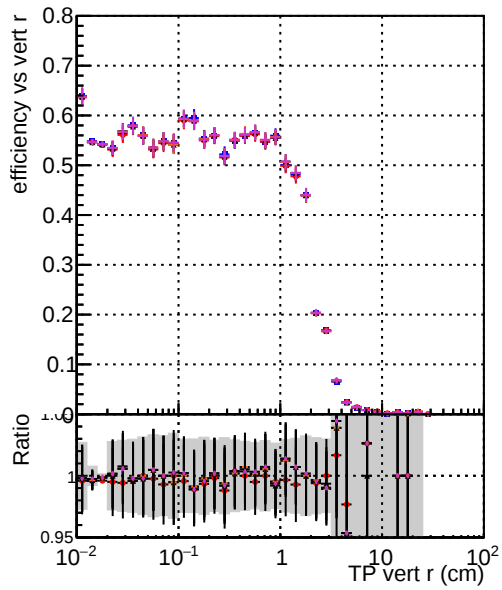
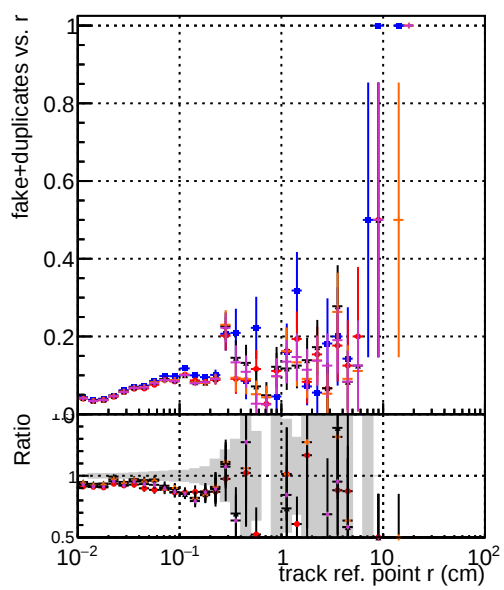
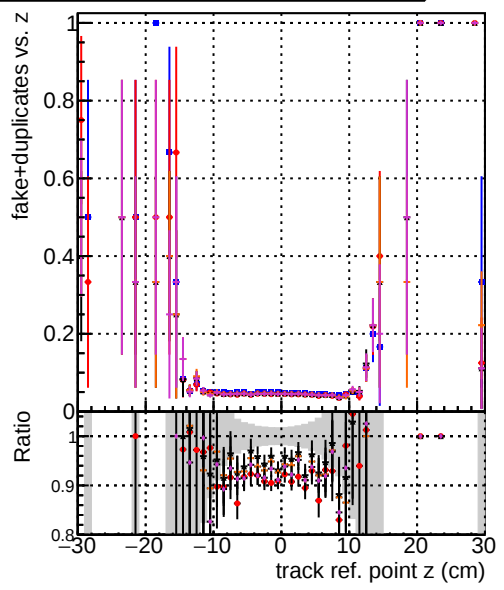
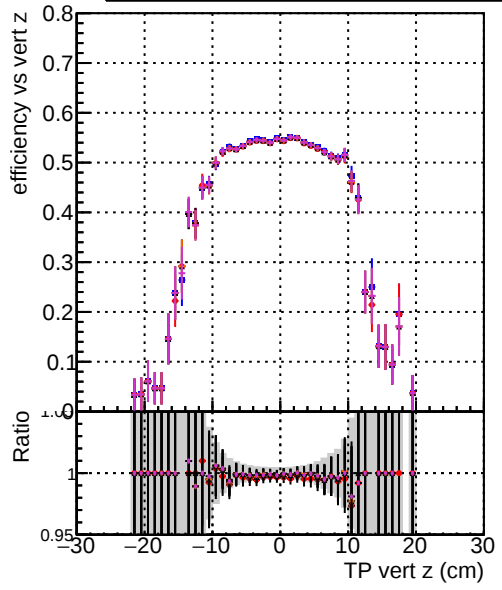
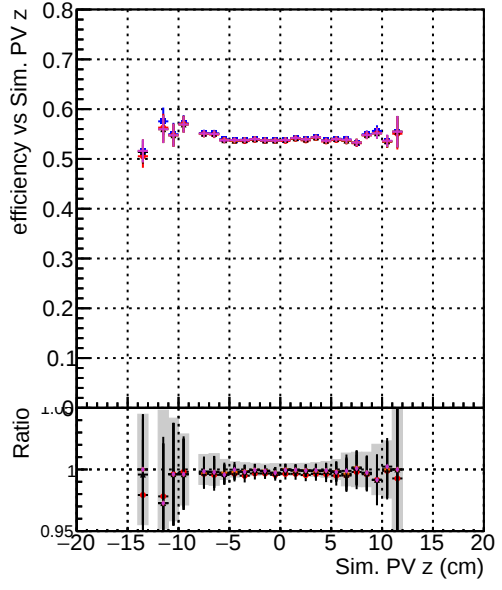


**Efficiency vs vertpos****fake+duplicates vs vert r**

— DQM original step2 ttbar-phase1-newgeom  
 — pixelCPETemplate step2 ttbar-phase1-newgeom  
 — DQM pixelCPETemplateCutChiSquareNew step2 ttbar-phase1-newgeom  
 — DQM pixelCPETemplateCutChiSquareNew2 step2 ttbar-phase1-newgeom  
 — DQM pixelCPETemplateCutChiSquareNew3 step2 ttbar-phase1-newgeom

**Efficiency vs vert z****Efficiency vs. sim PV z****fake+duplicates vs Sim. PV z**