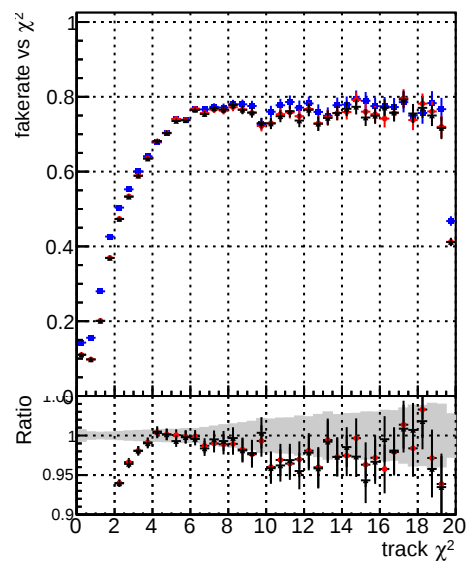
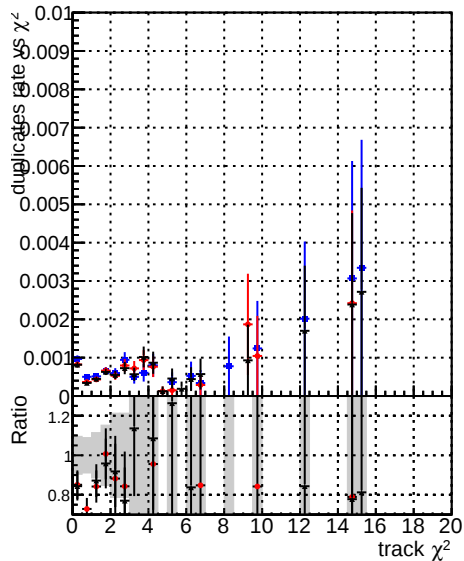


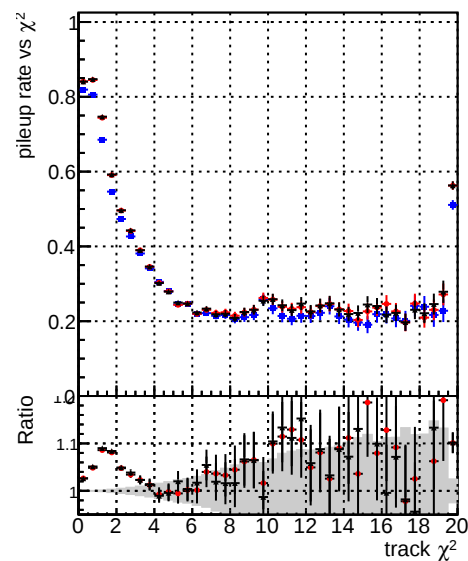
**Fake rate vs normalized  $\chi^2$**



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



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



**Fake rate vs.**  
DOM original step2 tbar-phase1 newgeom  
DOM pixelCPE template cutchisquare new5 step2 tbar-phase1 newgeom

