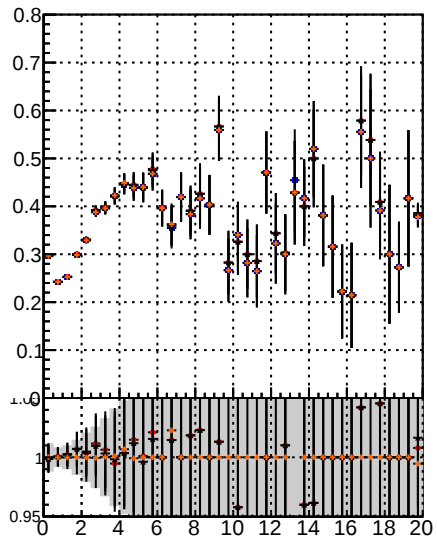
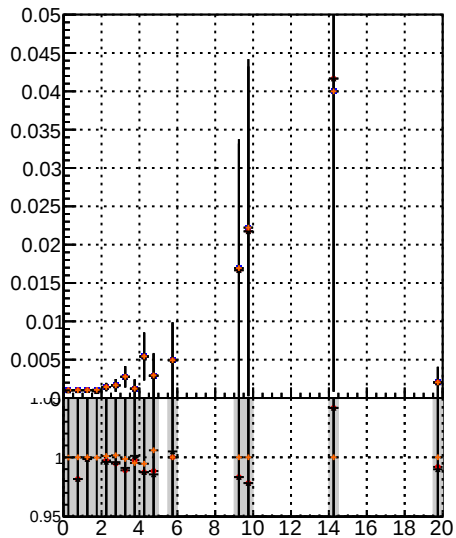


Fake rate vs normalized χ^2 Duplicates Rate vs normalized χ^2 Pileup rate vs normalized χ^2 

Fake rate vs.
 BQM MS det18 det19 det20
 BQM MS det18 det19 det20

