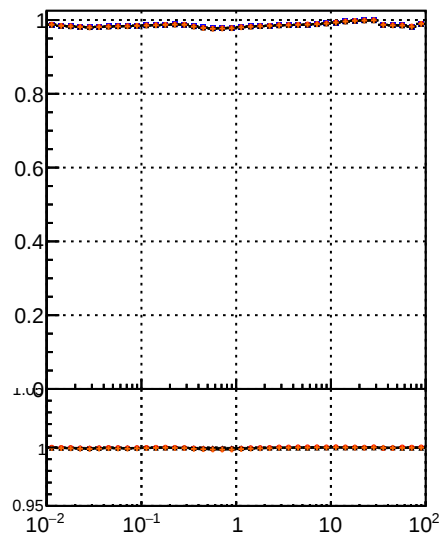
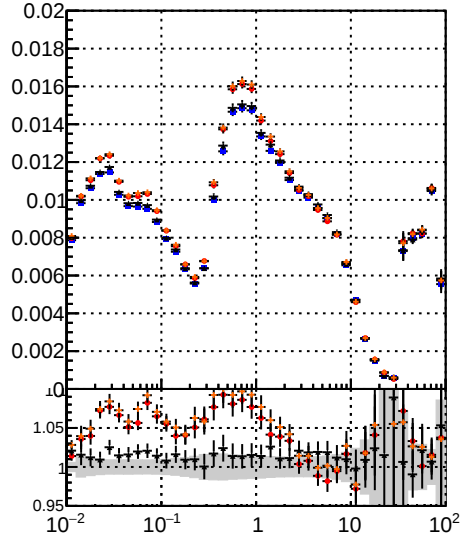


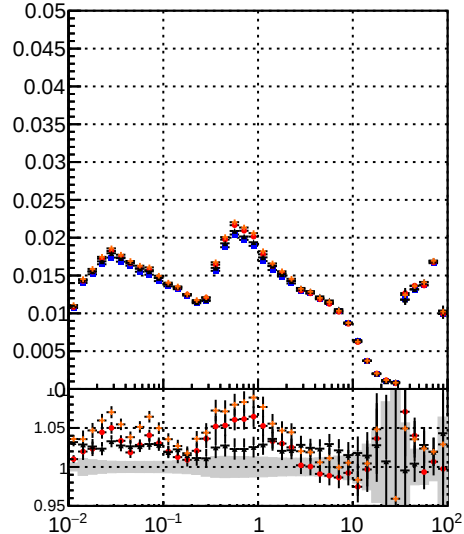
Fake rate vs vertpos



Duplicates Rate vs vertpos



Pileup rate vs vertpos



Fake rate vs v

DOM

IT

CKE

fit

BDT

Plot of Fake rate vs v. The x-axis ranges from -30 to 30. The y-axis ranges from 0.95 to 1.0. The data points (red stars) show a slight dip around $v=0$. The bottom panel shows the distribution of the data points, with a shaded gray region indicating the uncertainty.

Plot of Duplicates Rate vs v. The x-axis ranges from -30 to 30. The y-axis ranges from 0.005 to 0.05. The data points (red stars) show a peak around $v=0$. The bottom panel shows the distribution of the data points, with a shaded gray region indicating the uncertainty.

Plot of Pileup rate vs v. The x-axis ranges from -30 to 30. The y-axis ranges from 0.005 to 0.05. The data points (red stars) show a peak around $v=0$. The bottom panel shows the distribution of the data points, with a shaded gray region indicating the uncertainty.

Fake rate vs. sim PV z

Plot of Fake rate vs. sim PV z. The x-axis ranges from -20 to 20. The y-axis ranges from 0.95 to 1.0. The data points (red stars) show a slight dip around $z=0$. The bottom panel shows the distribution of the data points, with a shaded gray region indicating the uncertainty.

Duplicates Rate vs sim PV z

Plot of Duplicates Rate vs sim PV z. The x-axis ranges from -20 to 20. The y-axis ranges from 0.005 to 0.05. The data points (red stars) show a peak around $z=0$. The bottom panel shows the distribution of the data points, with a shaded gray region indicating the uncertainty.

Pileup rate vs. sim PV z

Plot of Pileup rate vs. sim PV z. The x-axis ranges from -20 to 20. The y-axis ranges from 0.005 to 0.05. The data points (red stars) show a peak around $z=0$. The bottom panel shows the distribution of the data points, with a shaded gray region indicating the uncertainty.