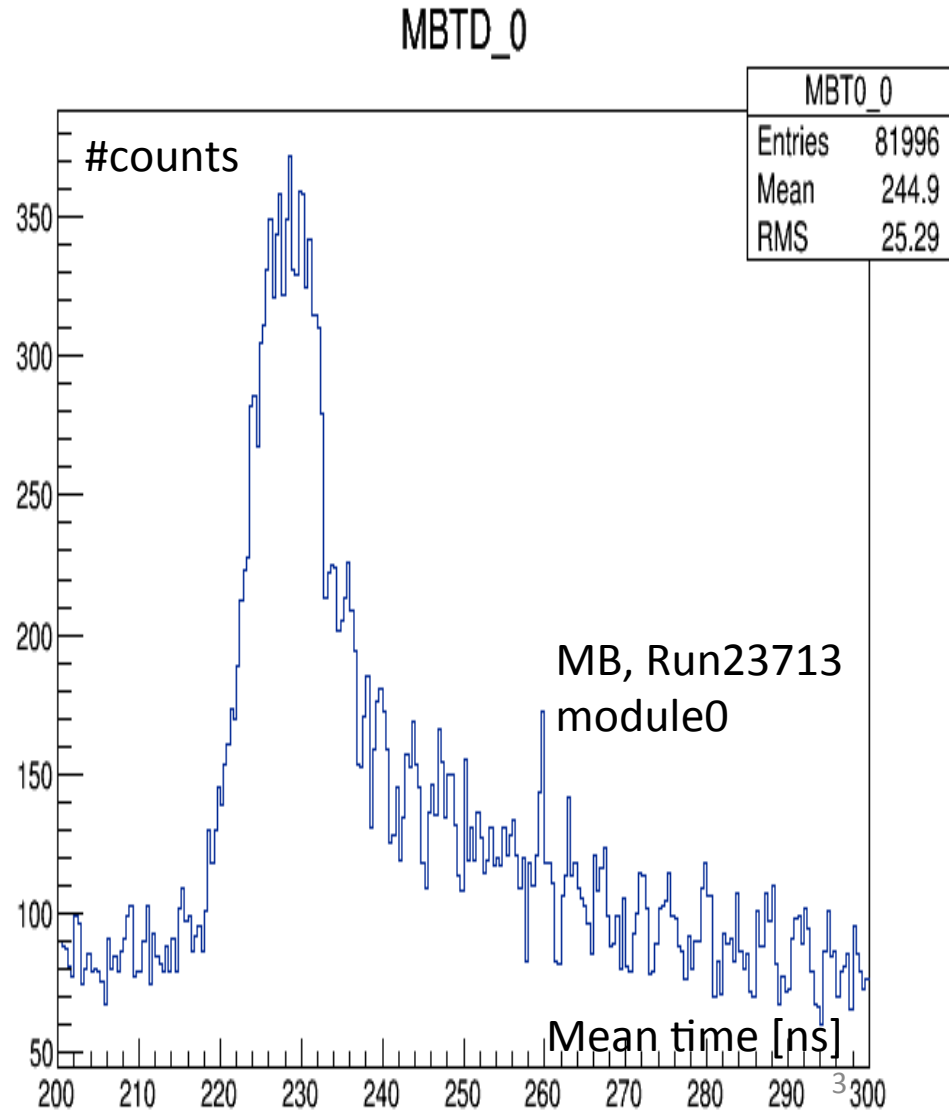
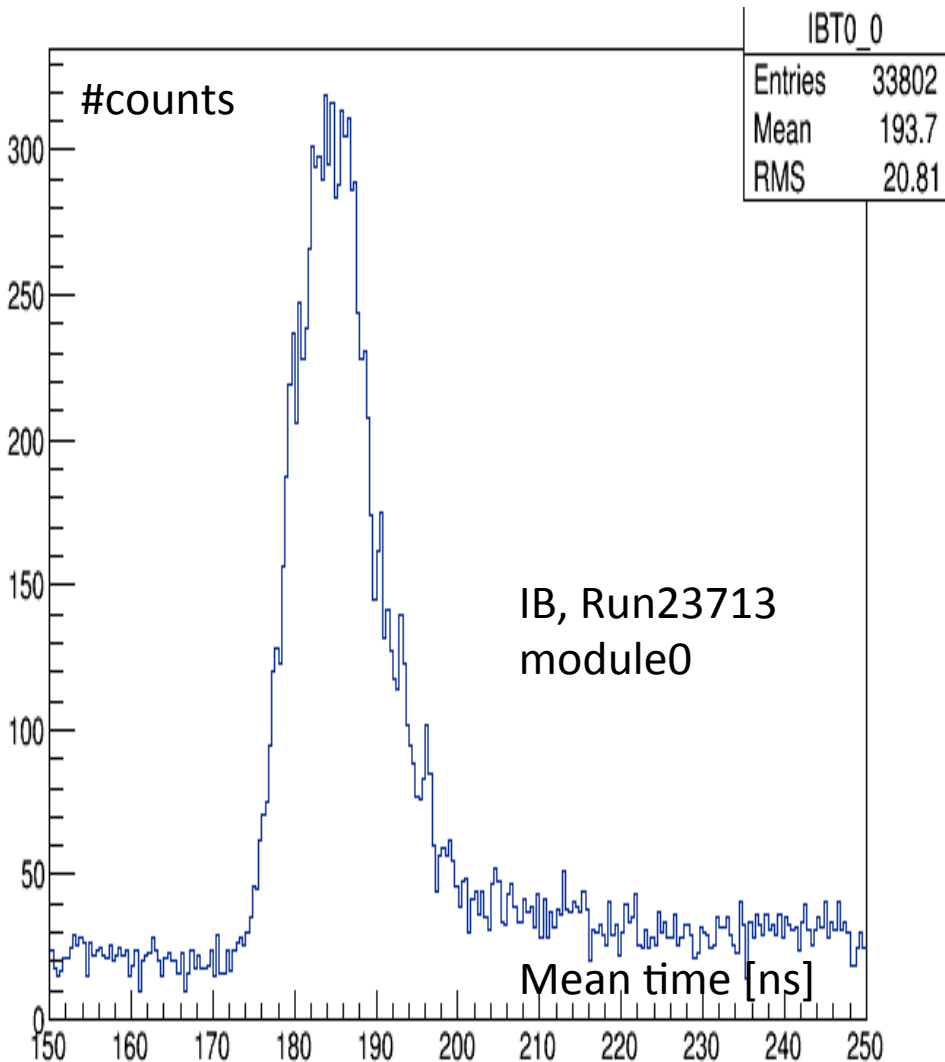


Report 160913

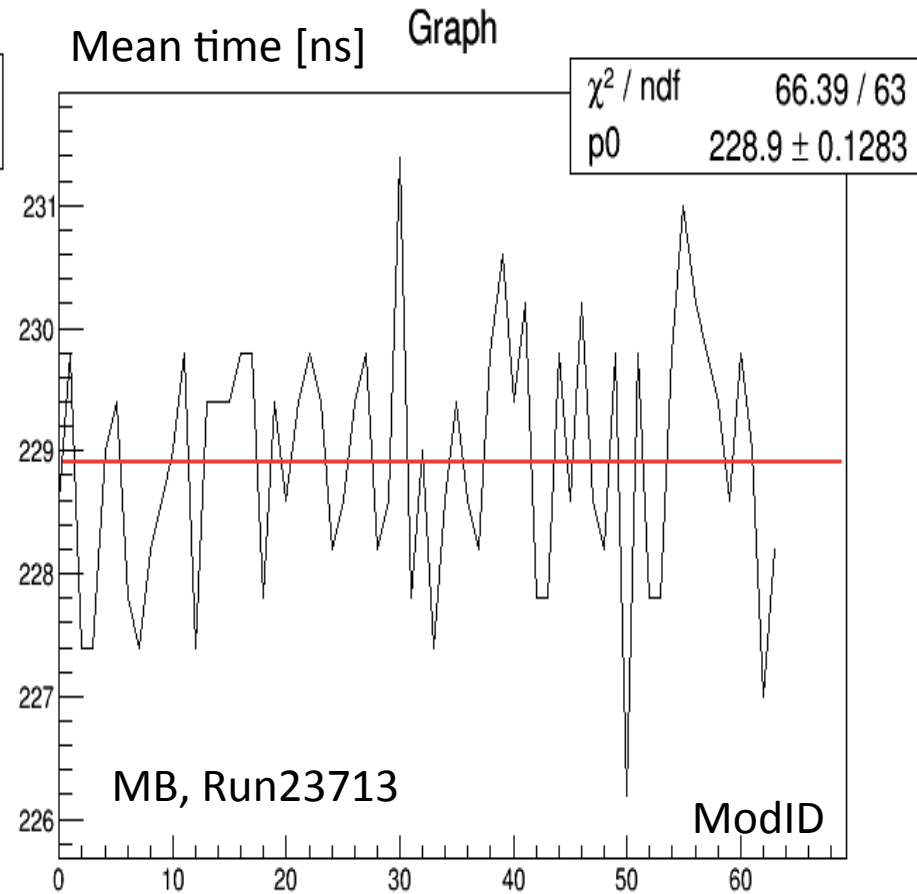
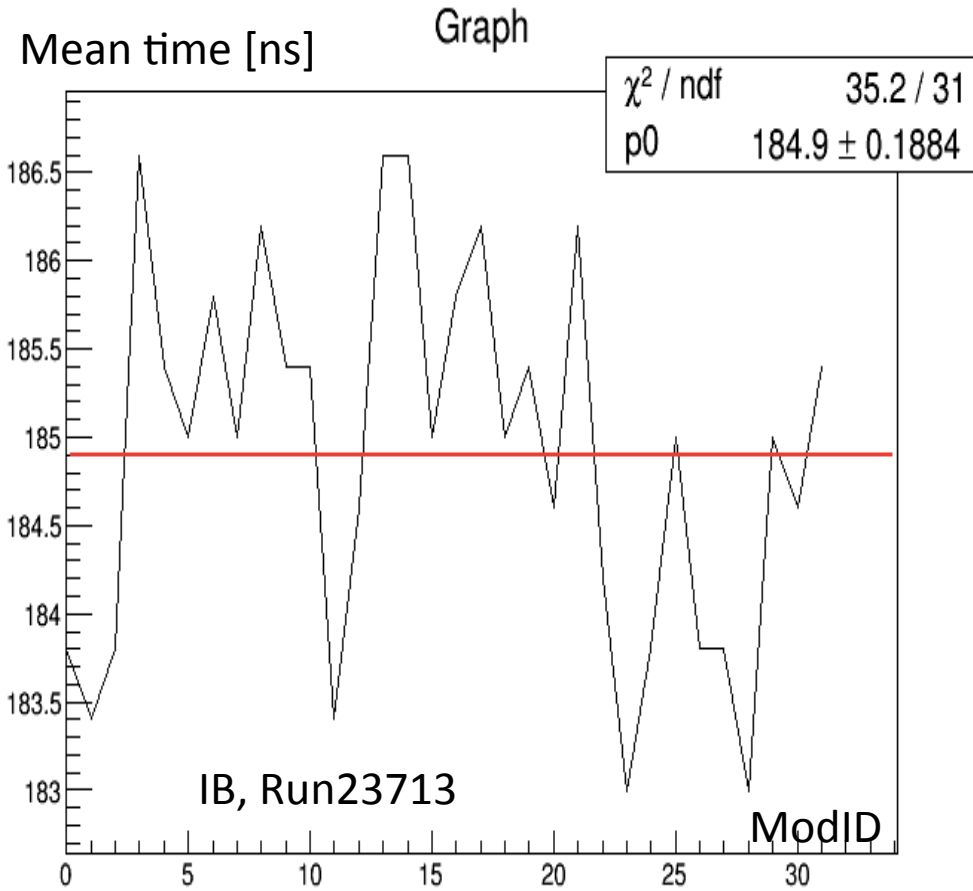
Check list

- Parameter
 - Mean time = $(\text{TimeUp} + \text{TimeDown}) / 2$
 - Module by module (1)
 - Get mean value
 - Run by run (2)
- Data
 - Select SpillOn && Normalization trigger

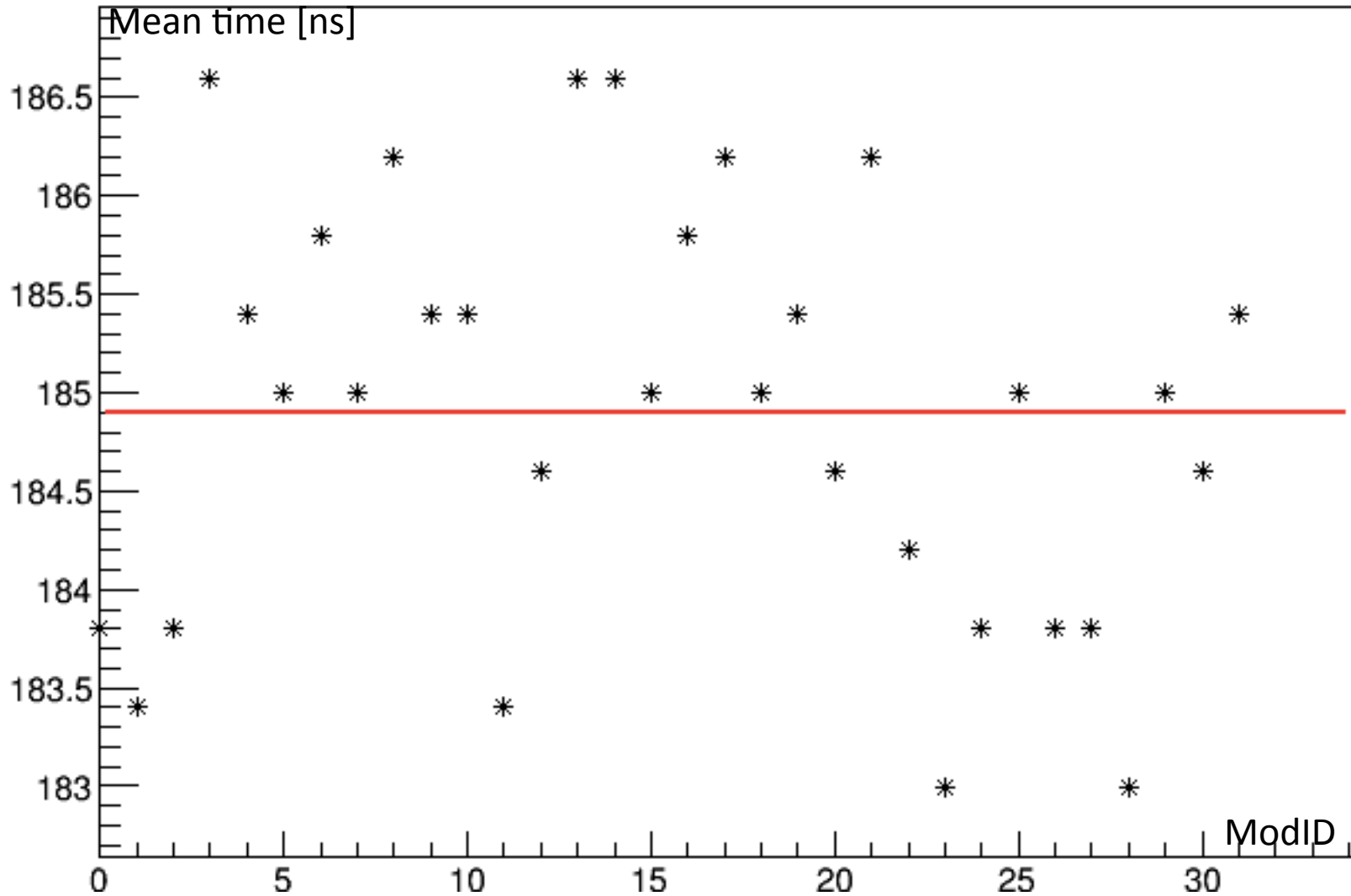
Mean time distribution



Module by module



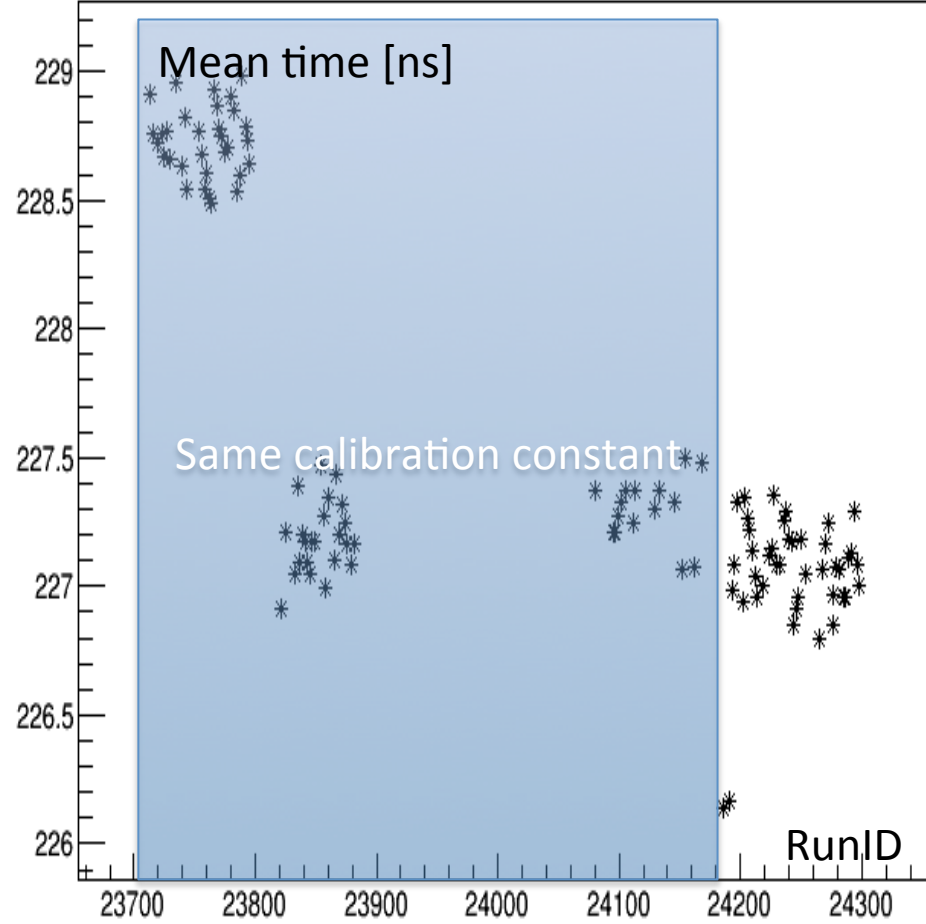
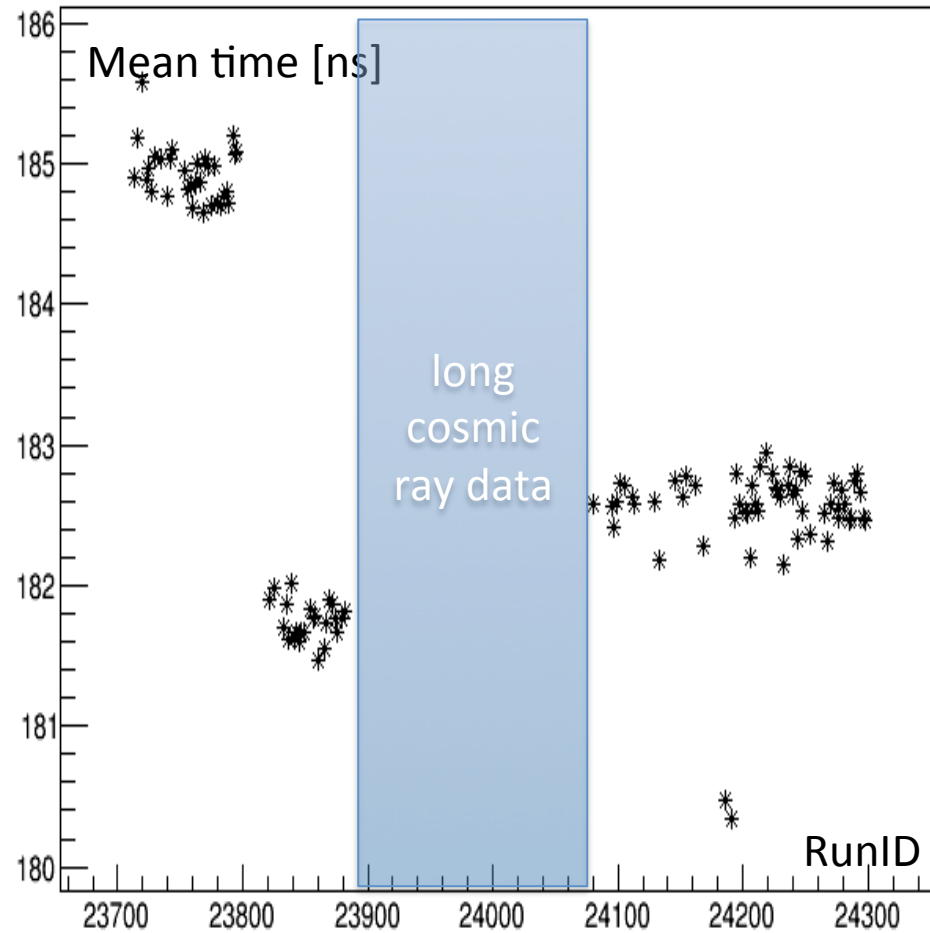
Run62 MB



Run by run

IB

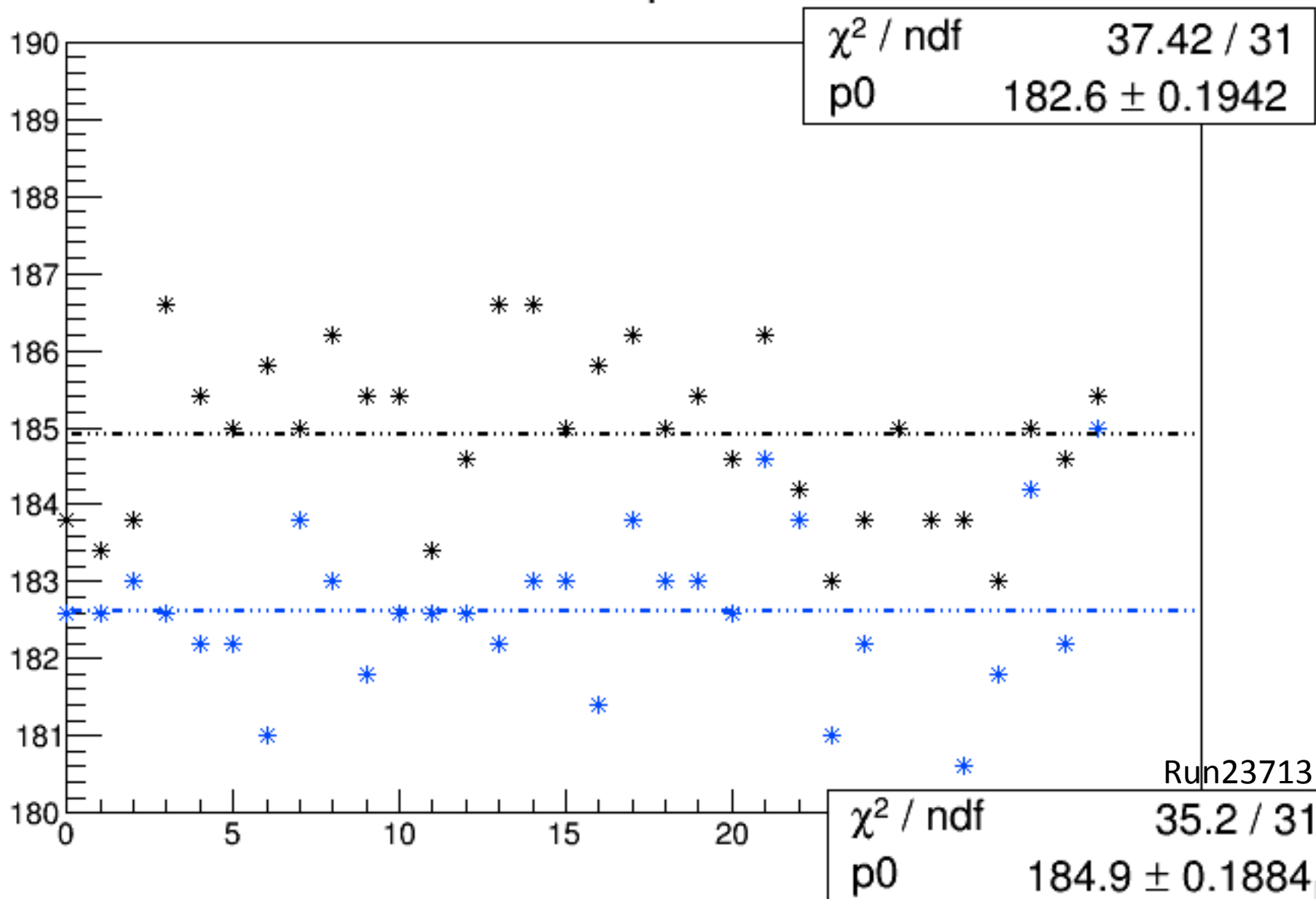
MB



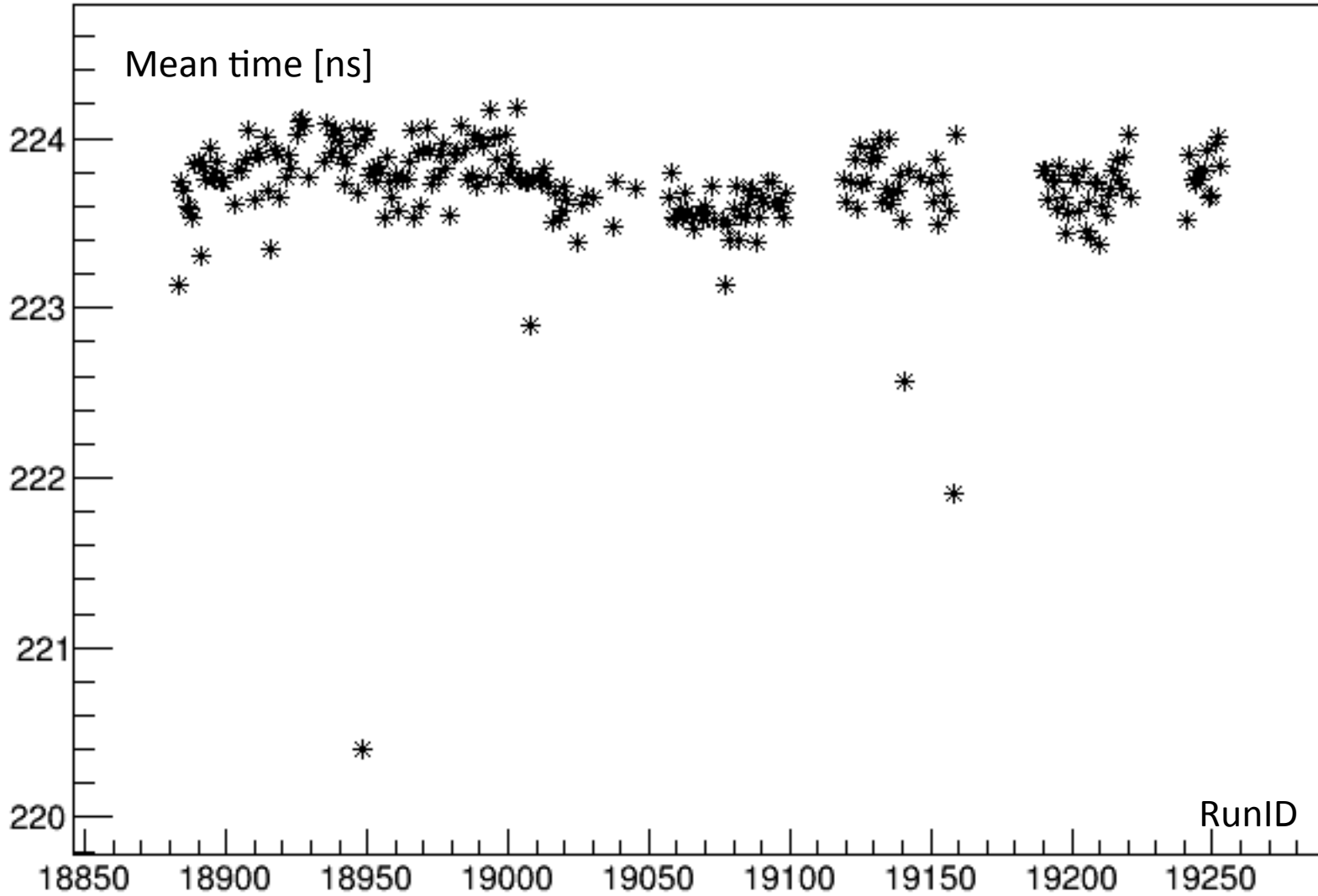
Y-axis : mean time from fitting result of page 4.
Systematic event between 23795 ~ 23821????

Run23713 vs Run24112

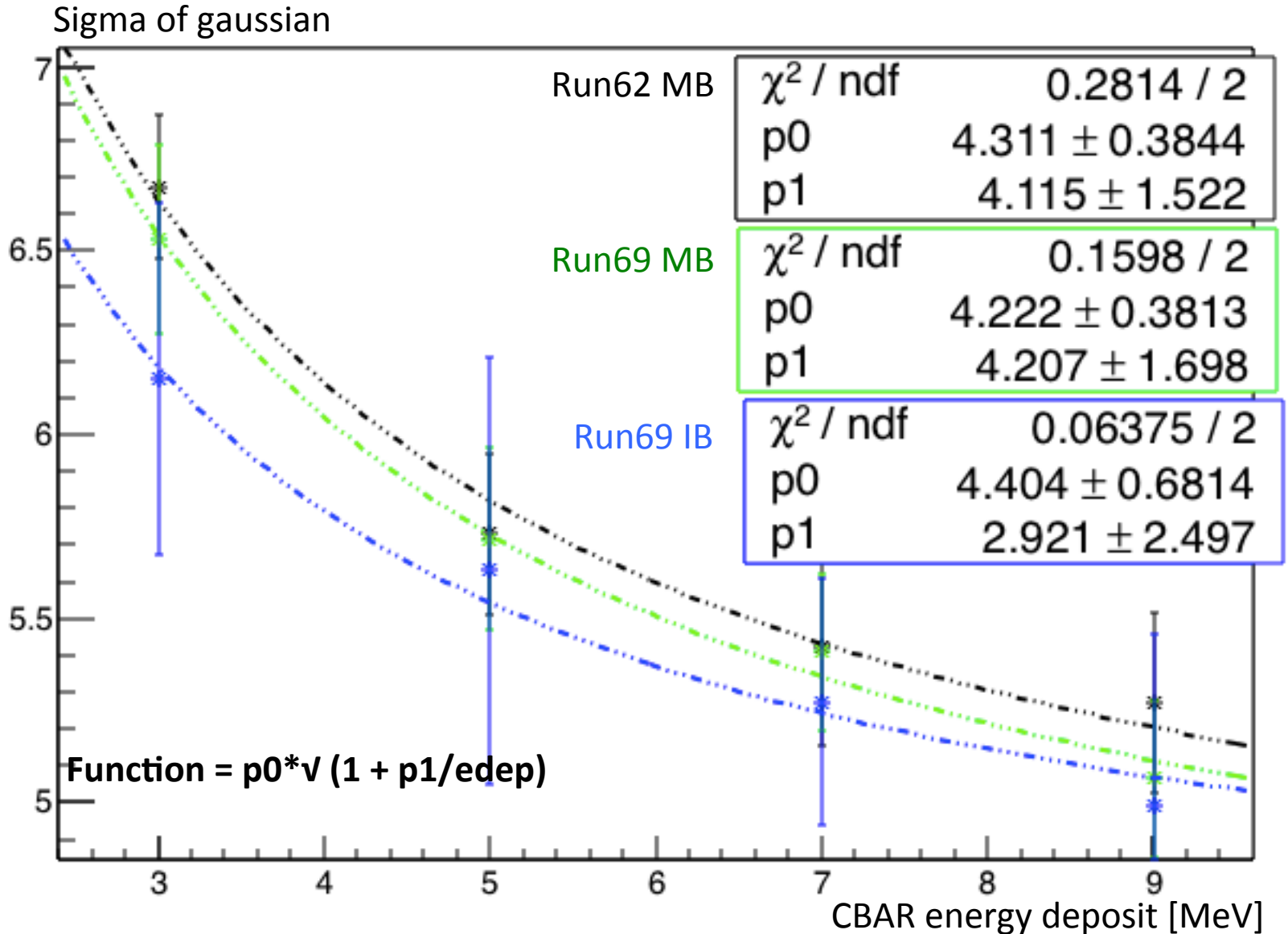
Graph



Run62 MB



Mass Resolution of IB & MB

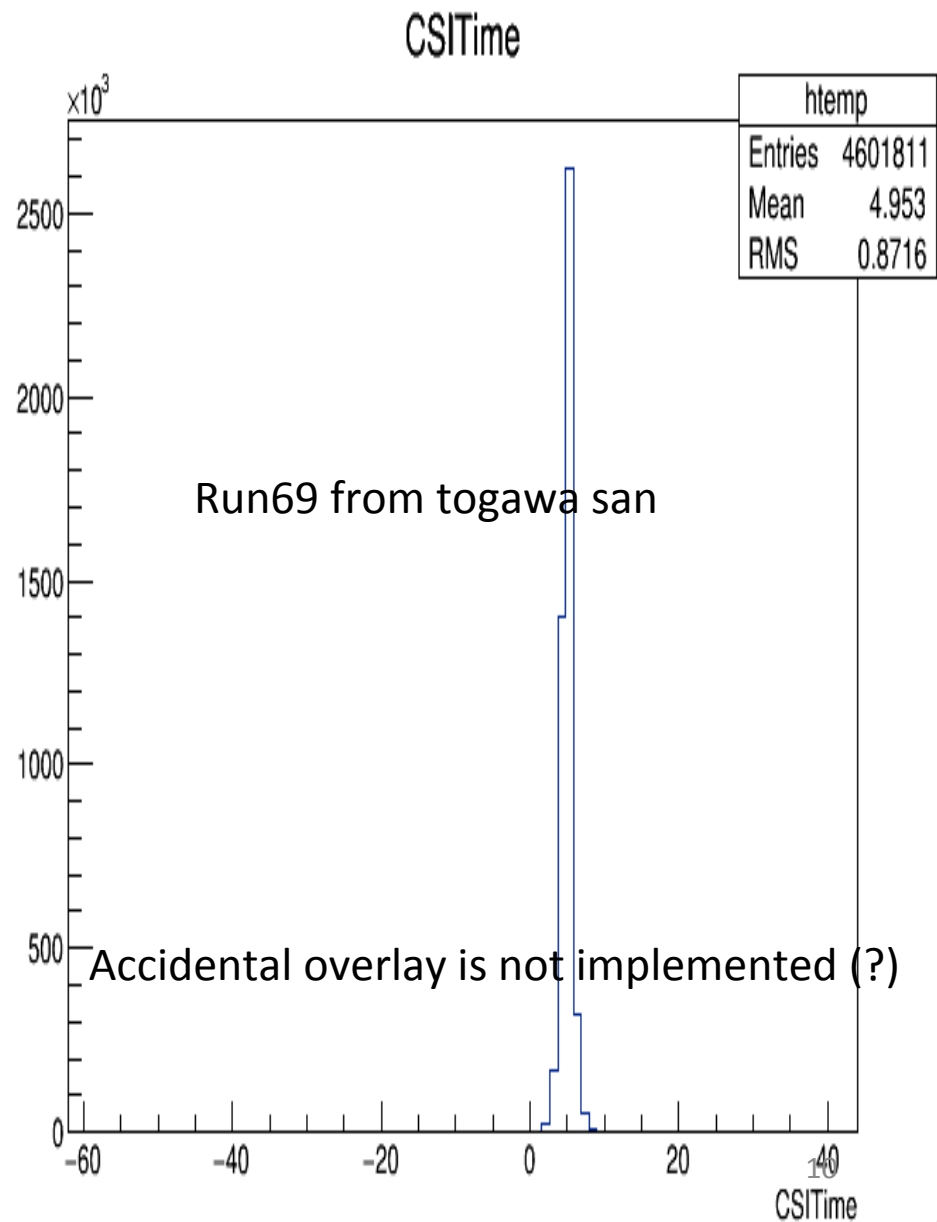
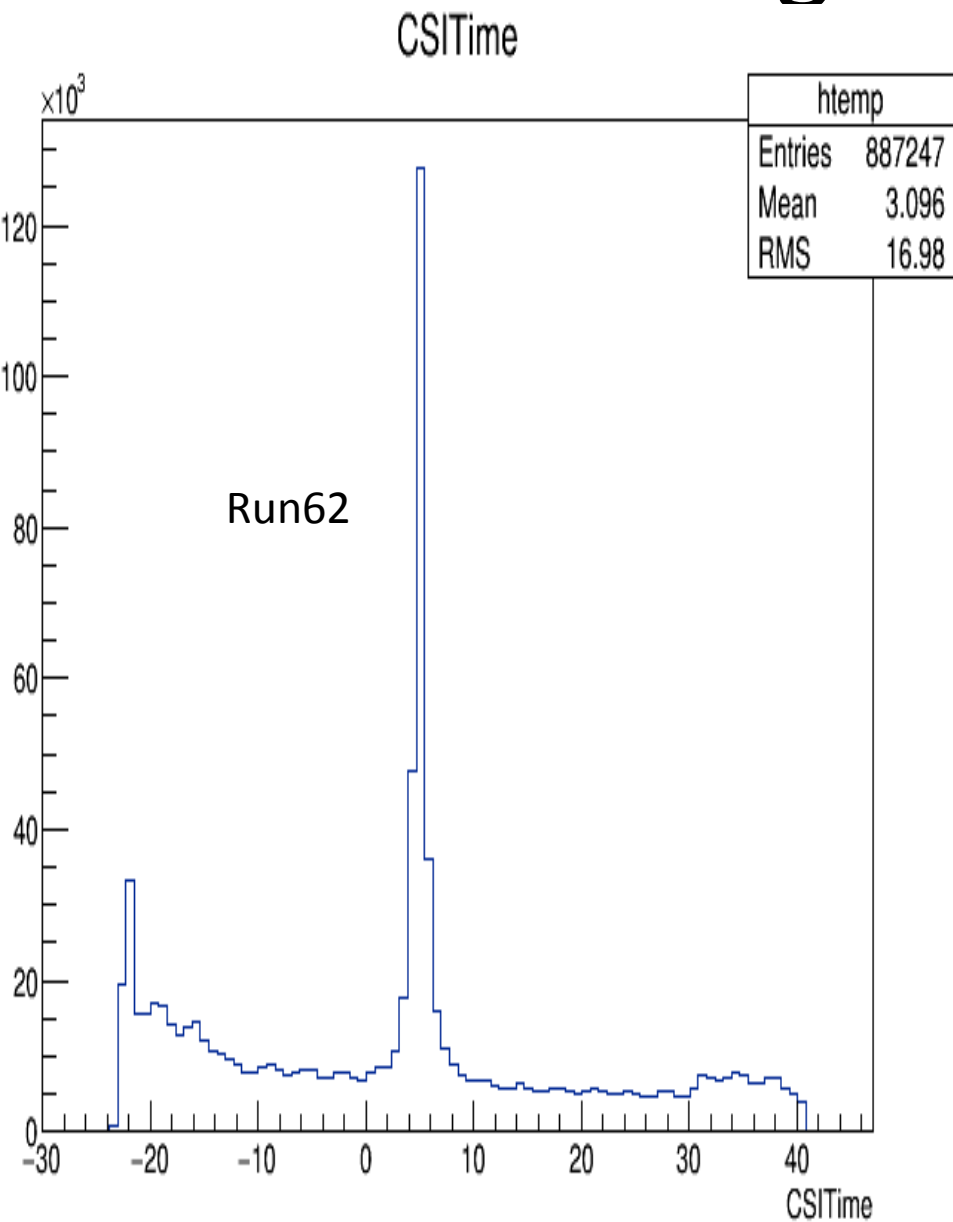


Large error on IB (low statistic)

Normalization trigger analysis?

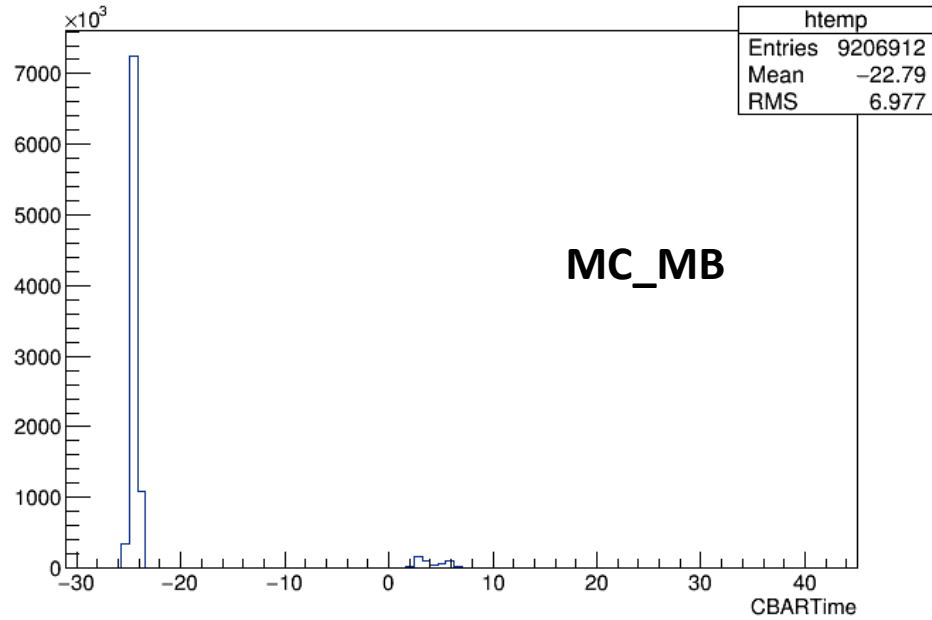
Timing distribution

KL3pi0 MC

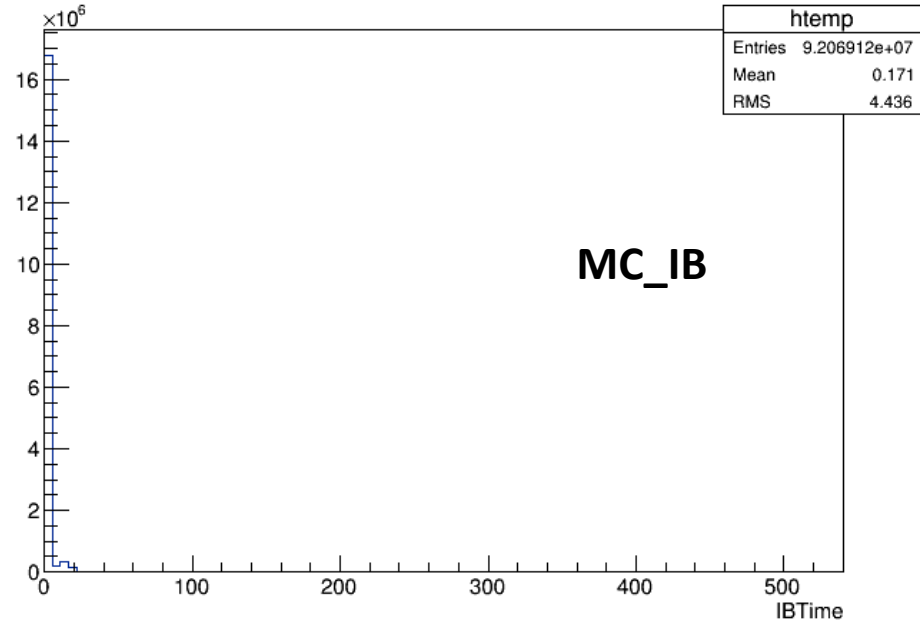


Timing Distribution (Barrel)

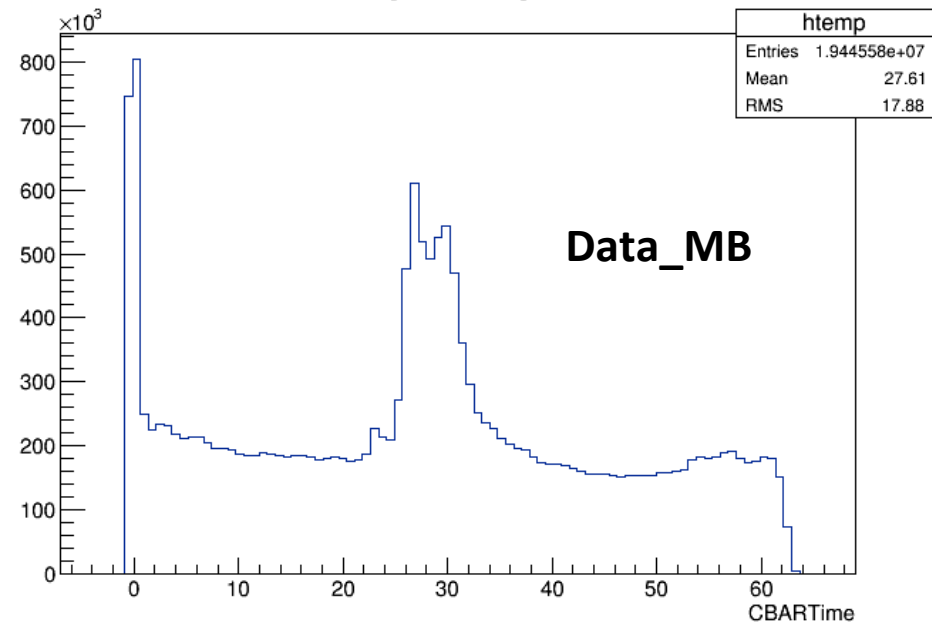
CBARTime



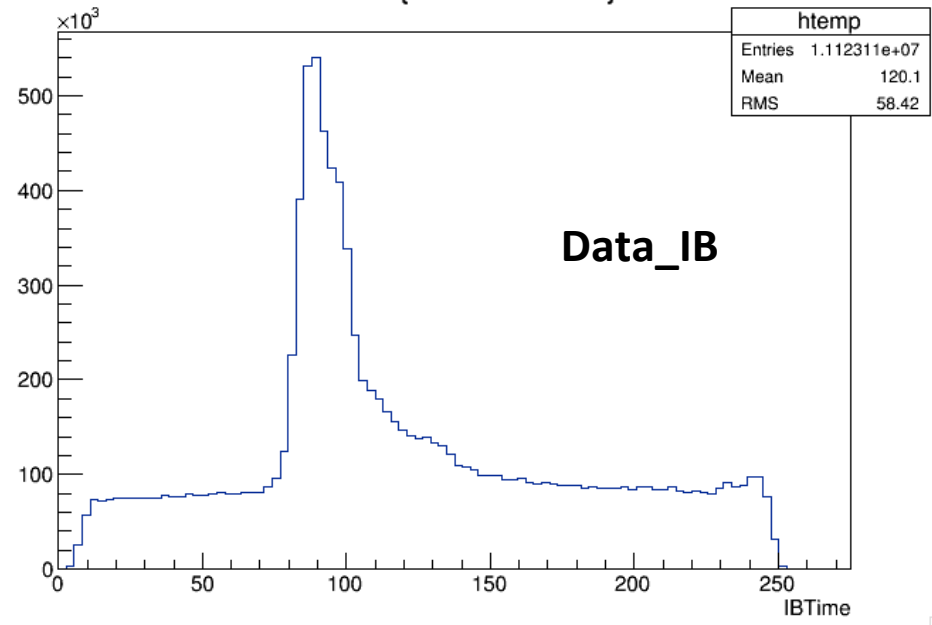
IBTime



CBARTime



IBTime {IBTime>-9000}

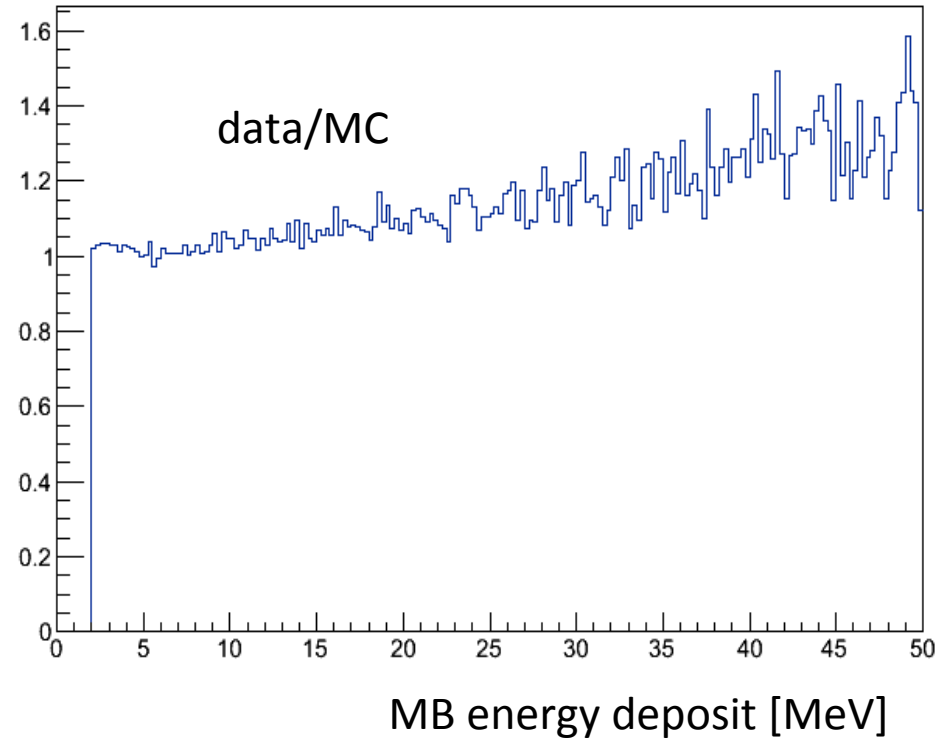
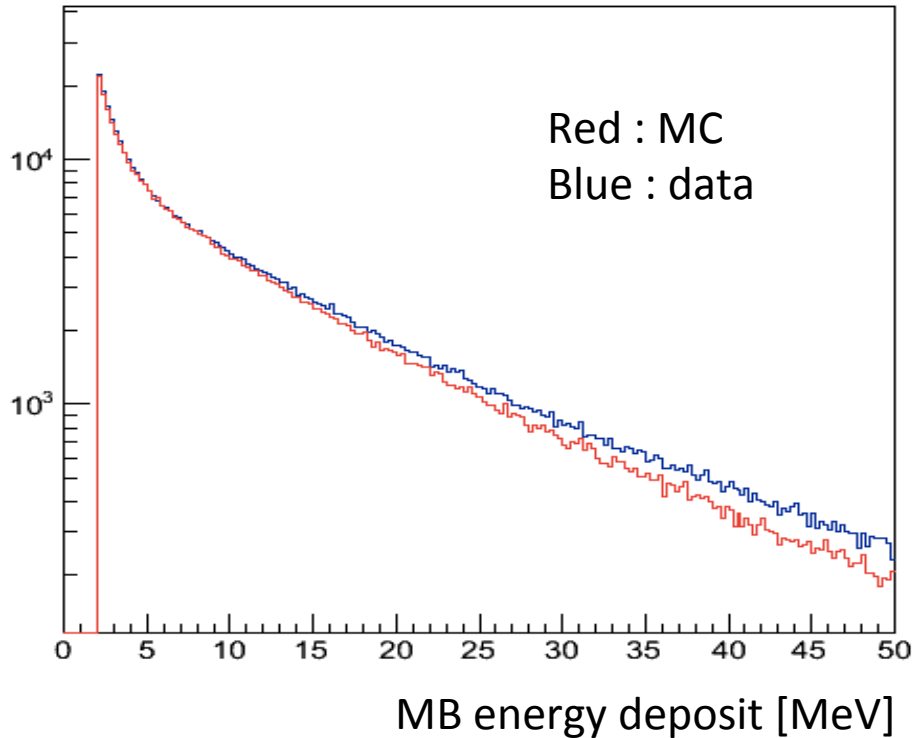


Energy deposit in Barrel

- We can decide signal in barrel as gamma using 5g+1g analysis.
- Check energy deposit of 1g between MC and data
- Energy calibration check (?)

MB energy deposit

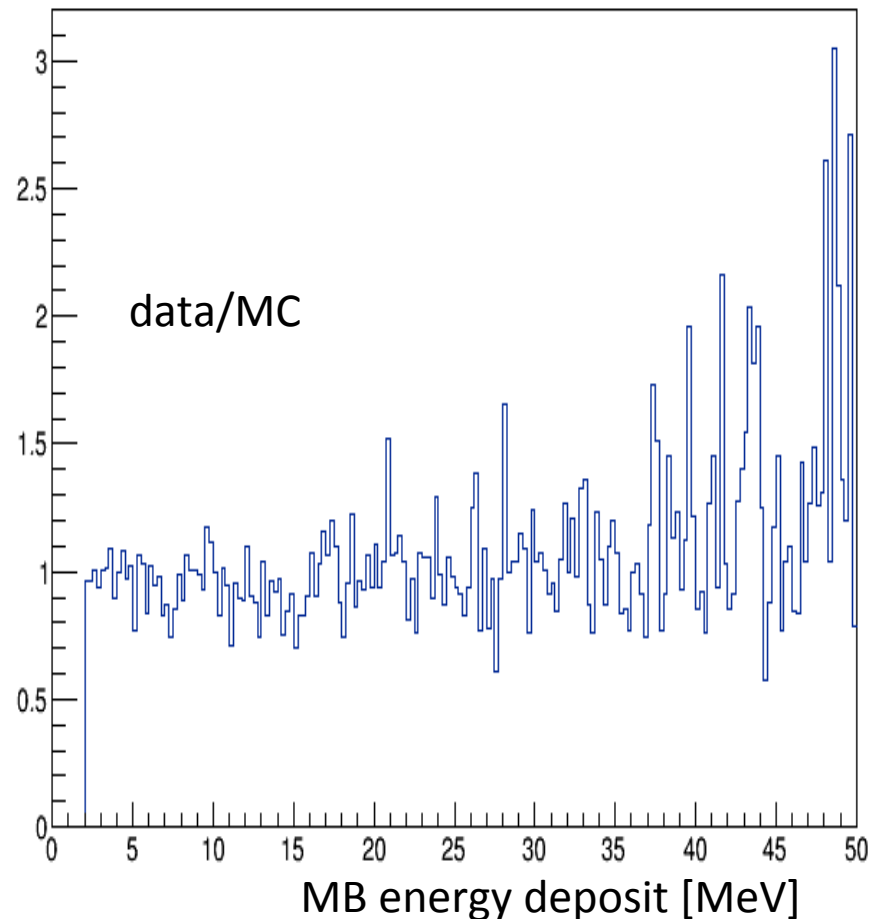
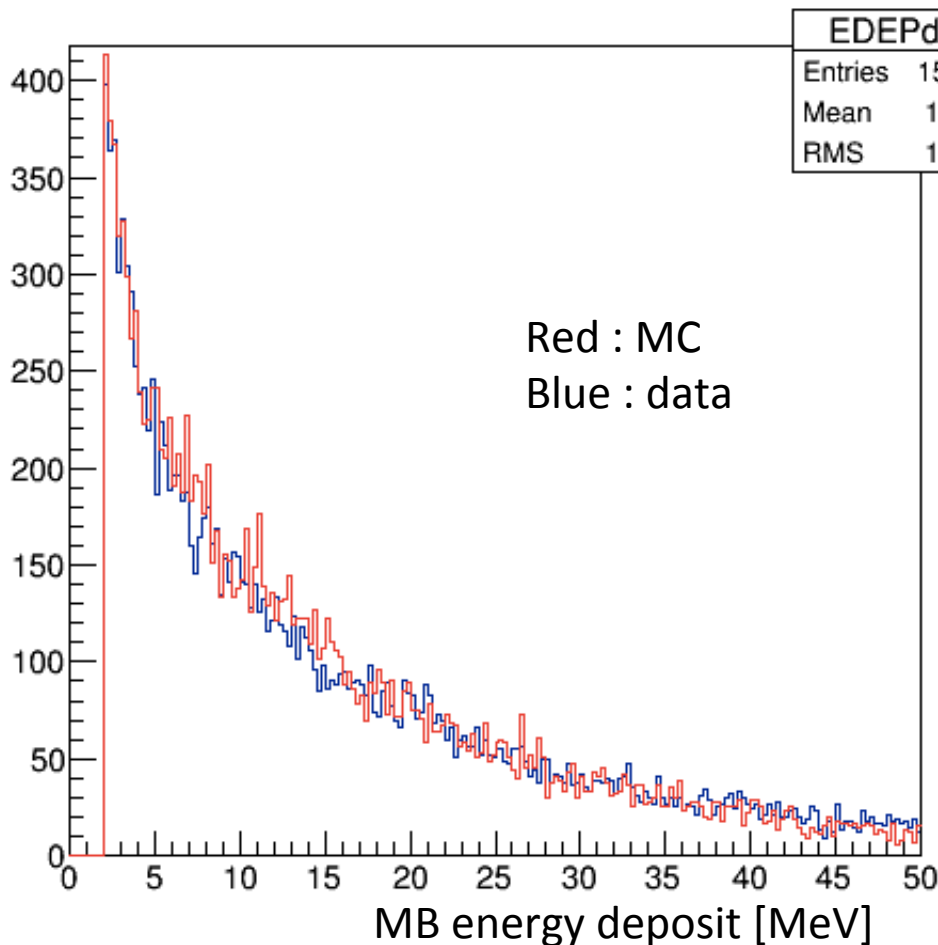
Run62, Min. Bias trigger
CSIET > 800MeV in offline
POT normalized



Condition :
Events which are well reconstructed

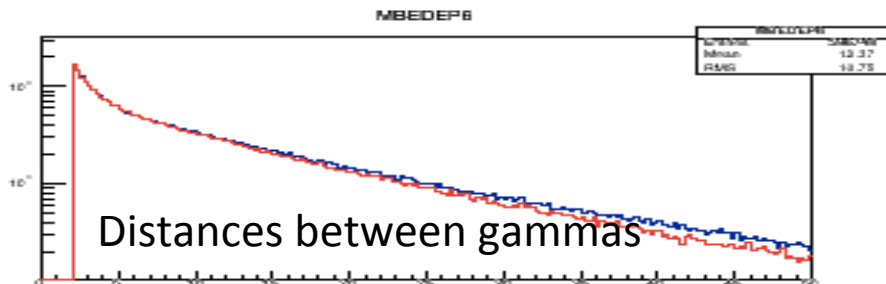
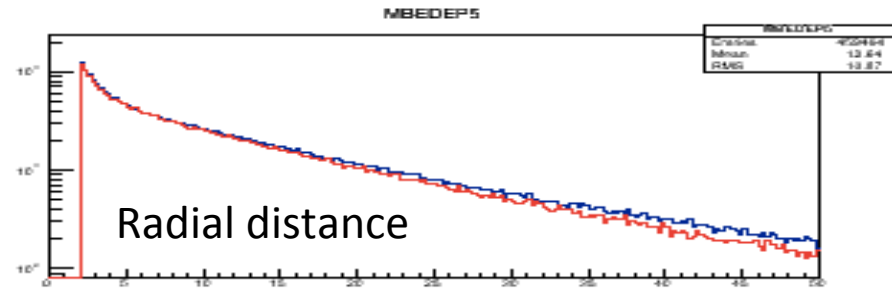
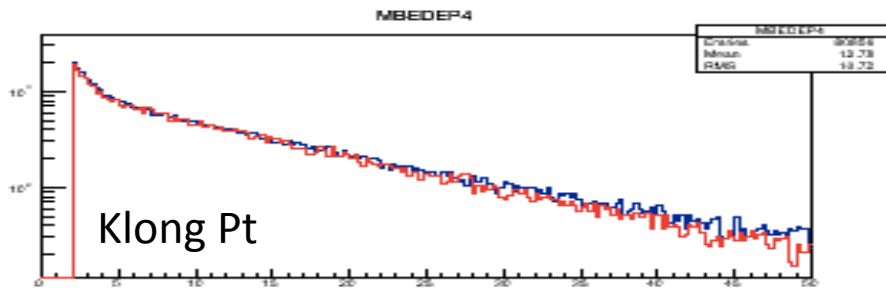
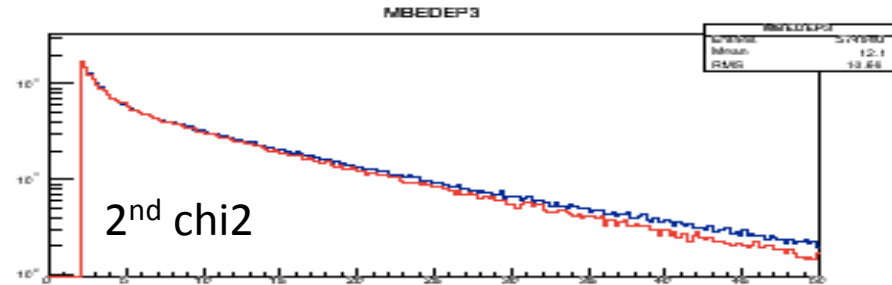
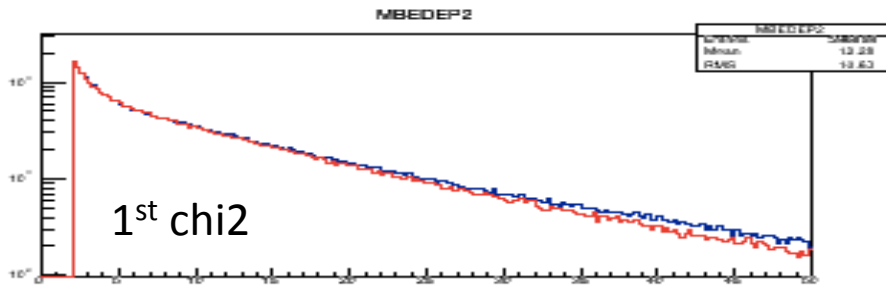
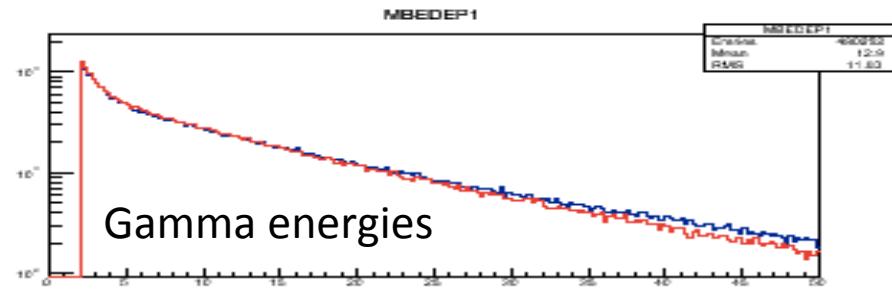
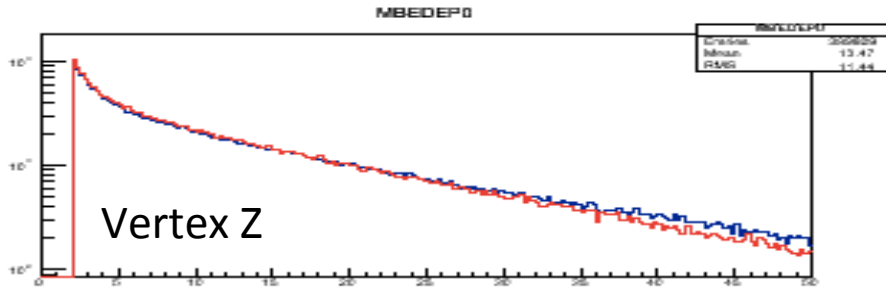
After cut bit

EDEPdat



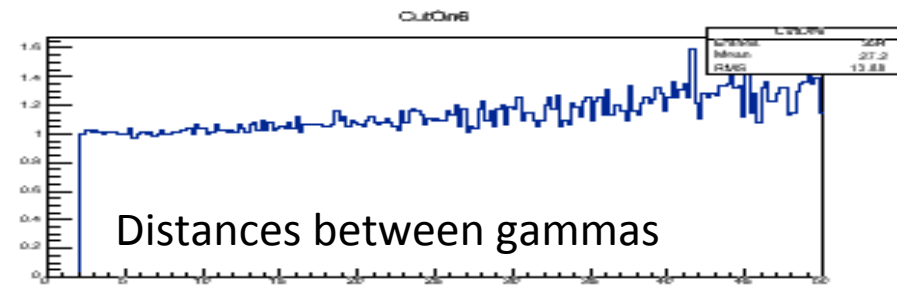
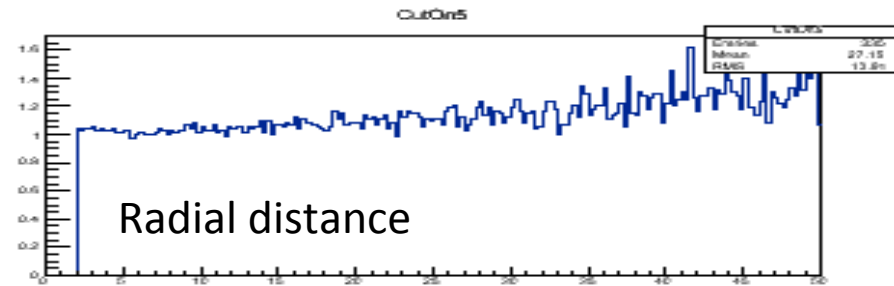
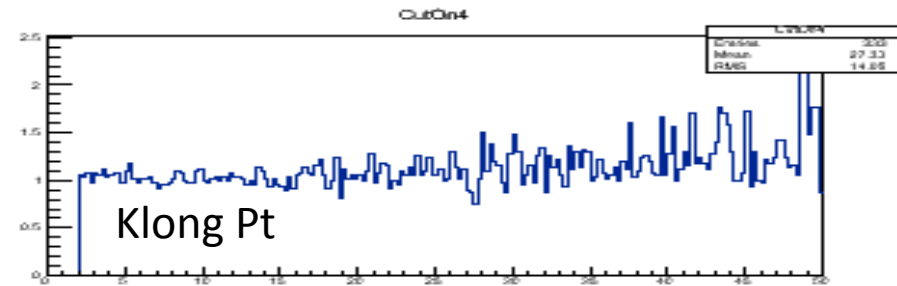
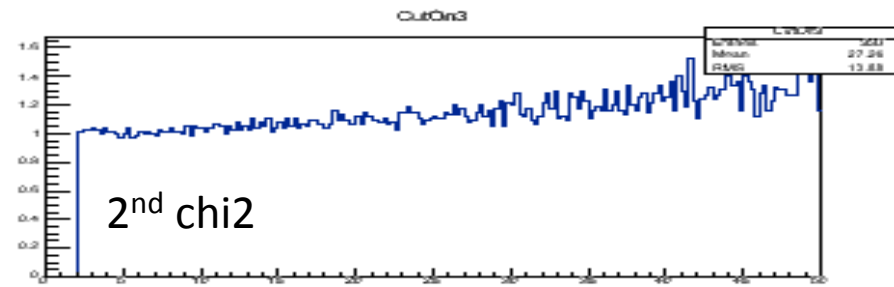
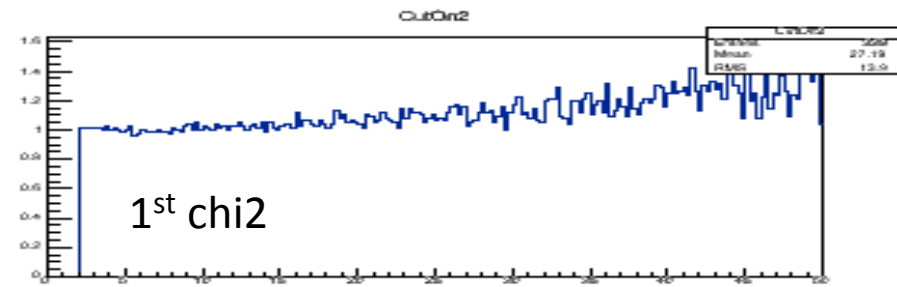
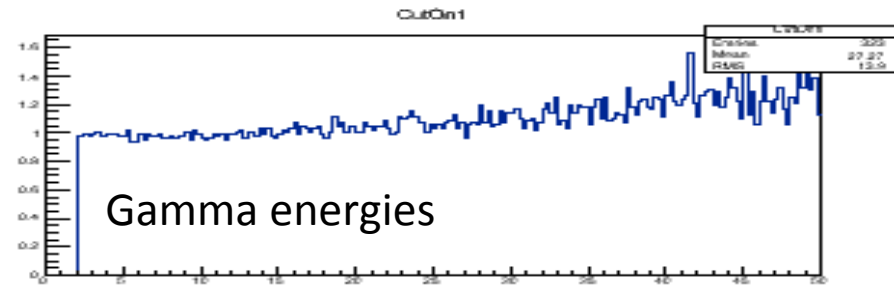
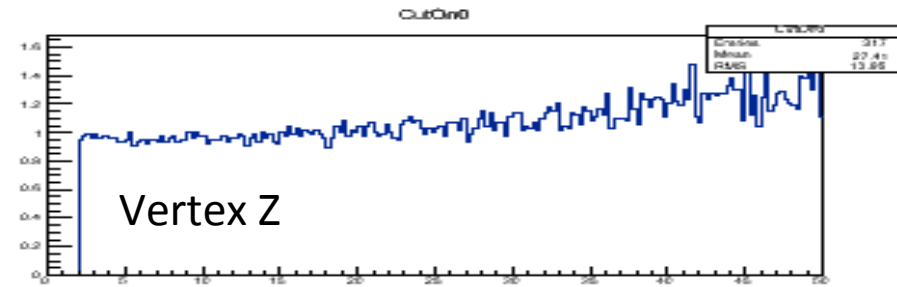
Condition :
Events which are well reconstructed
+ CutBit (apply kinematical cut)

Reductions for each cut



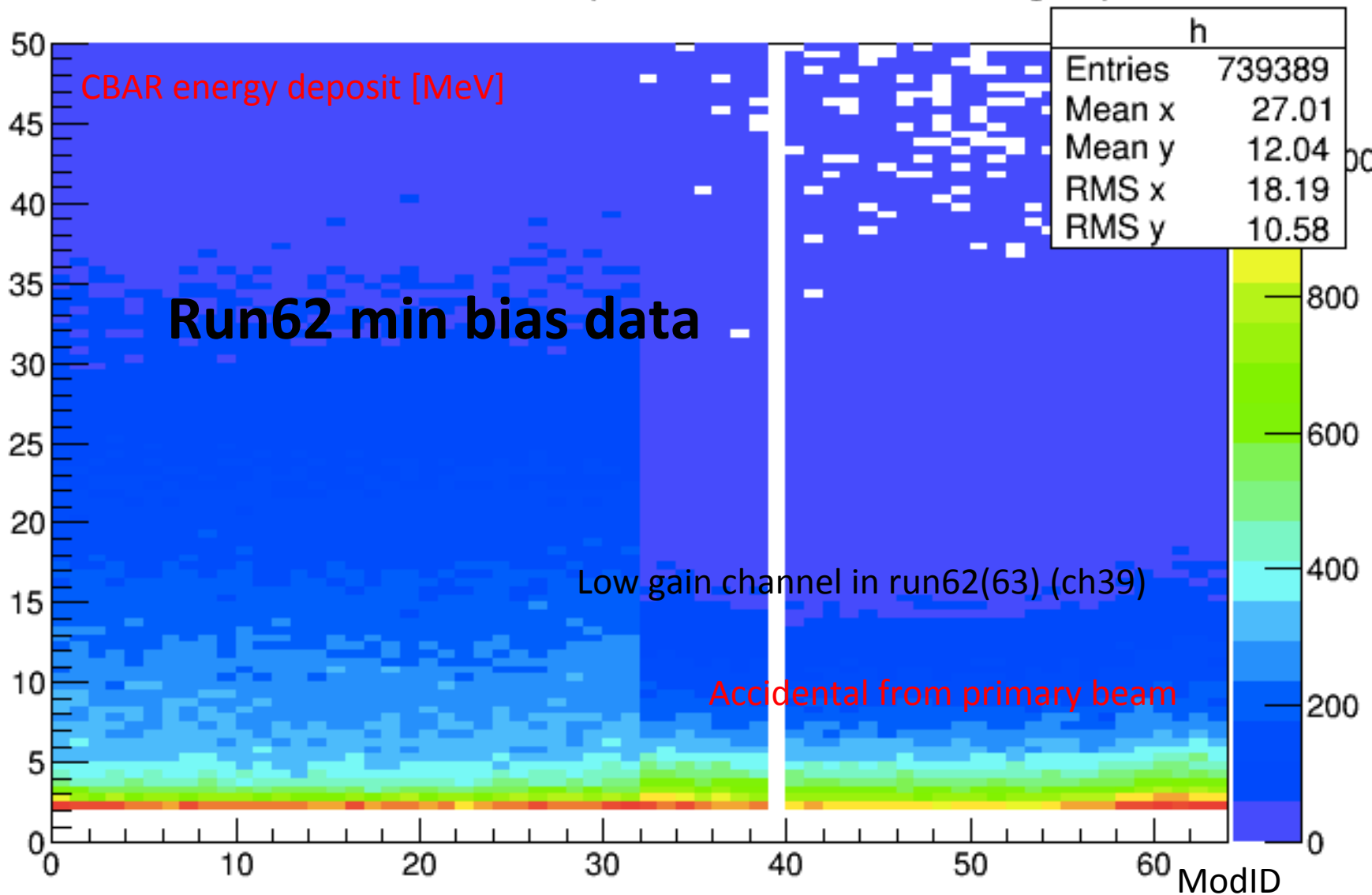
Plots
Blue : data, Red : MC

Reduction ratio for each cut



Plots : CBAR energy deposit ratio (data/MC)
With POT normalization

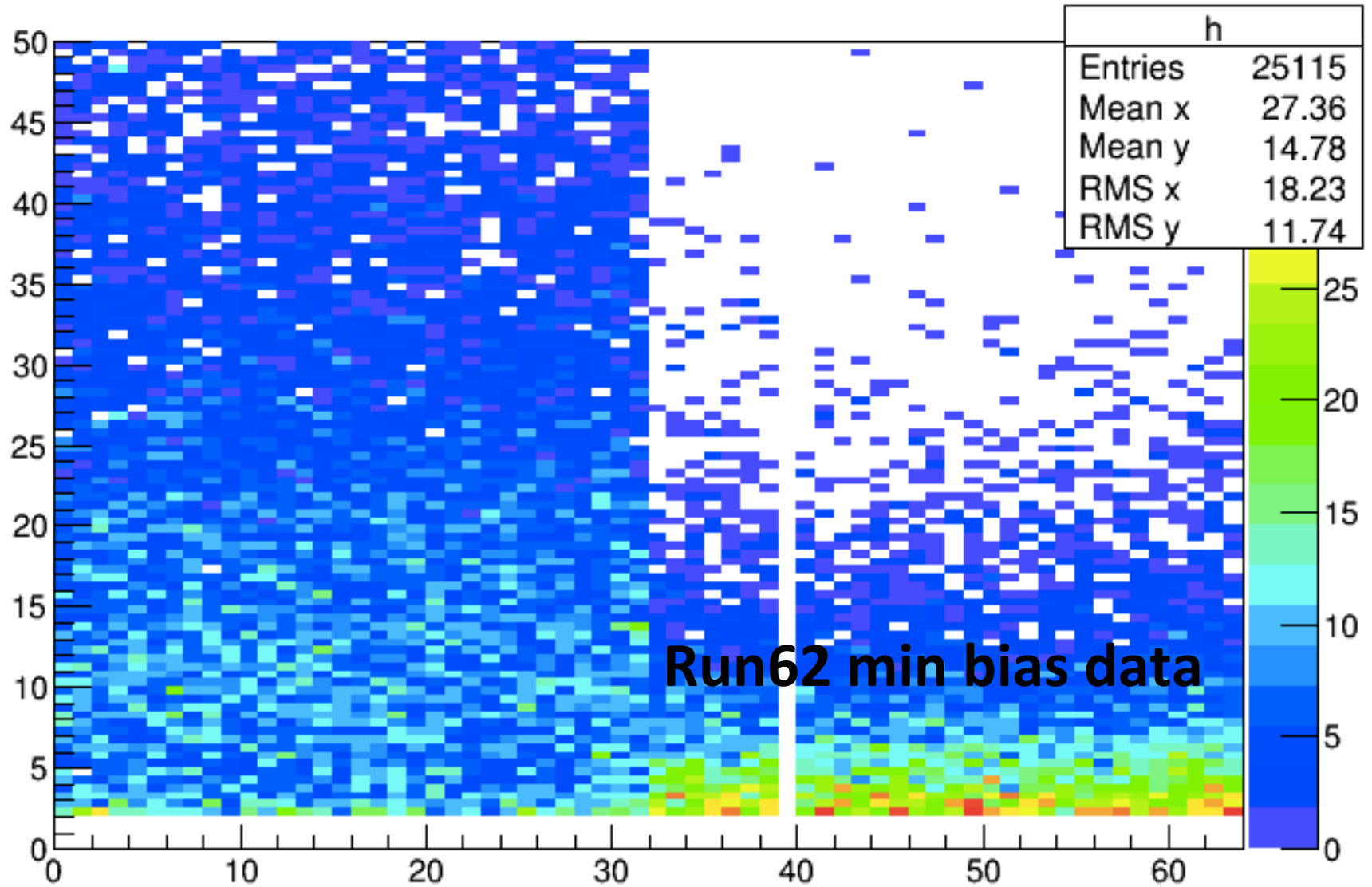
CBAREDEP:MBMod {KLmass>0&&MassTag>0}



Used accidental hit for 5g+1g analysis

After kinematical cut

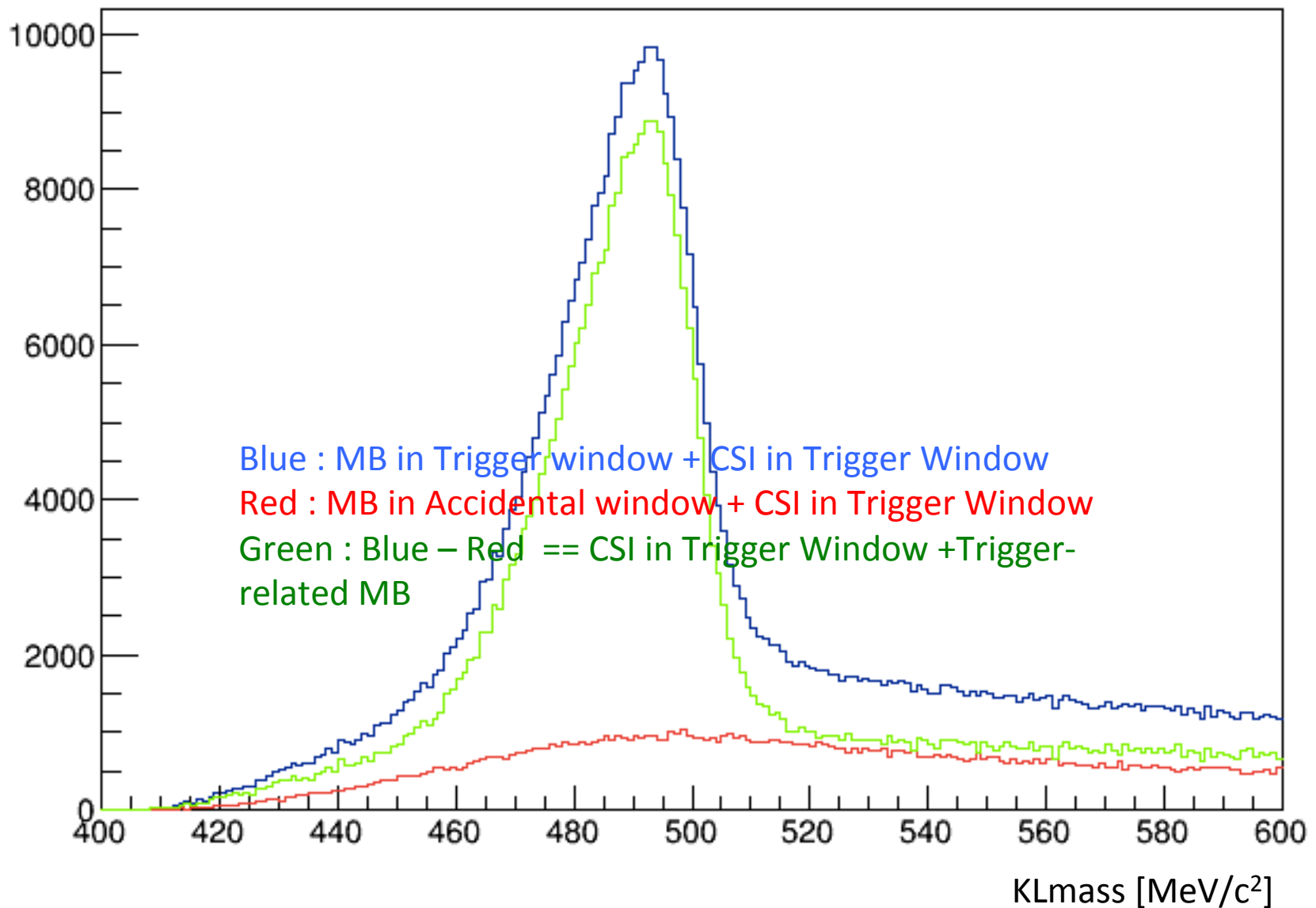
CBAREDEP:MBMod {KLmass>0&&MassTag>0&&CutBit==0}



Accidental events

- Accidental events
 - Accidental MB + Triggered CSI
 - Triggered MB + Accidental CSI
 - Accidental MB + Accidental CSI
- Data
 - Run62
 - In trigger window, there are two events
 - Trigger-dependent
 - Trigger-independent
 - In Accidental window, there is only one event
 - Trigger-independent

Accidental MB + Triggered CSI



After applying kinematical cut

