# Alignment: compare to MC

Per Hansson Adrian 10/20/2015







#### SLAC

#### Simulation:

- Radiative (exclusive) "A" MC (beam-tri after)
- 2.2GeV, 75MeV mass, 5k events
- SLIC v5.00, v3 detector (note: no fieldmap)
- Simplified readout simulation

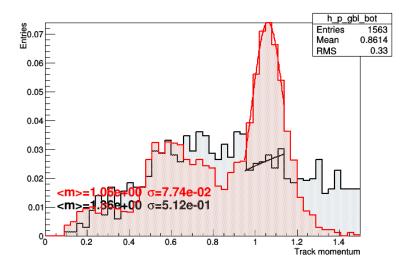
#### Data

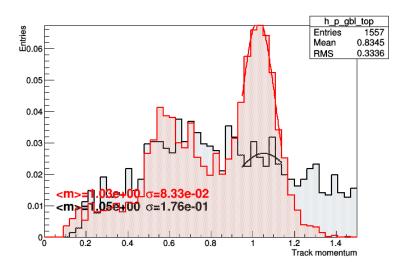
- v3-4-fieldmap
- Run 5772, ~20k events
- Any trigger



# Track sample are slightly different

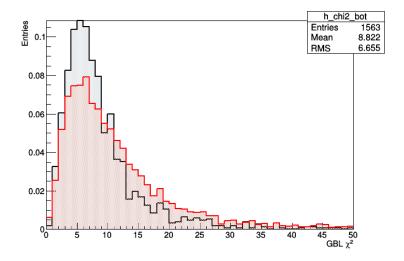
- Momentum harder and no FEE in MC
- Ok as a start

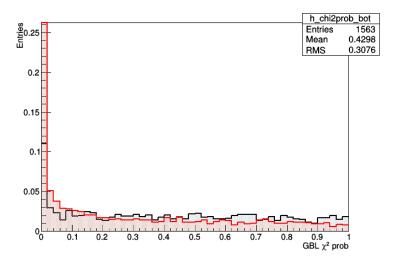


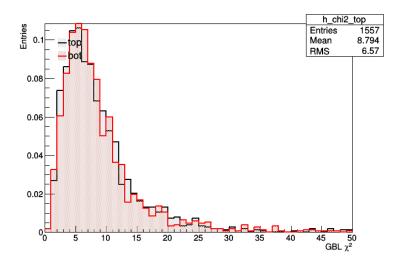


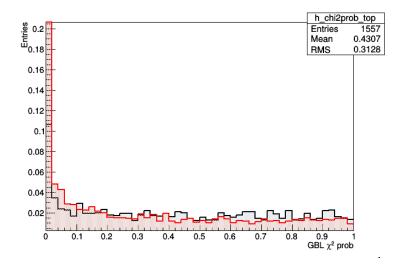
## Chi<sub>2</sub>

#### SLAC



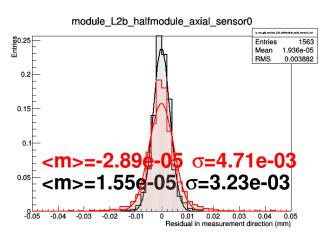


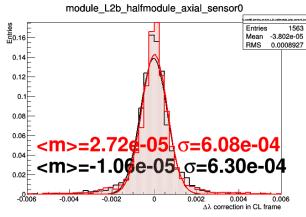


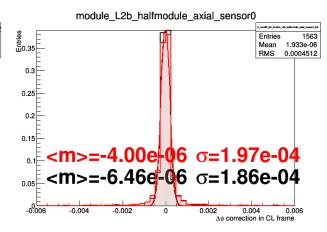


## **Examples**



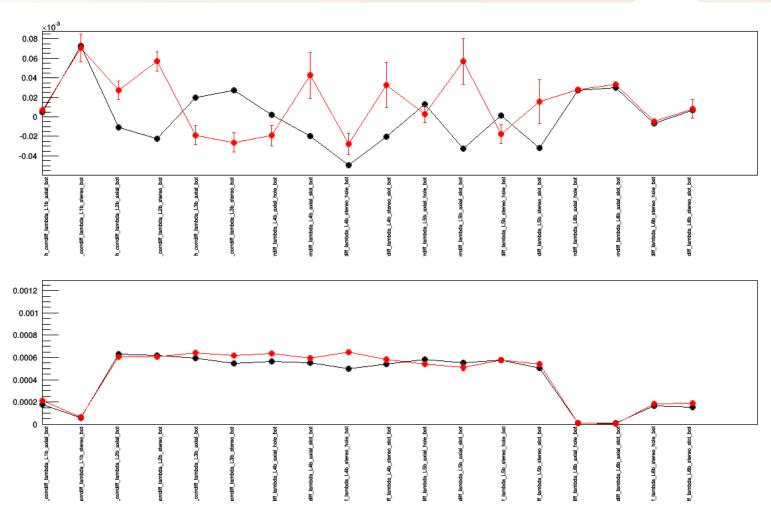






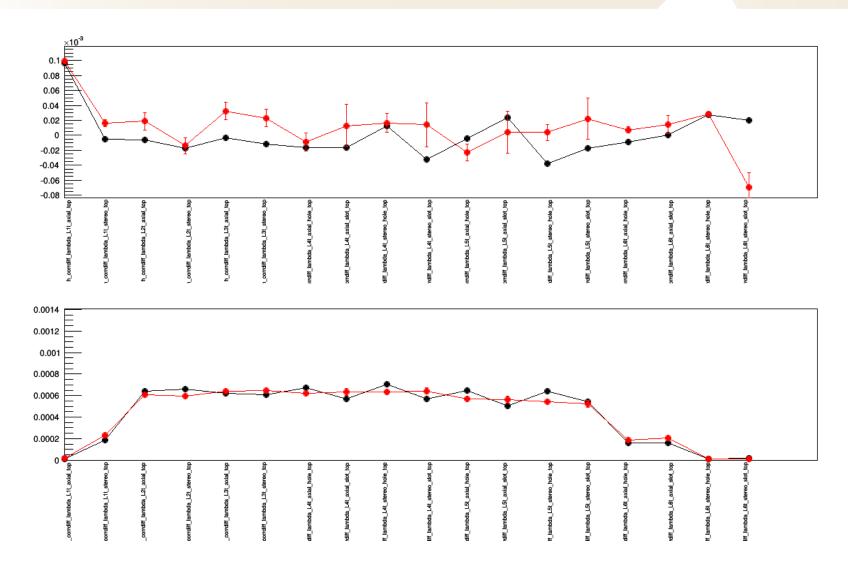
## Lambda bottom kinks





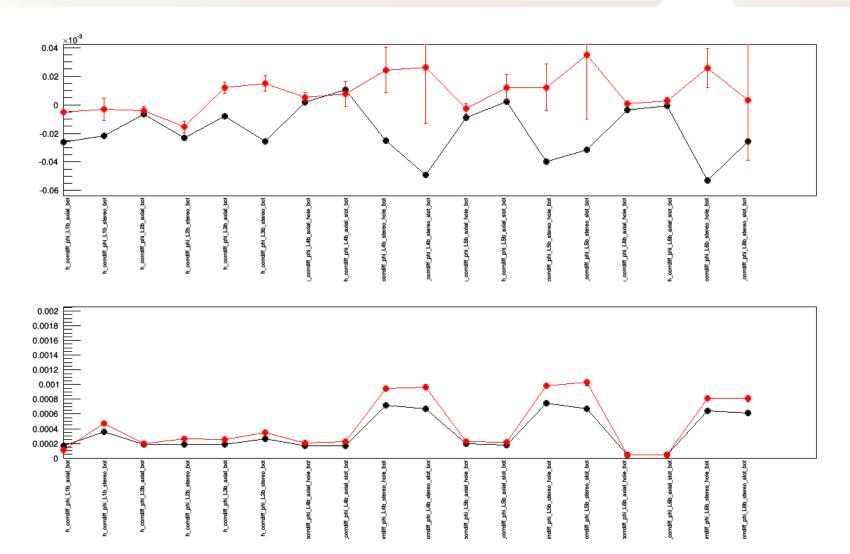
# Lambda top kinks





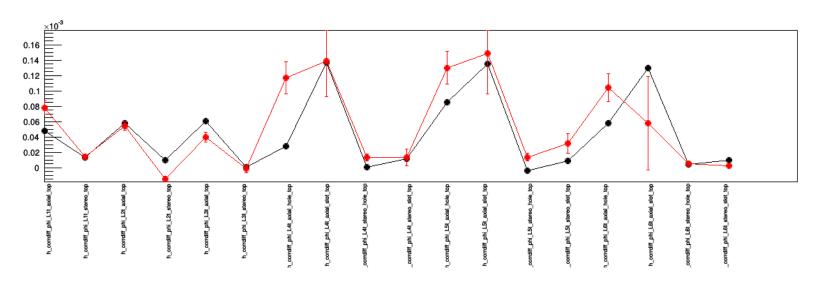
## Phi bottom kinks

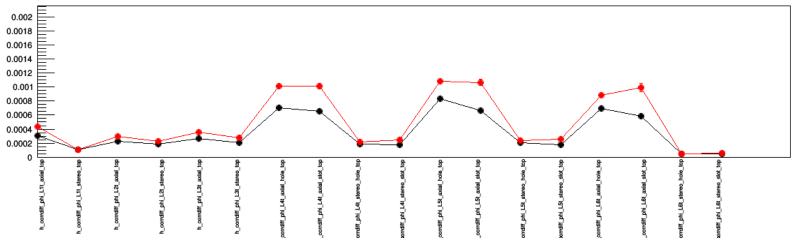




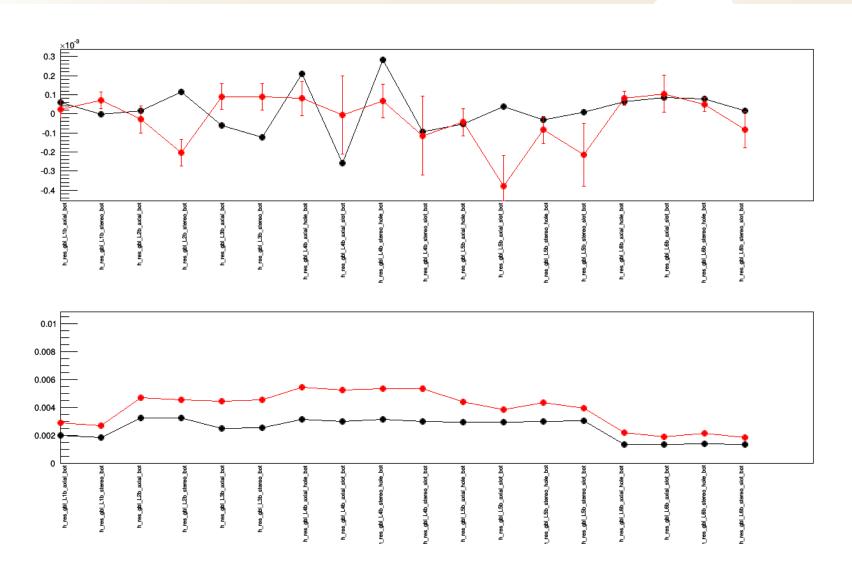
# Phi top kinks





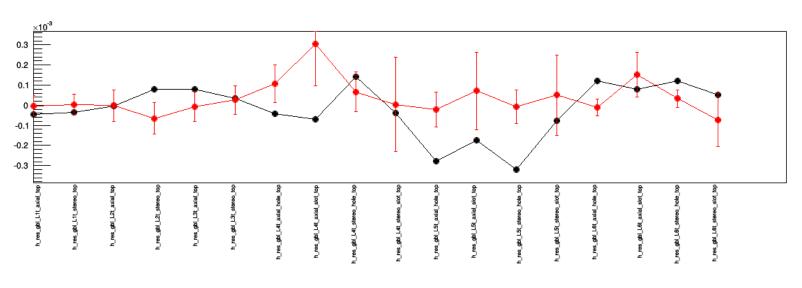


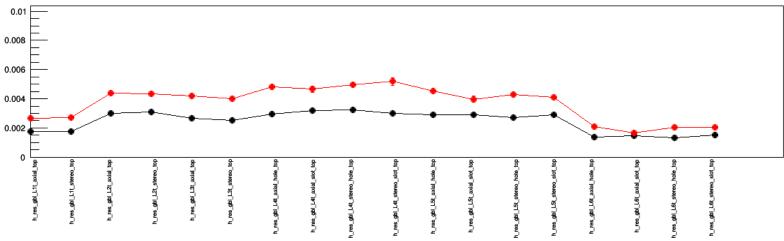




# **Residuals top**

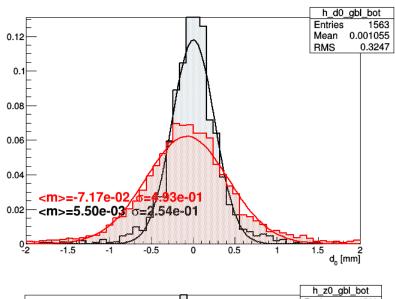


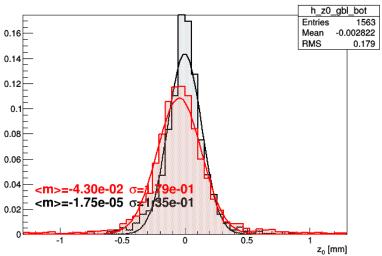


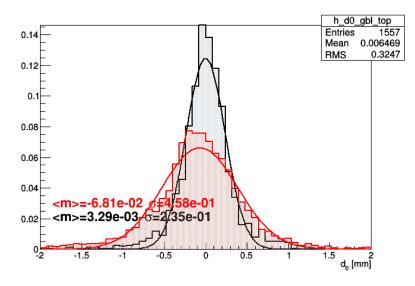


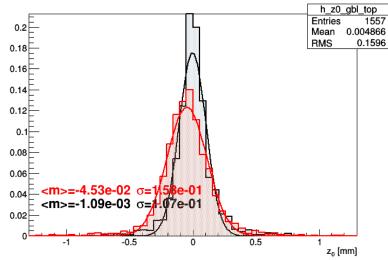
## **Impact parameters**

#### SLAC











#### Simulation:

- 1 Beam-tri SLIC sample file
- Dummy trigger (readout every 100<sup>th</sup> event)
- Single tracking strategy (s345)

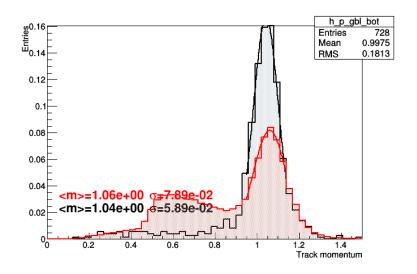
#### Data

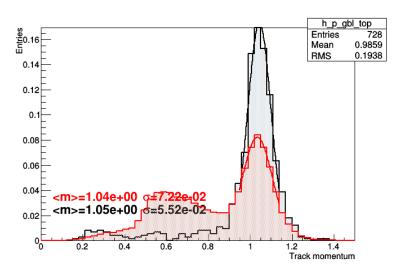
- v3-4-fieldmap
- Run 5772, all events from .0 file (100k?)
- Any trigger allowed



#### More low momentum tracks in data

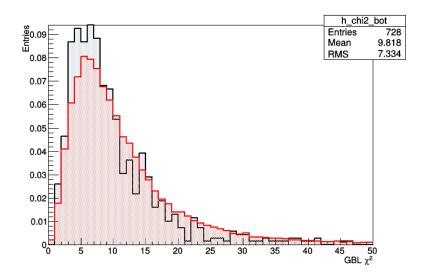
- Data is mostly pair1 triggers
- MC has no trigger bias

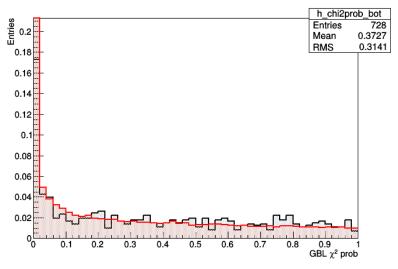


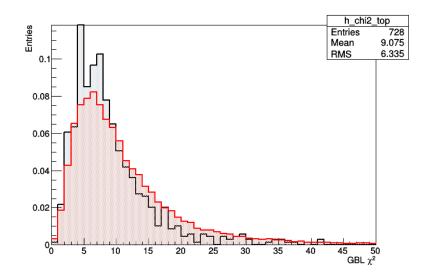


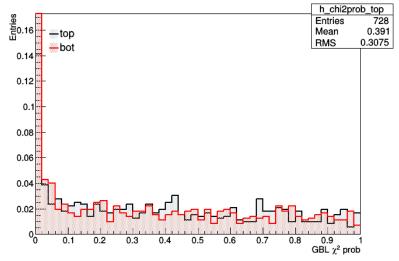
## Chi<sub>2</sub>

#### SLAC



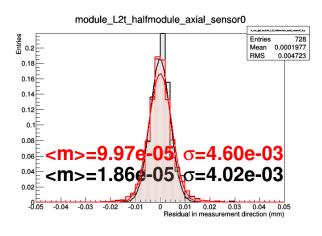


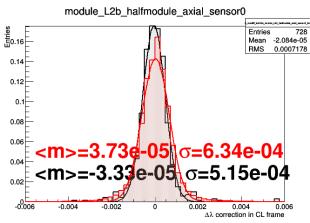


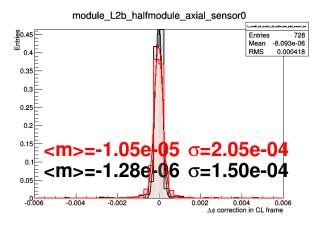


## **Examples**



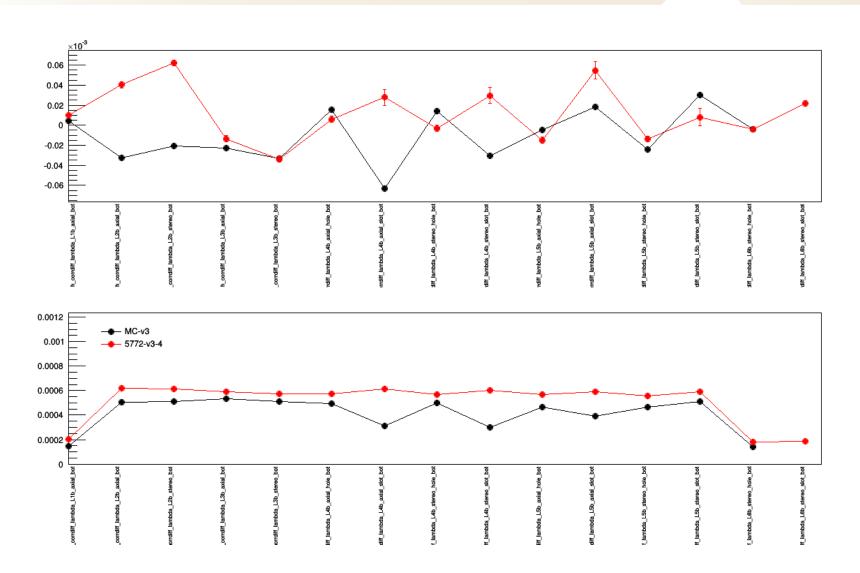






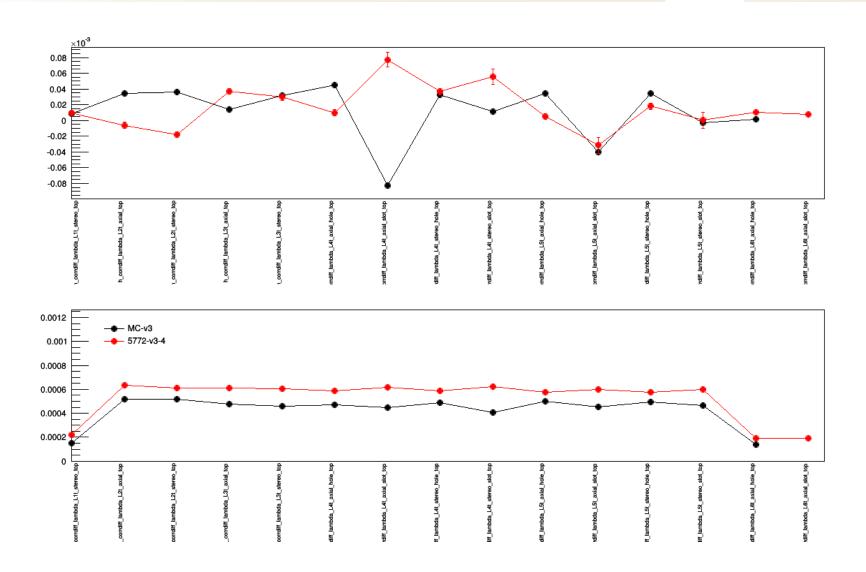
## Lambda bottom kinks



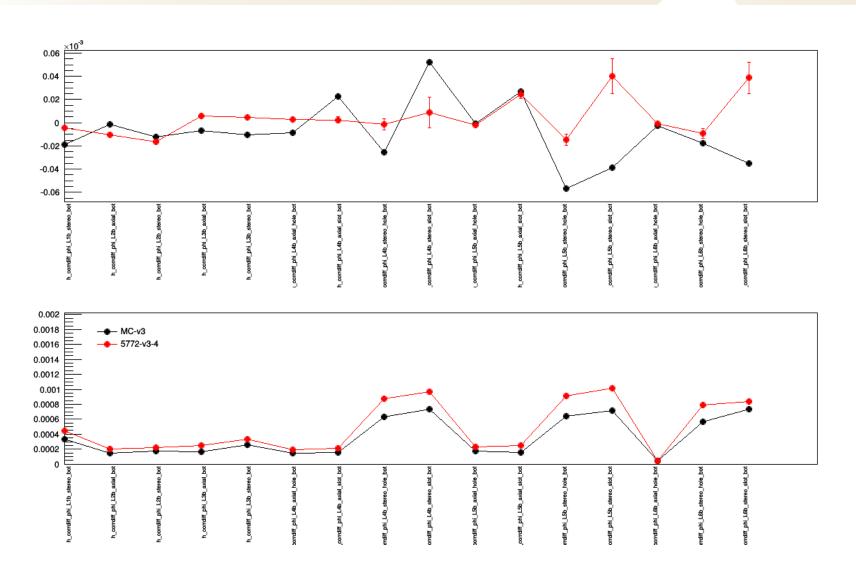


# Lambda top kinks



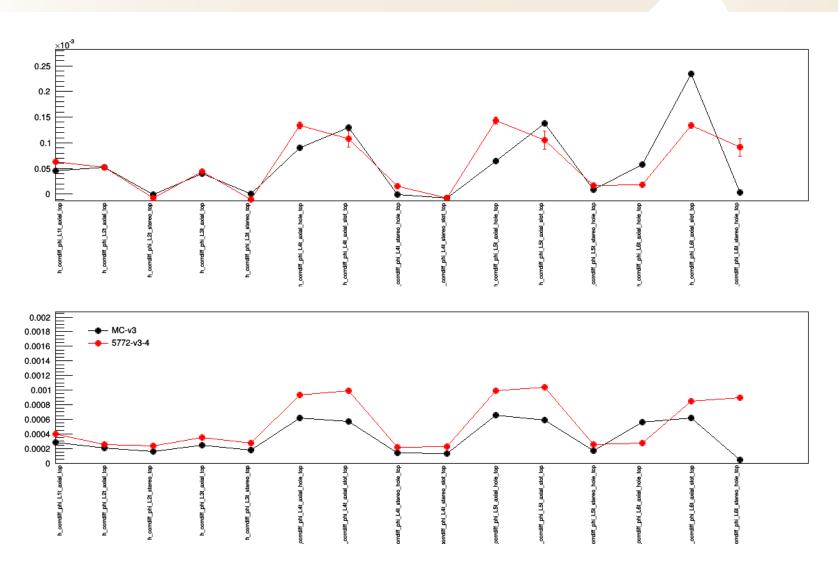




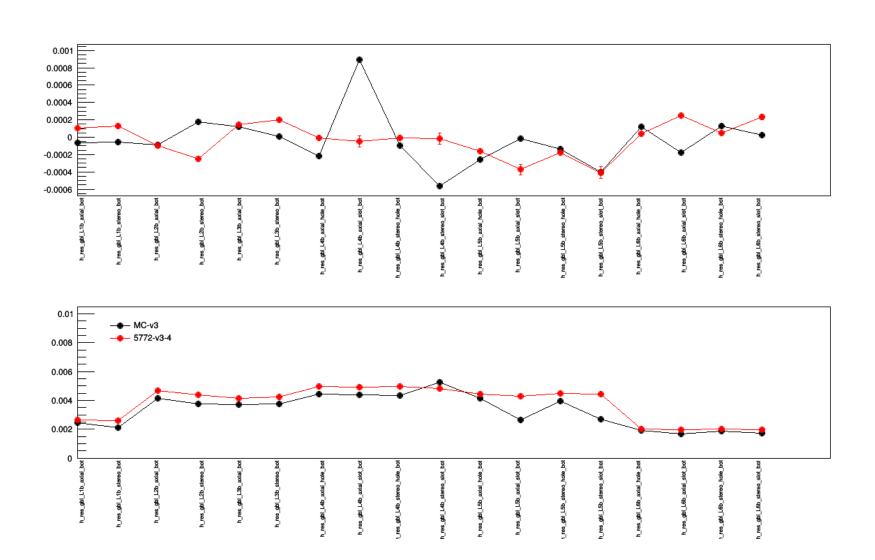


# Phi top kinks

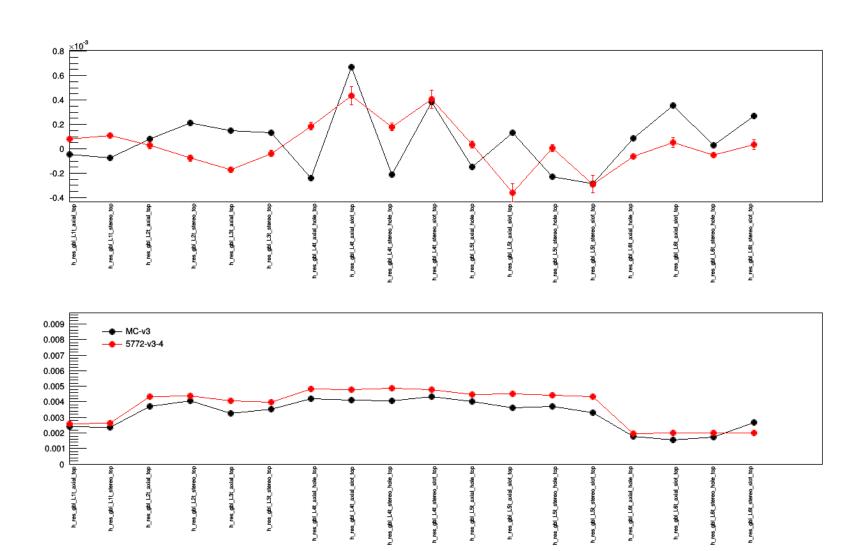












# **Impact parameters**



