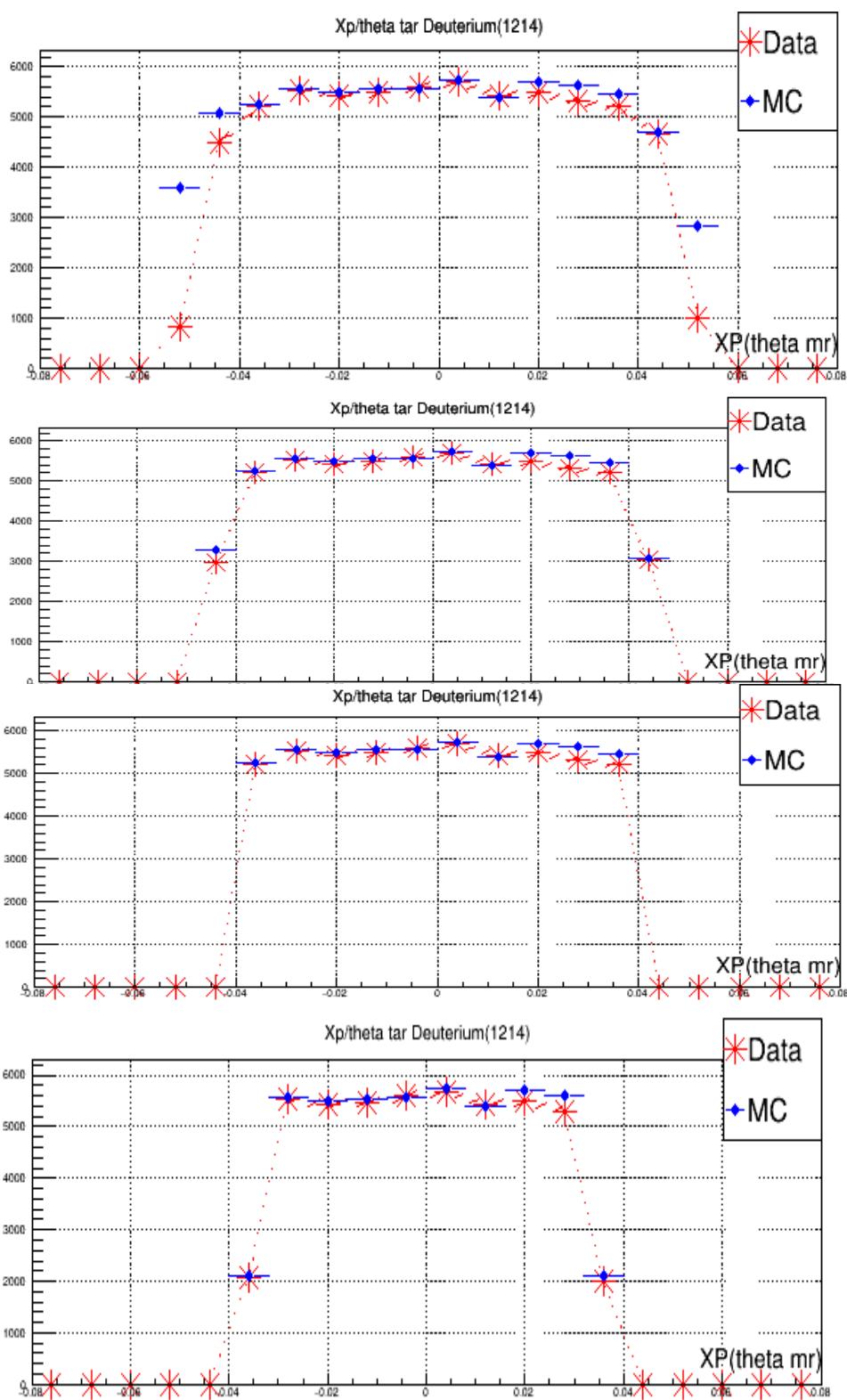


# Monte Carlo to Data comparison

- $\text{abs}(\text{yptar}) \leq 0.03$
- $\text{abs}(\text{xptar}) \leq 0.04$
- $\text{abs}(\text{ztar}) \leq 9.0$
- $\text{abs}(\text{delta}) < 4$
- $L.\text{cer}.\text{asum\_c} > 1500$ )
- $(L.\text{prl1.e} + L.\text{prl2.e}) > P0 * 0.7))$
- $(L.\text{tr}.\text{beta} > 0.5)$
- $\text{fabs}(L.\text{tr}.\text{tg_dp}) < 0.04)$
- $\text{fabs}(L.\text{tr}.\text{tg_th}) < 0.04)$
- $(\text{fabs}(L.\text{tr}.\text{tg_ph}) < 0.03)$
- $(\text{fabs}(L.\text{tr}.\text{vz}) < 0.09)$

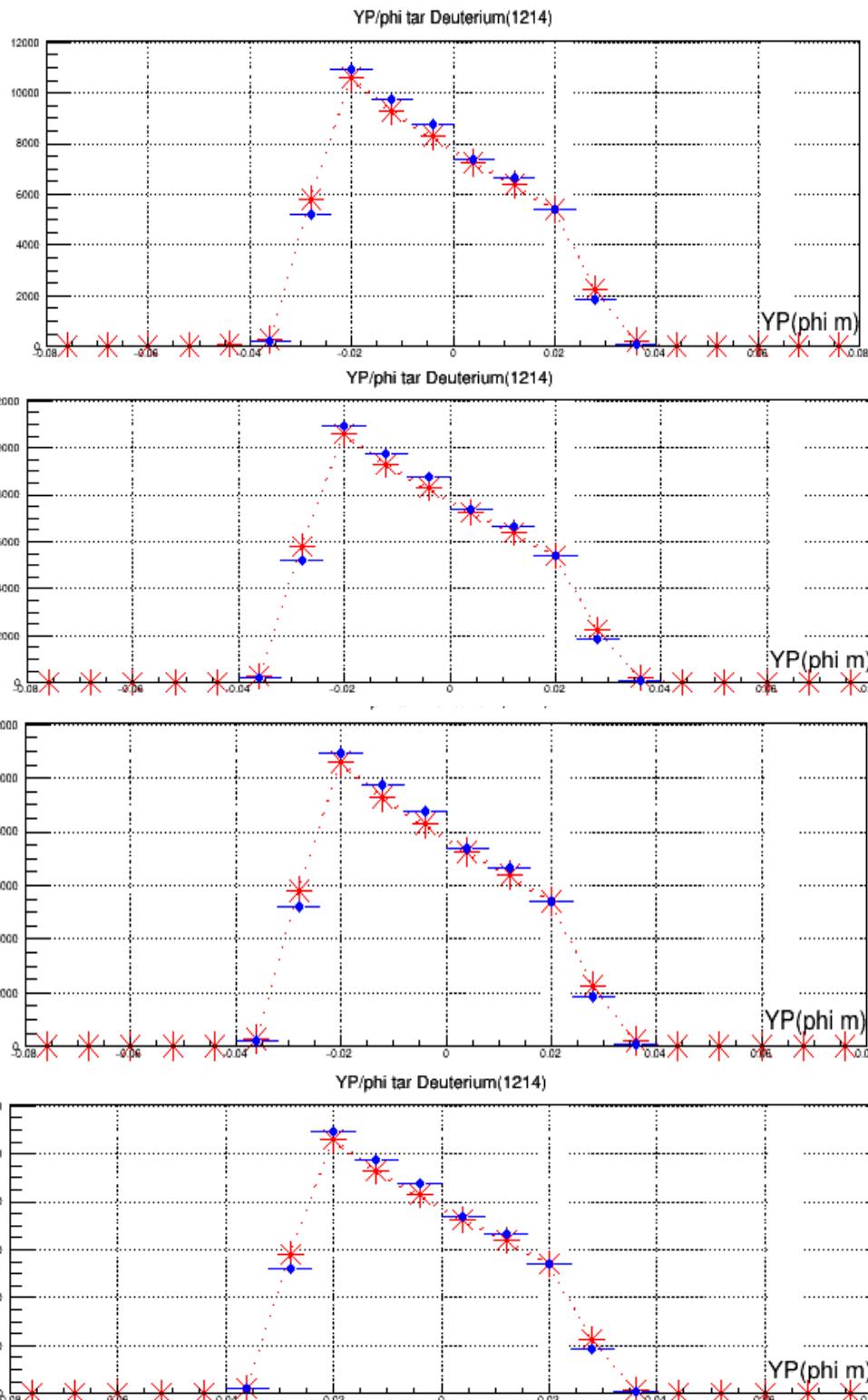
# Scan xptar(theta) cut

- 0.05 mrad data/mc ~ 0.914  
~65K events ~ err 0.0039
- 0.045 mrad data/mc ~ 0.979  
~60K events ~ err 0.0041
- 0.04 mrad data/mc ~0.983  
~54K events ~ err 0.0043
- 0.035 mrad data/mc ~0.982  
~48K events ~err 0.0045



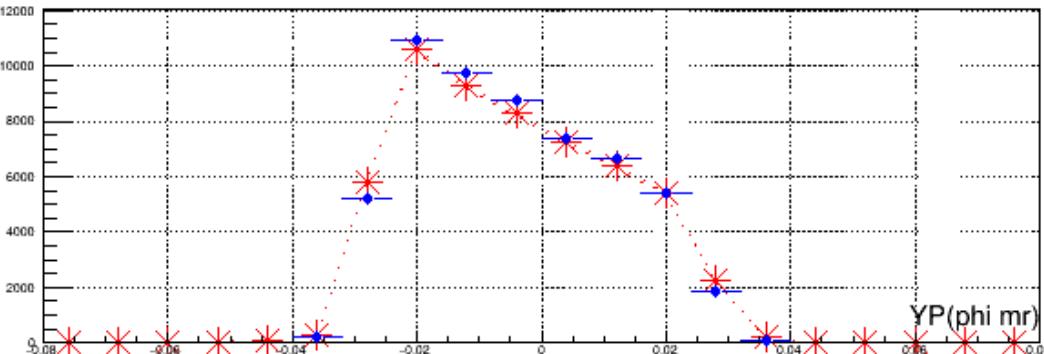
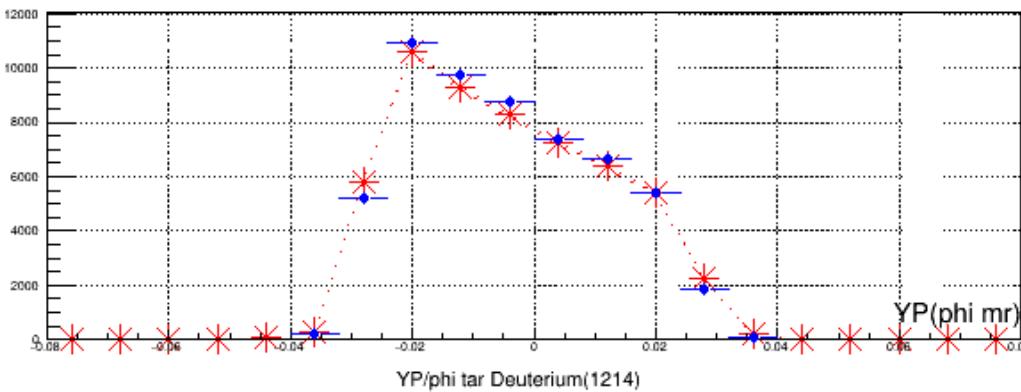
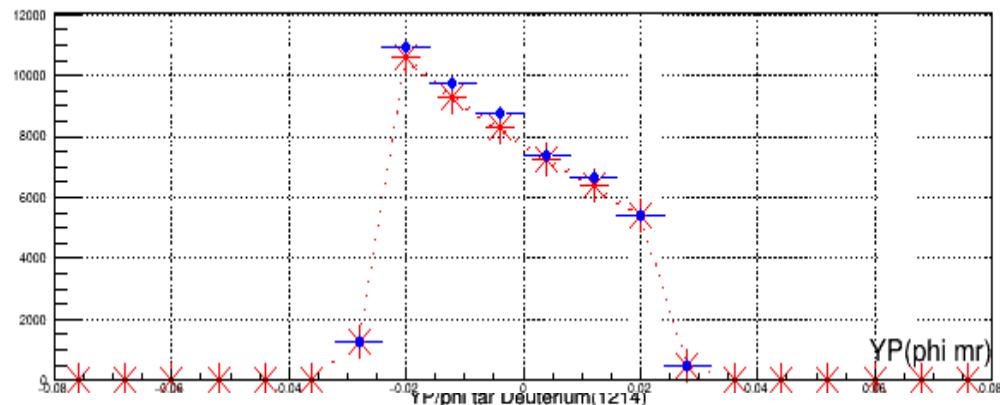
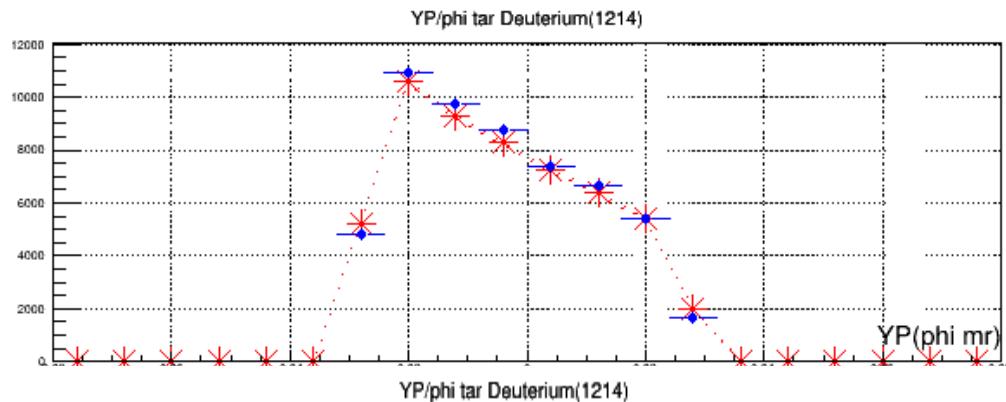
# Scan yptar(phi) cut

- 0.05 mrad data/mc  $\sim 0.993$   
 $\sim 55K$  events  $\sim \text{err } 0.0042$
- 0.045 mrad data/mc  
 $\sim 0.992$   $\sim 55K$  events  $\sim \text{err } 0.0042$
- 0.04 mrad data/mc  $\sim 0.991$   
 $\sim 55K$  events  $\sim \text{err } 0.0042$
- 0.035 mrad data/mc  $\sim 0.99$   
 $\sim 55K$  events  $\sim \text{err } 0.0042$
- 



# Scan yptar(phi) cut

- 0.3 mrad data/mc ~0.983  
~54K events ~ err 0.0042
- 0.025 mrad data/mc ~0.967  
~48K events ~ err 0.0045
- 0.055 mrad data/mc  
~0.9939 ~55.7k err  
~0.0042
- 0.06 mrad data/mc ~0.994  
~55.8k err ~ 0.0042

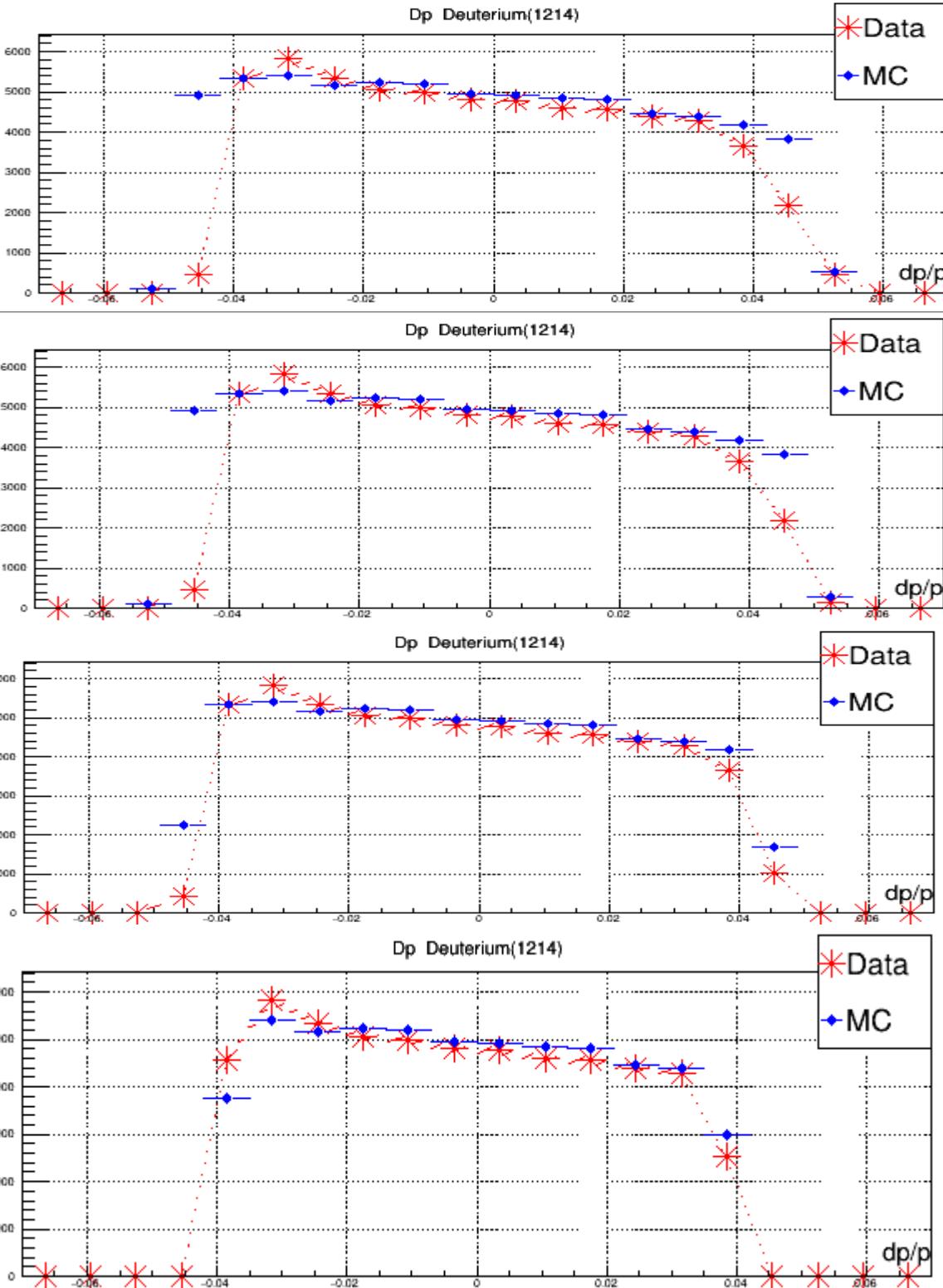


# Scan xptar(theta) cut with phi at 0.05 mrad

- 0.06 mrad data/mc ~0.979 ~72K ~ err 0.0037
- 0.055 mrad data/mc ~0.981 ~70K ~ err 0.0037
- 0.05 mrad data/mc ~0.983 ~68k ~ err 0.0038
- 0.045 mrad data/mc ~0.988 ~61K ~ err 0.0040
- 0.040 mrad data/mc ~0.993 ~55k ~err 0.0042
- 0.035 mrad data/mc ~0.993 ~49k ~err 0.0045
- Set new theta and phi cuts to 0.04 and 0.05

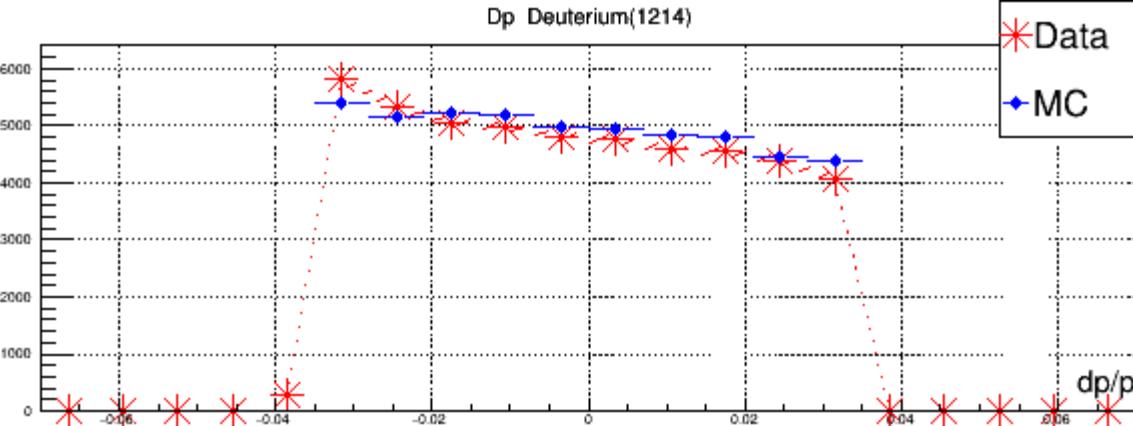
# Scan in delta!

- $Dp/p = 0.055$  data/mc  $\sim 0.89$   
 $\sim 60K$  events  $\sim \text{err } 0.004$
- $Dp/p = 0.05$  data/mc  $\sim 0.89$   
 $\sim 60K$  events  $\sim \text{err } 0.004$
- $Dp/p = 0.045$  data/mc  $\sim 0.94$   
 $\sim 59K$  events  $\sim \text{err } 0.0041$
- $Dp/p = 0.04$  data/mc  $\sim 0.993$   
 $\sim 55K$  events  $\sim \text{err } 0.0042$



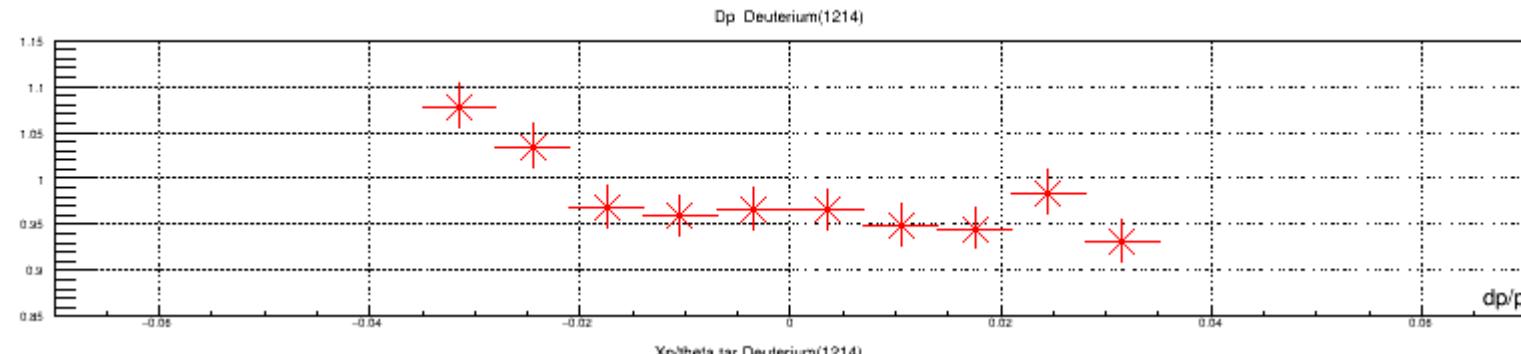
# Scan in delta!

- $Dp/p = 0.035$  data/mc  $\sim 0.99$   
 $\sim 48K$  events  $\sim \text{err } 0.0045$

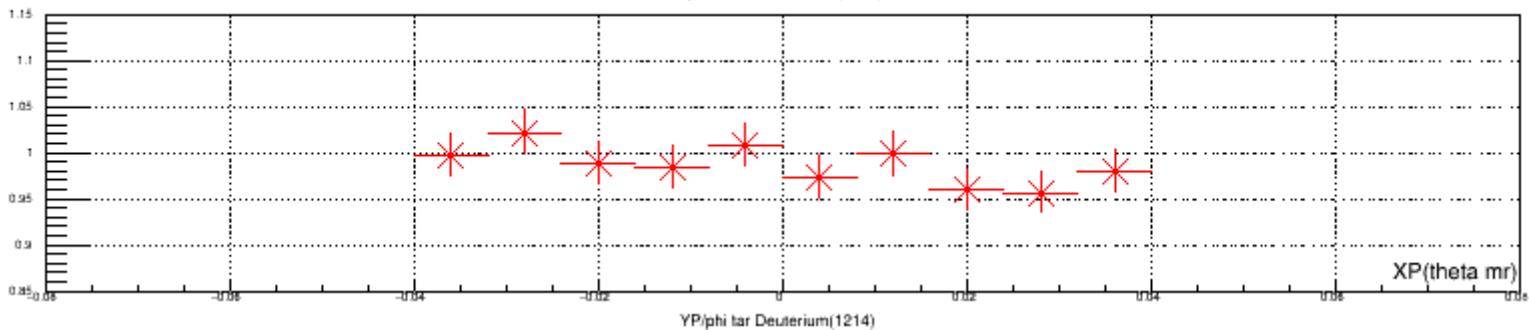


## Residual plots

- DP



- $Xp(\theta)$



- $Yp(\phi)$

