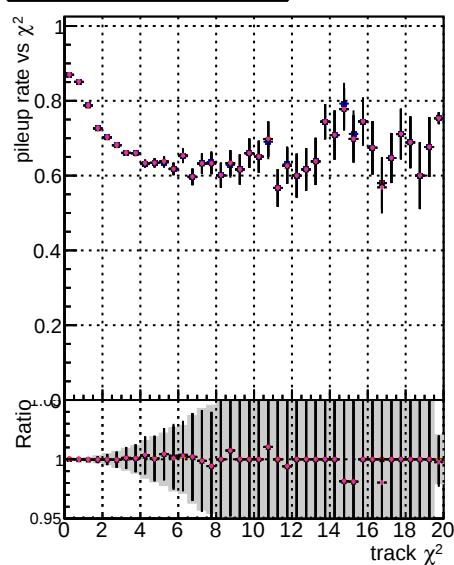
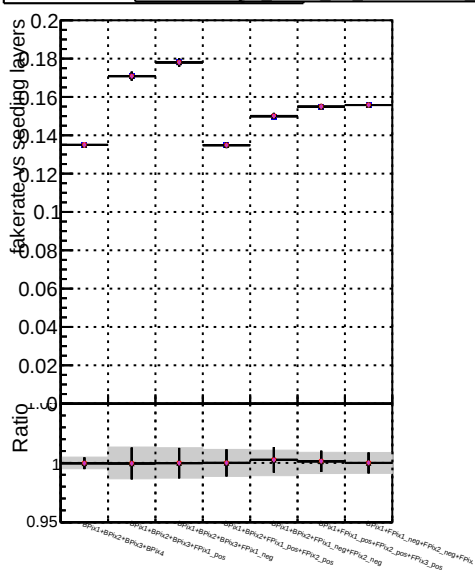
[illegible]

Figure 1 is a plot showing the ratio of the number of observed to expected OLCs for different combinations of OLCs and their corresponding OLCs. The y-axis is labeled 'Ratio' and ranges from 0.95 to 0.01 on a logarithmic scale. The x-axis is labeled 'OLCs' and shows combinations of OLCs. The plot is divided into two regions: a shaded region for ratios below 1.0 and an unshaded region for ratios above 1.0. Data points are shown as red dots with vertical error bars. The ratios are generally close to 1.0, indicating that the observed number of OLCs is consistent with the expected number.

Figure 10 consists of two plots. The top plot shows the ratio of pileup rates vs. pileup layers for models with 1, 2, 3, and 4 layers. The y-axis is labeled 'pileup rate vs. pileup layers' and ranges from 0.6 to 1.0. The x-axis shows four models: BFuK1+BFuK2+BFuK3 , $\text{BFuK1+BFuK2+BFuK3+BFuK4}$, $\text{BFuK1+BFuK2+BFuK3+BFuK4+BFuK5}$, and $\text{BFuK1+BFuK2+BFuK3+BFuK4+BFuK5+BFuK6}$. The data points are shown as open circles with error bars, and a solid line represents the ratio of 1.0. The bottom plot shows the ratio of pileup rates for models with 1, 2, 3, and 4 layers. The y-axis is labeled 'Ratio' and ranges from 0.95 to 1.0. The x-axis shows the same four models. The data points are shown as open circles with error bars, and a solid line represents the ratio of 1.0.