

SAMC : single arm MC for acceptance cuts study

Goal:

- Run the SAMC with the same kin setting with experiment E08014
- Use cross section model XEMC to do weight on MC data

( Weight factor is the radiated cross section)

- compare MC to data
- Find the range MC and data match each other fine
- then decide the fine range for acceptance cuts on target variables.

SAMC running:

## **1. Generator:**

SAMC will generate uniform distributions for :

Es : beam energy follow gaussian distribution and smear by E resolution

th\_tg\_gen: out plan\_angle

ph\_tg\_gen: in plan\_angle

dp\_gen : relative momentum

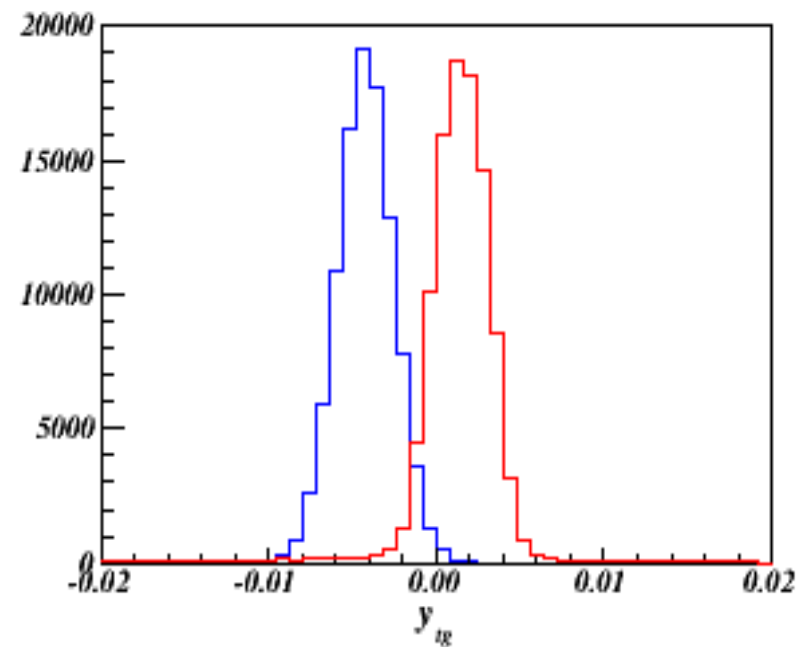
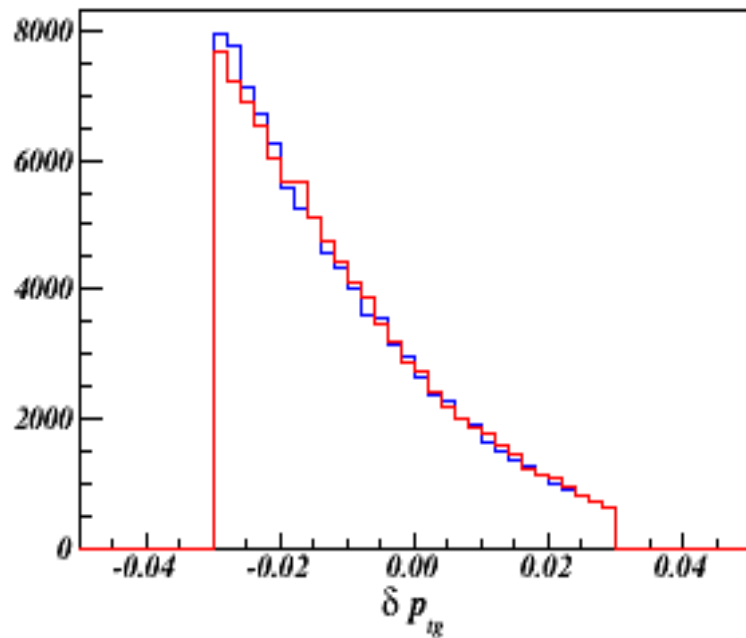
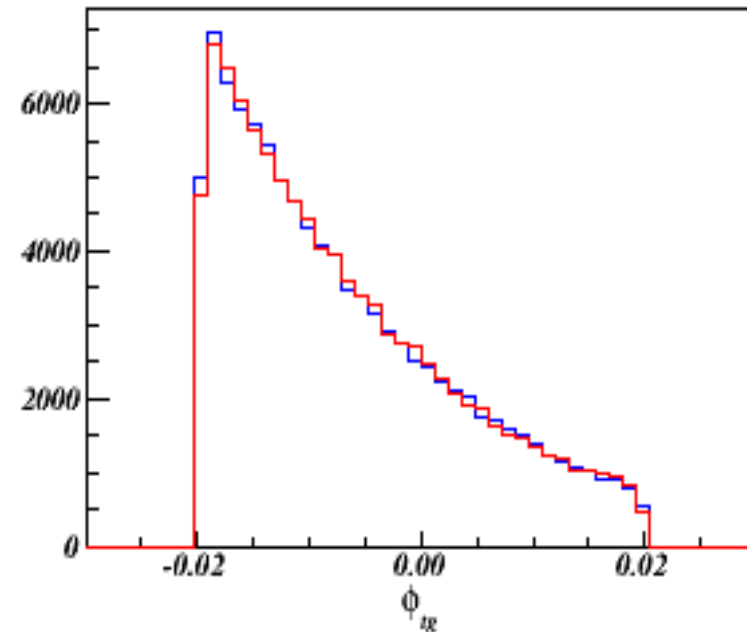
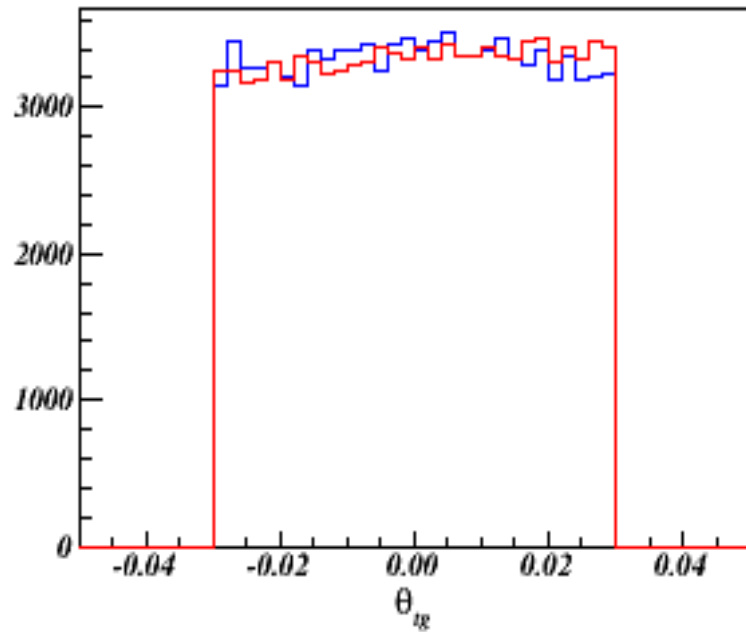
## **2. Forward transportation function (FTF)**

After events generated FTF will transport them to FP and add smearing of VDC.

## **3. Backward transportation function(BTF)**

This will reconstruct the event to target

First check with C12:



# First test for D2

