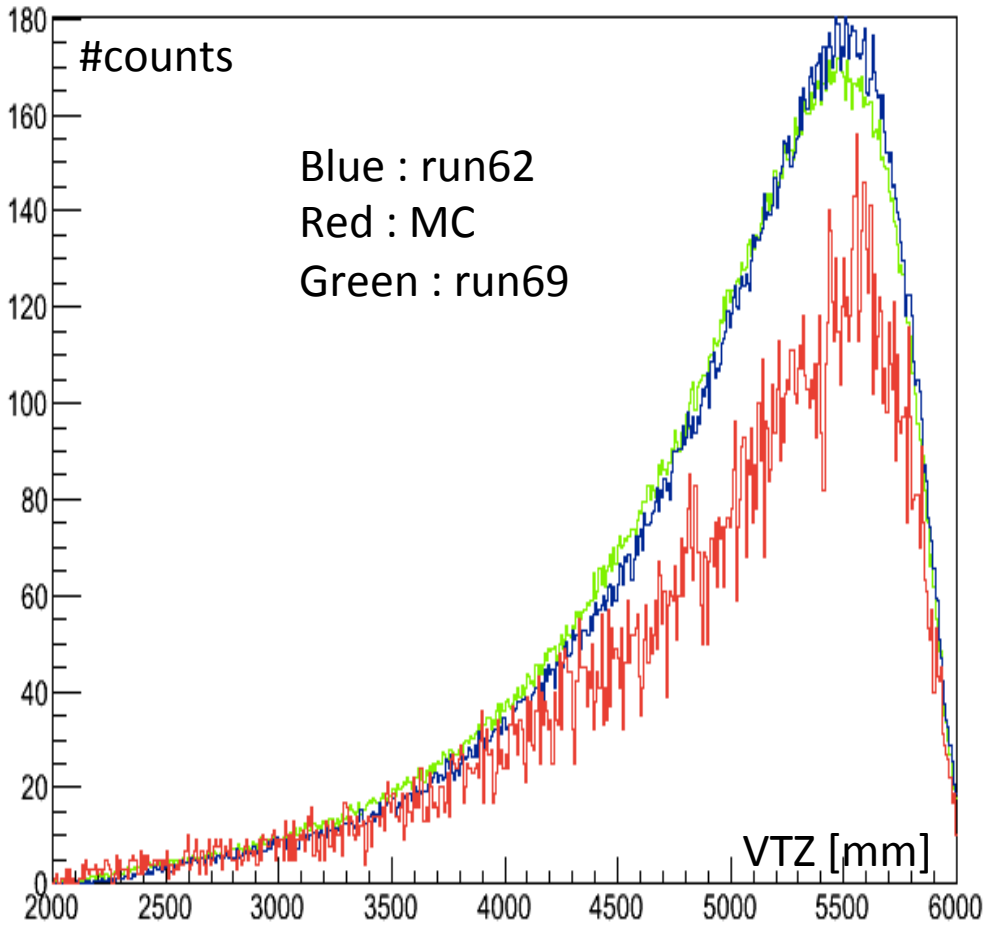
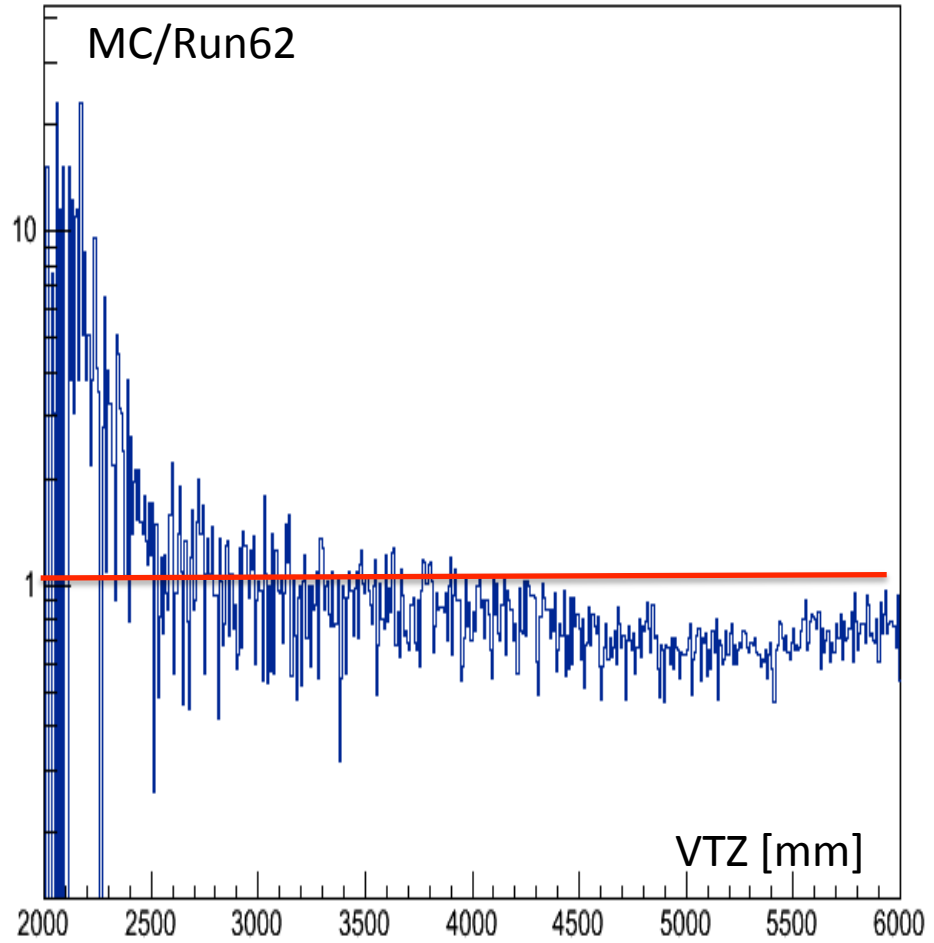
reports

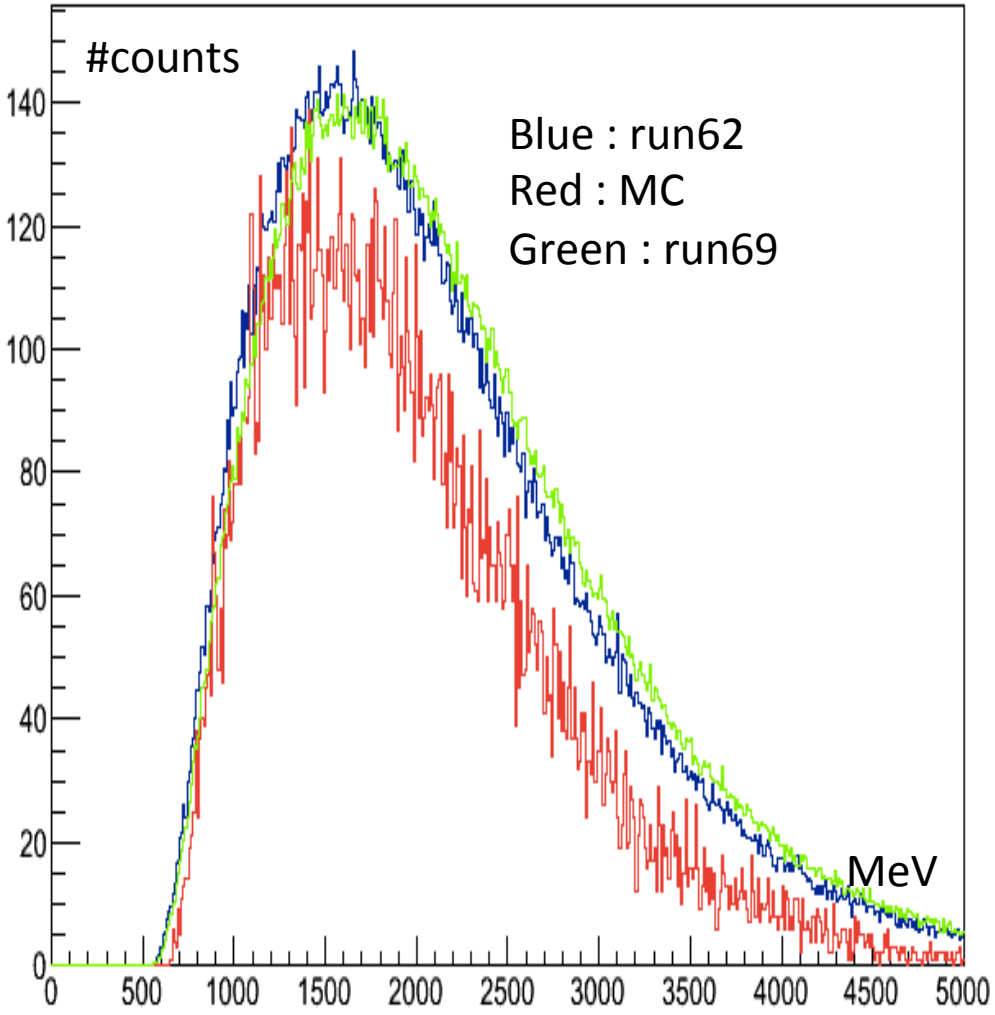
Vertex Z check

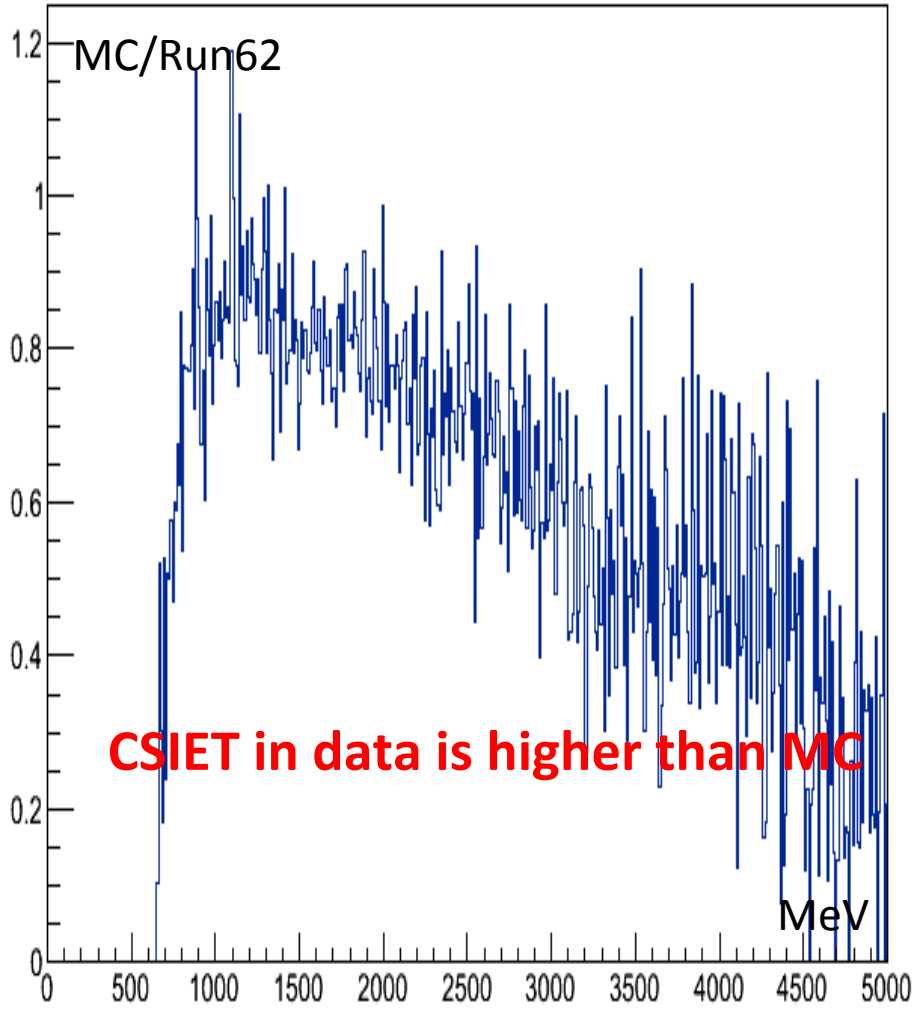




CSI ET threshold effect

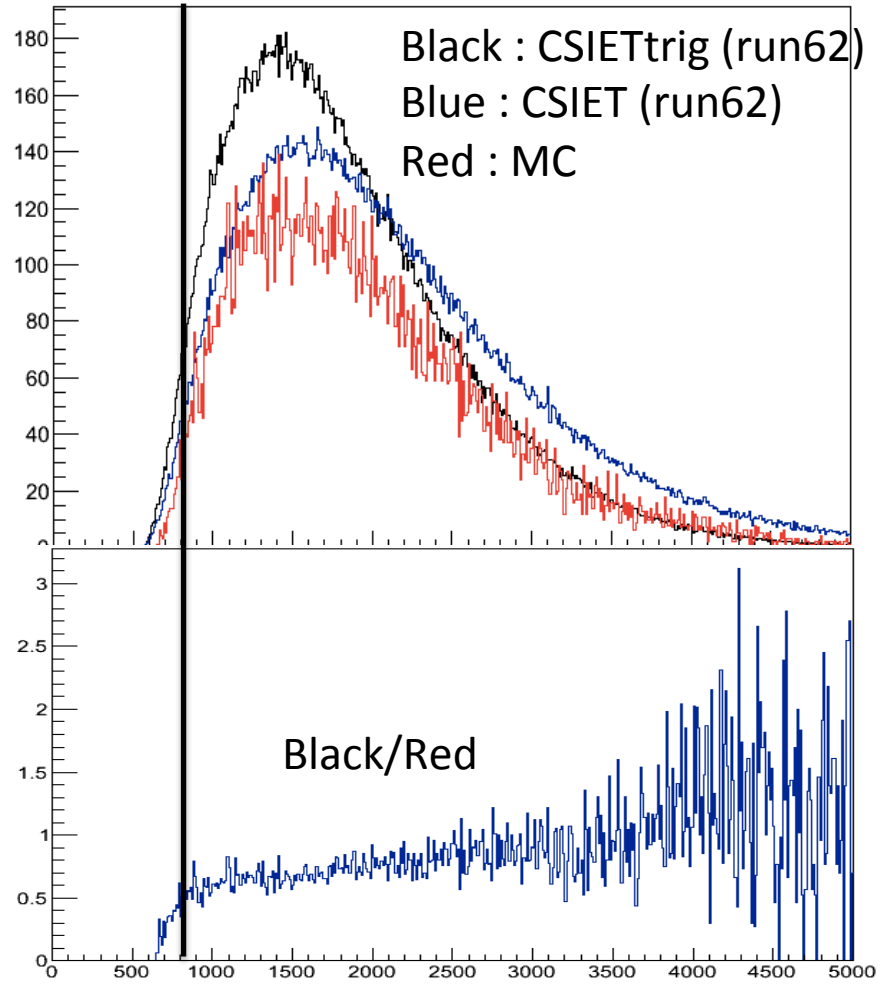
- Enhance ET threshold in offline.

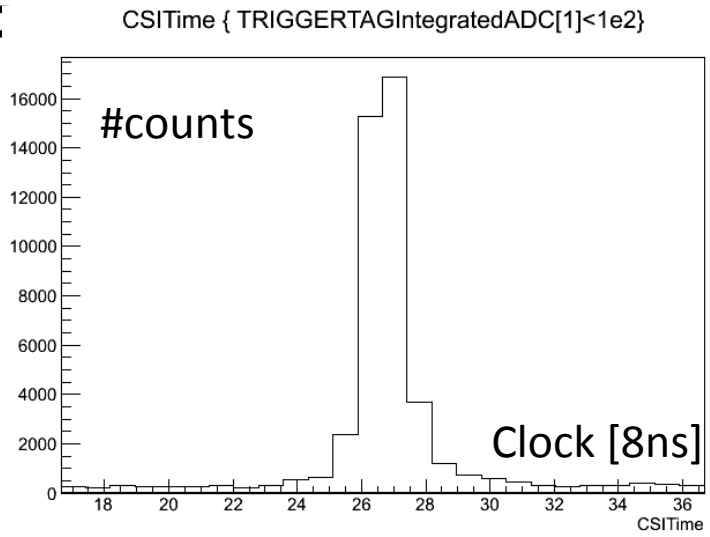


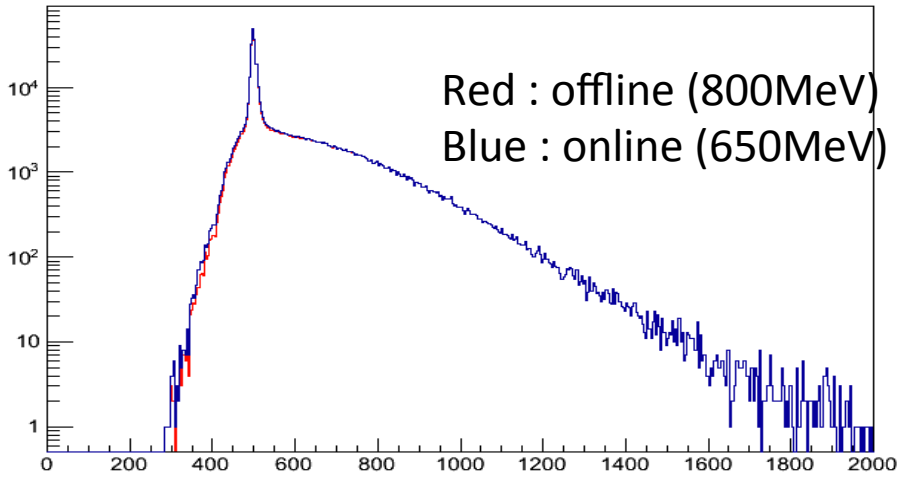


CSIETtrig

- CSIET in trigger timing only.
  - 24~30[clock]





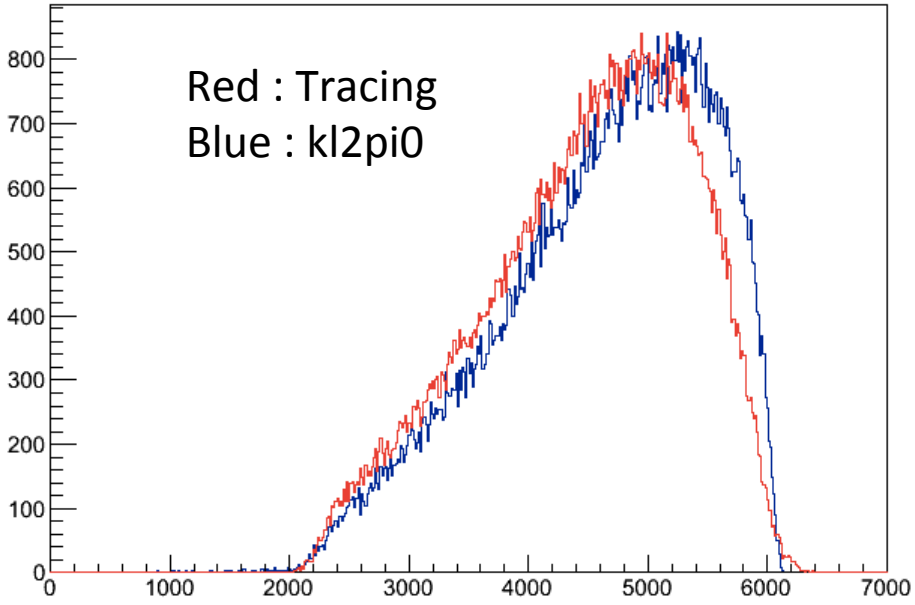


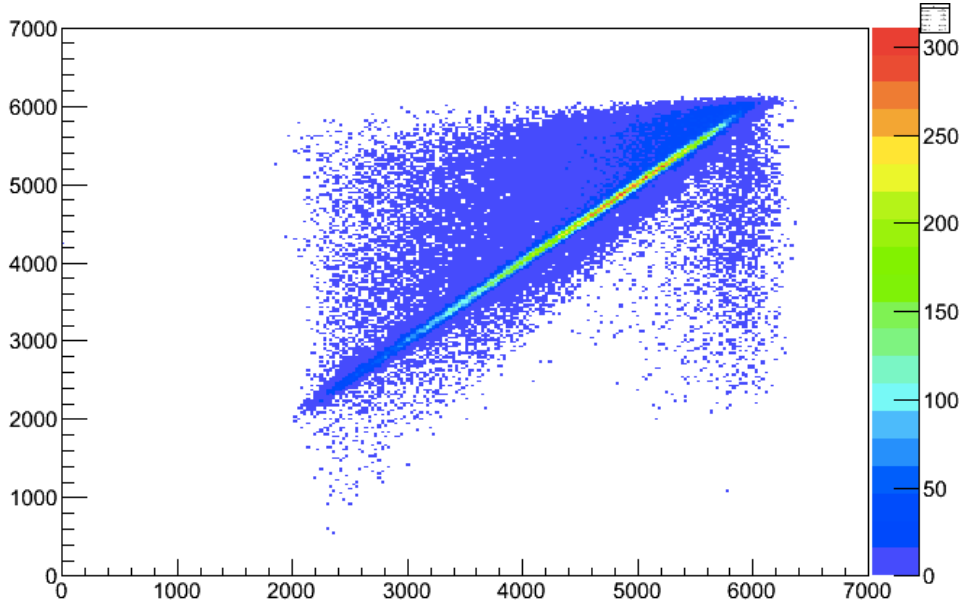
After offline cut, (>800MeV)
Run62 : 28094 -> 27520
Run69 : 28640 -> 28090
MC : 20493 -> 20281

Reconstruction of kl3pi0 in 5g on CsI && 1g on Barrels (MC)

- Vertex comparison
  - KL2pi0 vertex vs SimVertex

X axis : Tracing
Y axis : kl2pi0

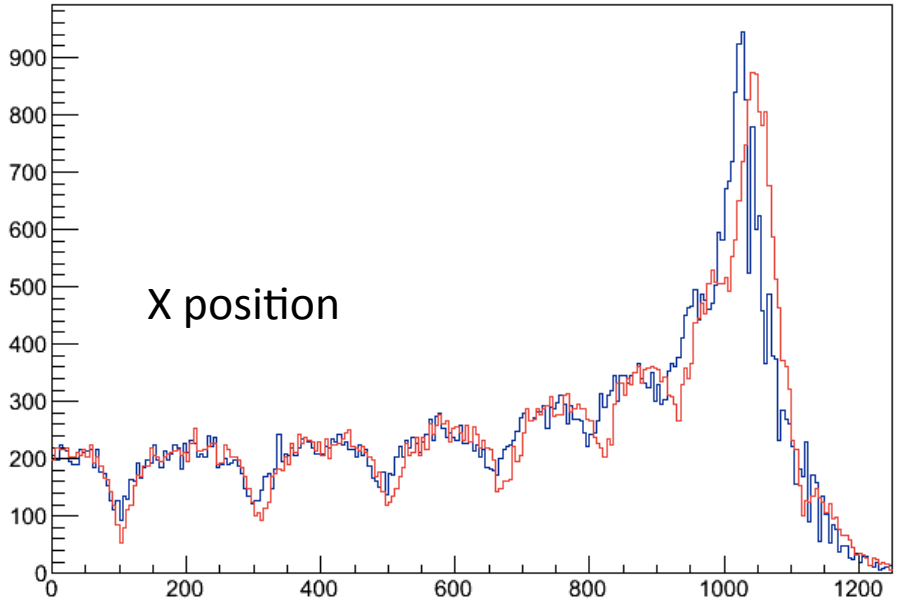


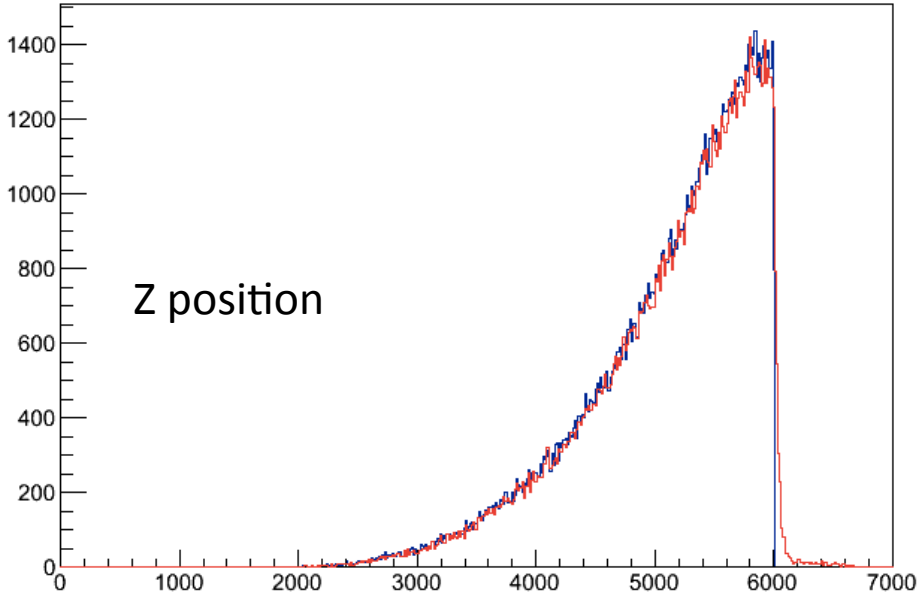


Reconstruction of kl3pi0 in 5g on CsI && 1g on Barrels (MC)

- Result of Tracing simulation Gamma
- Reconstruction direction of missing Gamma from data of Barrels
- Compare Tracing and information from Barrels

Red : Tracing
Blue : Barrel

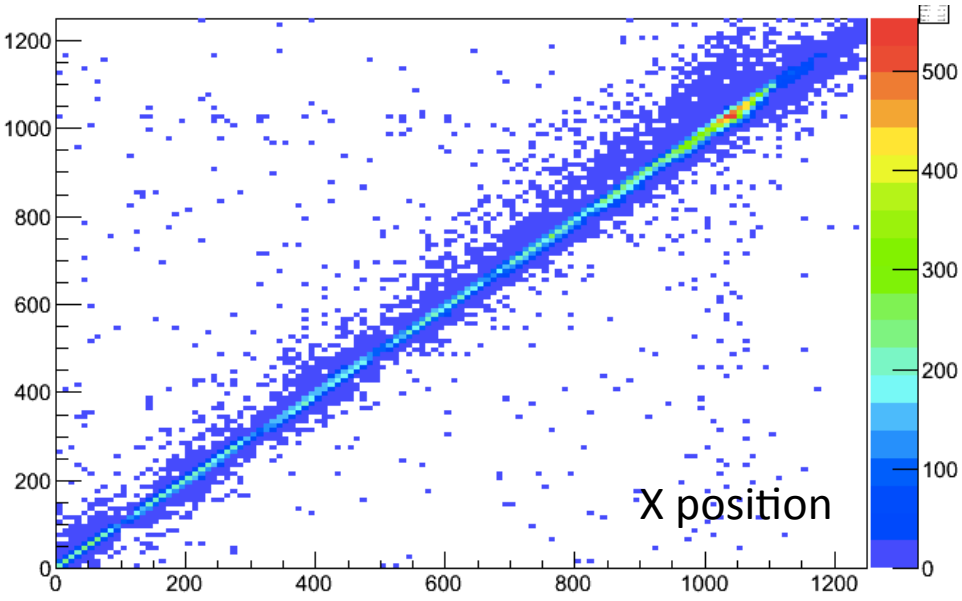


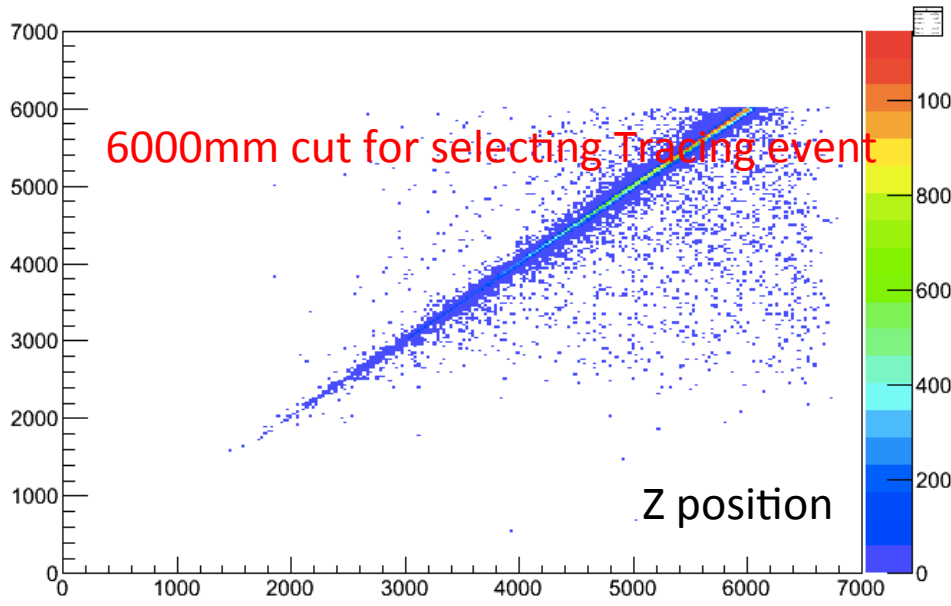


Reconstruction of kl3pi0 in 5g on CsI && 1g on Barrels (MC)

- 2d (Barrel vs Tracing)

X axis : Barrel
Y axis : Tracing



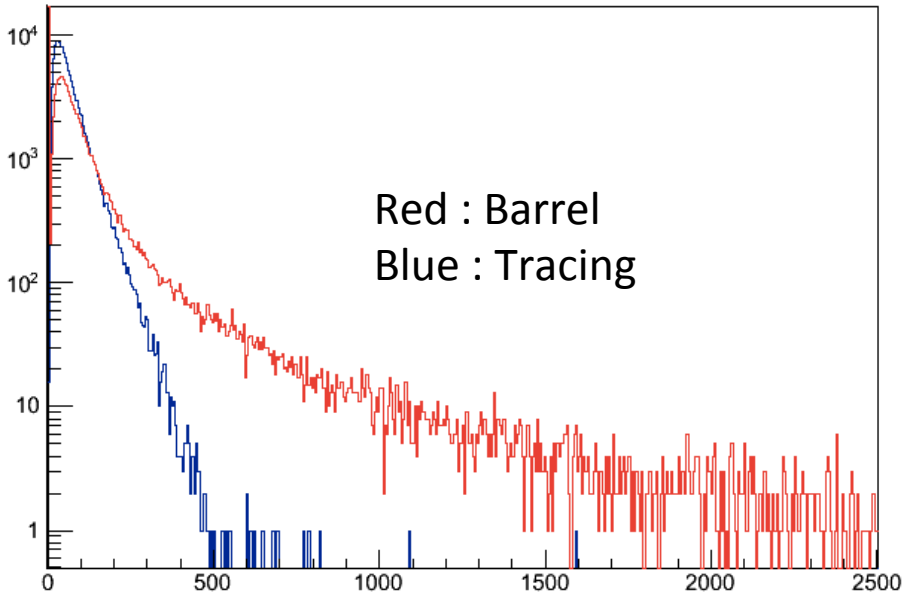


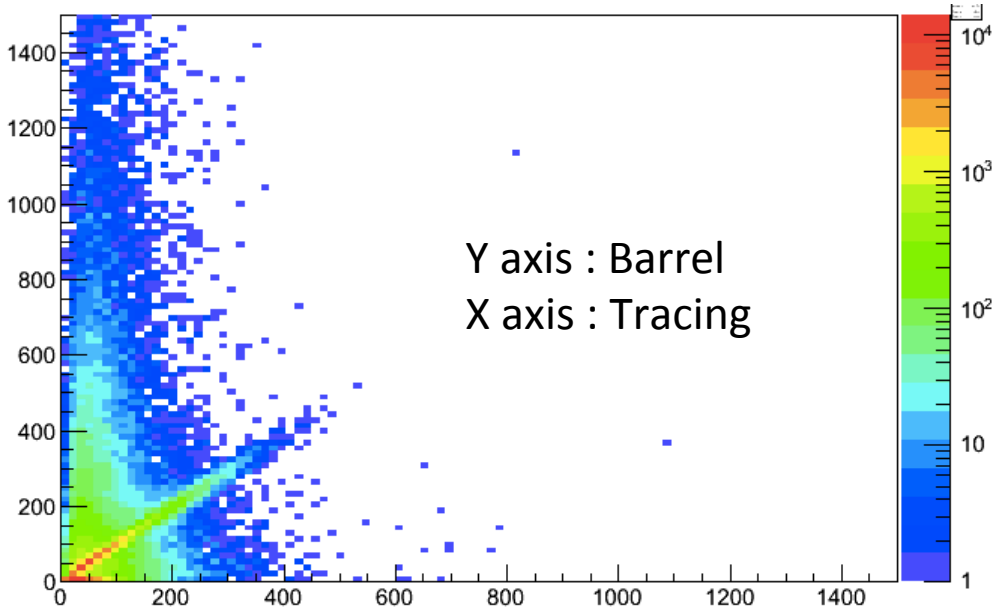
Reconstruction of kl3pi0 in 5g on CsI && 1g on Barrels (MC)

- From reconstruction of direction of missing gamma, we can calculate energy of the gamma

$$2(E_s E_r - \overrightarrow{p_s} \cdot \overrightarrow{p_r}) = m_\pi{}^2 \quad \overrightarrow{p_s} \cdot \overrightarrow{p_r} = E_s E_r \cos(\theta)$$

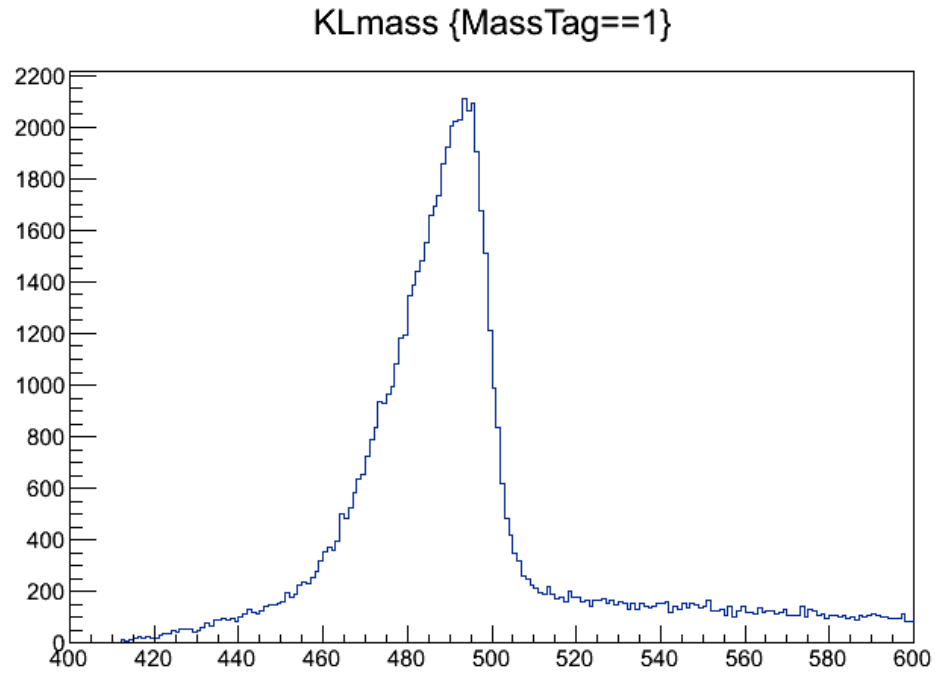
$$E_r = m_\pi{}^2/(2E_s(1\text{-}\cos(\theta)))$$

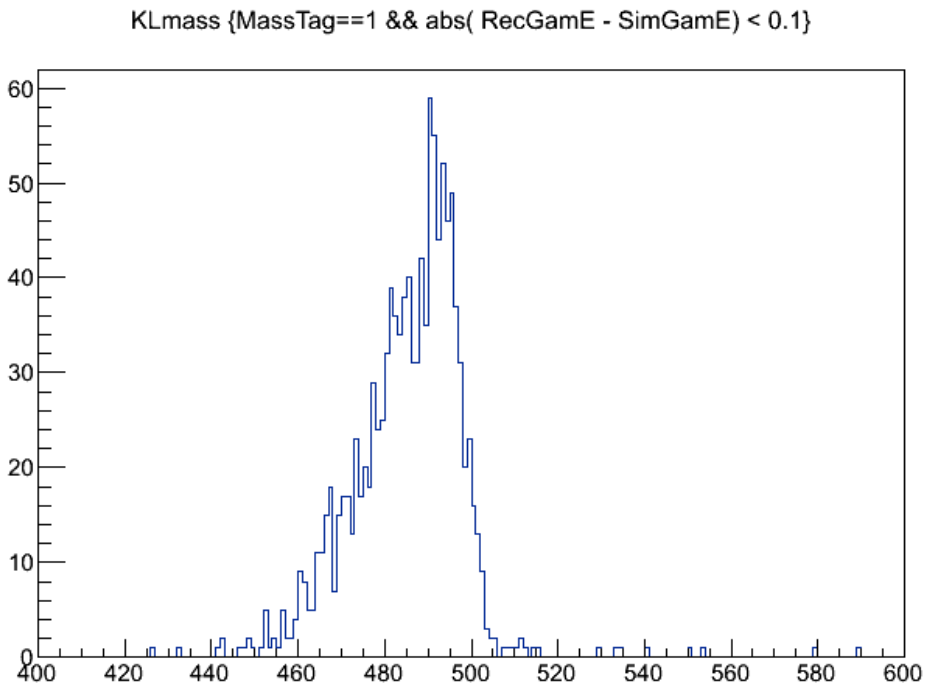




KLmass

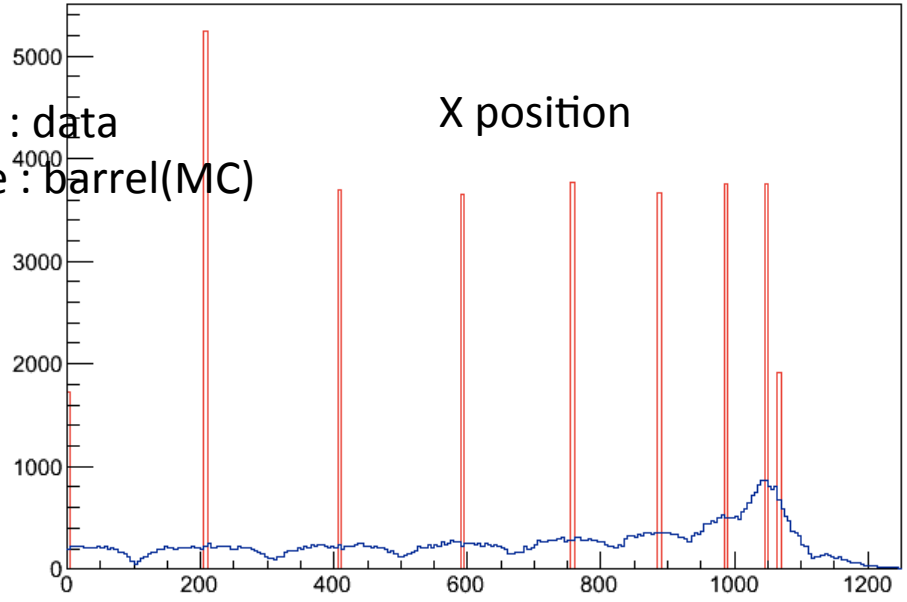
No Kinematical cut about KL

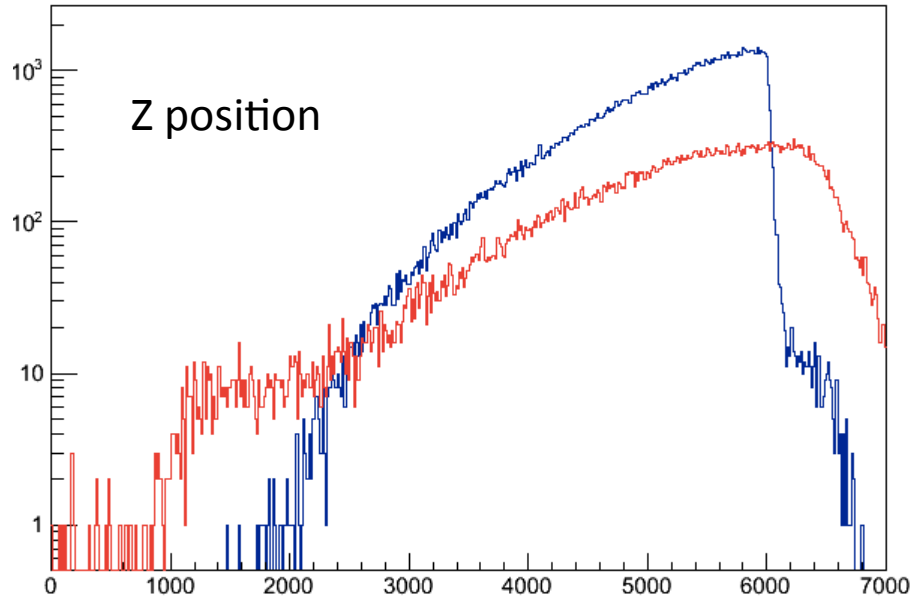


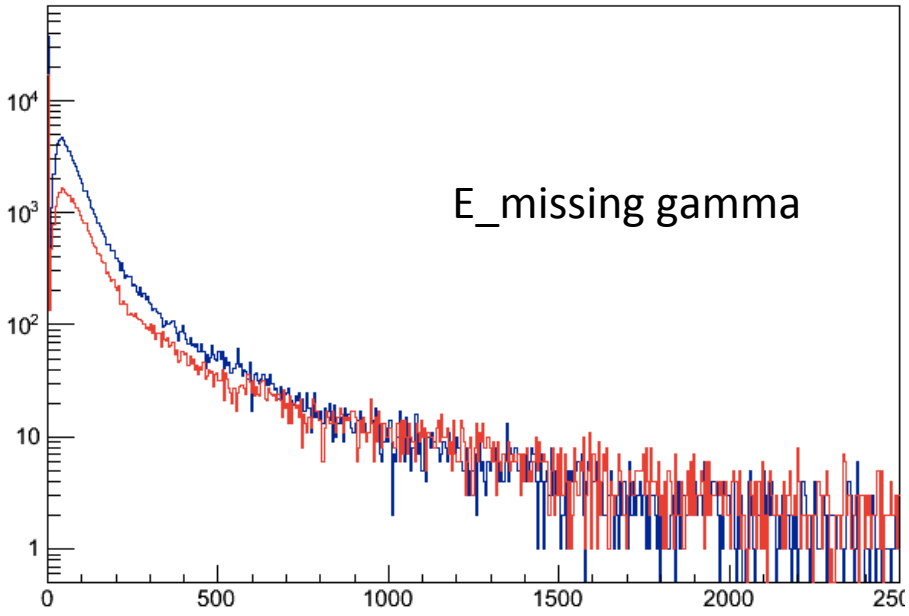


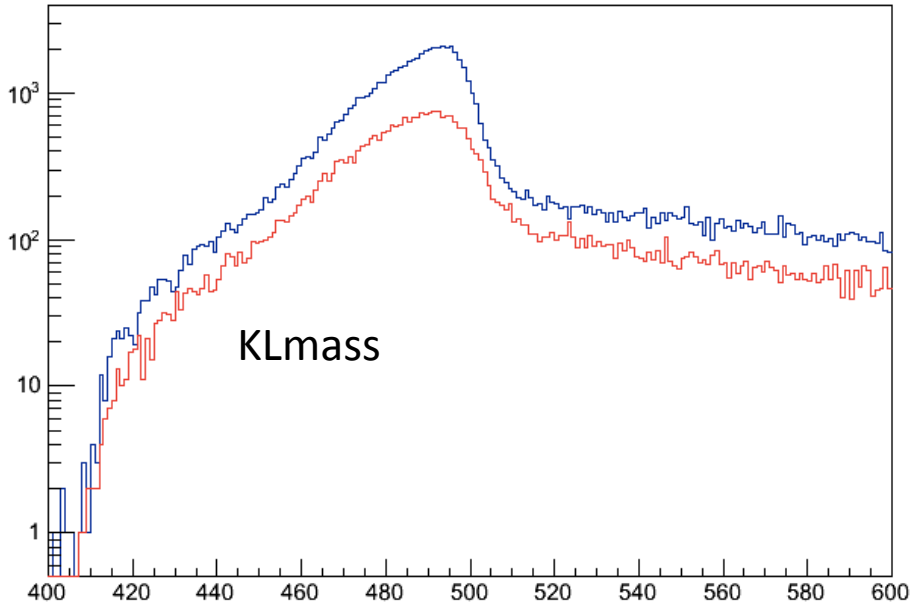
With data(Run18884), not normalized

Red : data
Blue : barrel(MC)

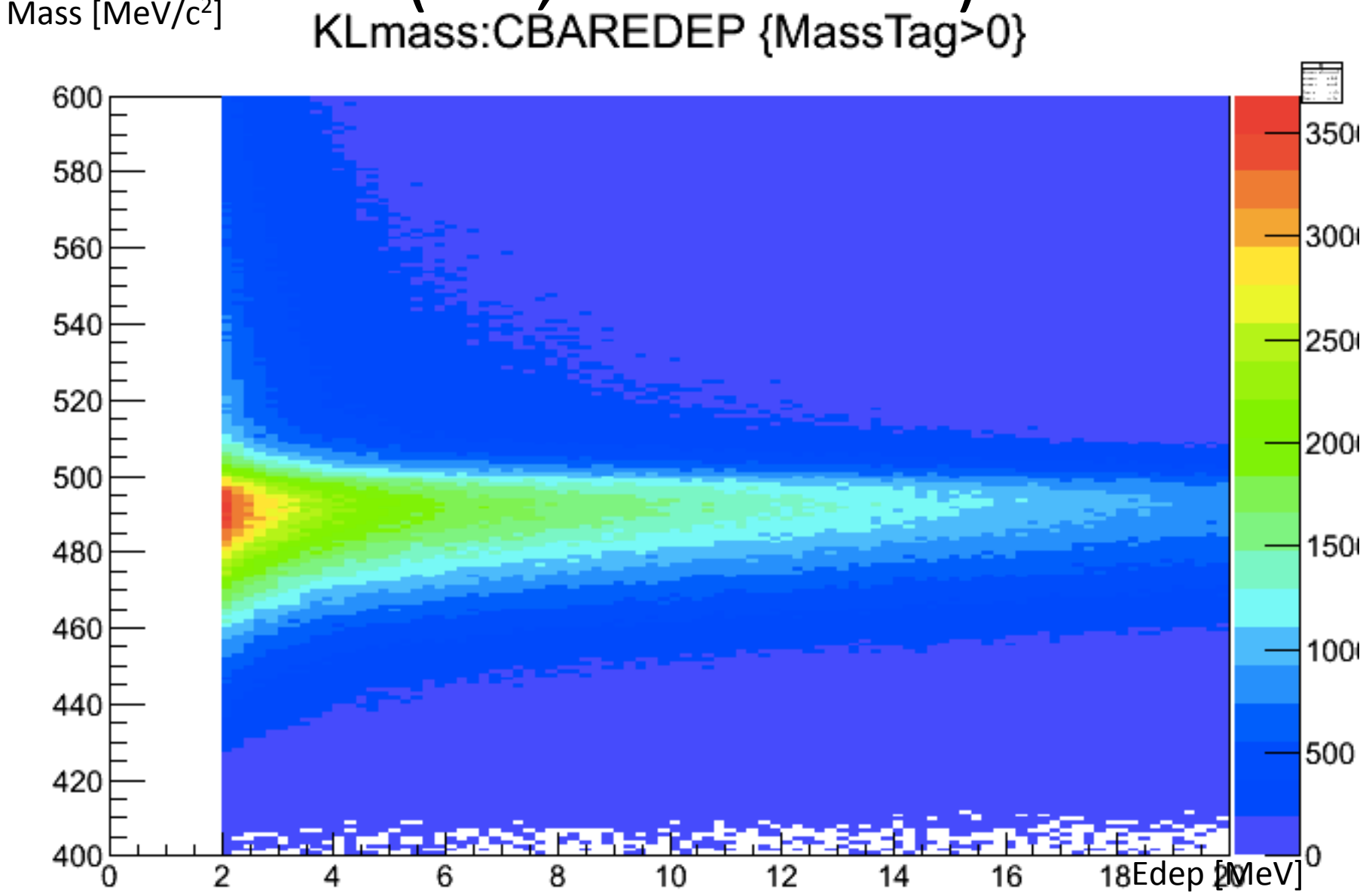








KLmass vs CBAREdep (dat, total Run62)



Gamma Energy

Gamma energy of 5g (on CsI)