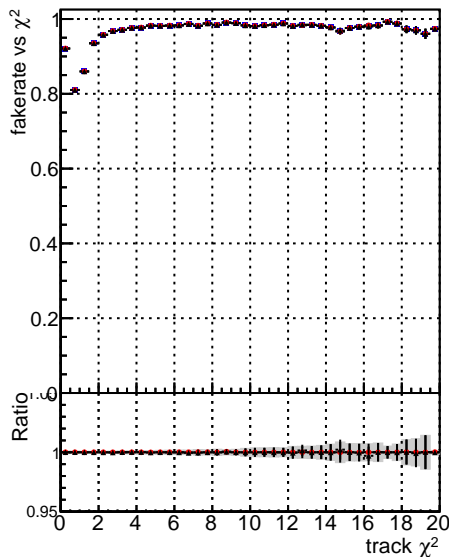
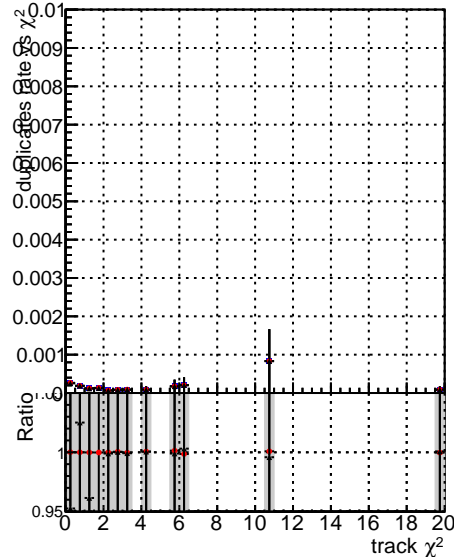


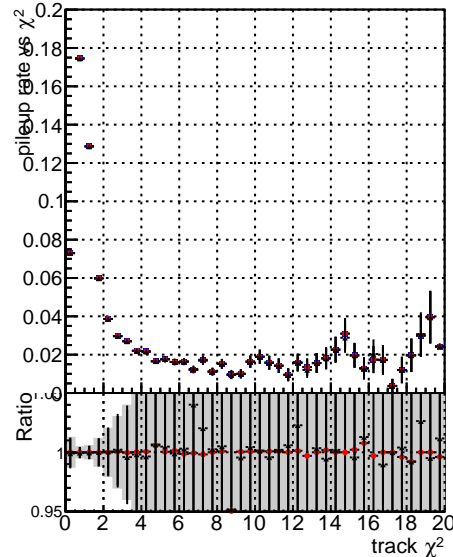
**Fake rate vs normalized  $\chi^2$**



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

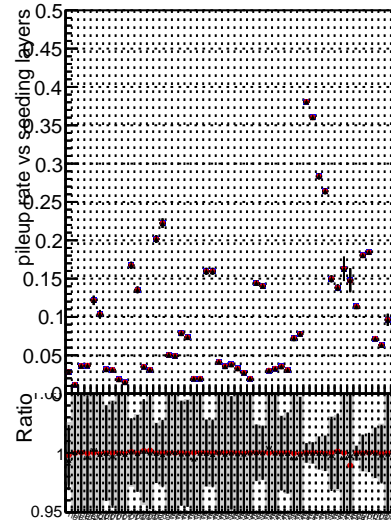
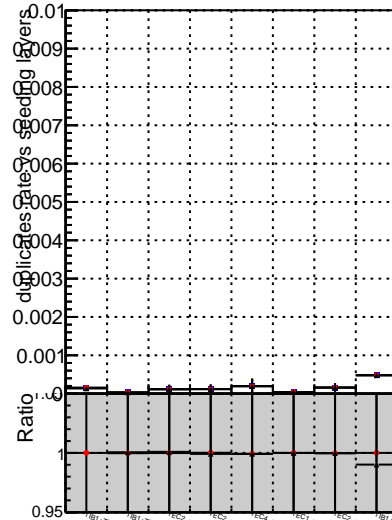
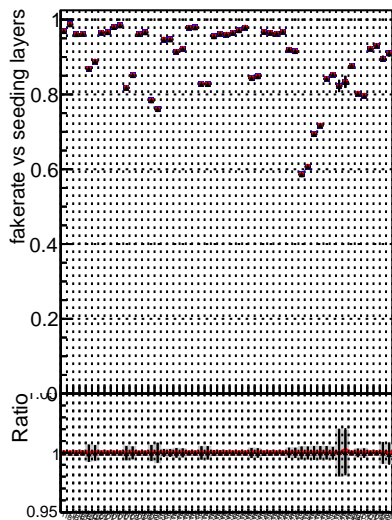


**Pileup rate vs normalized  $\chi^2$**



**Fake rate vs.**

- BQM ttbarPU mkFit\_5iter
- BQM ttbarPU mkFit\_5iter updatedPR111\_update
- BQM ttbarPU mkFit\_5iter updatedPR111\_update fixPropagation



BQM+TEC3\_100  
 BQM+TEC3\_100+TEC4\_100  
 BQM+TEC3\_100+TEC4\_100+TEC5\_100  
 BQM+TEC3\_100+TEC4\_100+TEC5\_100+TEC6\_100  
 BQM+TEC3\_100+TEC4\_100+TEC5\_100+TEC6\_100+TEC7\_100  
 BQM+TEC3\_100+TEC4\_100+TEC5\_100+TEC6\_100+TEC7\_100+TEC8\_100  
 BQM+TEC3\_100+TEC4\_100+TEC5\_100+TEC6\_100+TEC7\_100+TEC8\_100+TEC9\_100  
 BQM+TEC3\_100+TEC4\_100+TEC5\_100+TEC6\_100+TEC7\_100+TEC8\_100+TEC9\_100+TEC10\_100