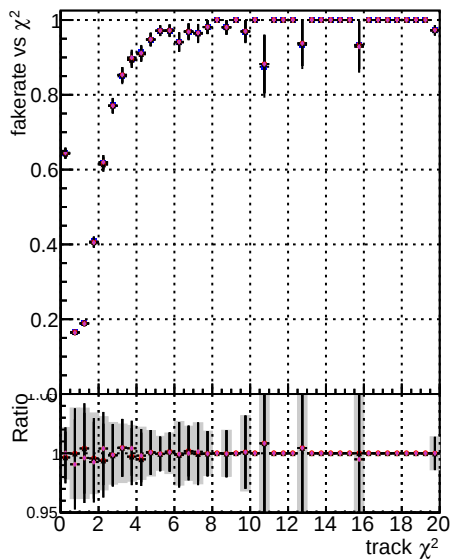
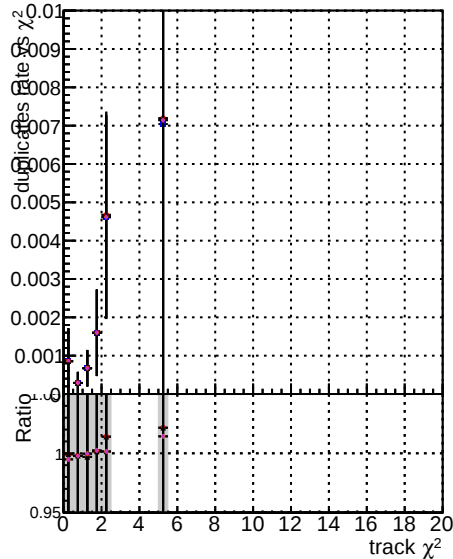


### Fake rate vs normalized $\chi^2$



### Duplicates Rate vs normalized $\chi^2$



### Pileup rate vs normalized $\chi^2$

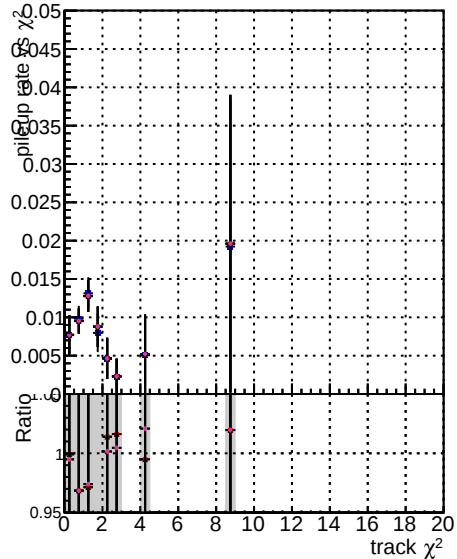


Figure 10: Fake rate vs. DQM steps. The plot shows the fake rate for different DQM steps (1, 2, 3) and TT (Total Truth) for GKE and default settings. The y-axis is 'Fake rate vs.' and the x-axis is 'DQM steps'. The plot shows that the fake rate is highest for DQM step 1 and lowest for DQM step 3. The TT (Total Truth) is the highest, followed by GKE, and then default. The GKE and default settings show a significant drop in fake rate for DQM step 3 compared to step 1 and 2.

