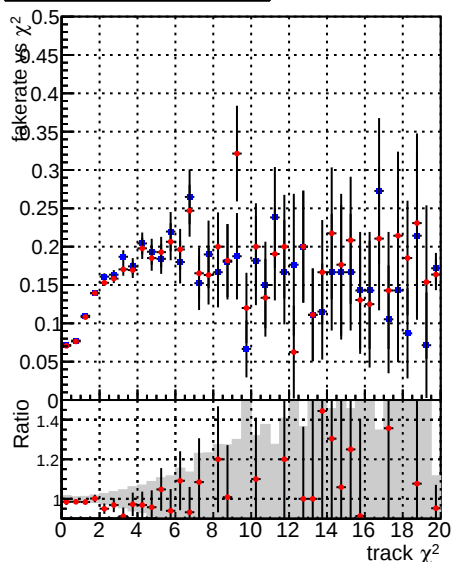
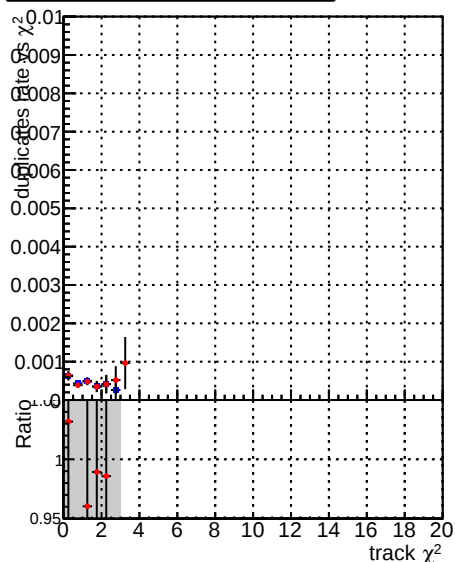


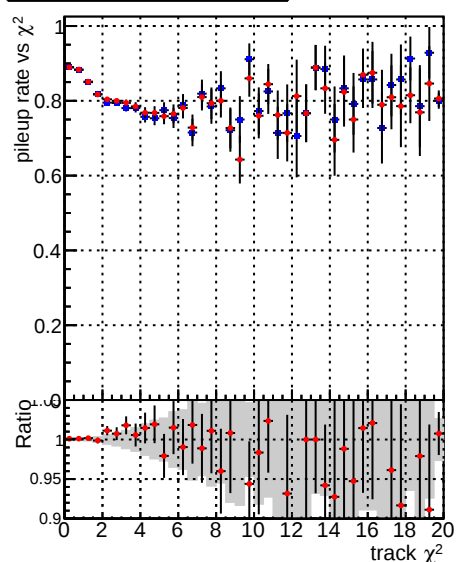
**Fake rate vs normalized  $\chi^2$**



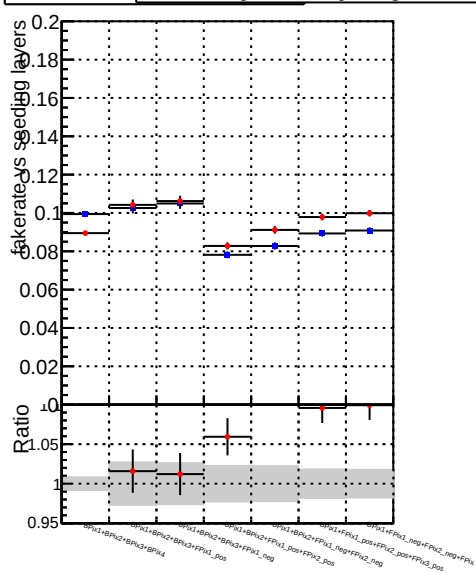
**Duplicates Rate vs normalized  $\chi^2$**



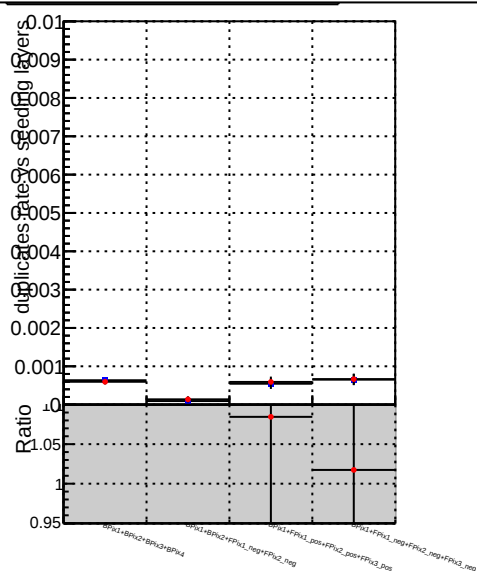
**Pileup rate vs normalized  $\chi^2$**



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



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



**Pileup rate vs seeding layers**

