

2009-03-11

Update on Phi studies
Celestino Rodriguez Cobo

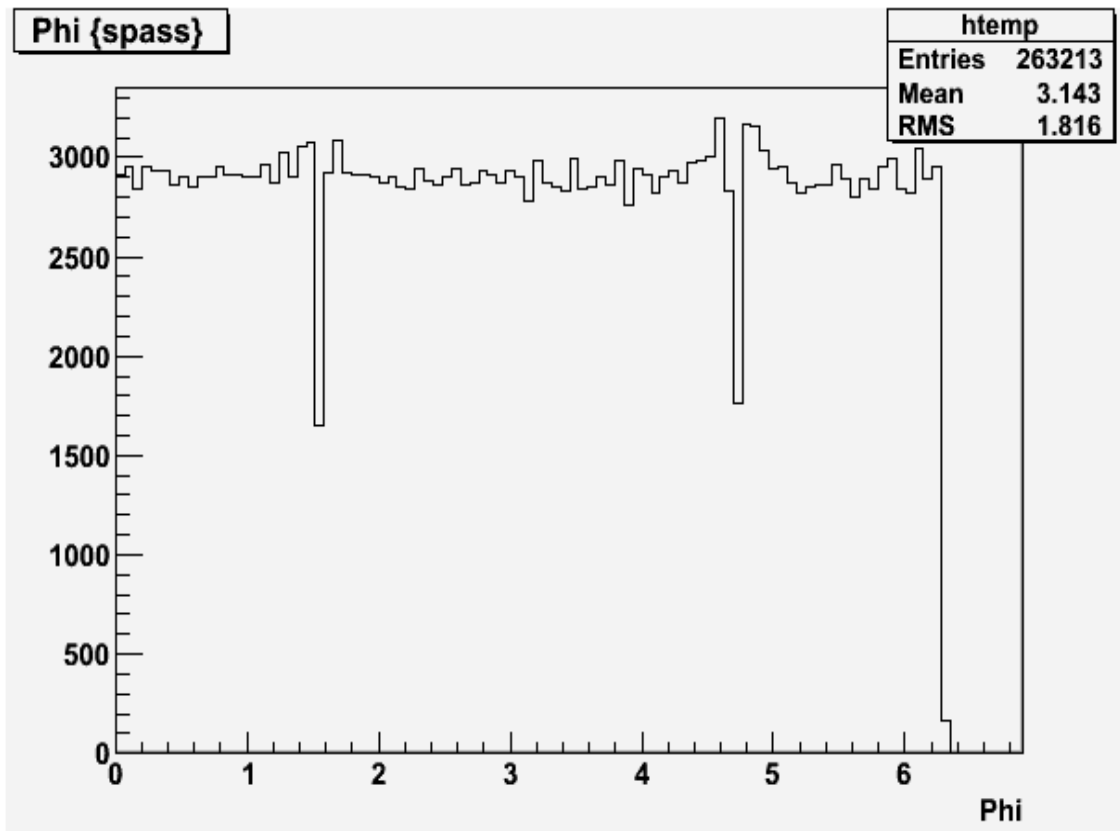
DC06 MC Retrieval

- 305K events sample (95% whole DC06)
- Only 263 K events are suitable (85% of the sample)
- Not all events decay in 4 bodies (gammas)
- Needs further explanation

Phi Angle definition

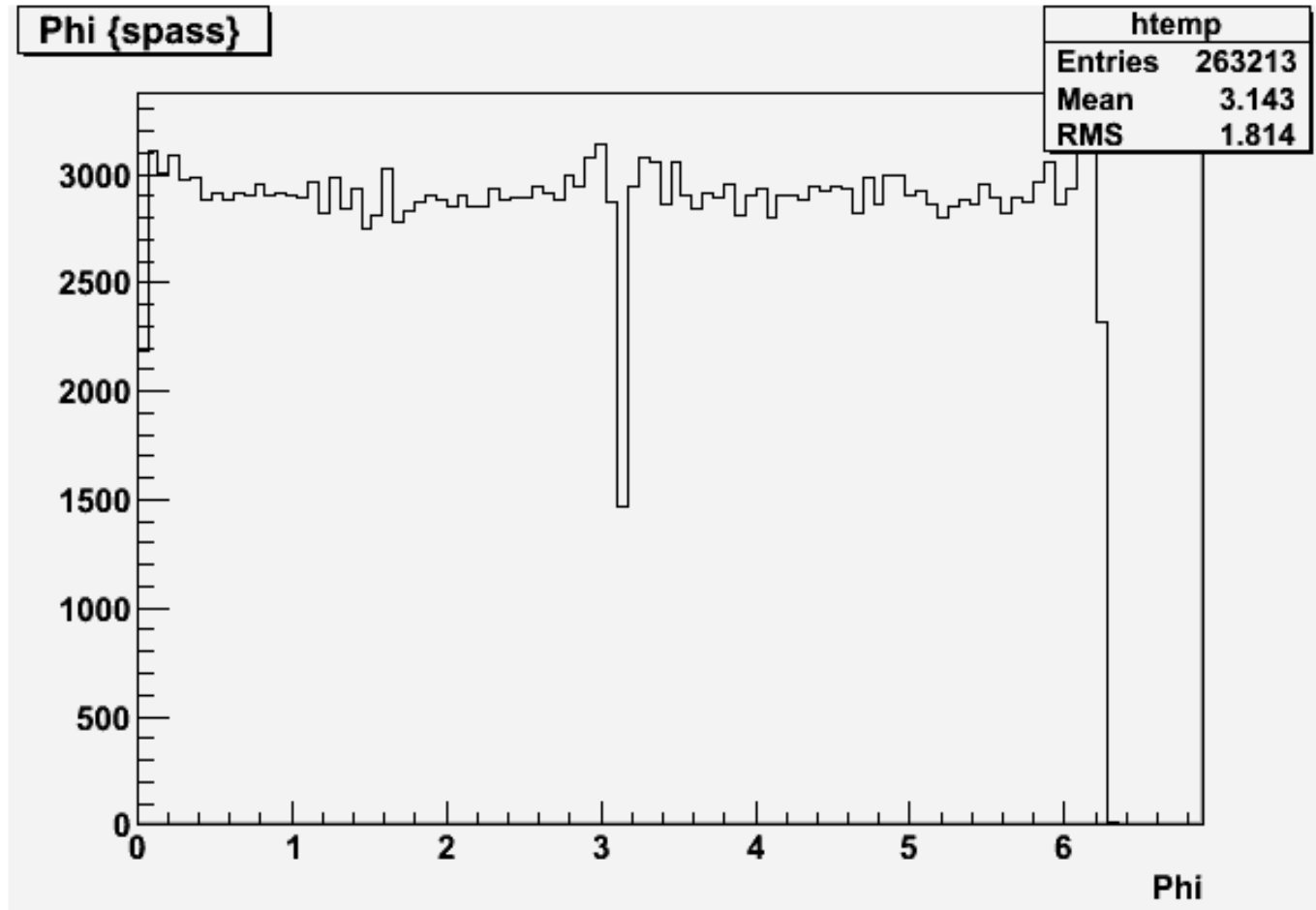
- M. Beneke et al , hep-ph/0612290
- B rest frame
- Angle between decay planes
- We use $P(K^*)$ as axis reference
- Obtained with vectorial and escalar operations

Phi angle definition

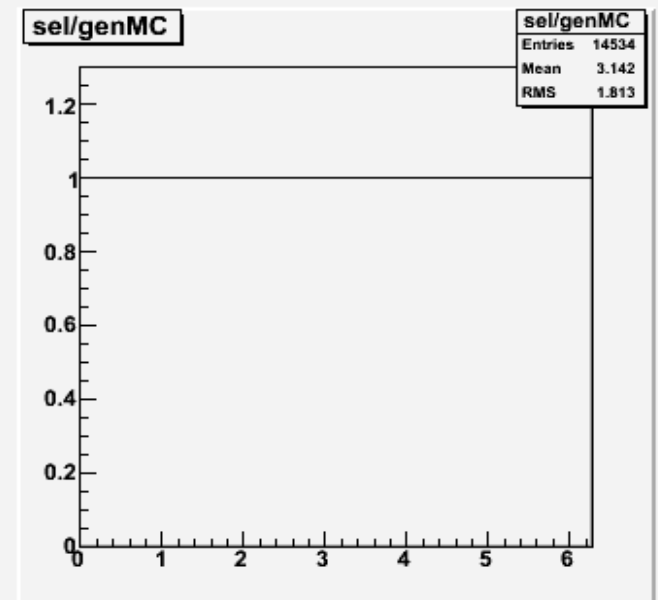
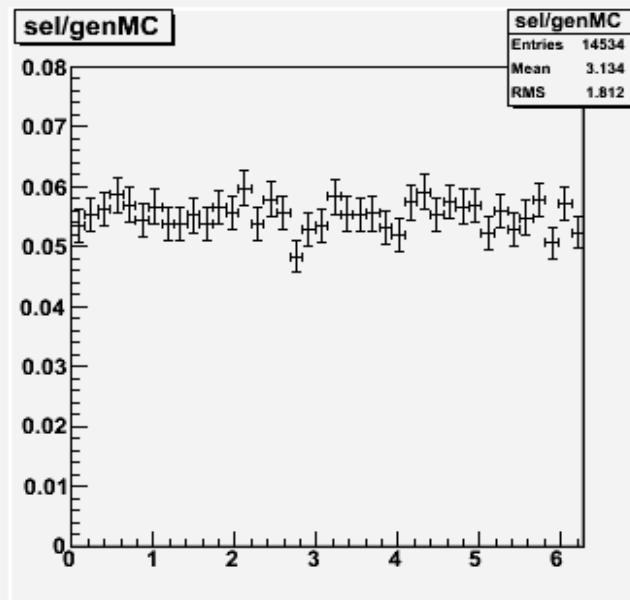
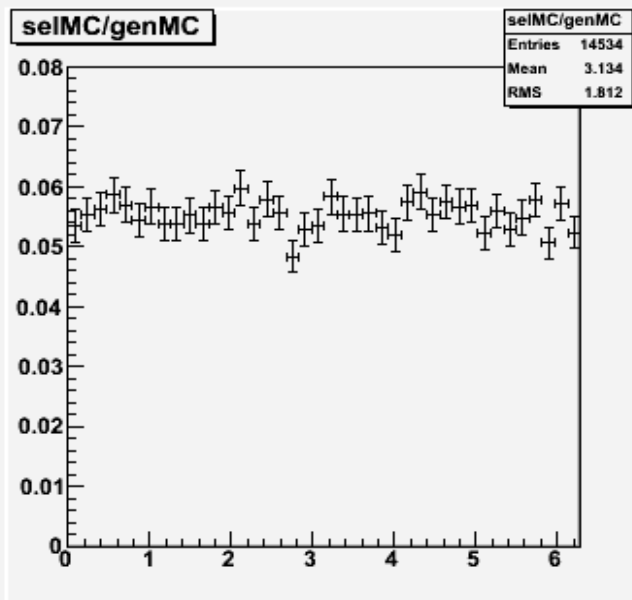
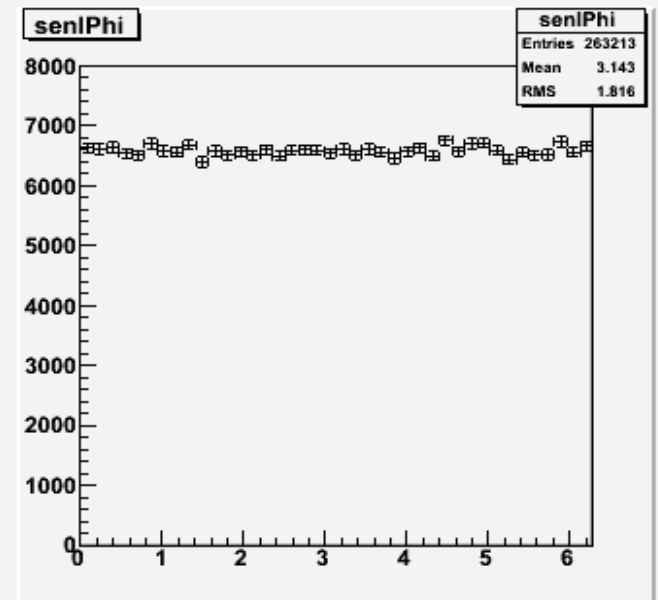
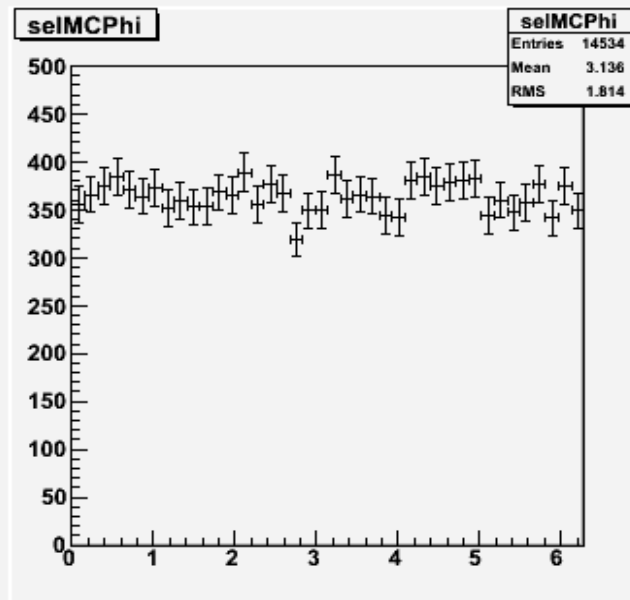
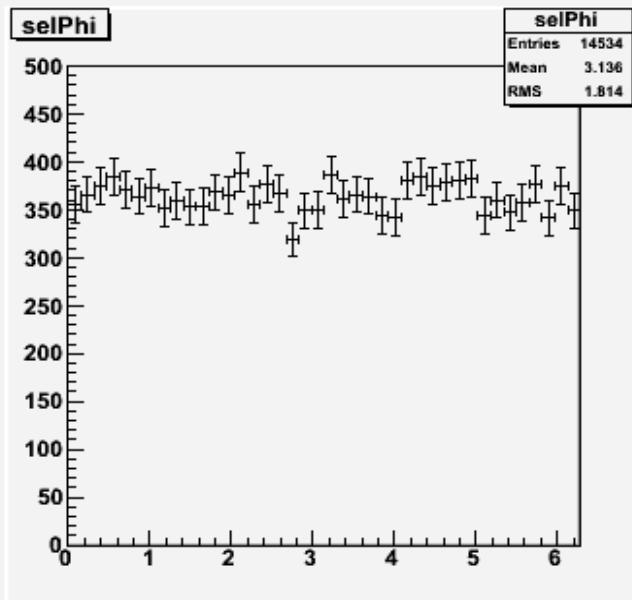


- $\arcsin(\sin(\text{Phi}))$
and
 $\arccos(\cos(\text{phi}))$
) have weird
cave-ins
- Mix of both
methods

Phi angle definition

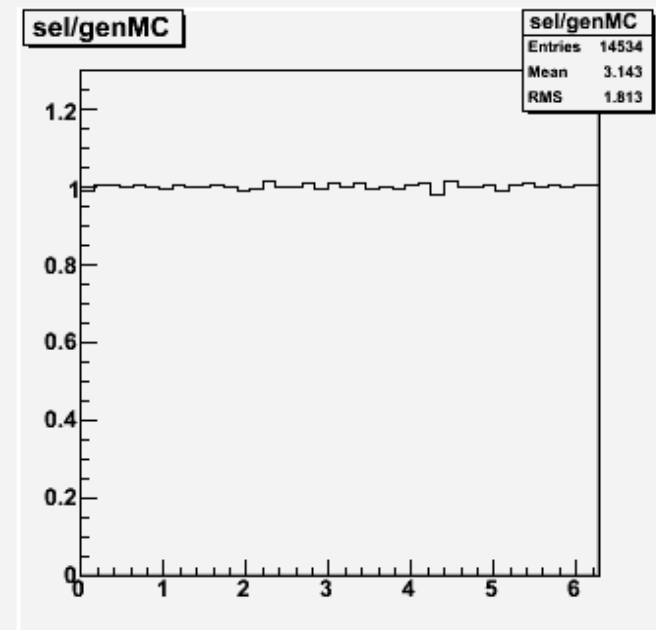
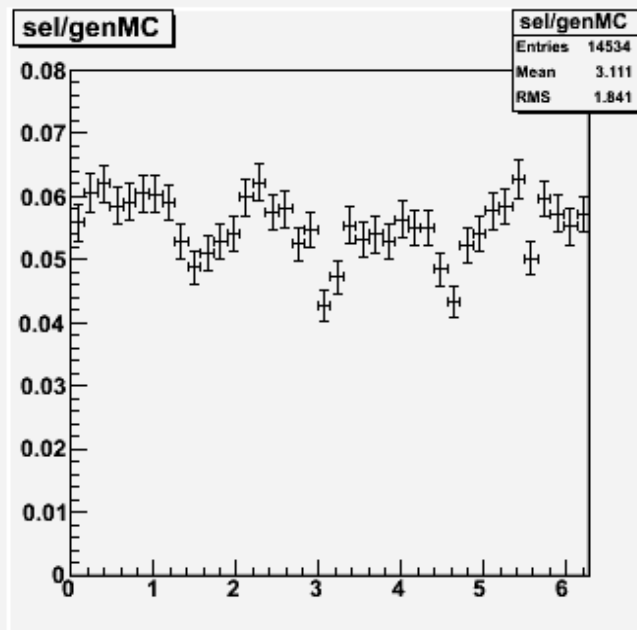
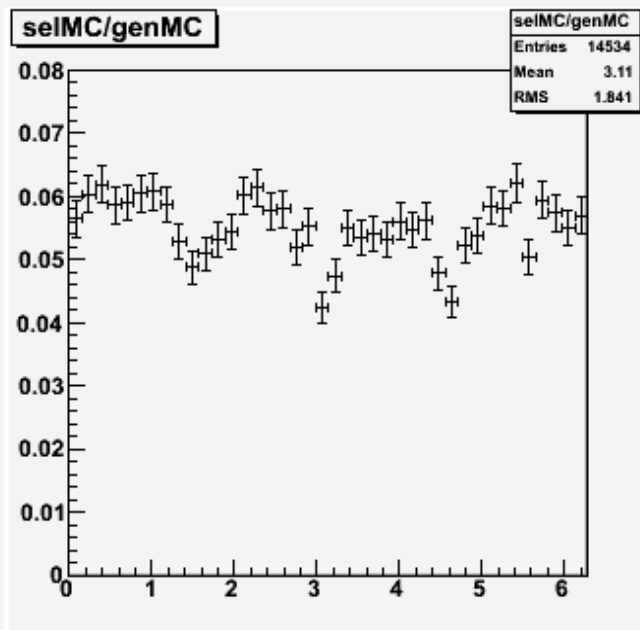
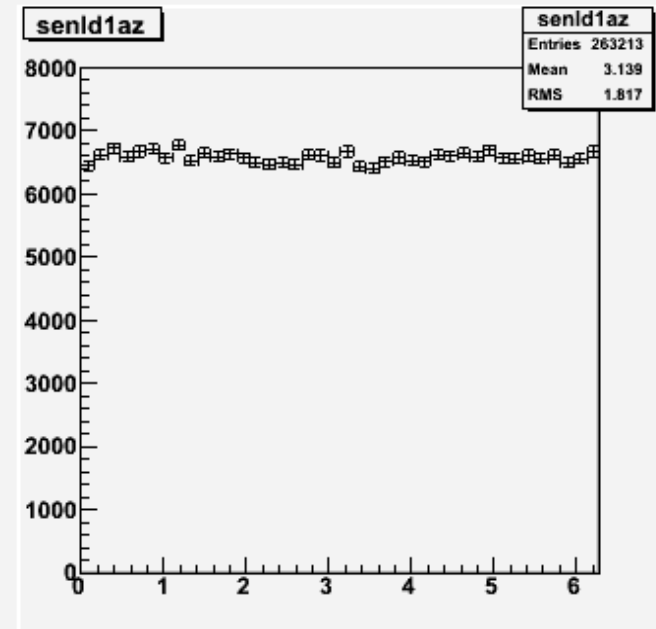
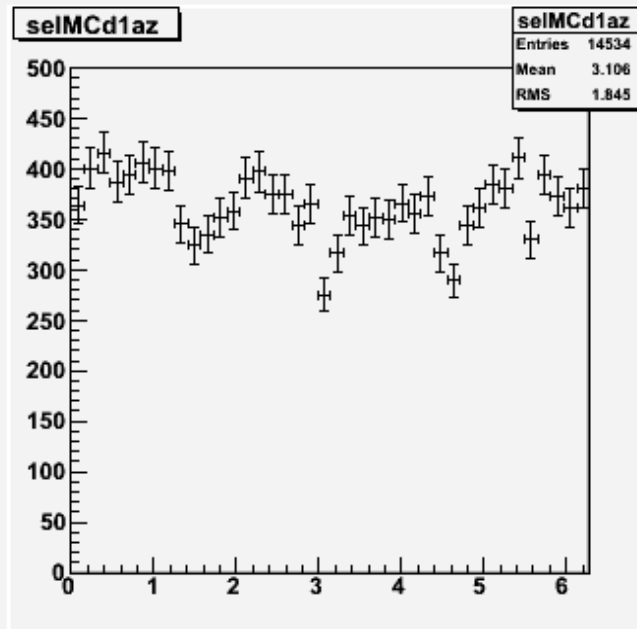
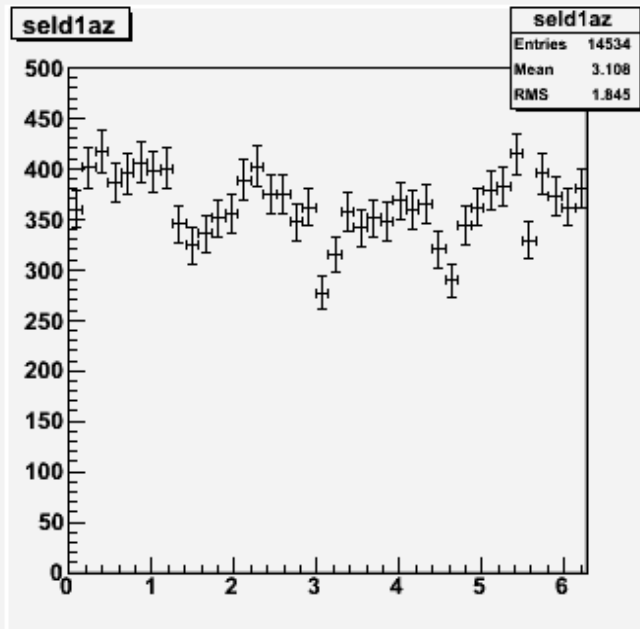


Phi

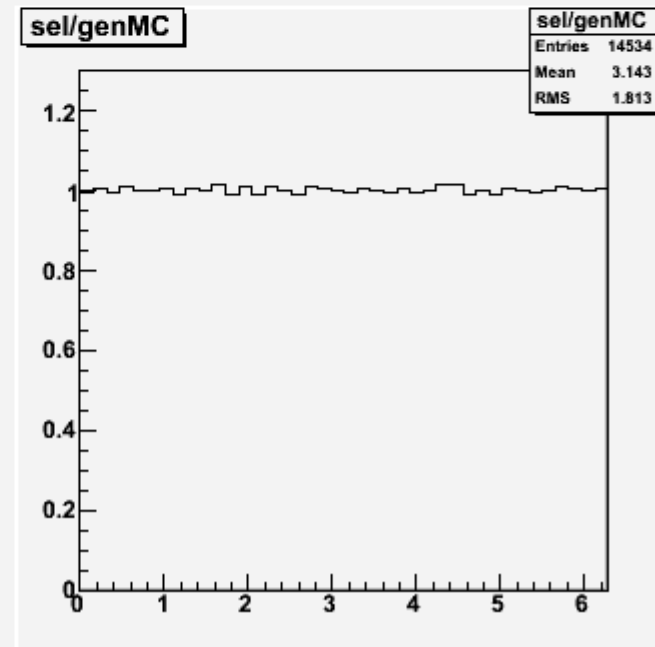
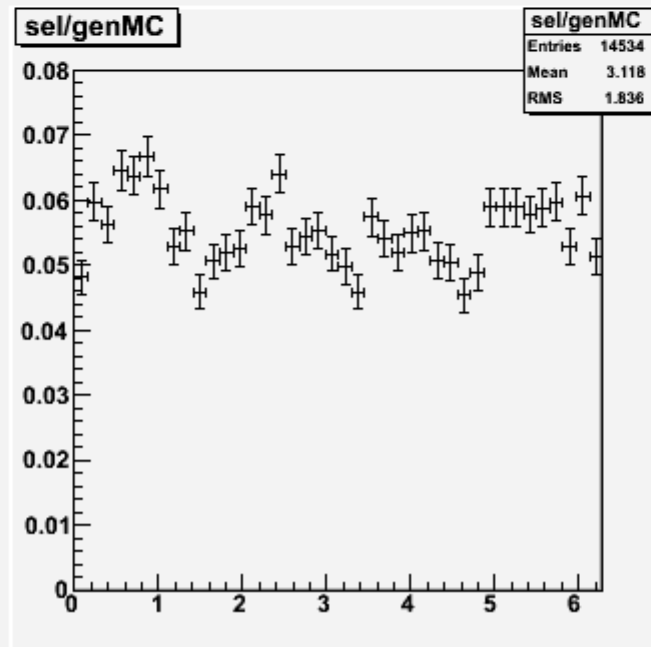
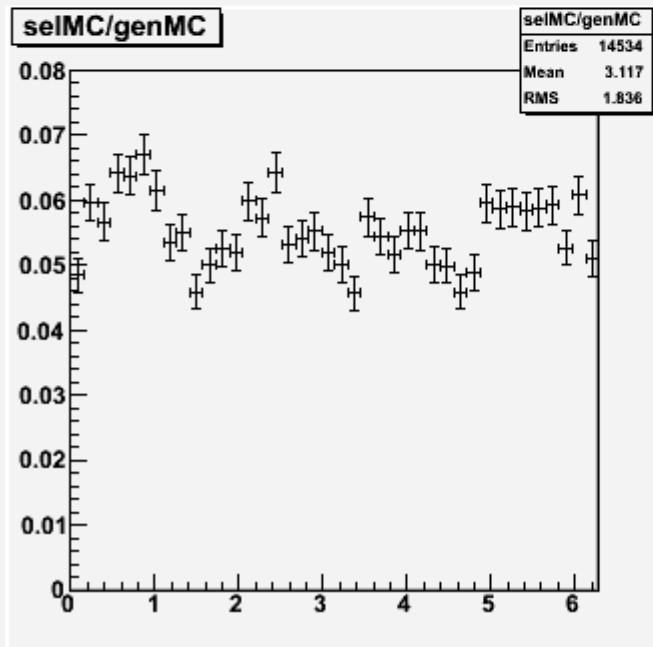
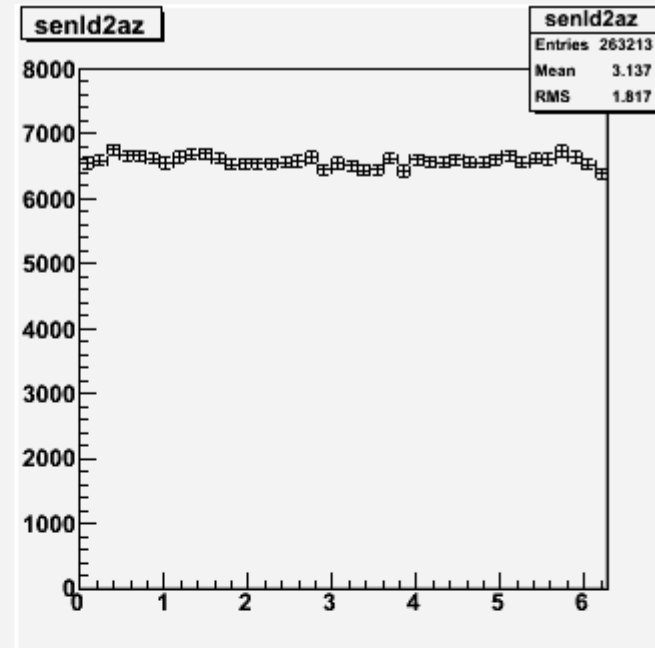
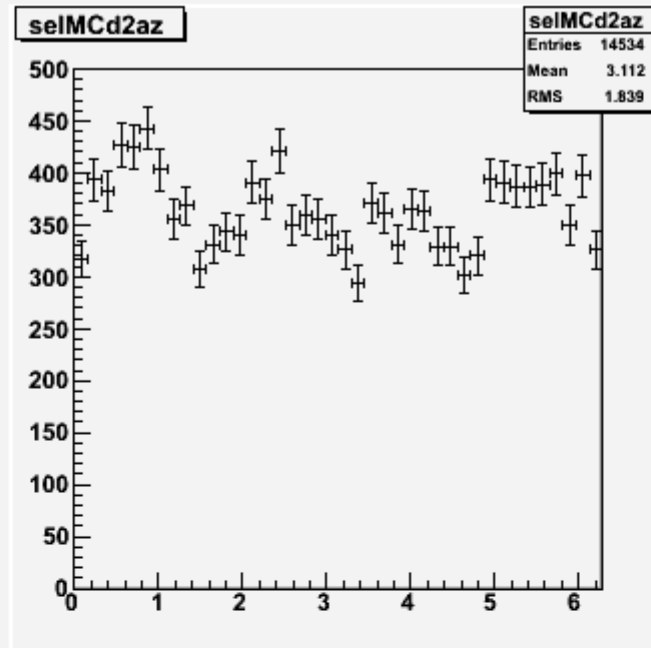
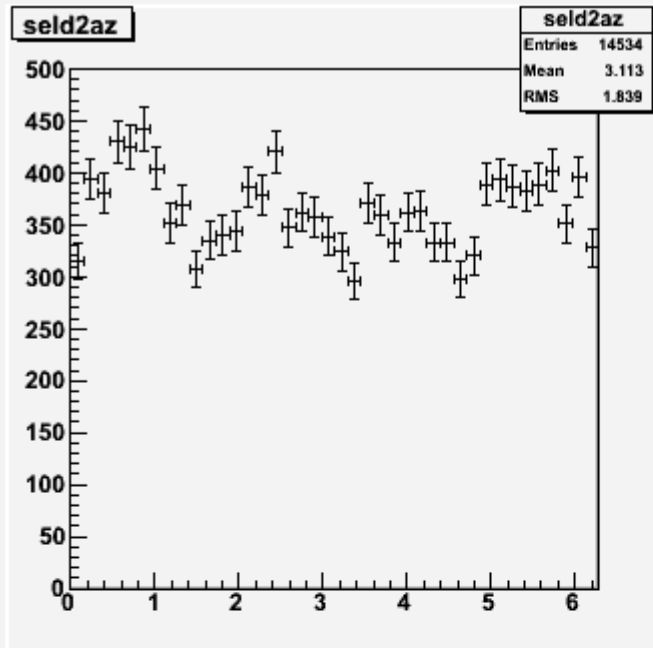


Other Azimutal plots

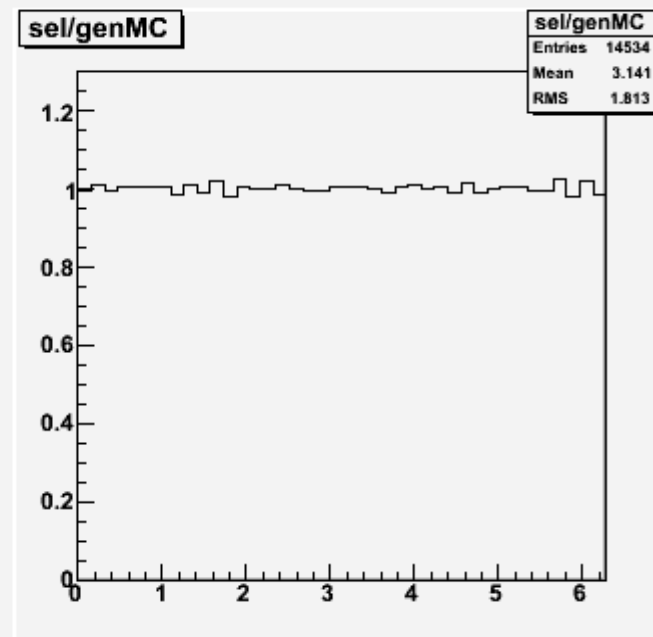
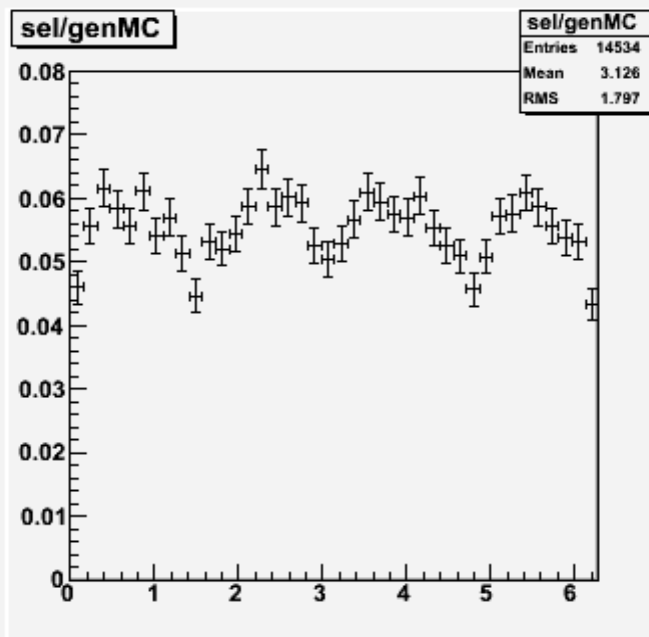
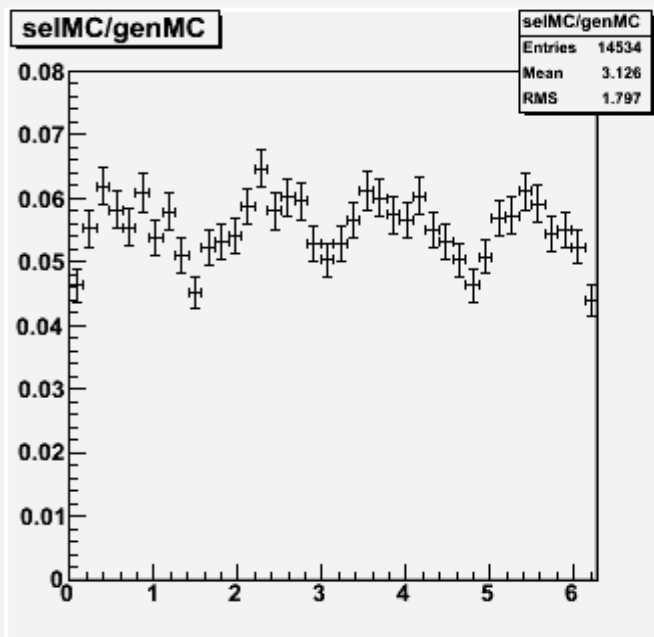
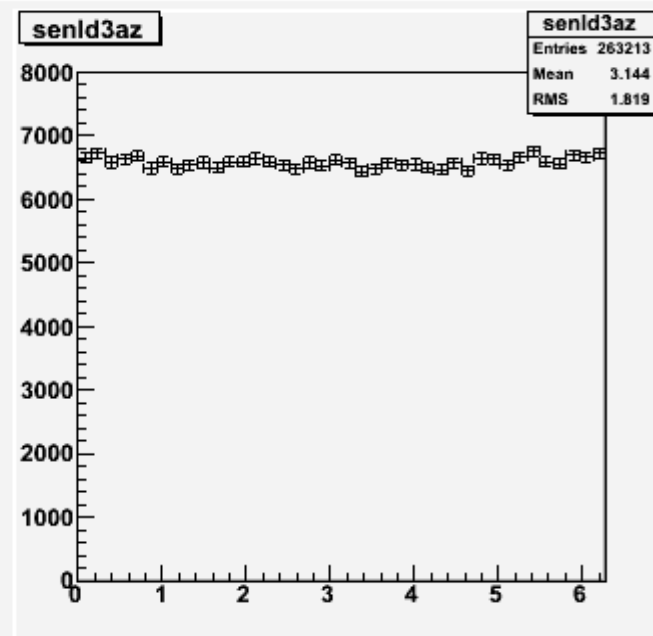
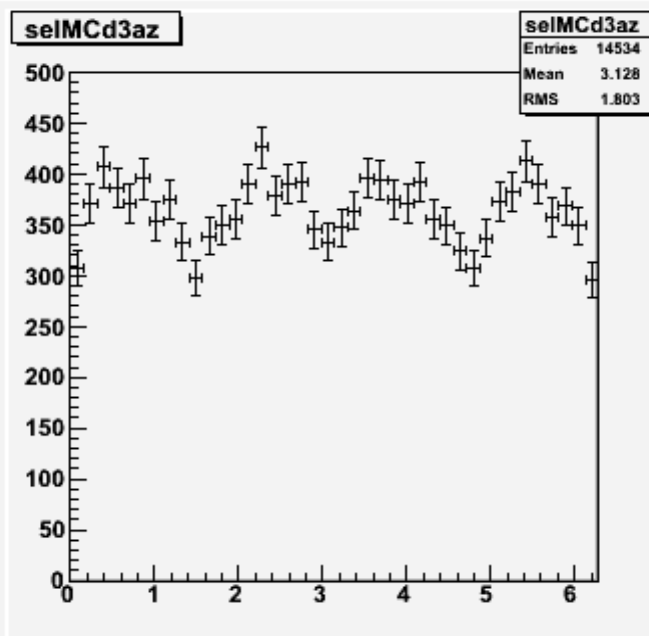
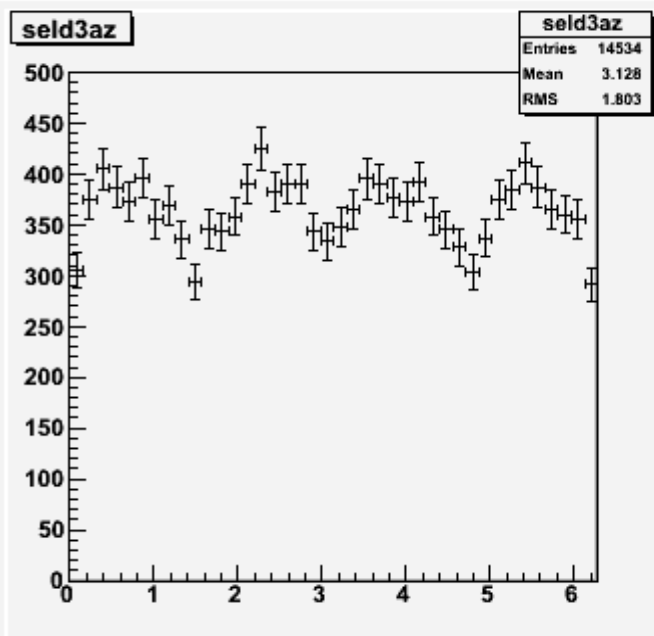
K+



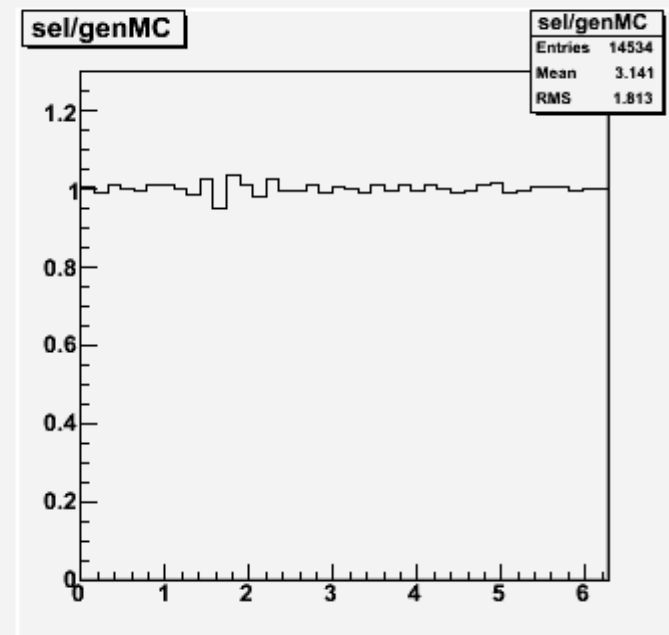
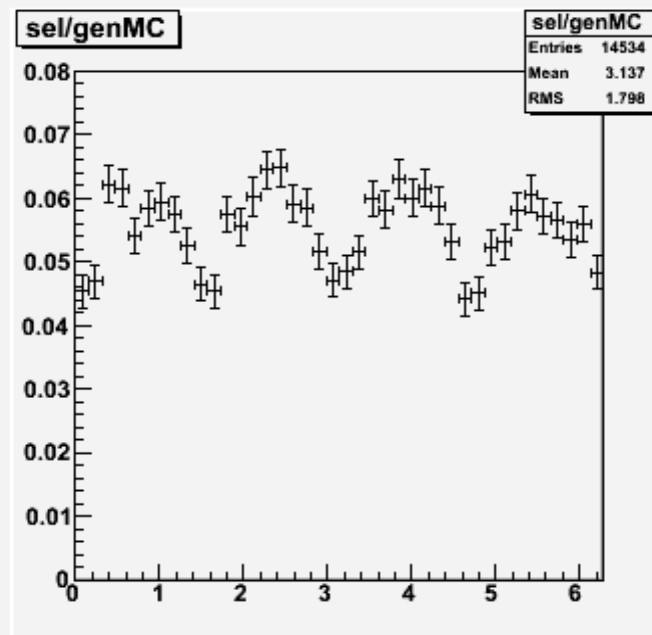
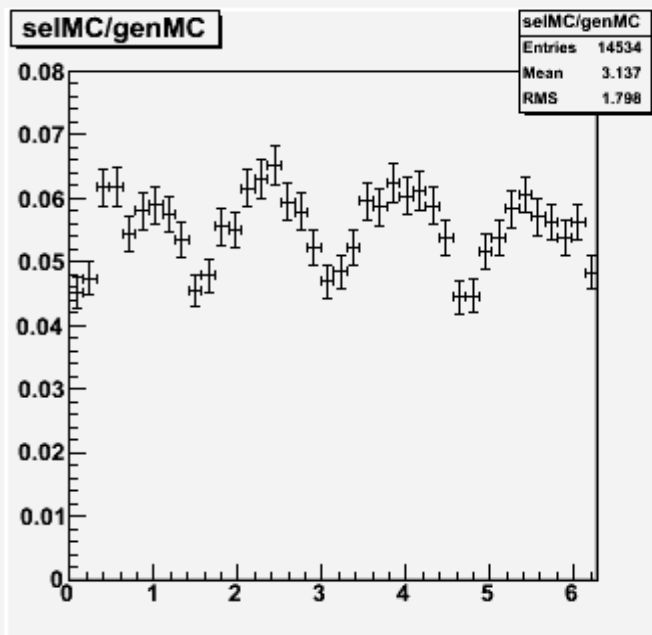
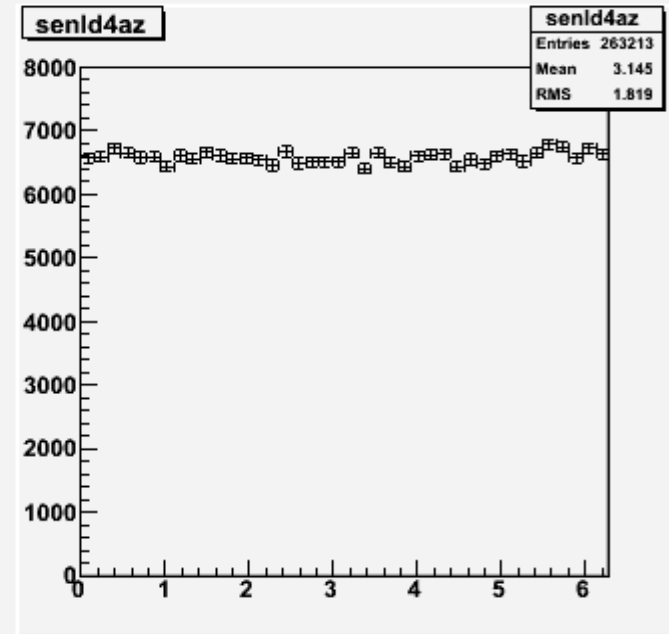
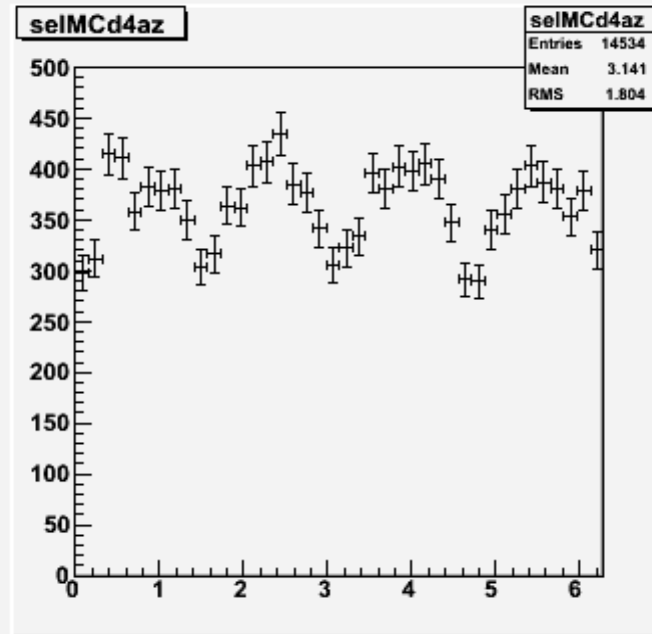
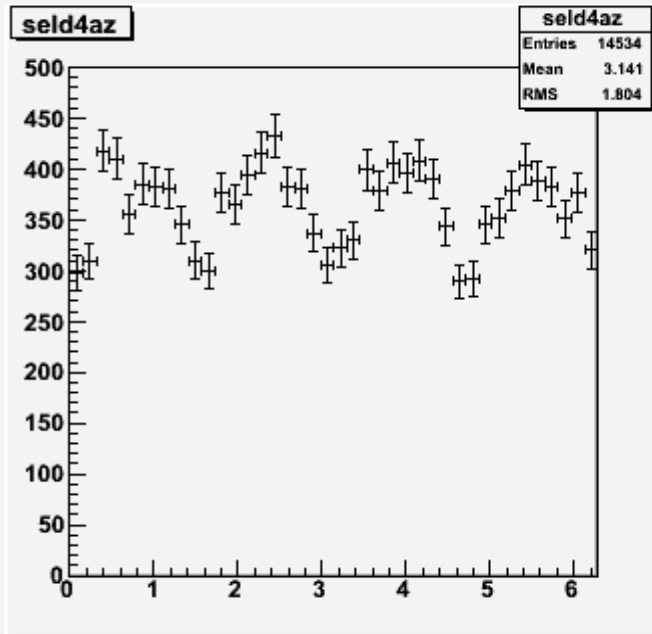
Pi-



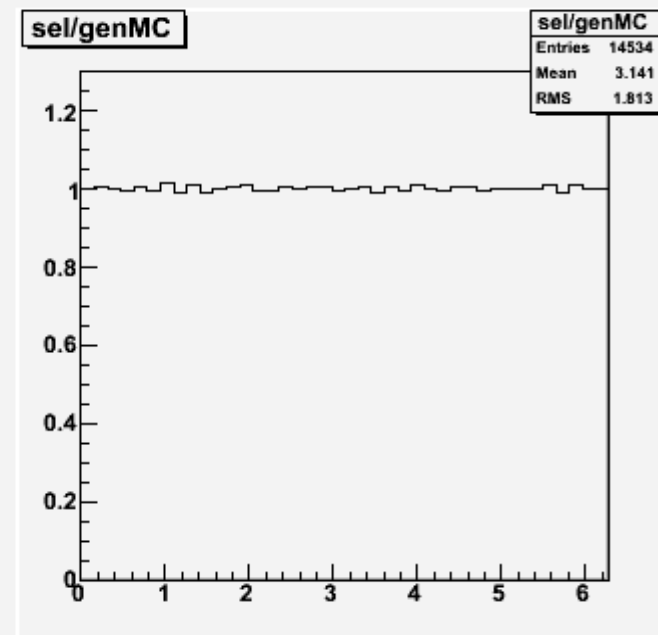
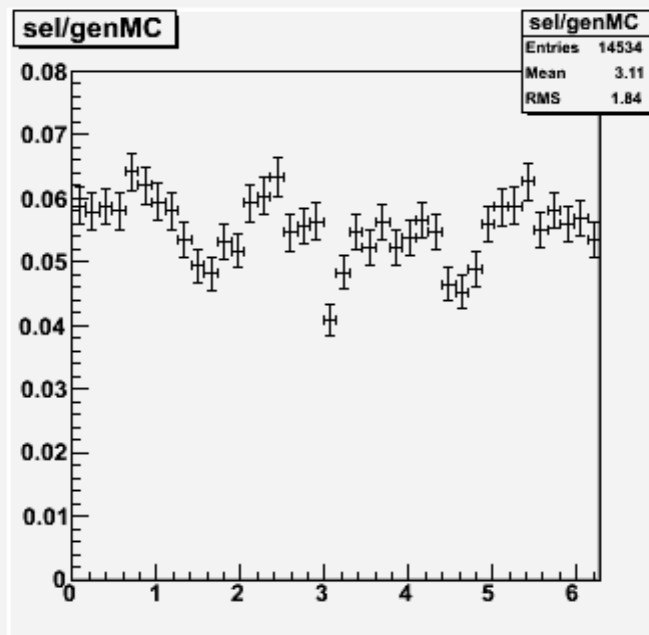
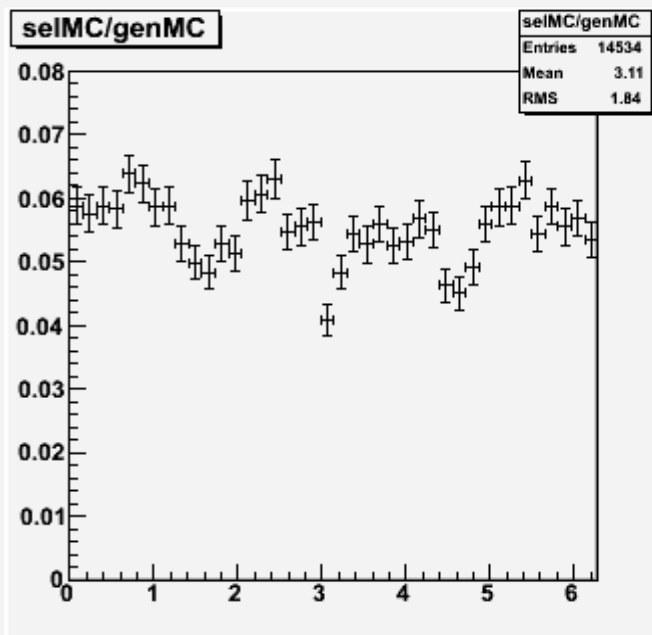
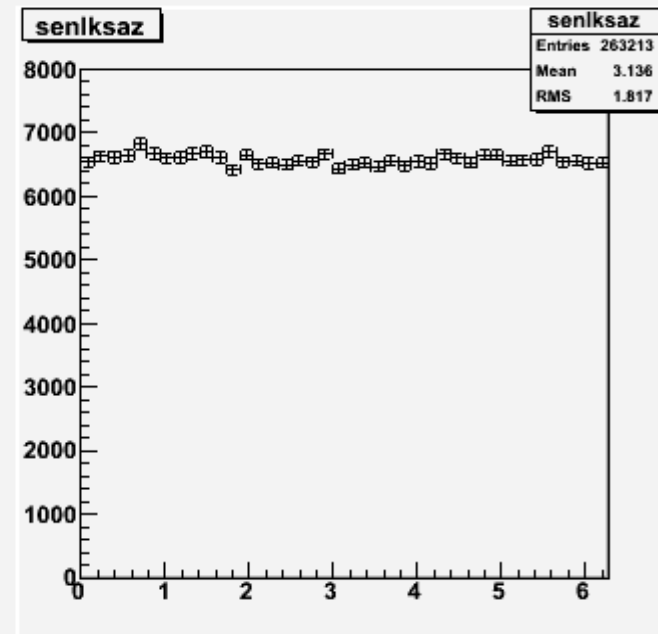
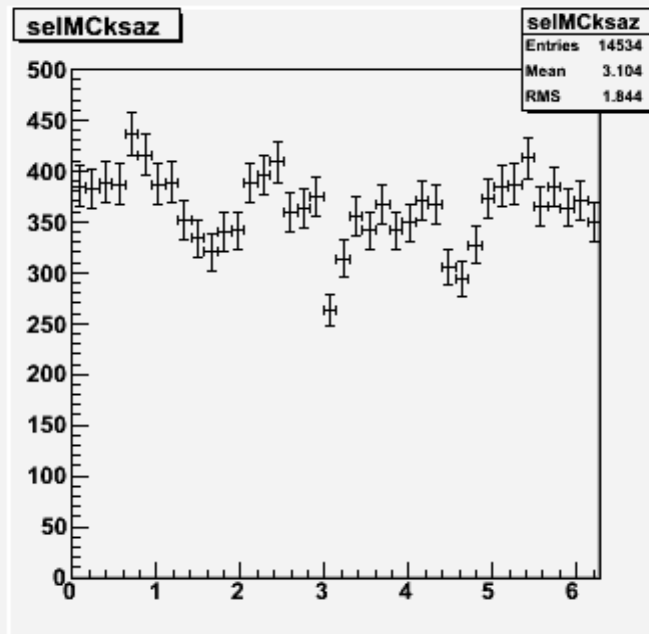
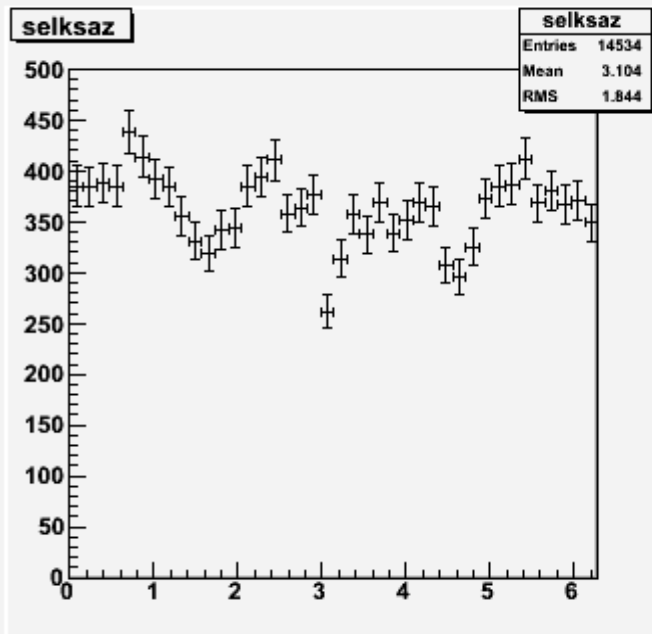
K-



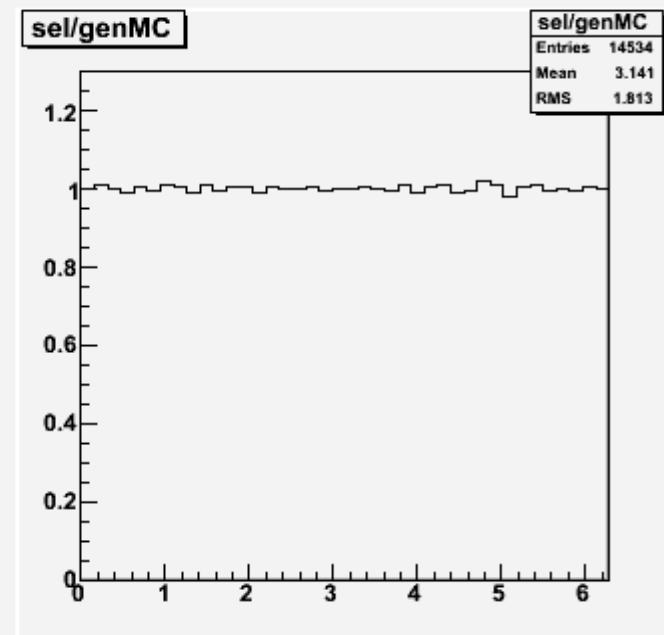
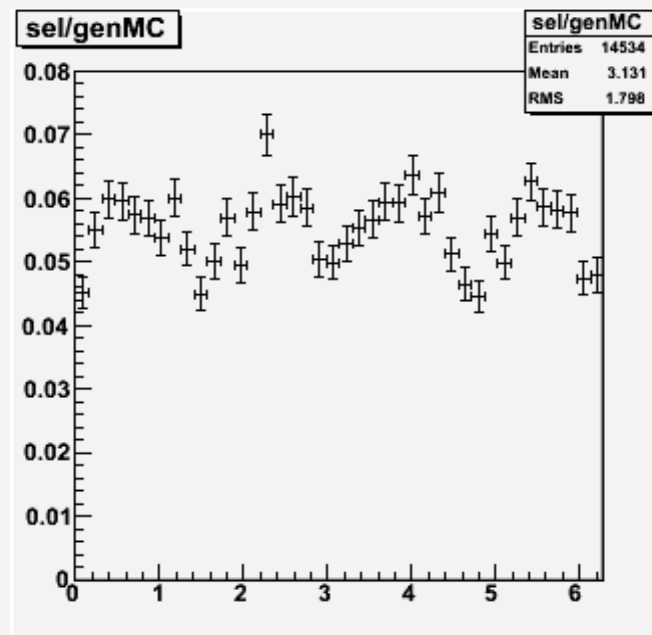
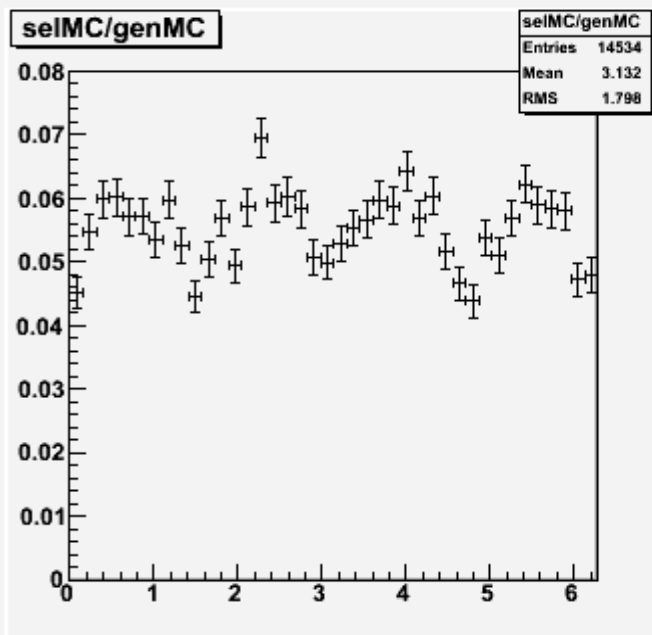
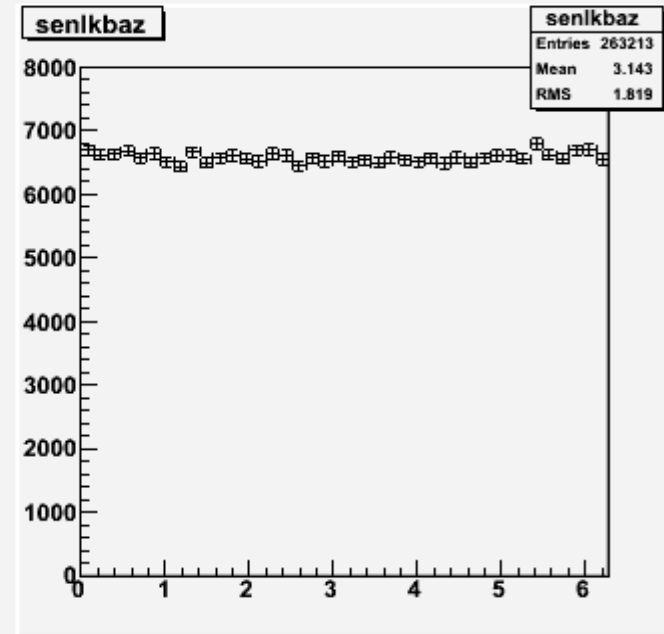
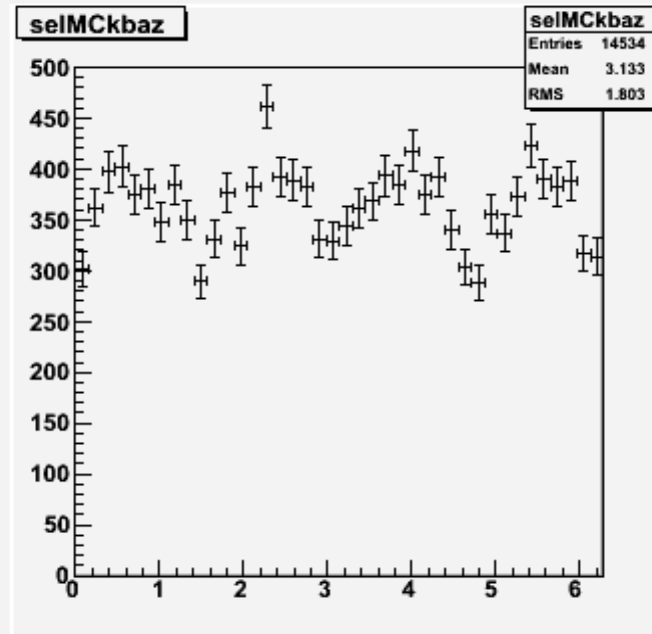
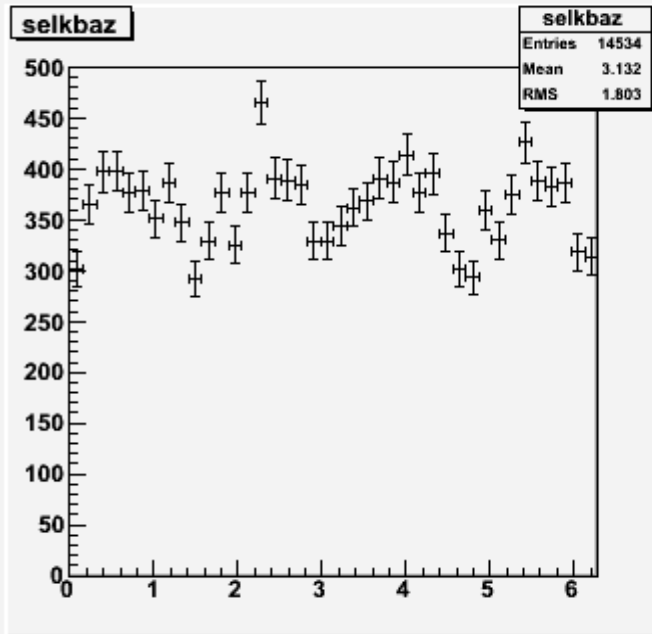
Pi+



K*



K^* bar



Bs

