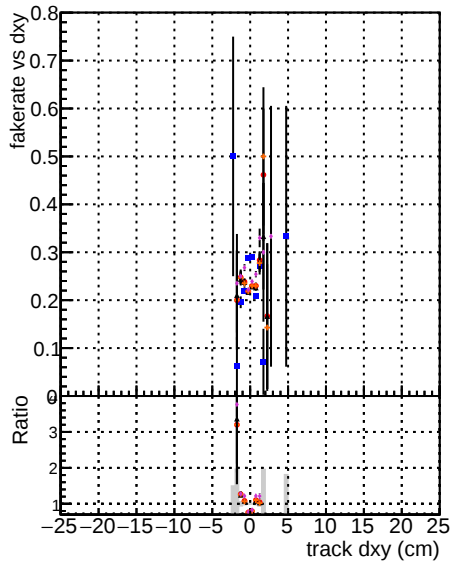
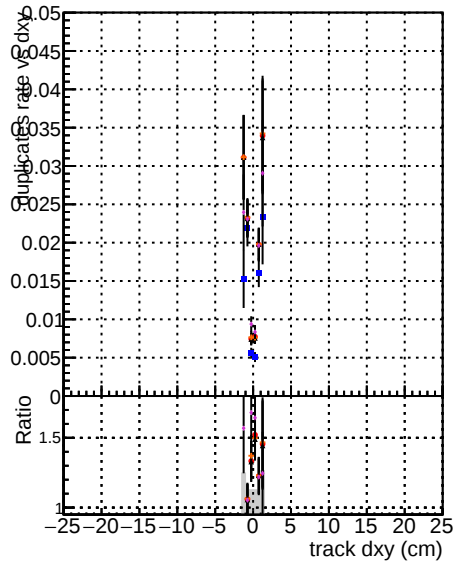


Fake rate vs dxy



Duplicates Rate vs Dxy



Pileup rate vs dxy

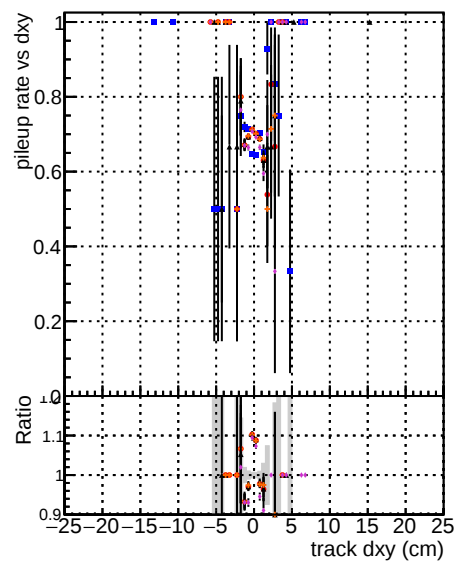


Figure 1: Fake rate vs d. The plot shows the fake rate for various models and parameters. The x-axis is labeled 'Fake rate vs d' and the y-axis is labeled 'Fake rate'. The legend on the right indicates the following models and parameters: DOMstep2, TT, GKE, default, Krell, less, default, NEWTOLDSAMPLE, and relf.

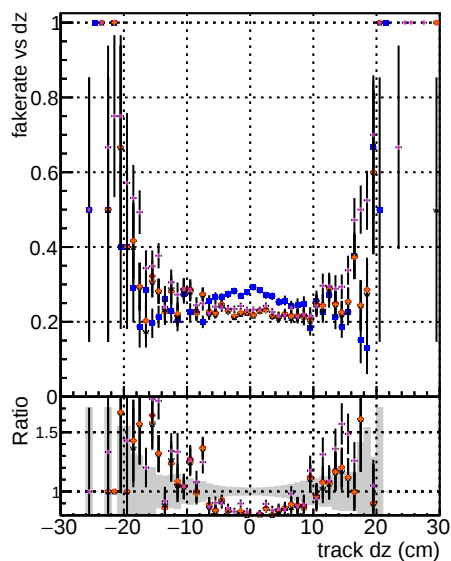


Figure 1 consists of two panels. The top panel shows the pileup rate (y-axis, 0 to 1) versus track dz (x-axis, -30 to 30 cm). The bottom panel shows the ratio (y-axis, 0.7 to 1.0) versus track dz (x-axis, -30 to 30 cm). Both panels include data points (black dots with error bars) and four theoretical models: MC (red circles), MC+MC (orange circles), MC+MC+MC (blue circles), and MC+MC+MC+MC (purple circles). The models show a significant dip in the pileup rate and ratio around track $dz = 0$ cm, which is not observed in the data points.