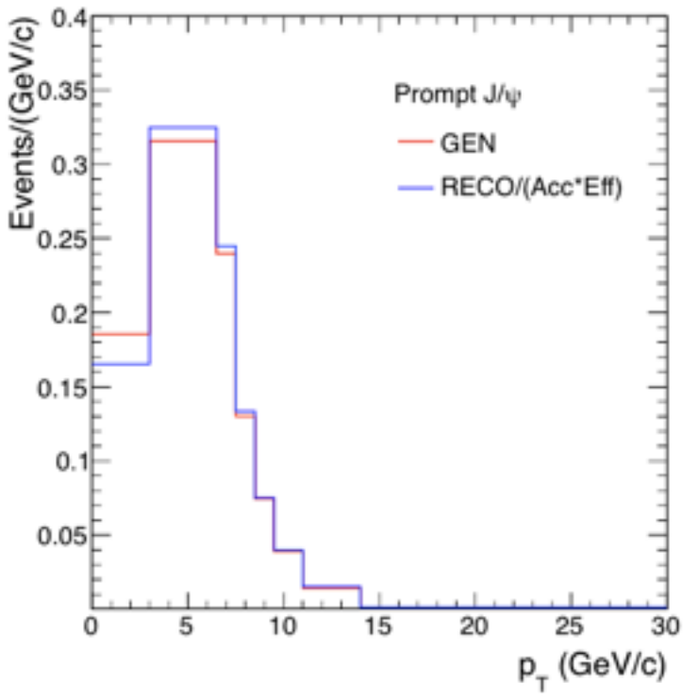
[HIN-14-009]
embedded sample check

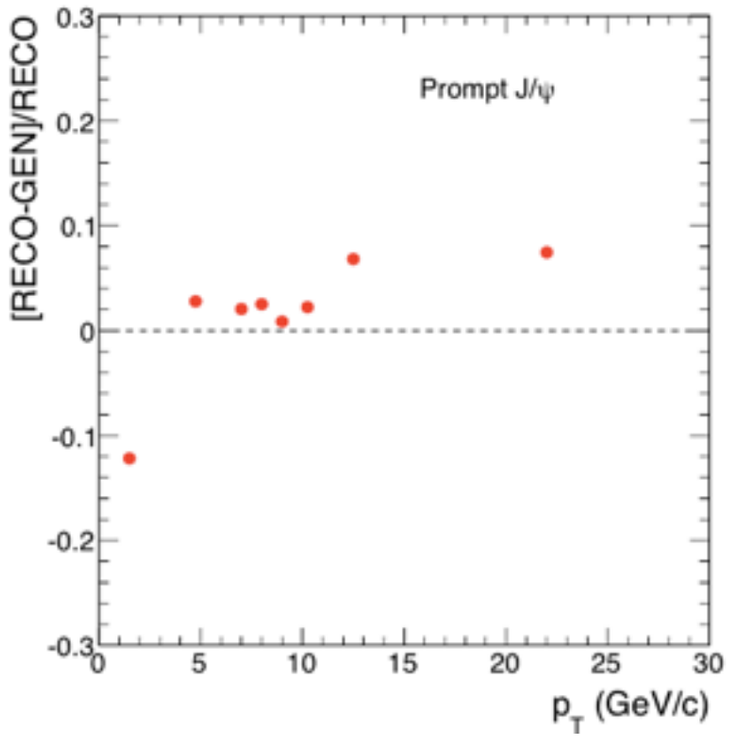
**Songkyo Lee*, Lamia Benhabib,
Yongsun Kim, Kisoo Lee
Mihee Jo, Hyunchul Kim**

working meeting
9th January 2015

MC Closure test

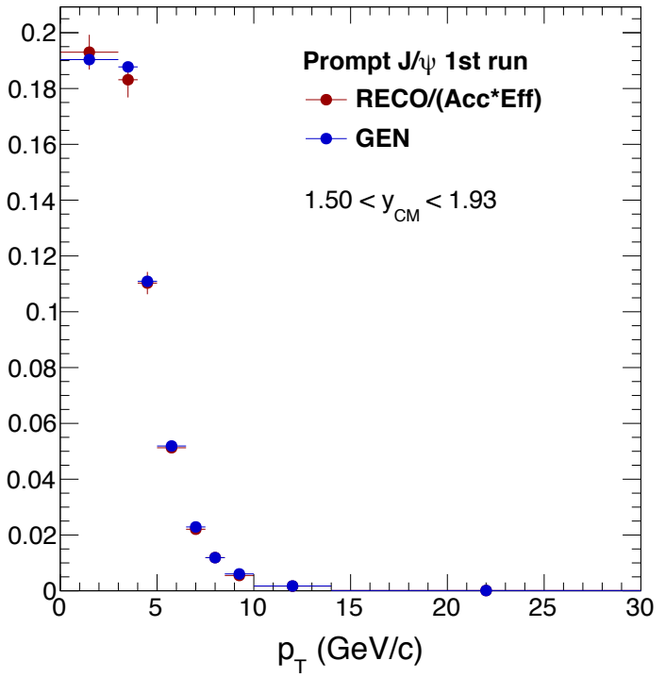
Old result

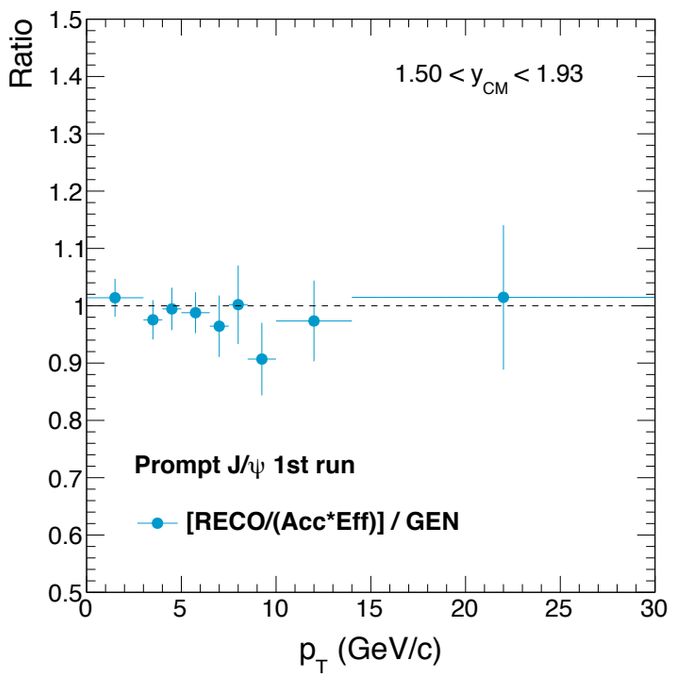




- rapidity integrated
- Disagreement in 0-3 GeV/c

New result



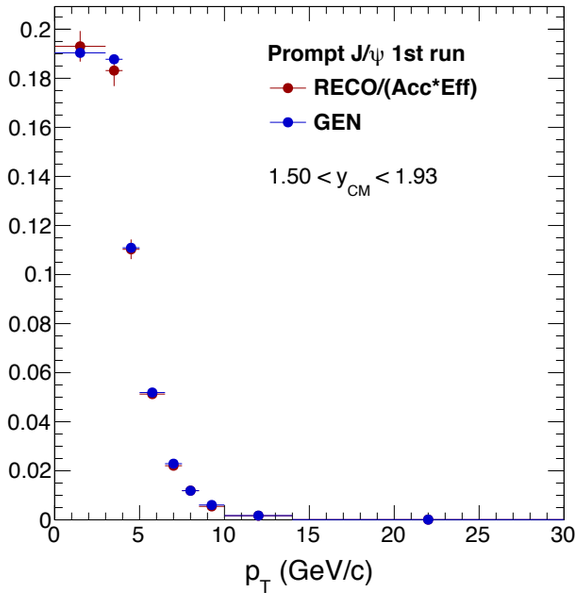


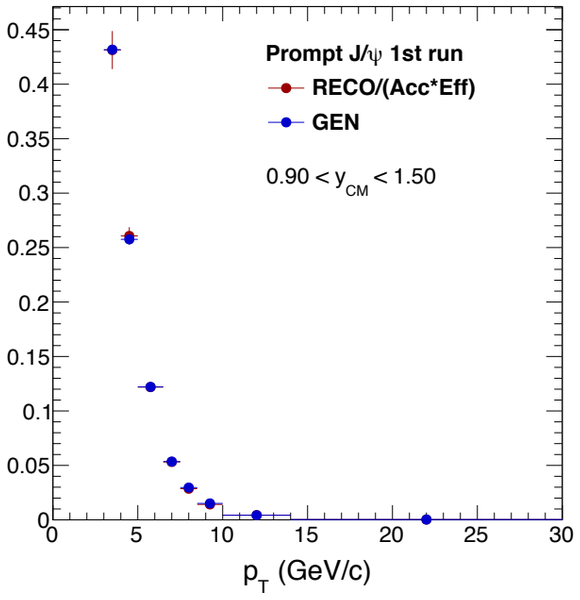
- in differential rapidity ranges
- 1st run & 2nd run separately
- statistical error bars included (We are using two sample)
- They Agree well now!

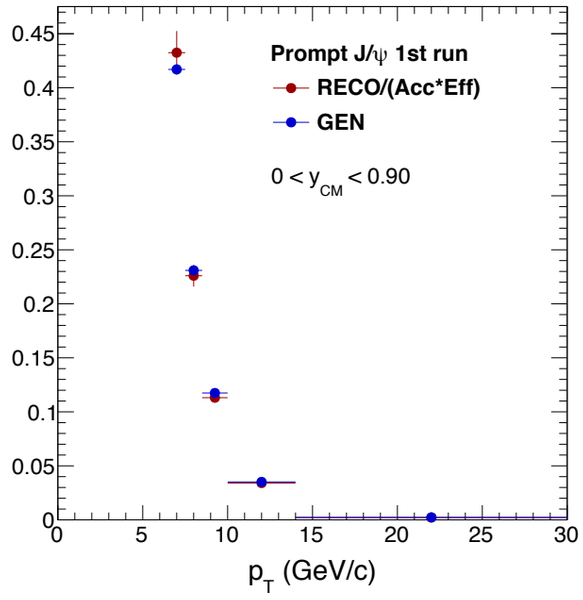
All the plots in p3-p10

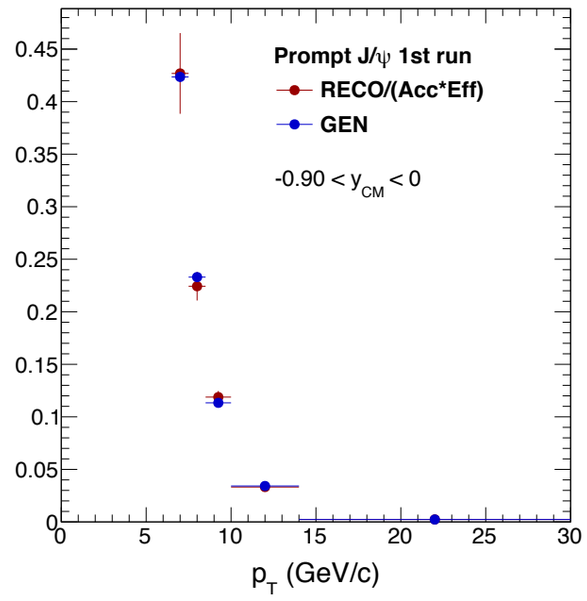
Closure test

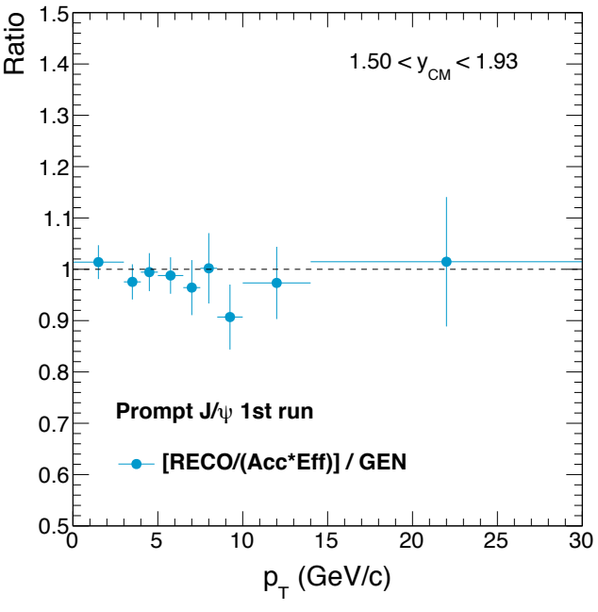
- prompt MC 1st run

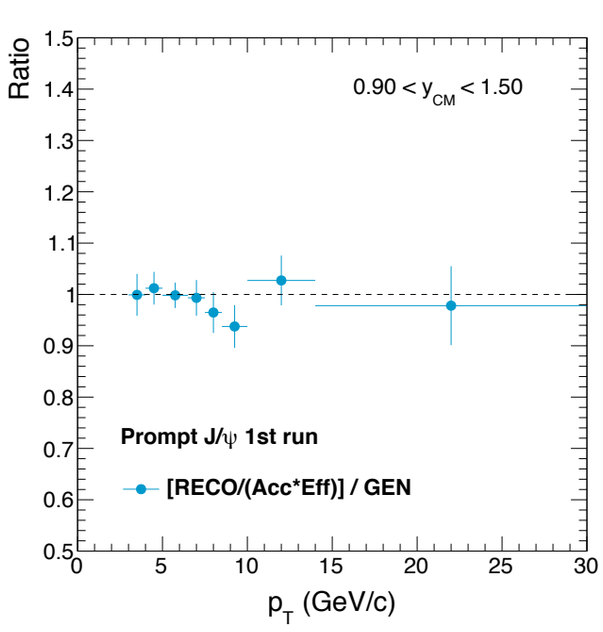


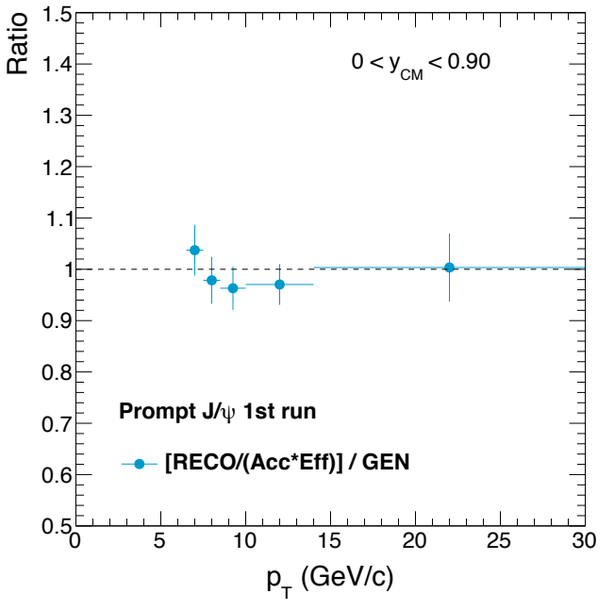


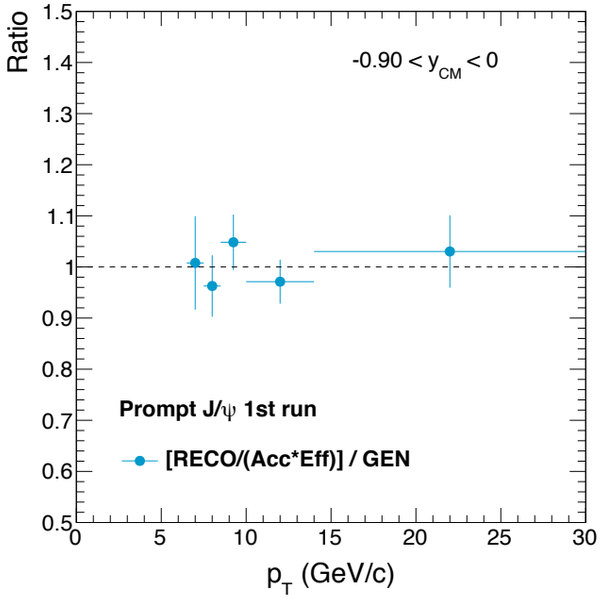




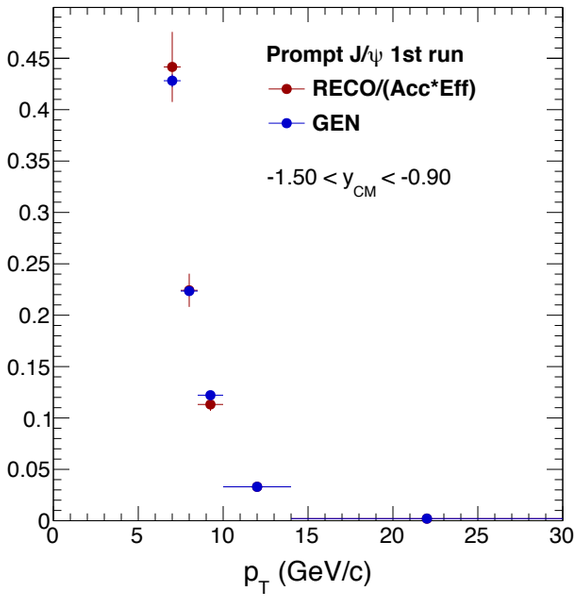


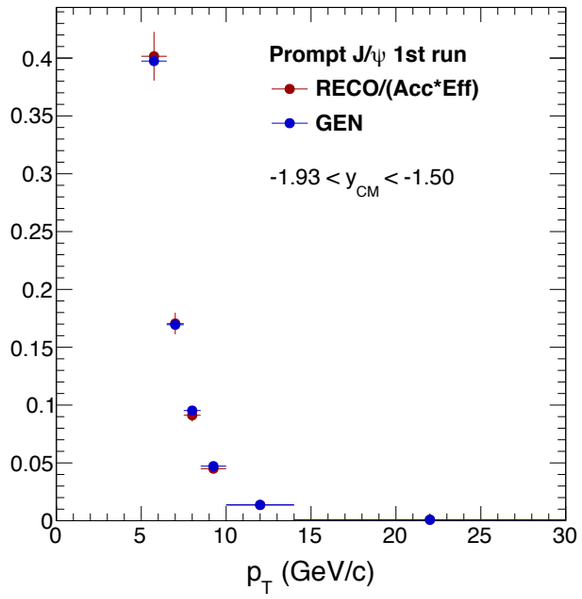


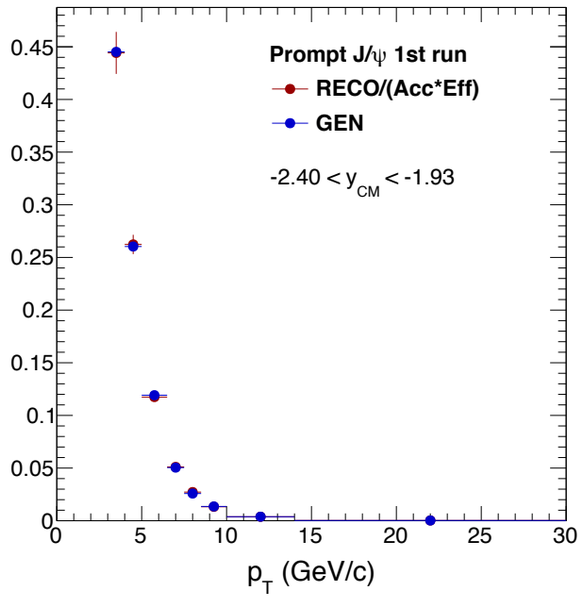


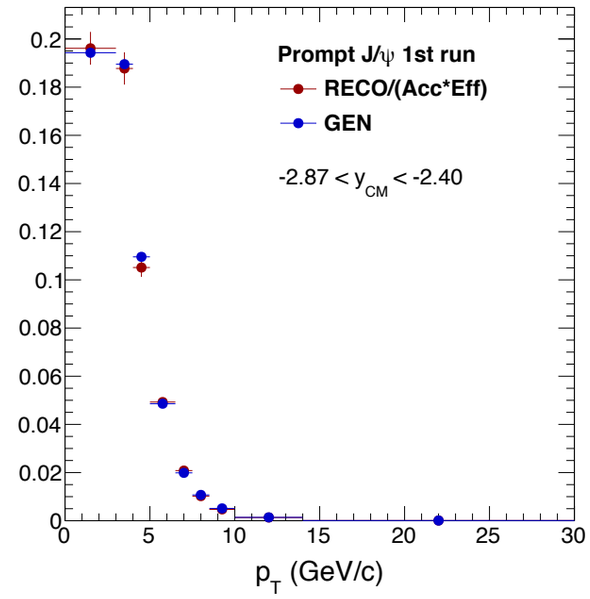


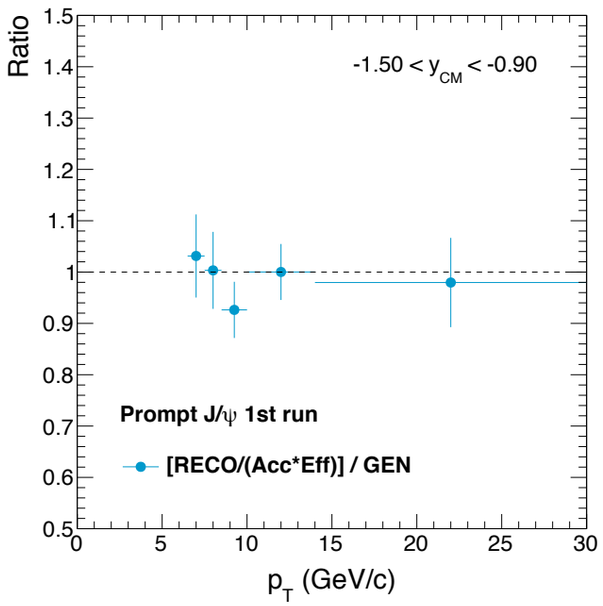
Closure test

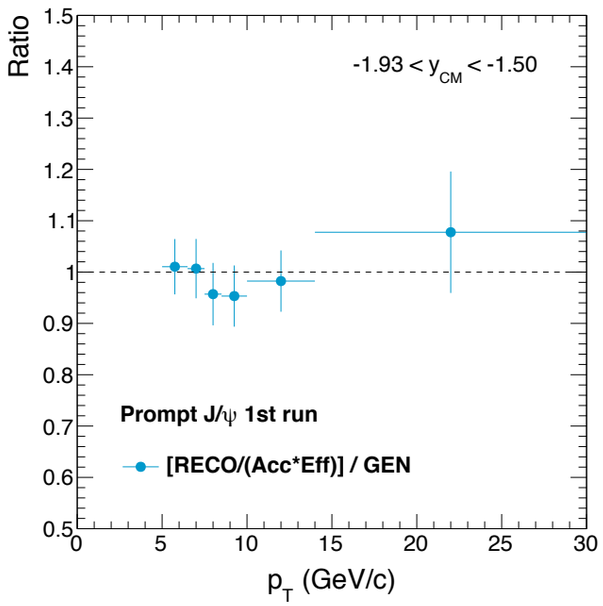


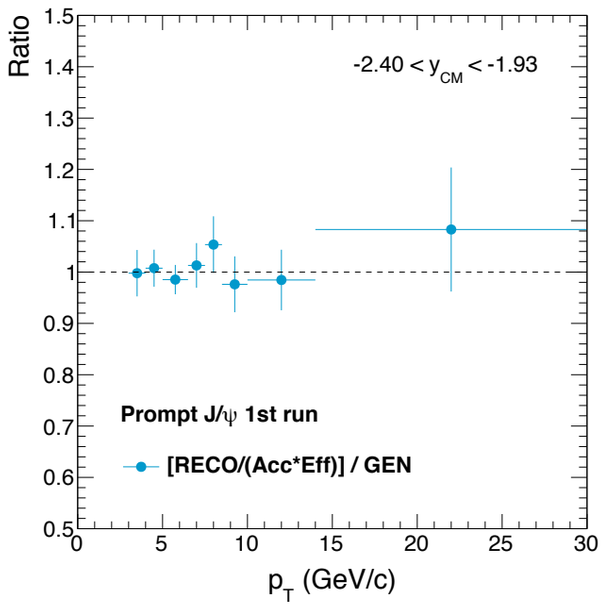


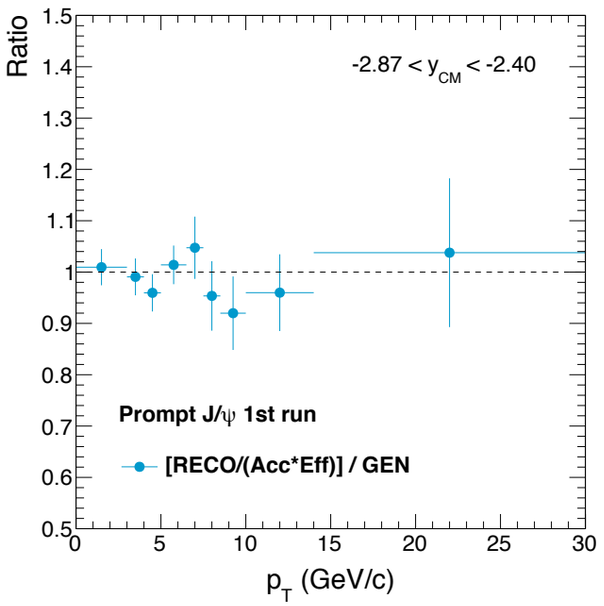






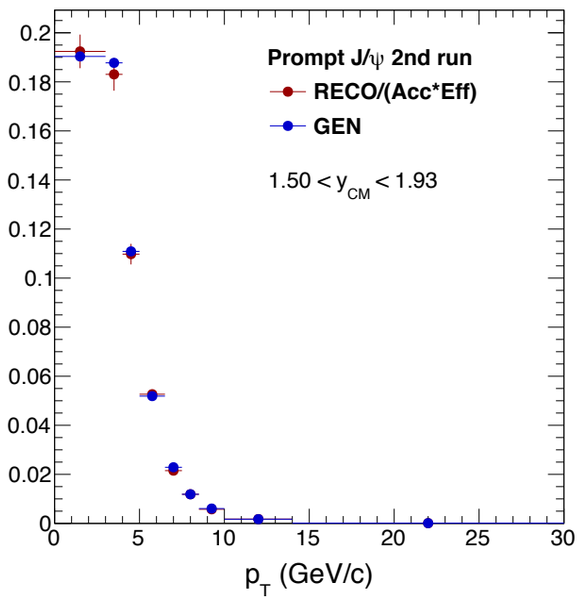


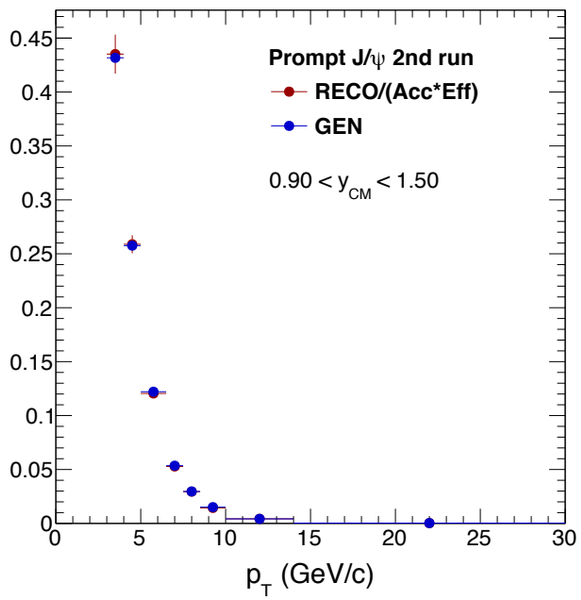


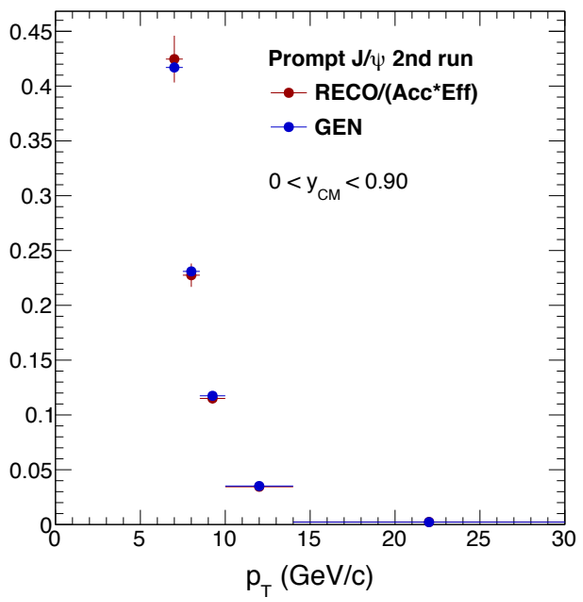


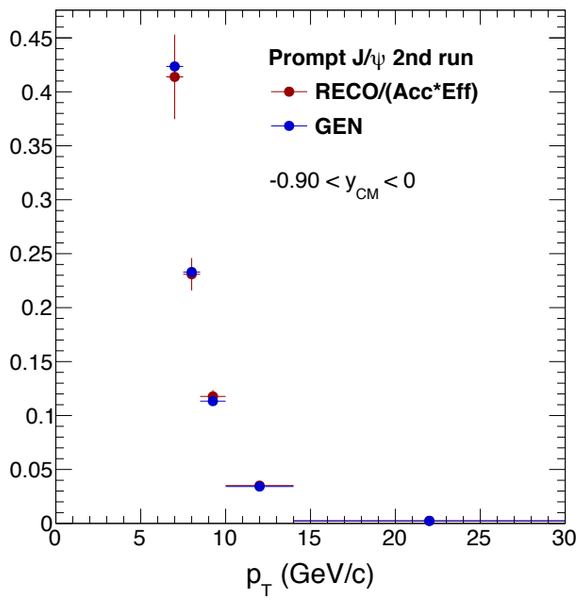
Closure test

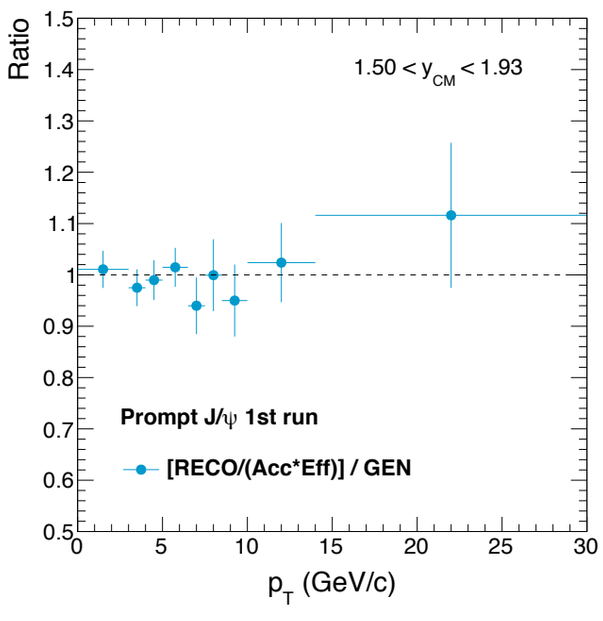
- prompt MC 2nd run

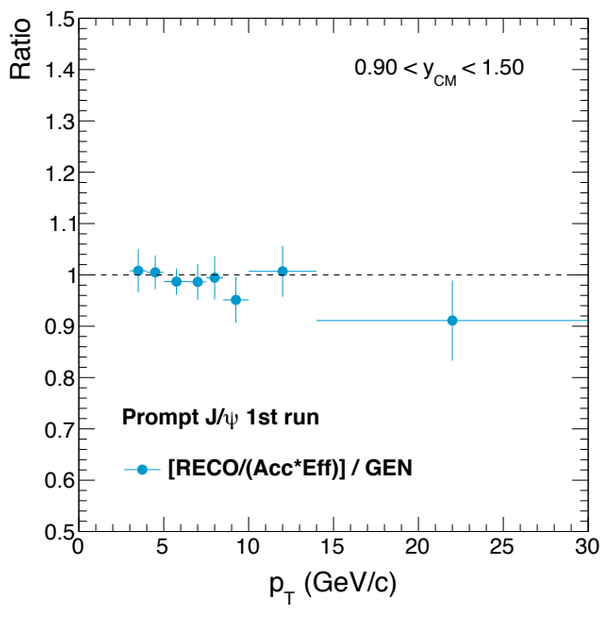


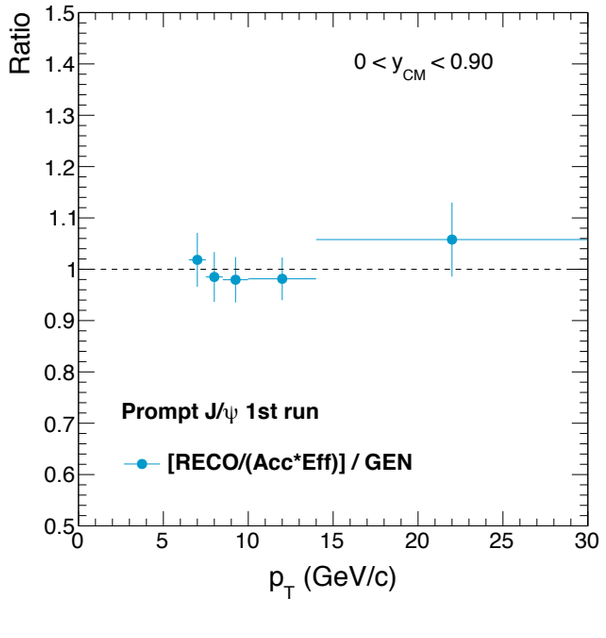


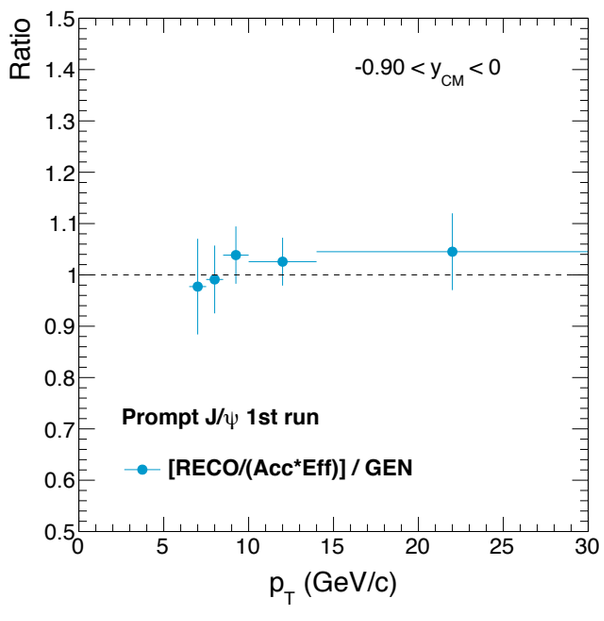




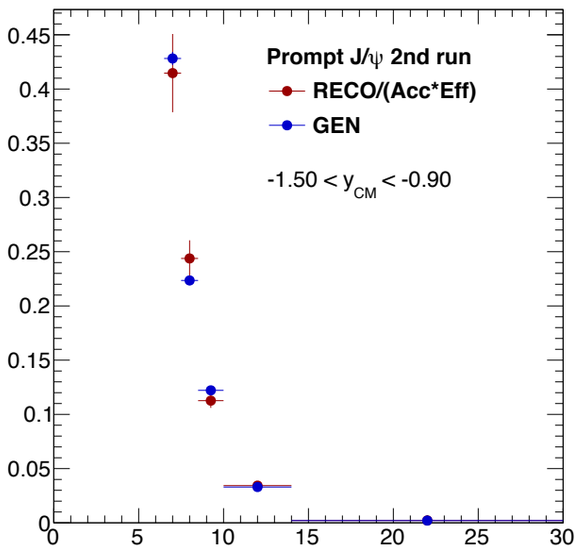


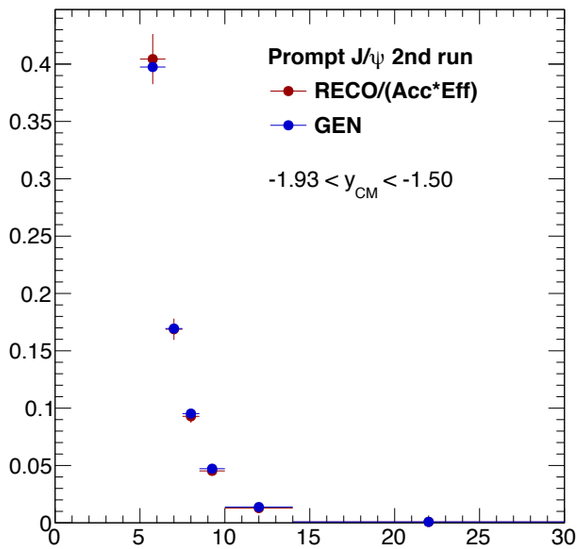


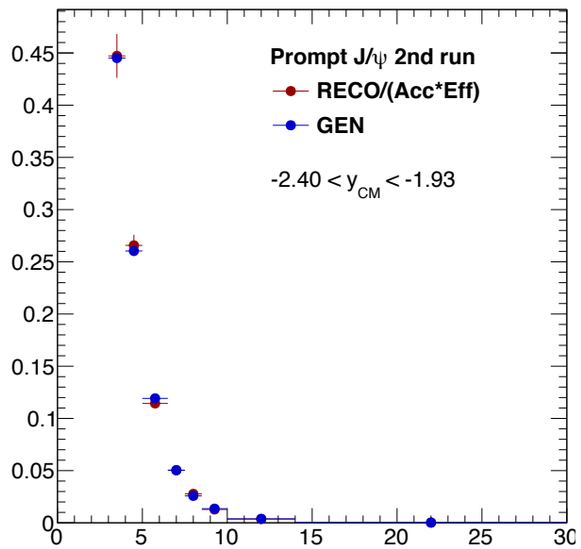


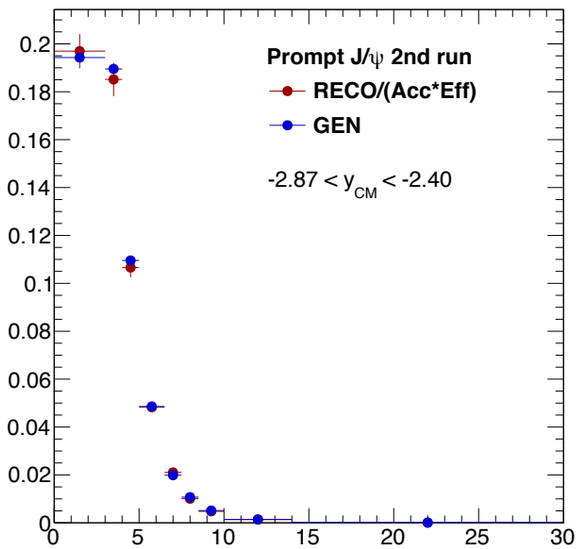


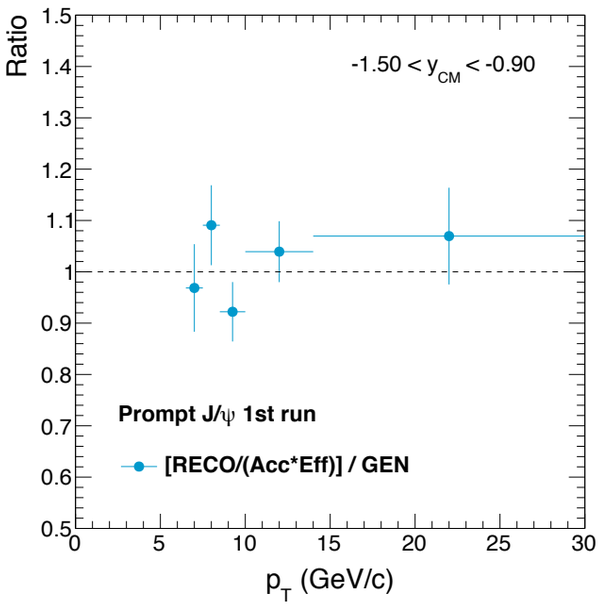
Closure test

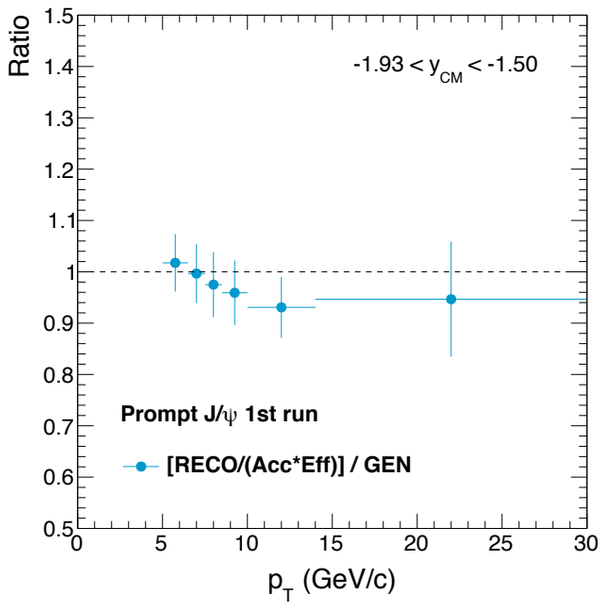


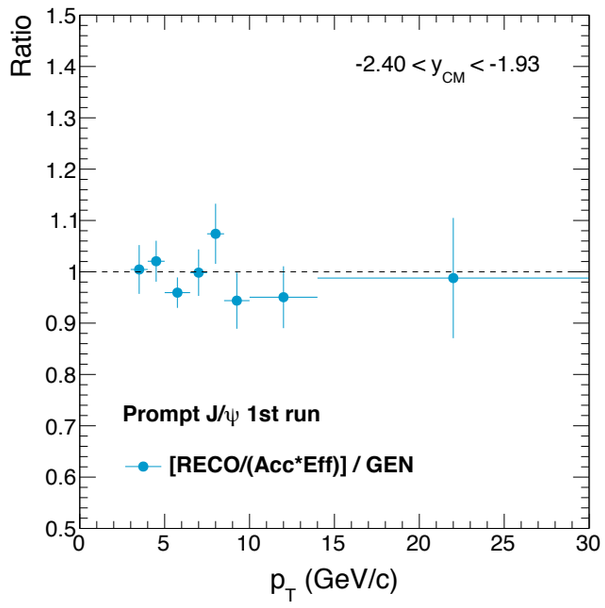


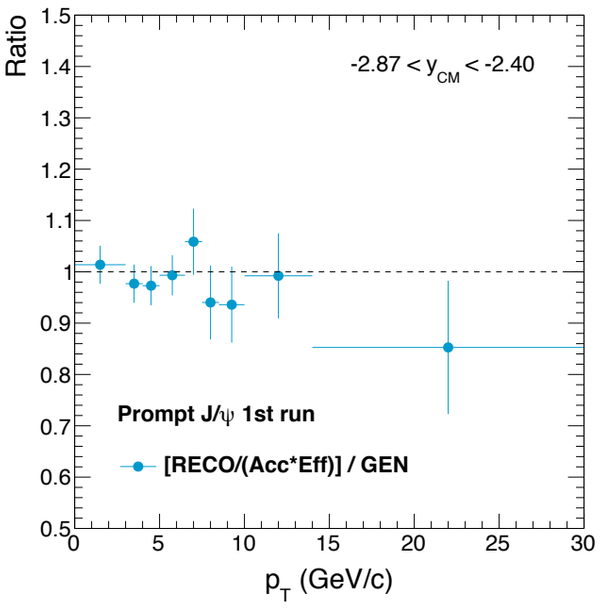






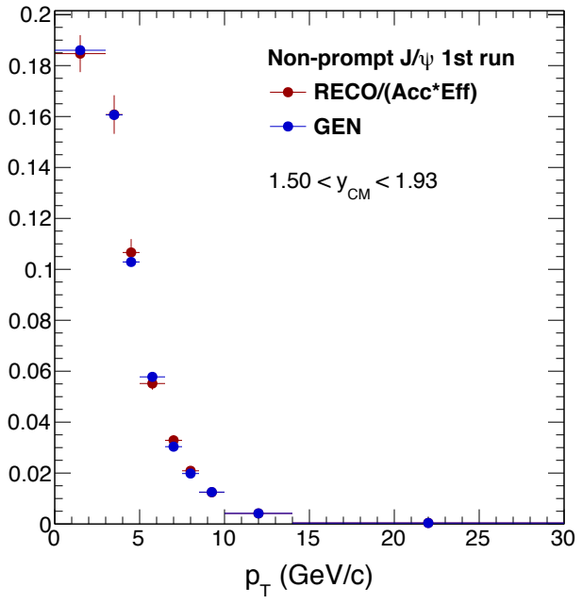


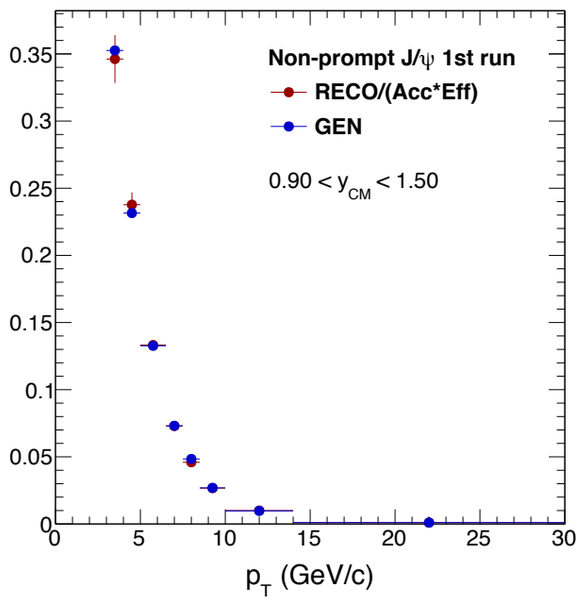


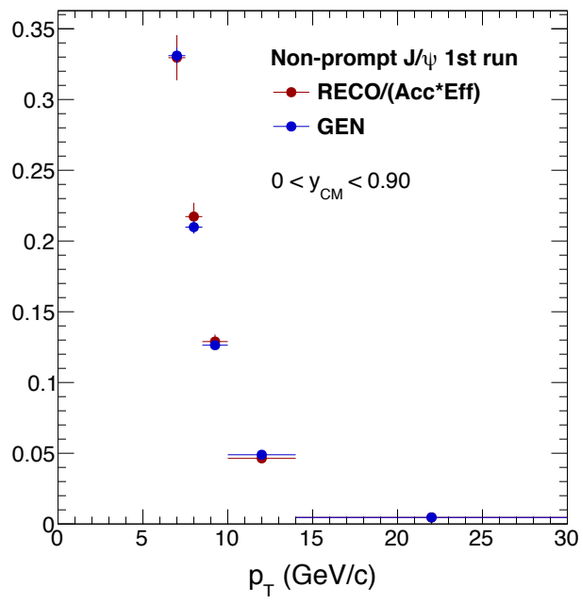


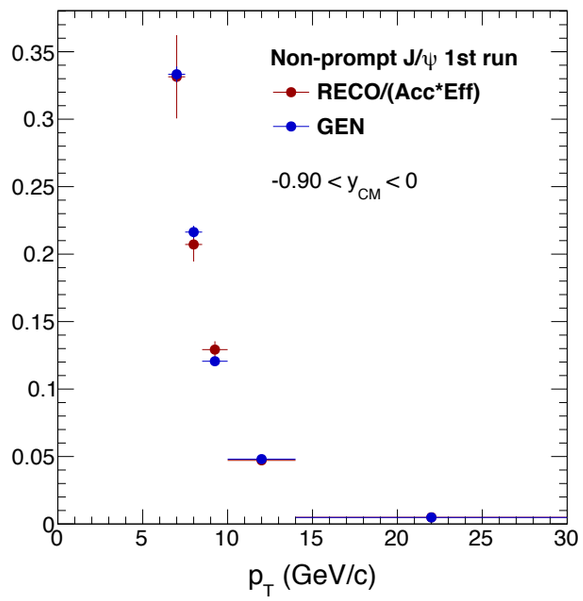
Closure test

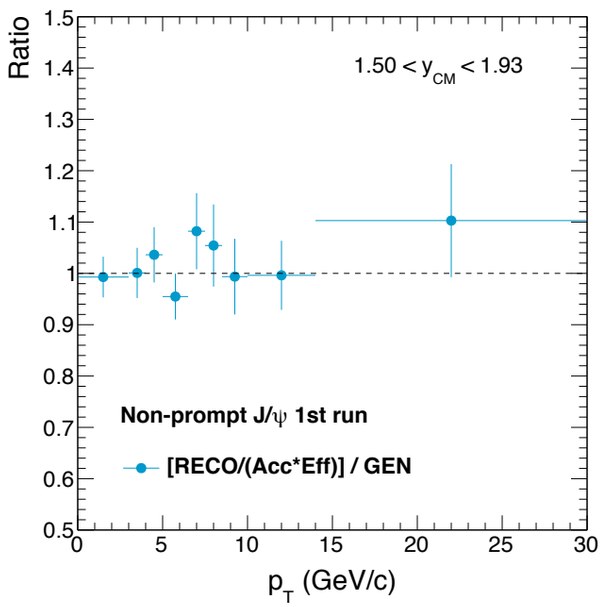
- non-prompt MC 1st run

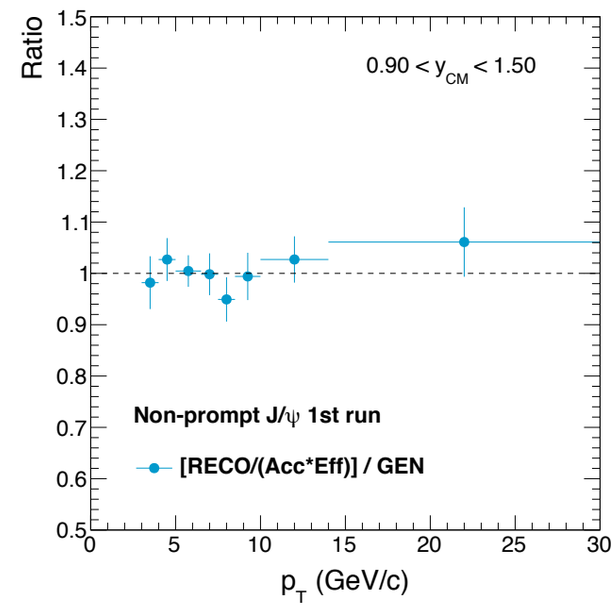


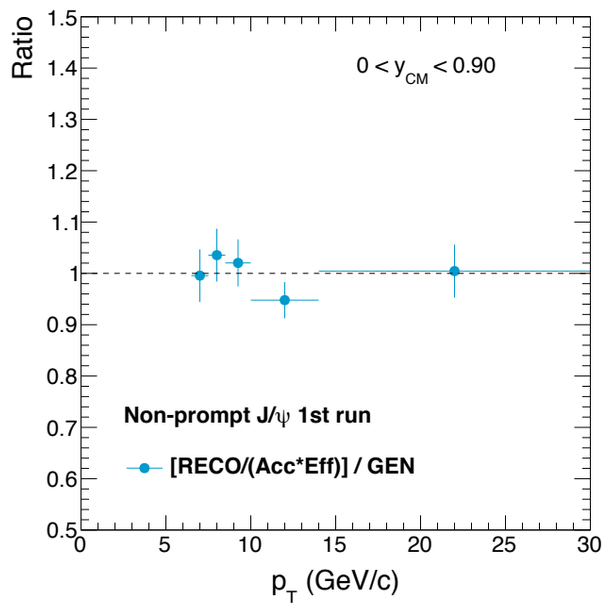


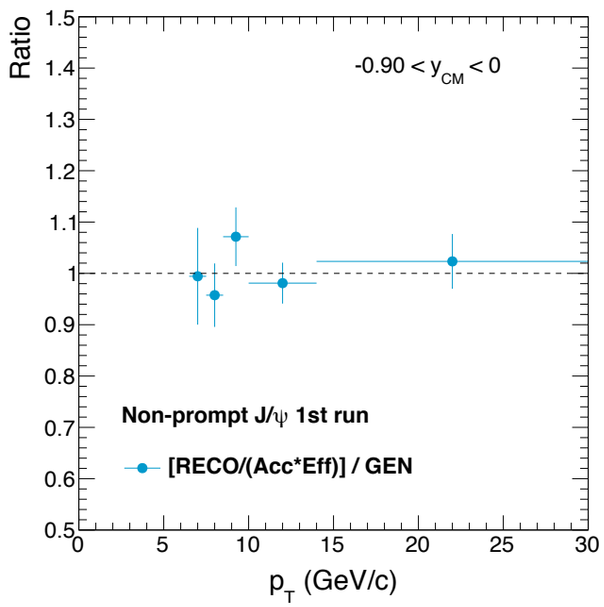




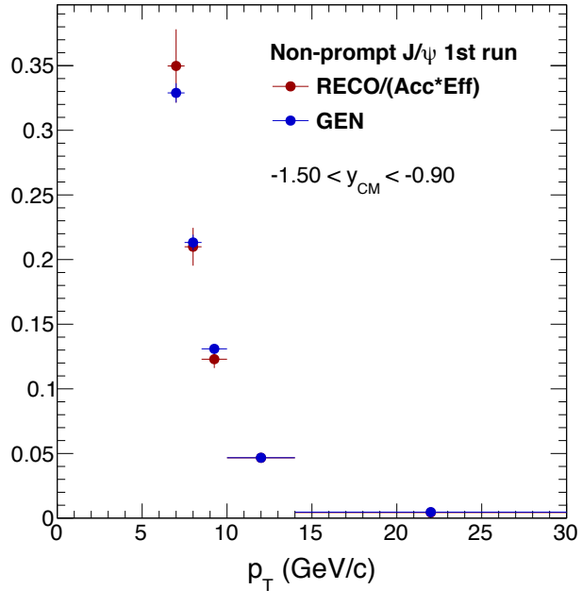


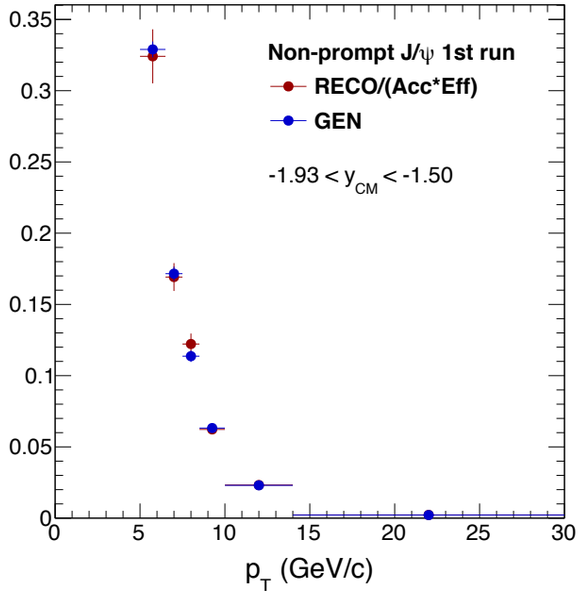


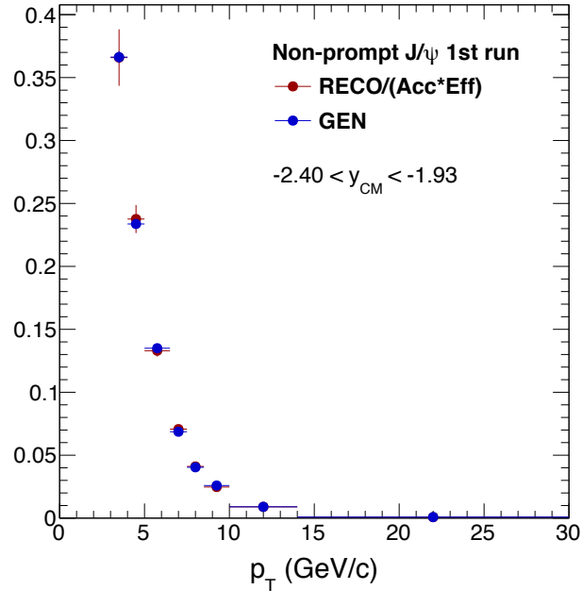


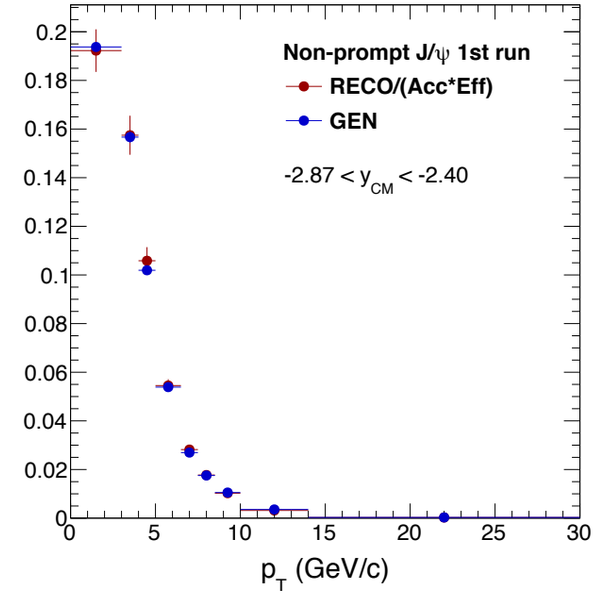


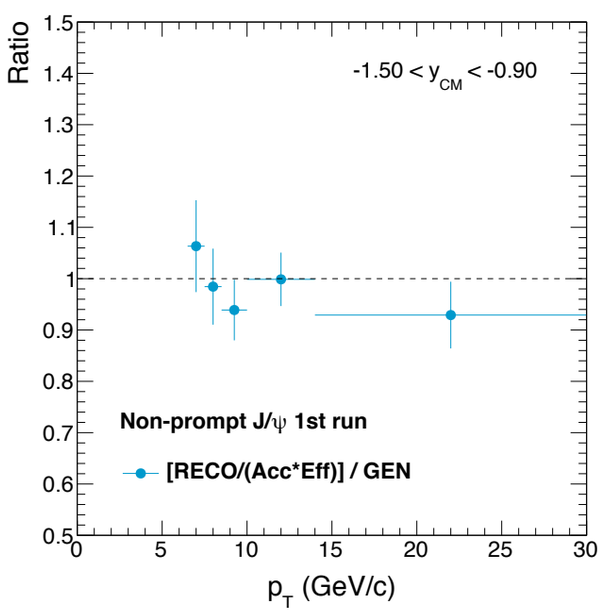
Closure test

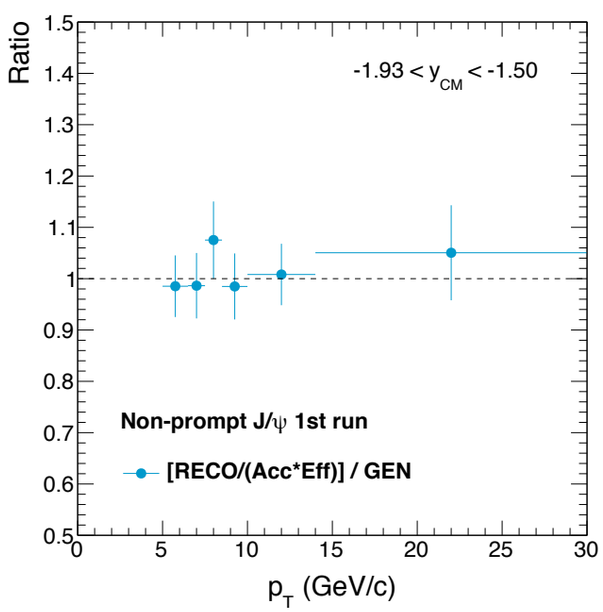


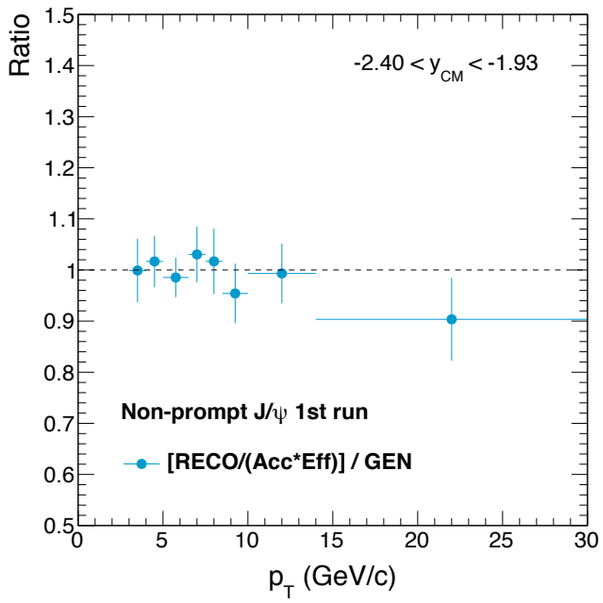


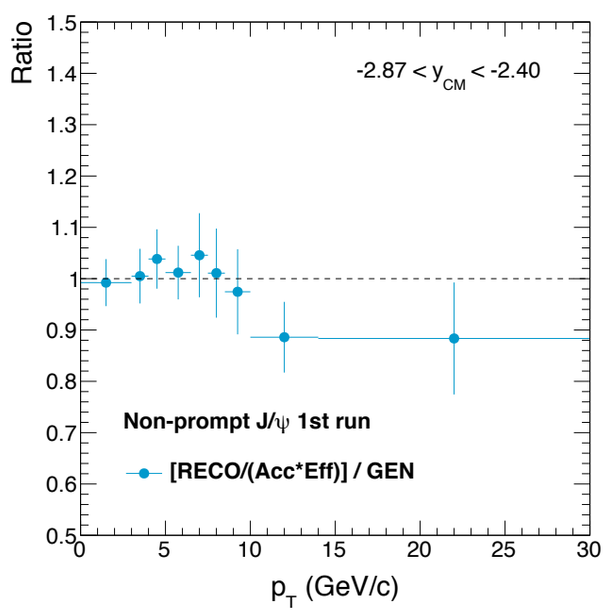






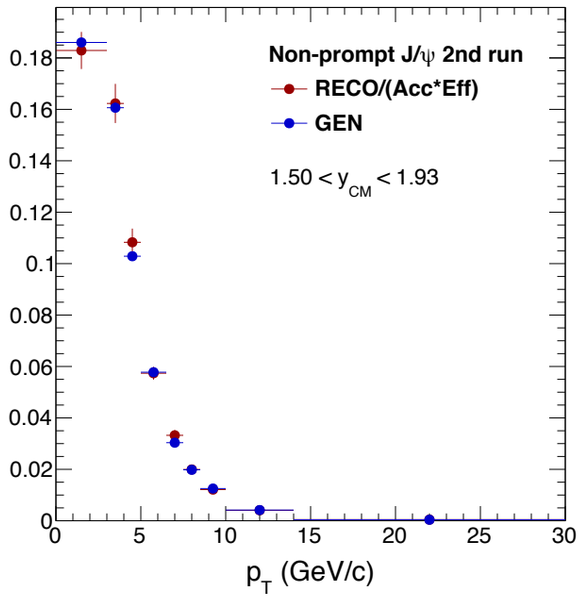


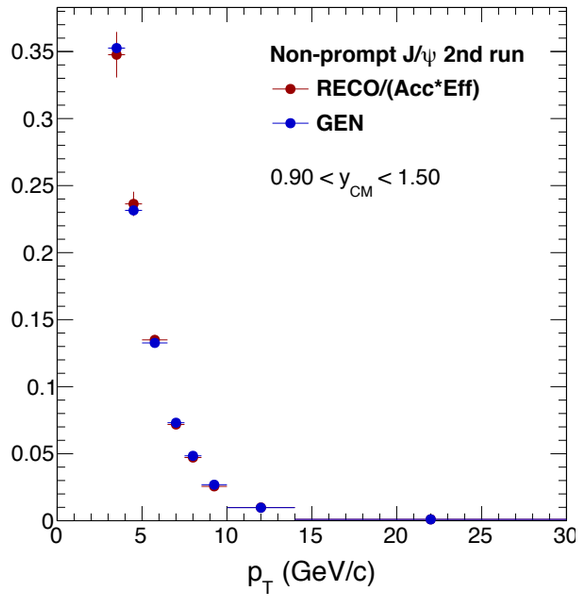


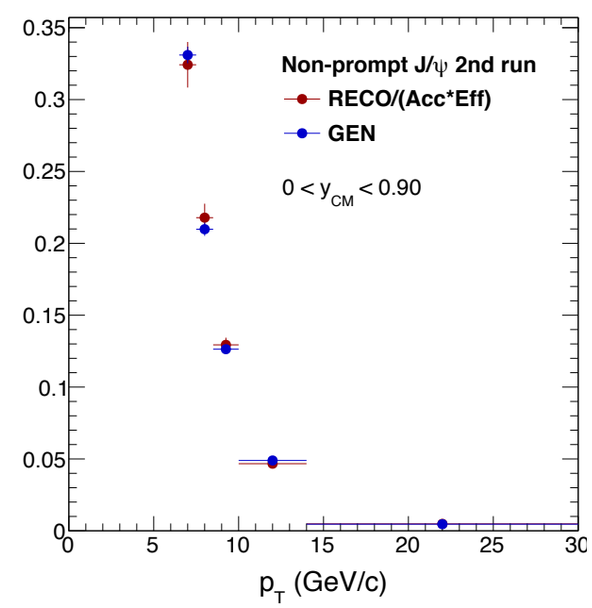


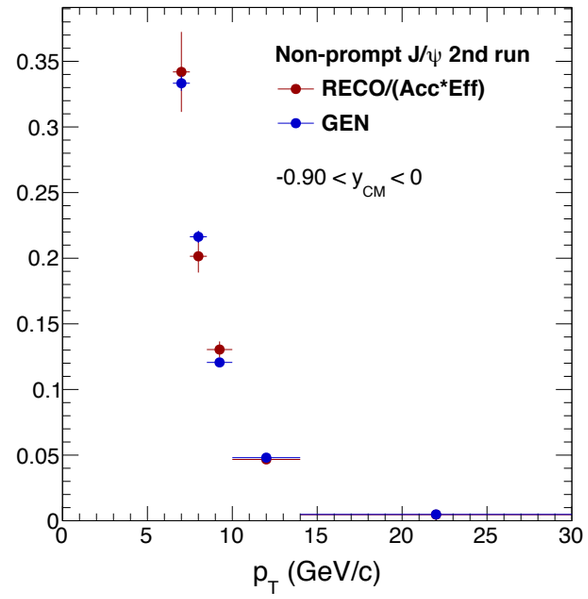
Closure test

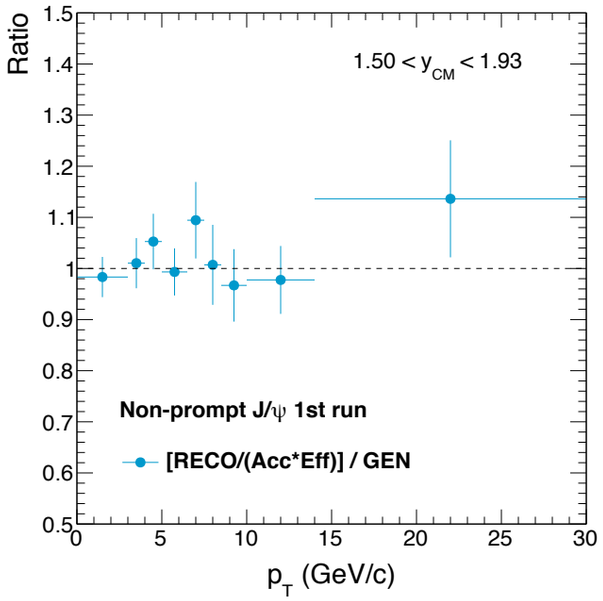
- non-prompt MC 2nd run

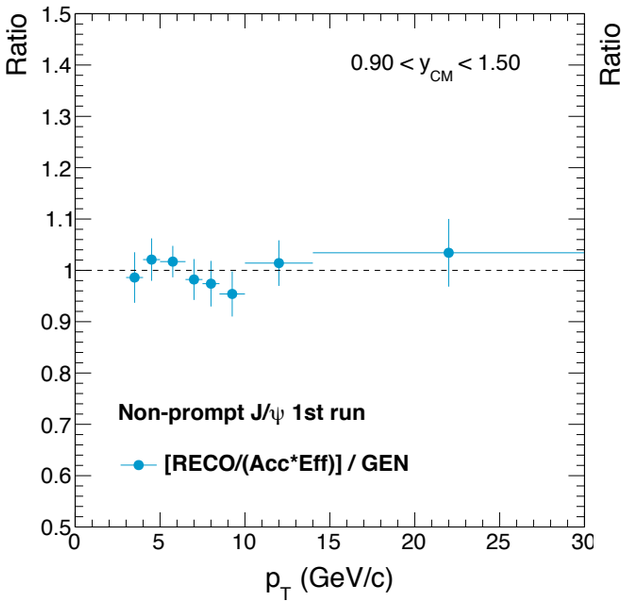


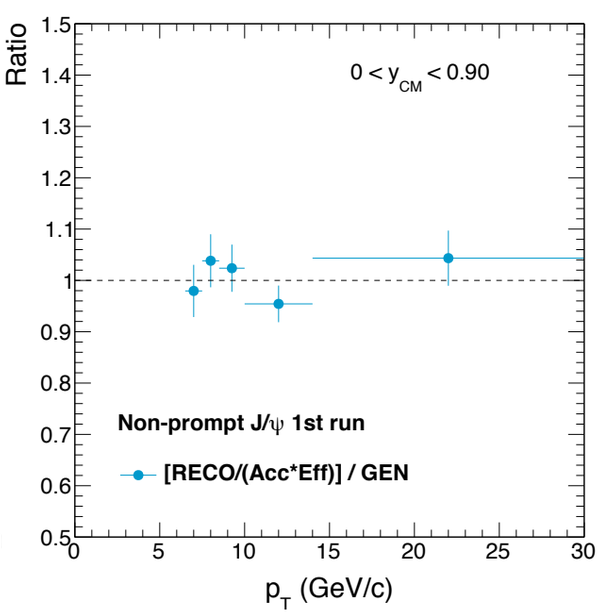


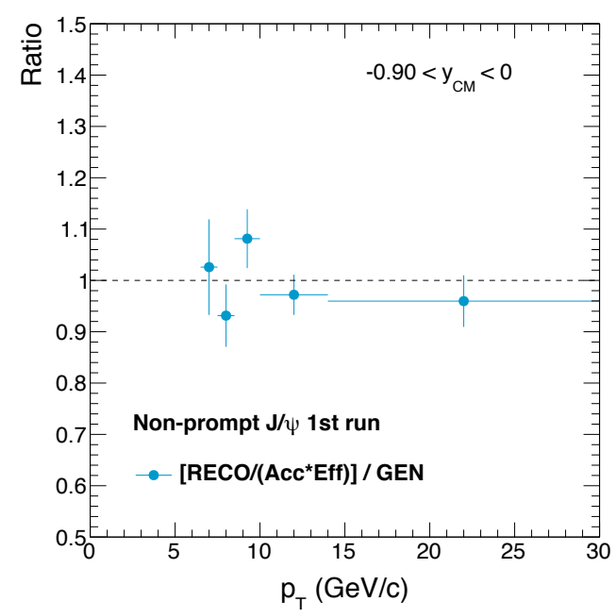




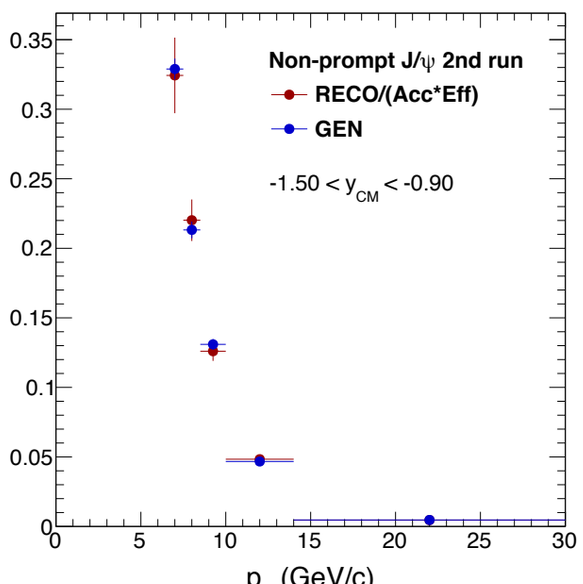


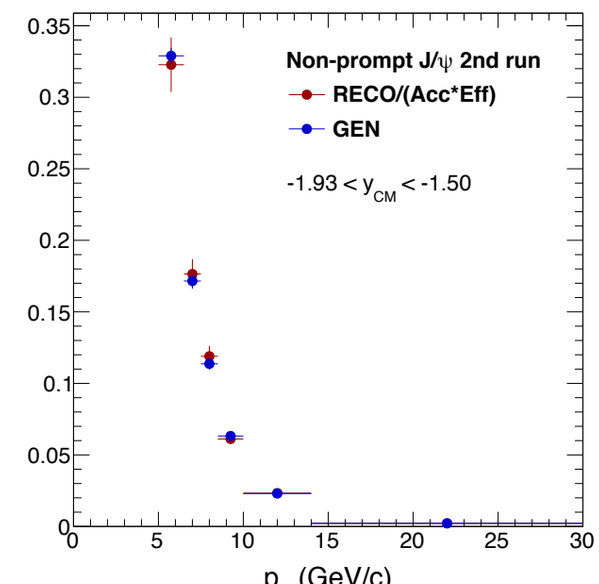


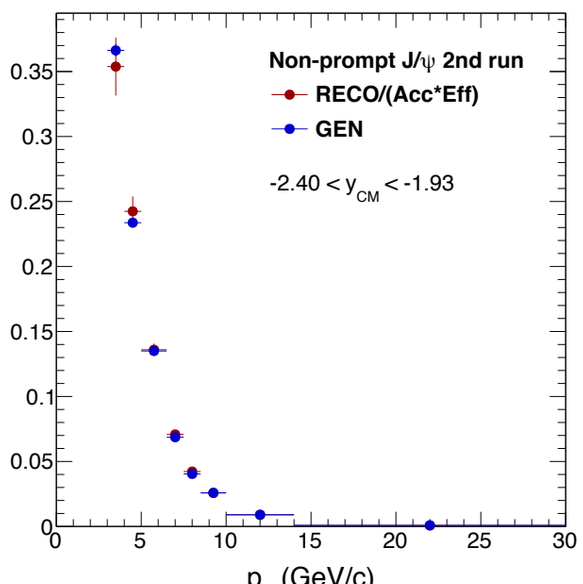


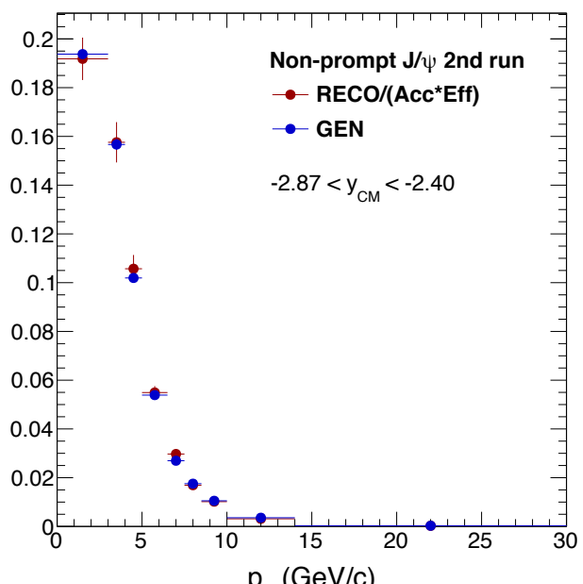


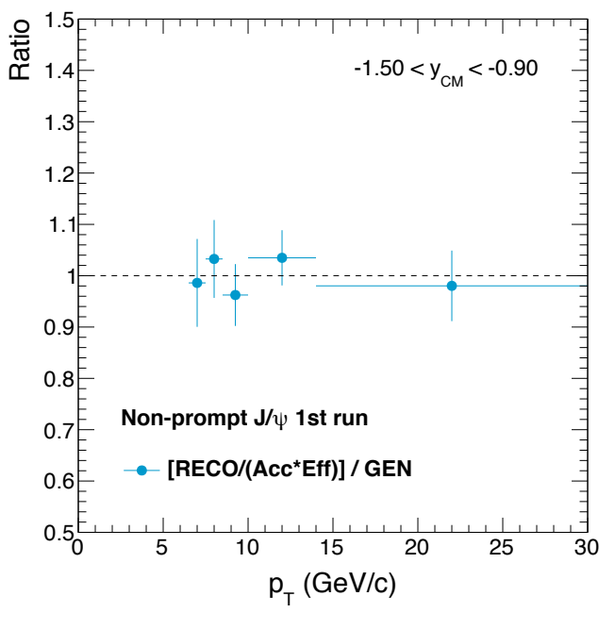
Closure test

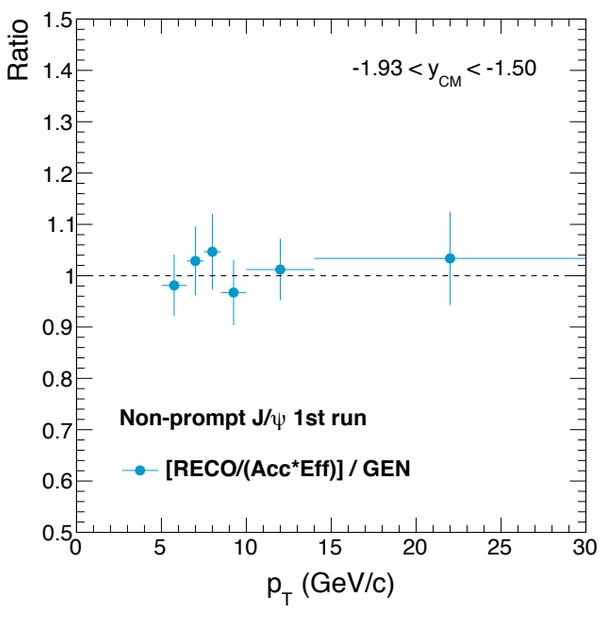


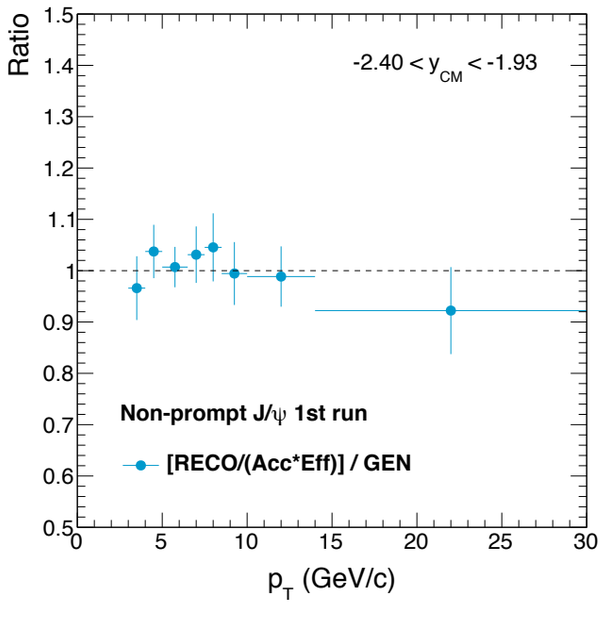


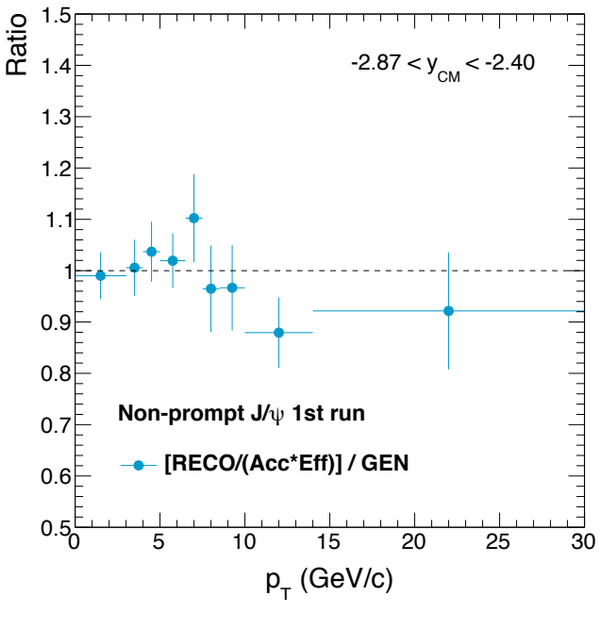




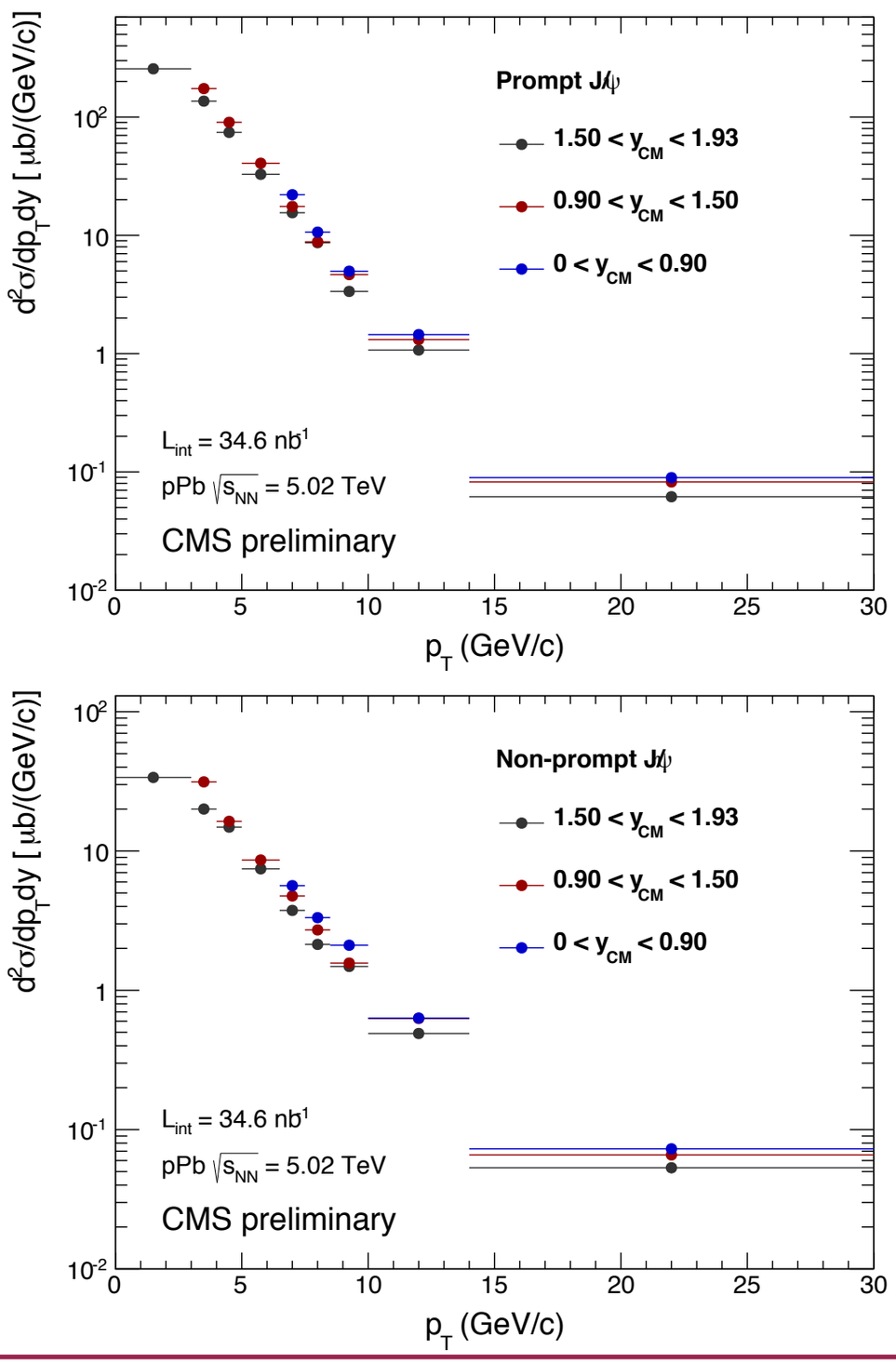


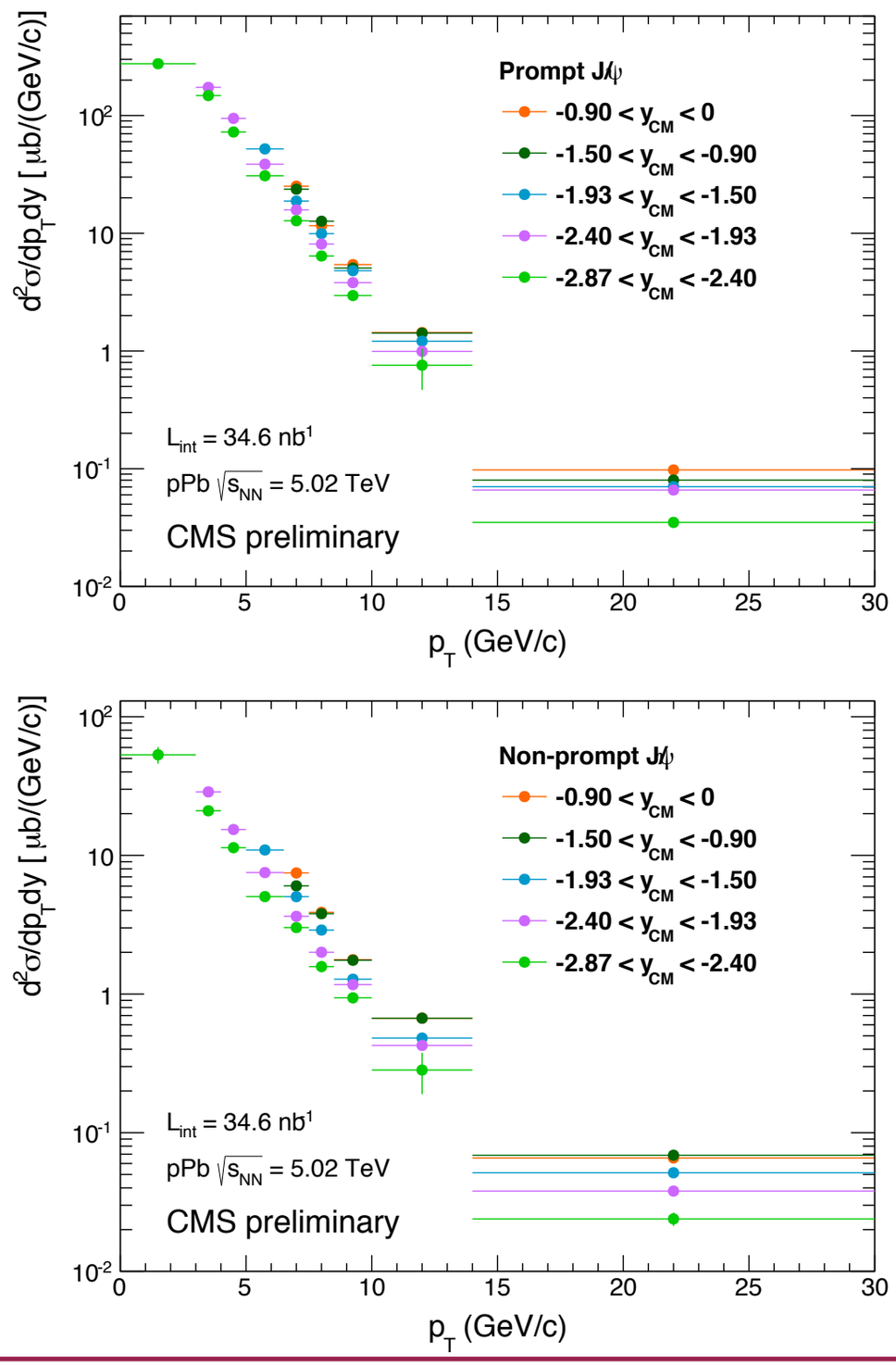






cross-sections

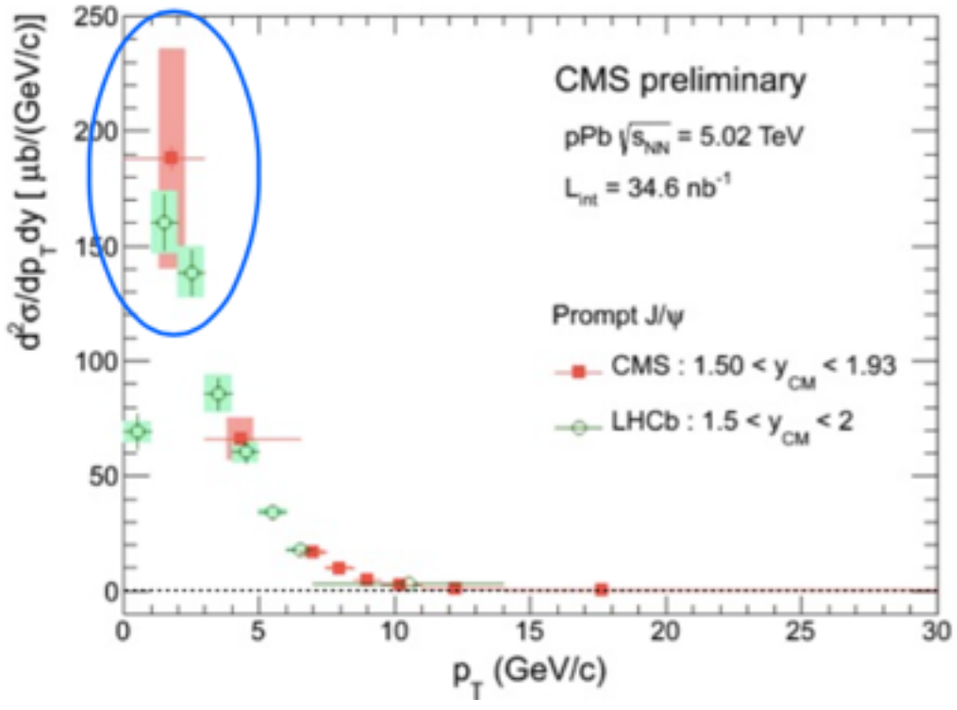


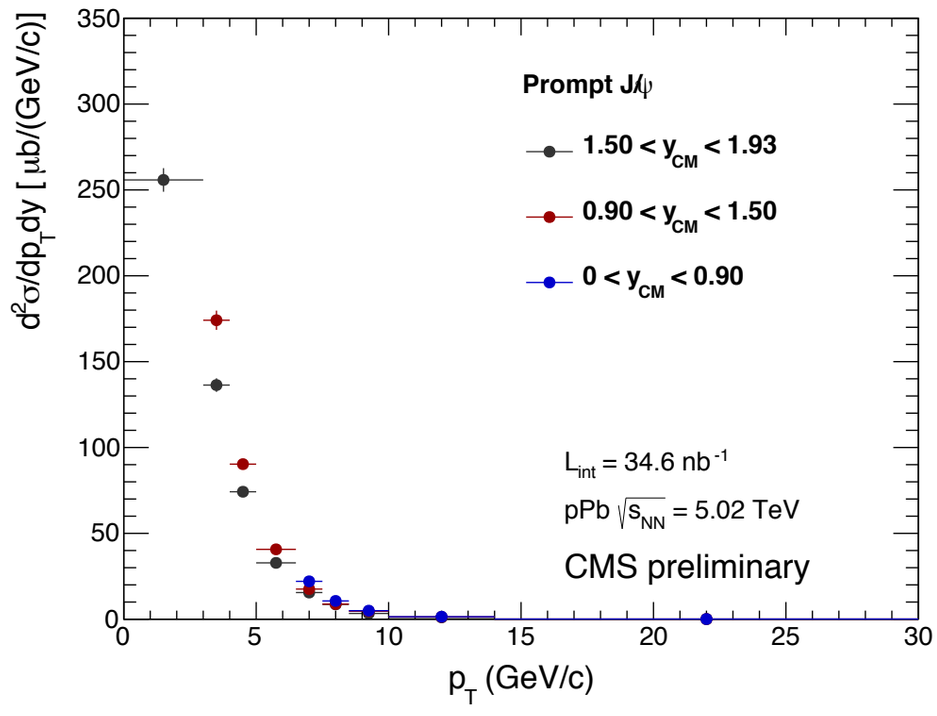


cross-sections

- **For the most forward, lowest pT bin :**
  - Old result with SF : 188.053 /μb
  - Old result w/o SF ~ 249.842 /μb
  - New result w/o SF ~ 255.812 /μb

[Prompt]



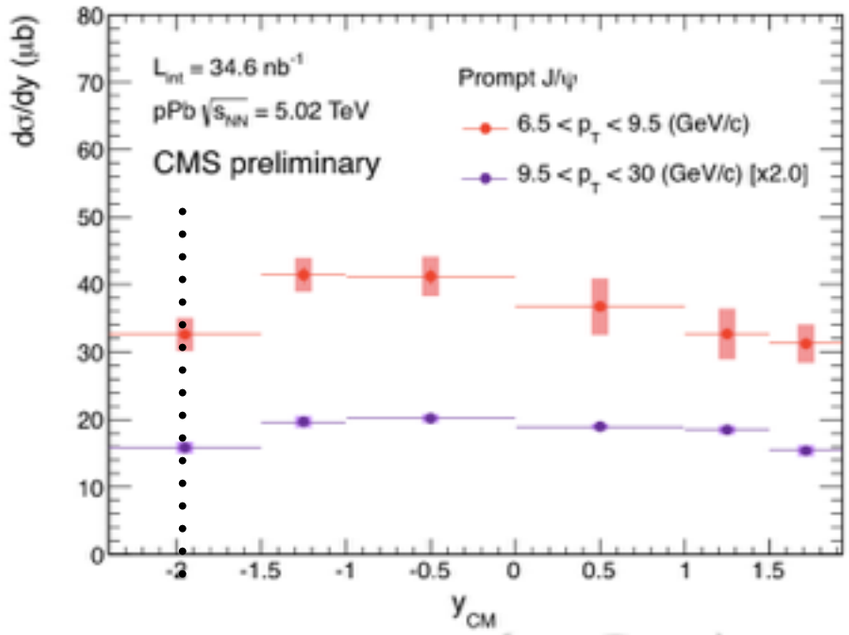


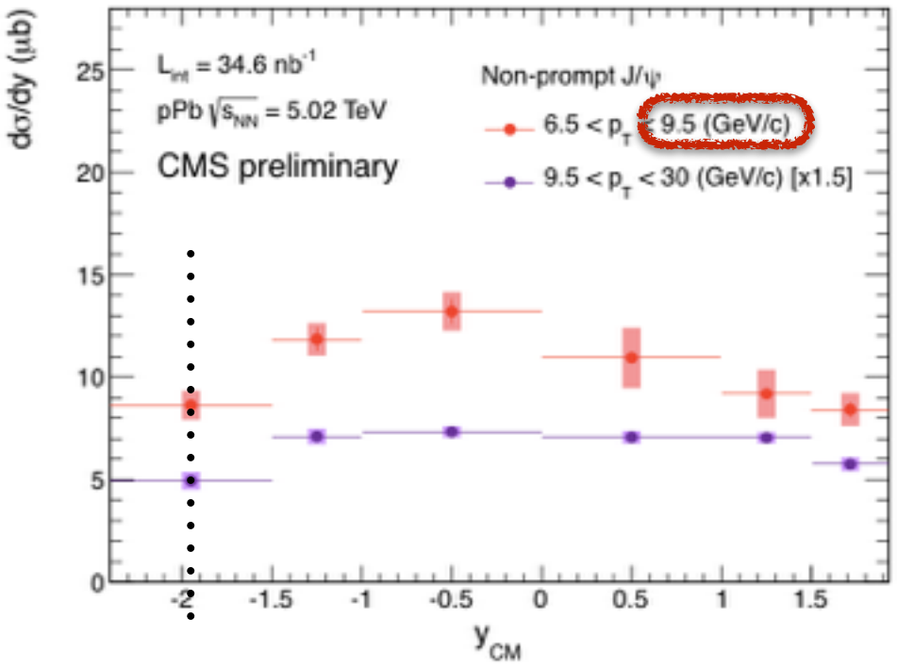
Range			Efficiency		Error	
y_{CM}	p_T	E_T	Before	After	Abs.	Rel. (%)
1.5 - 1.93	0.0-3.0	0.0-120.0	0.070	0.093	0.024	25.32

0.074 ??

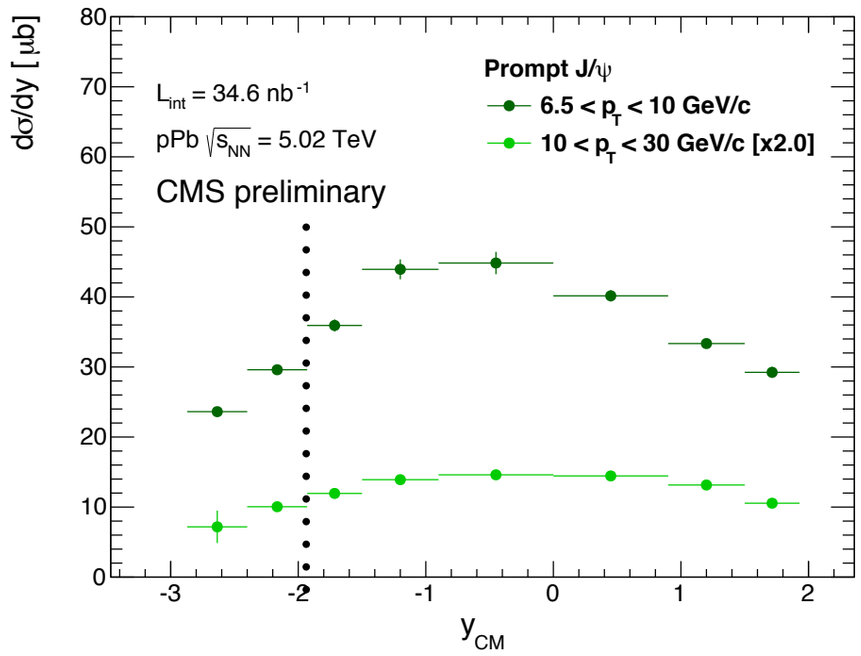
dσ/dy

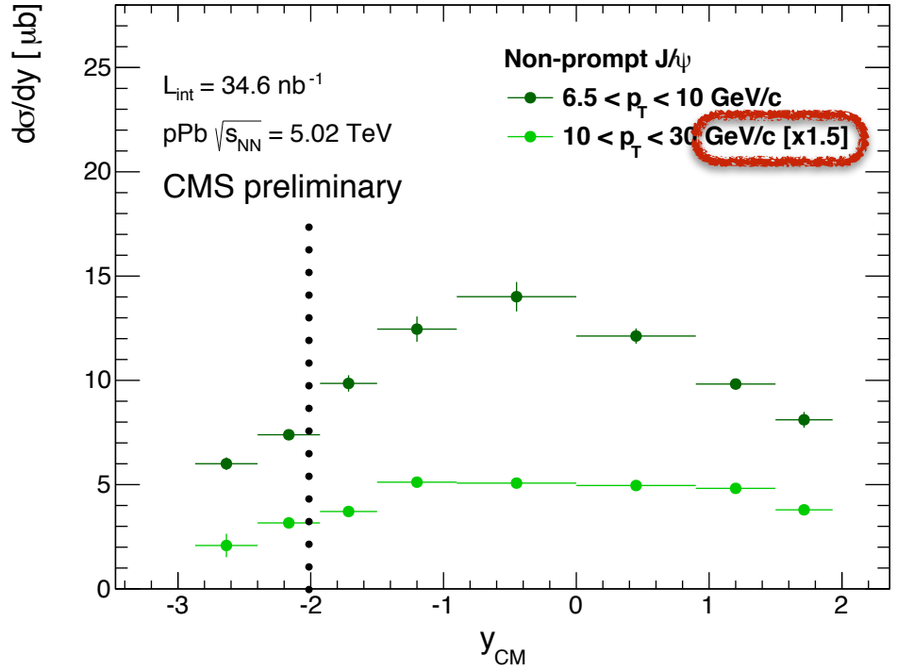
- **Old result**





- **New result**

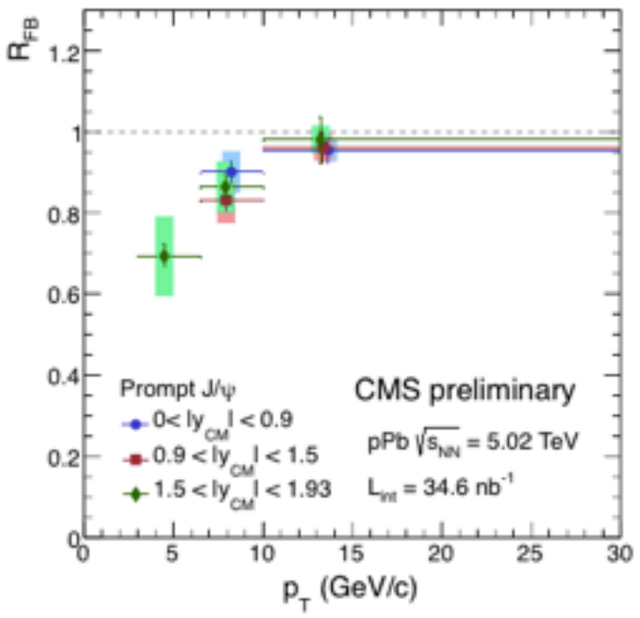


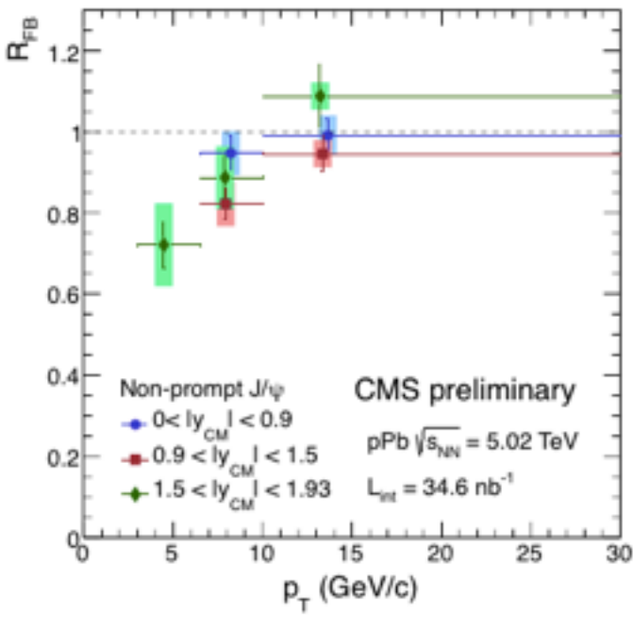


- bin boundaries are modified
- For high pT, distributions are rather symmetric with respect to y_CM.

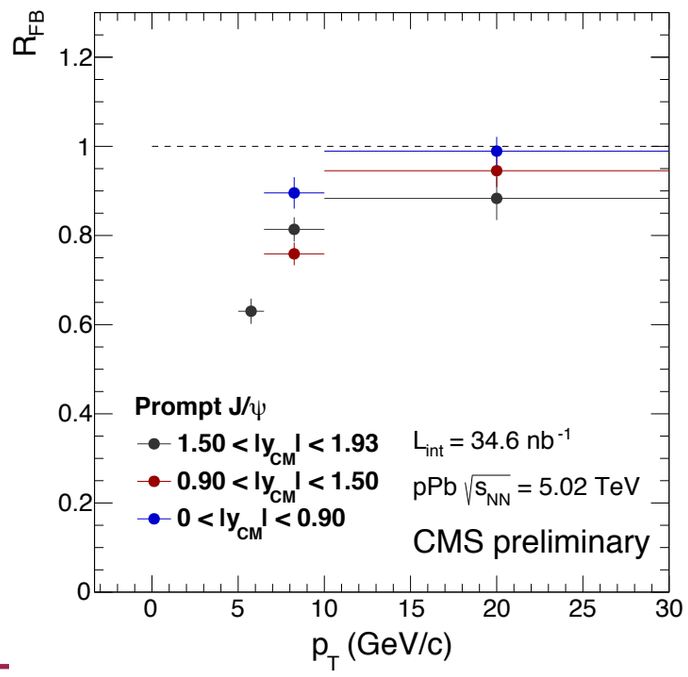
R_FB vs pT

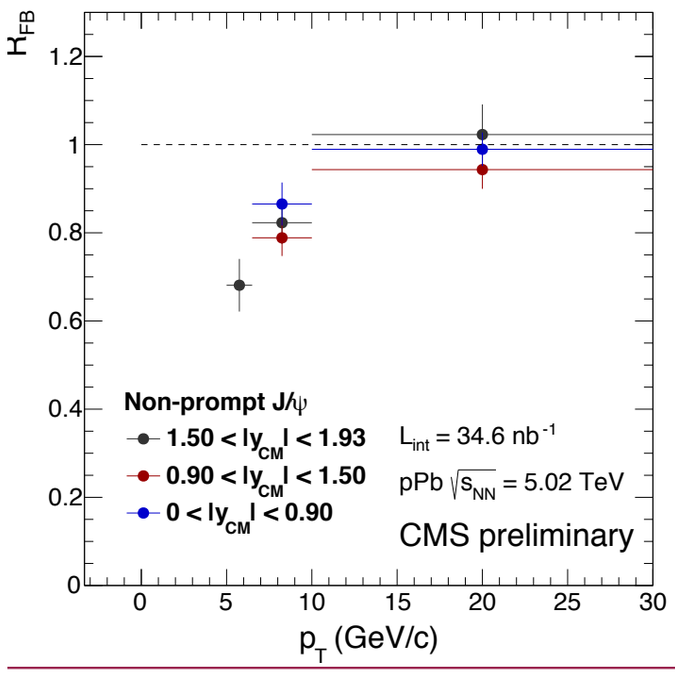
- **Old result**





- **New result**

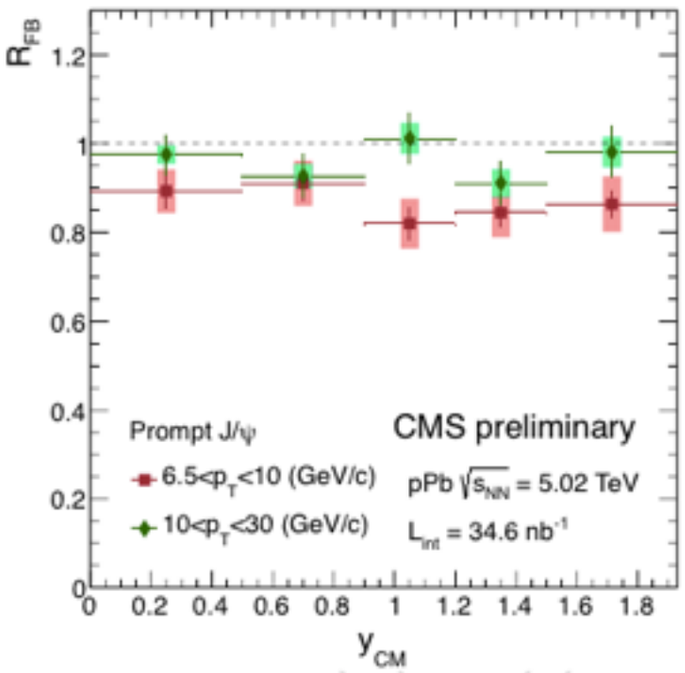


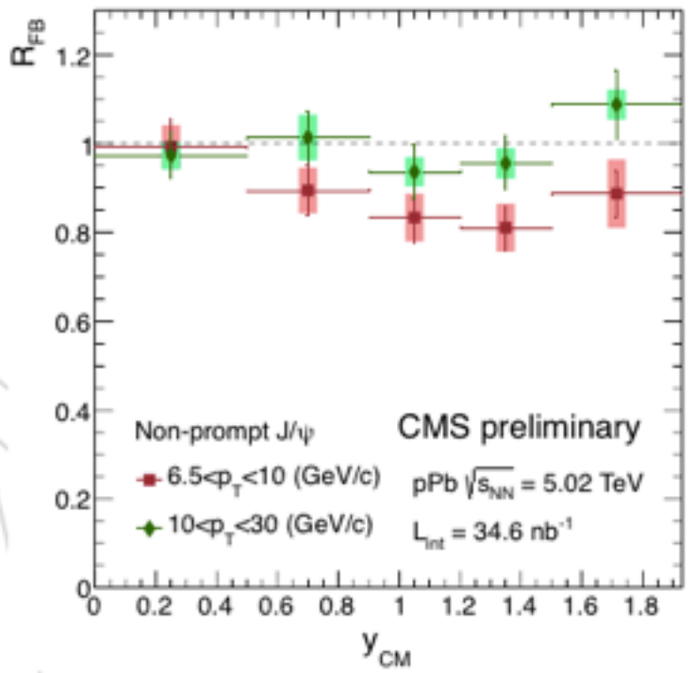


- For non-prompt,
  the most forward, high pT bin
  is now closer to 1

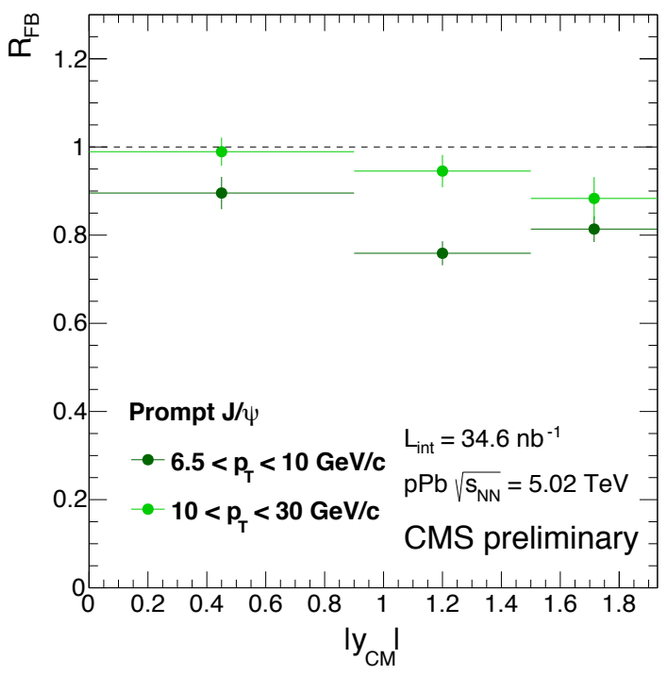
R_FB

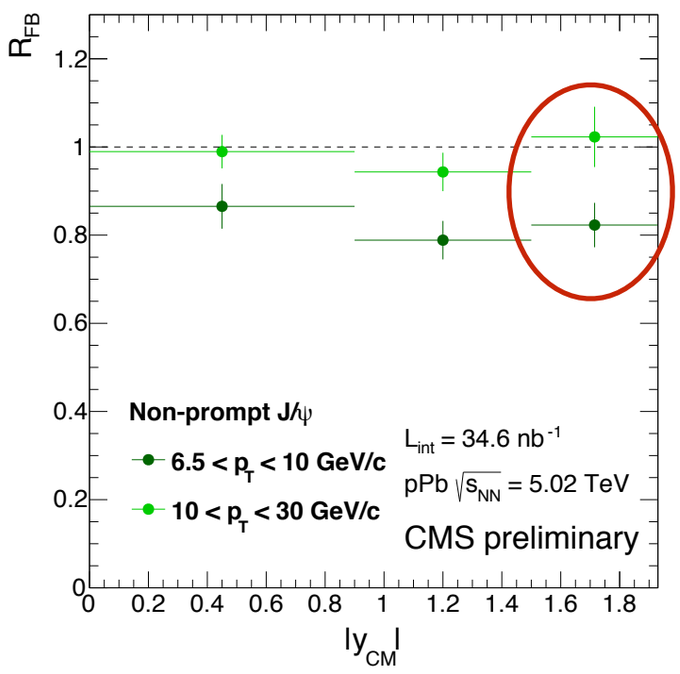
- **Old result**





- **New result**

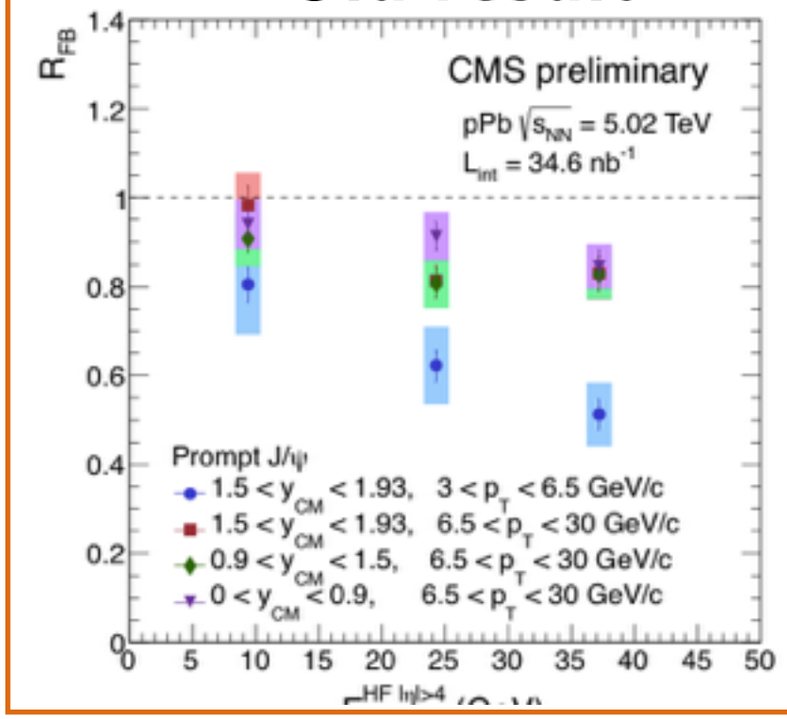




- rapidity bin merged (consistent with cross-sections)
- For high pT & mid rapidity, both prompt & non-prompt close to 1
- more suppression in lower pT

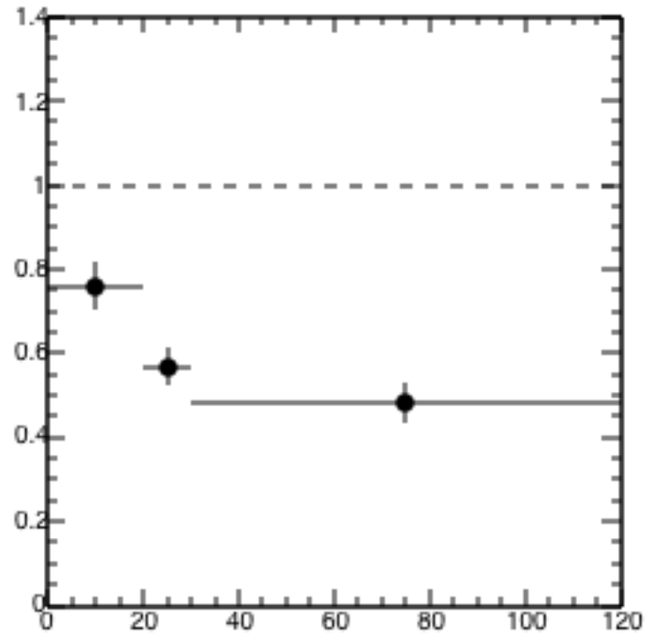
R_FB vs ET

Old result

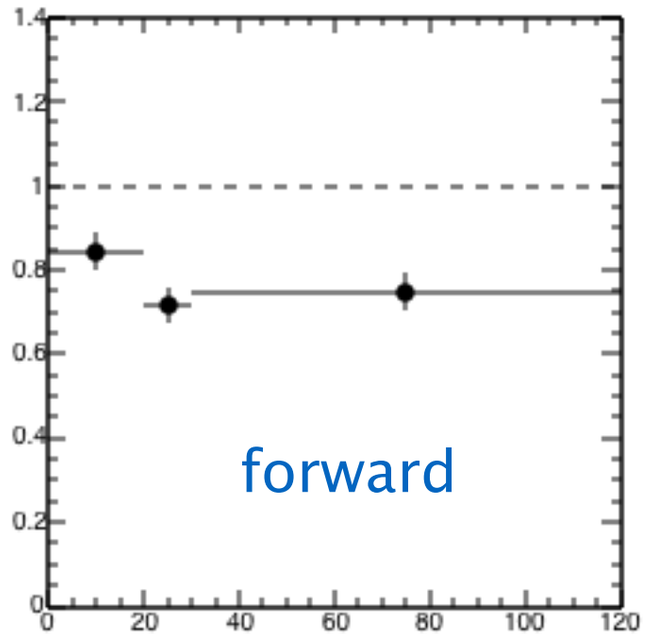


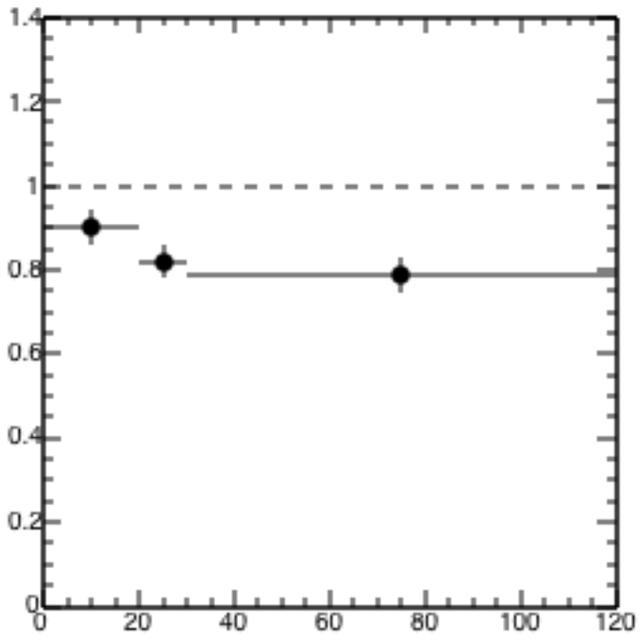
New result

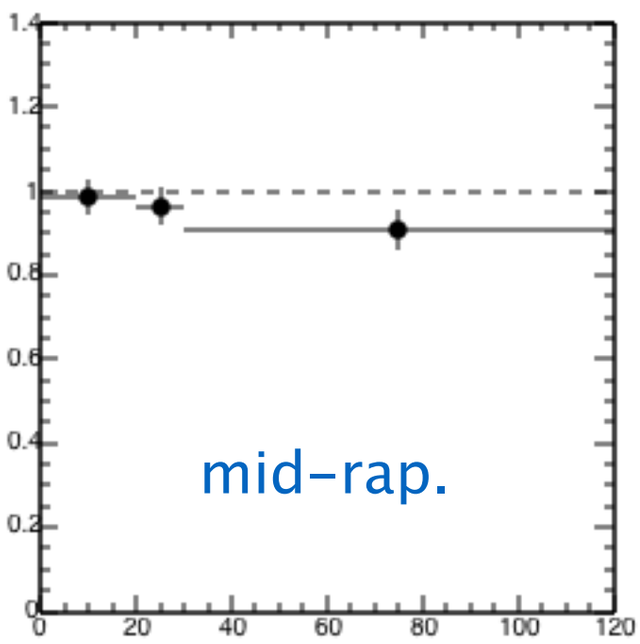
* low pT, forward :



* high pT :

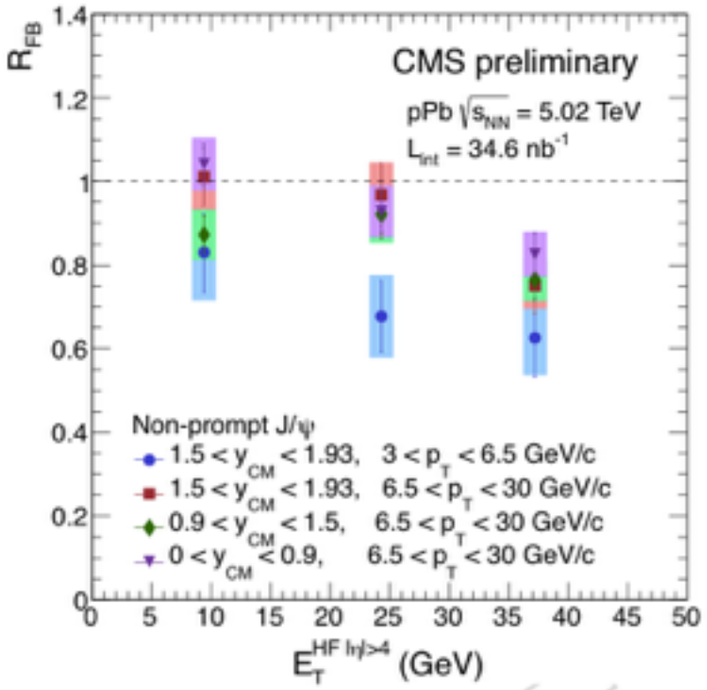






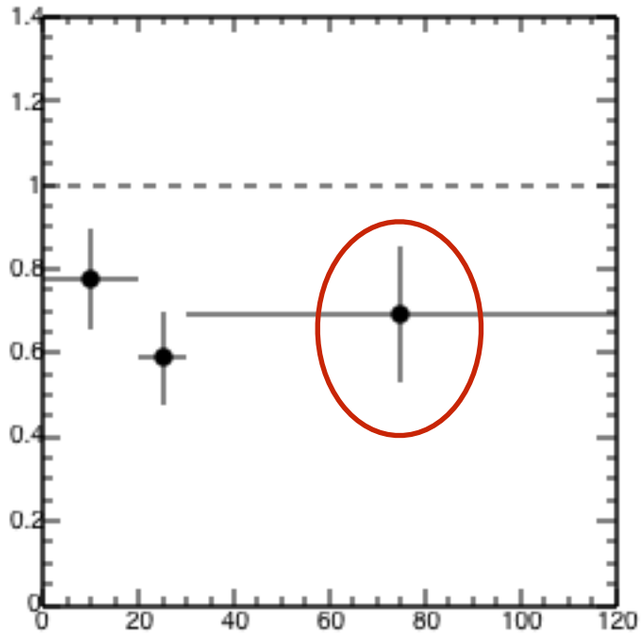
Non-prompt

Old result

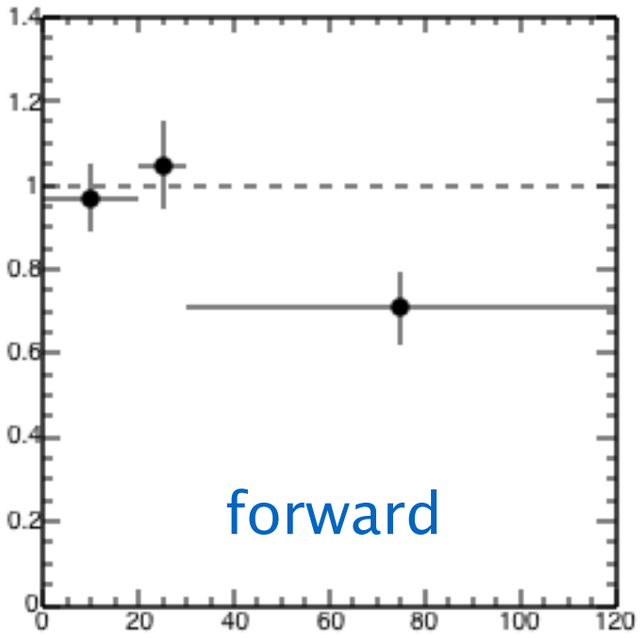


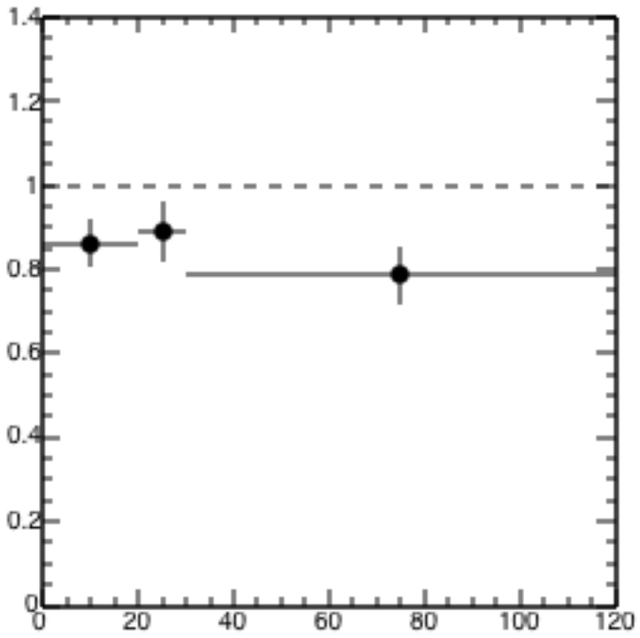
New result

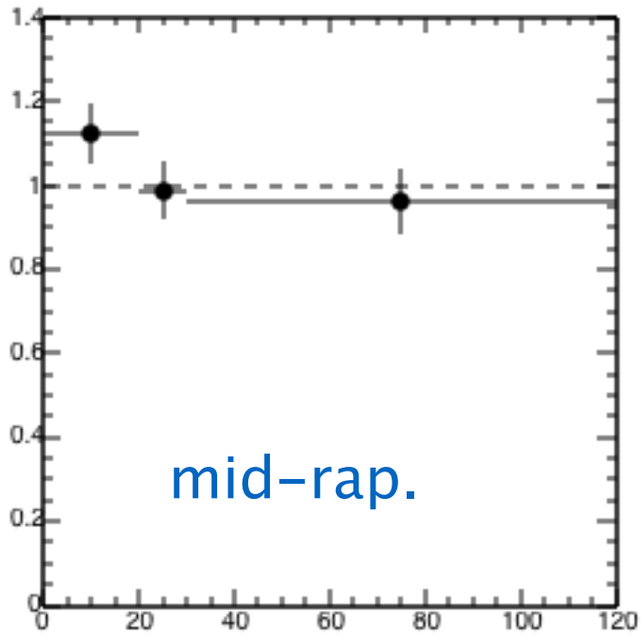
* low pT, forward :



* high pT :







to-do

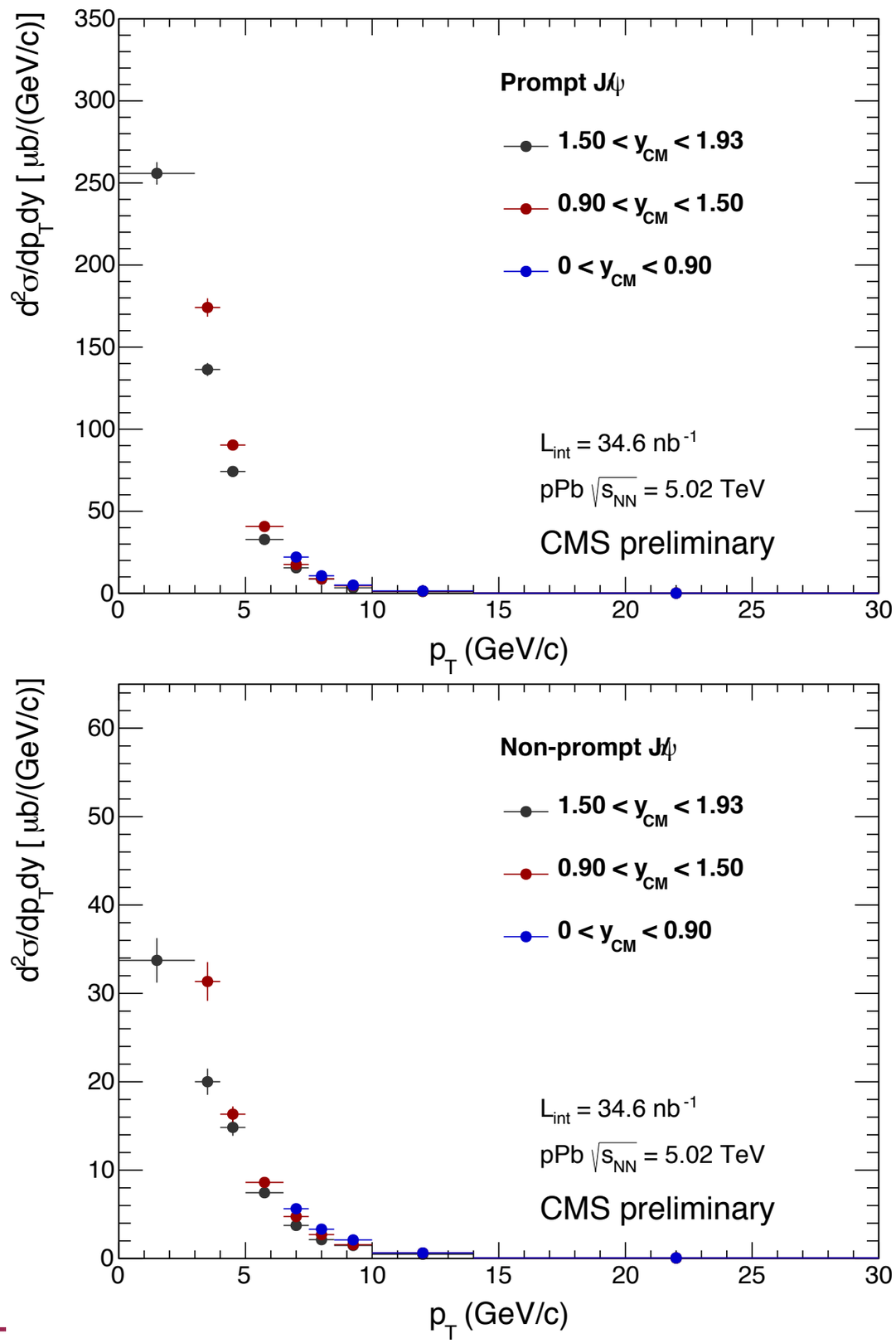
- **systematics from signal extraction is on-going**
  - Using the same method (just time-consuming)

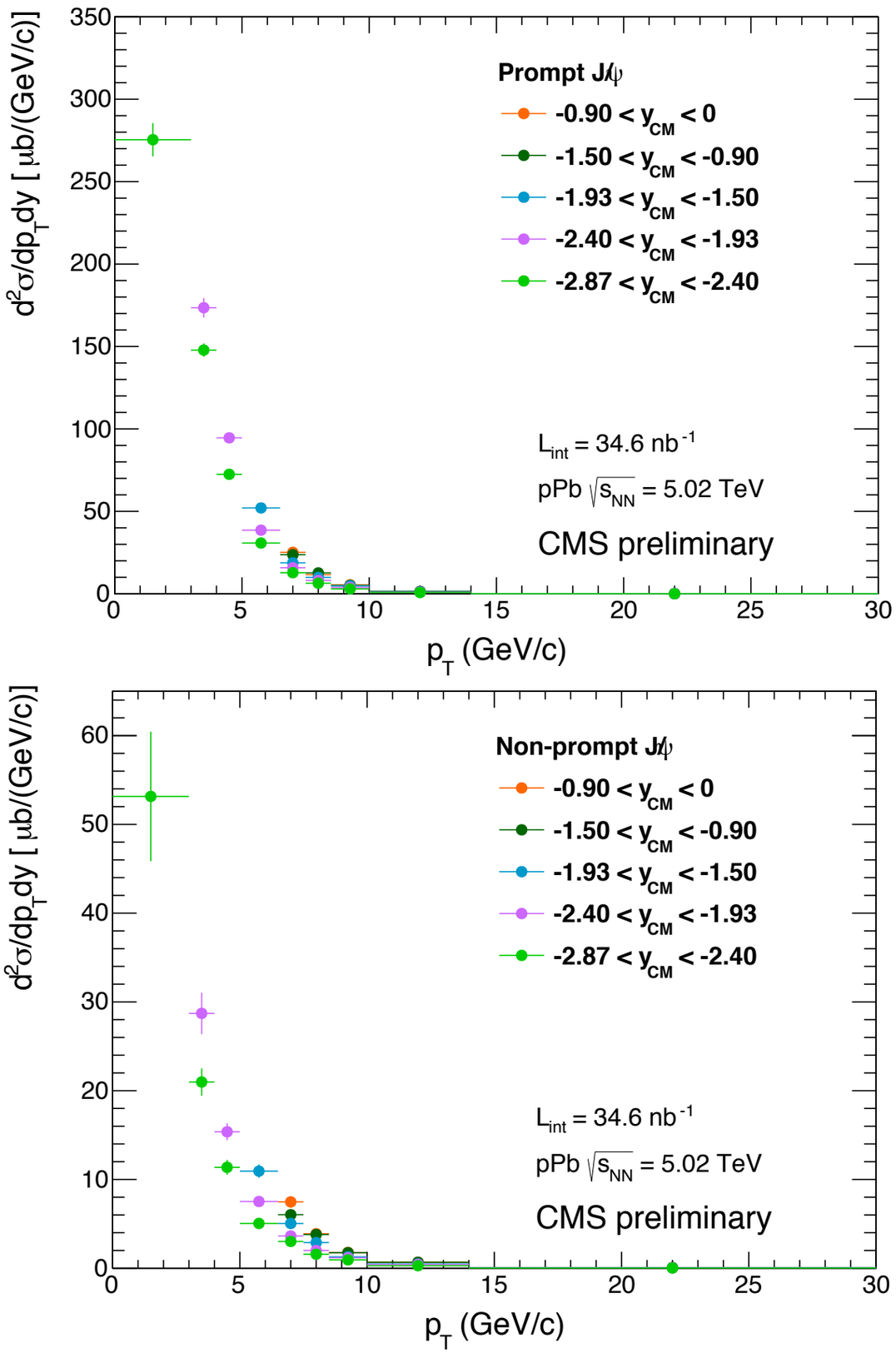
- **mean pT calculation (for data points in plots)**

dimuons GEN

Back up

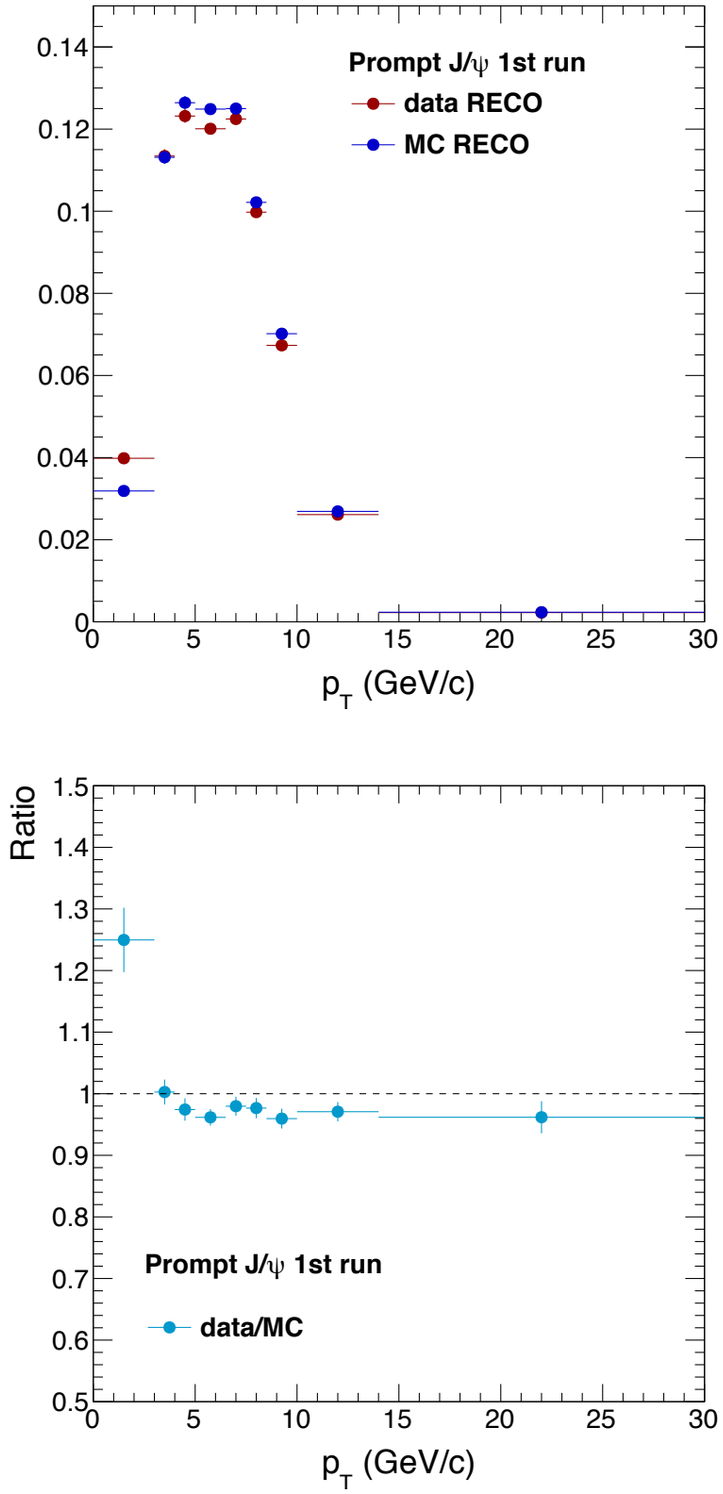
linear scale

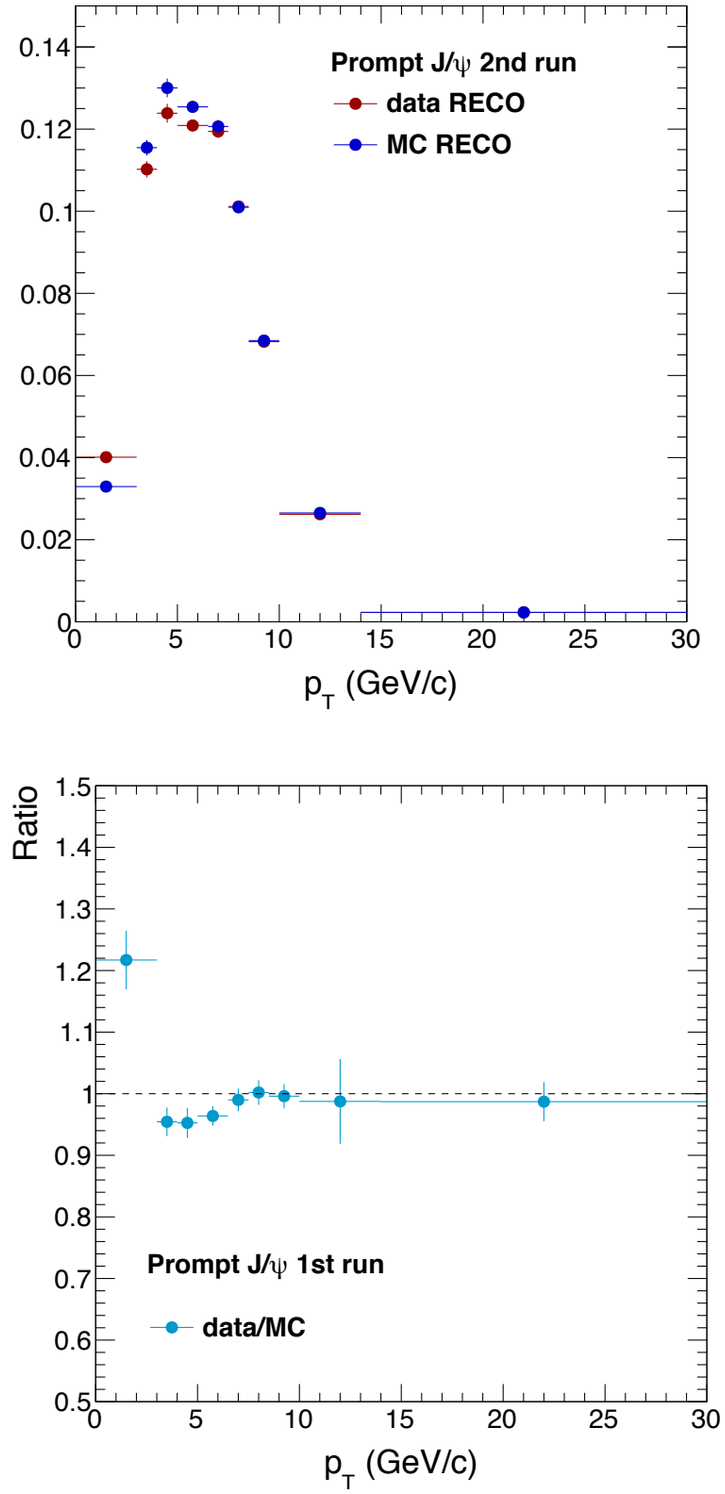




Data vs MC reco dist.

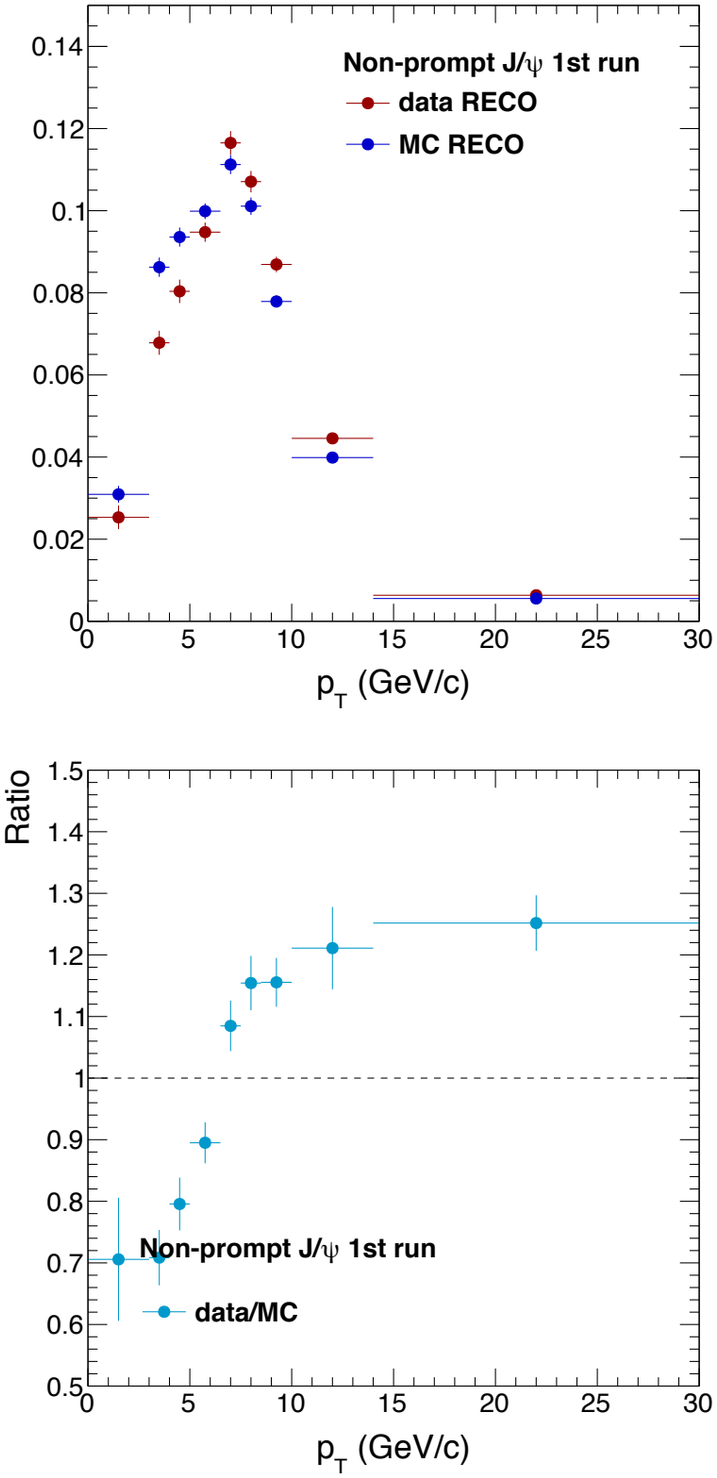
- **prompt**

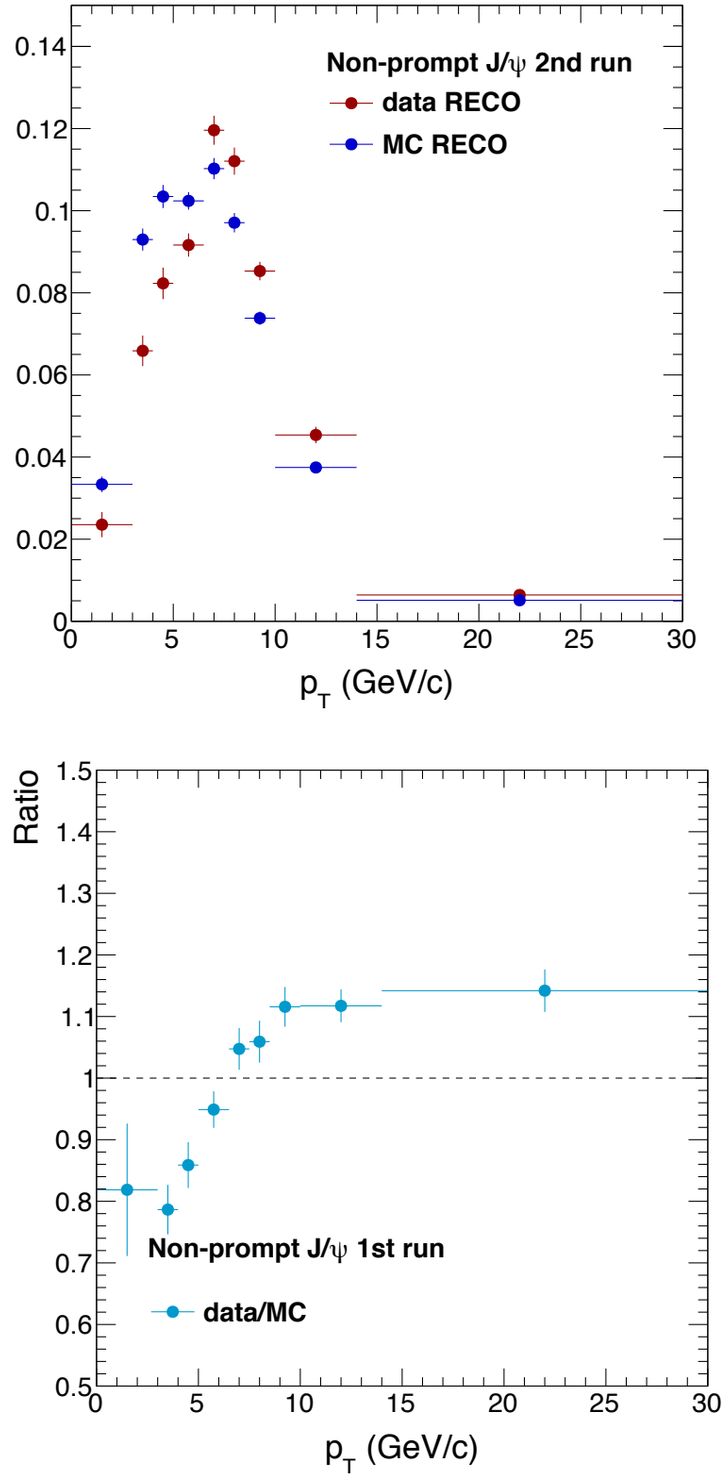




Data vs MC reco dist.

- **non-prompt**

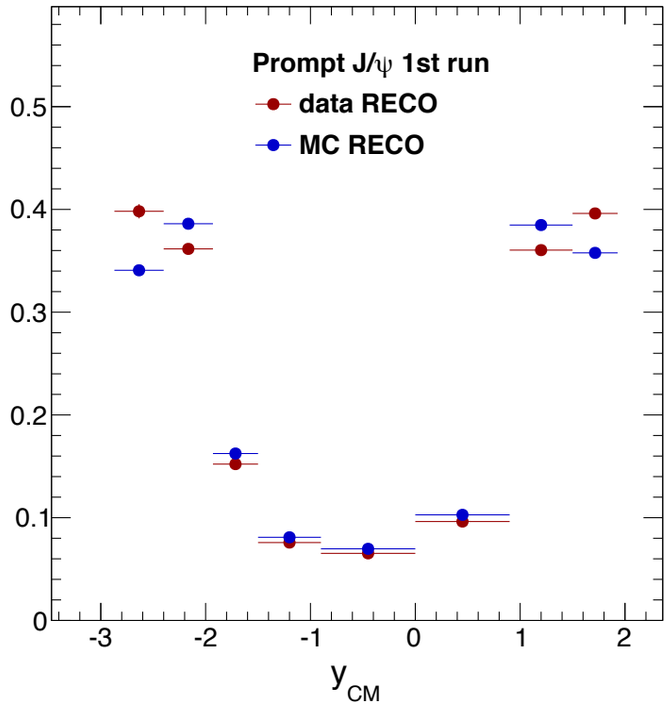


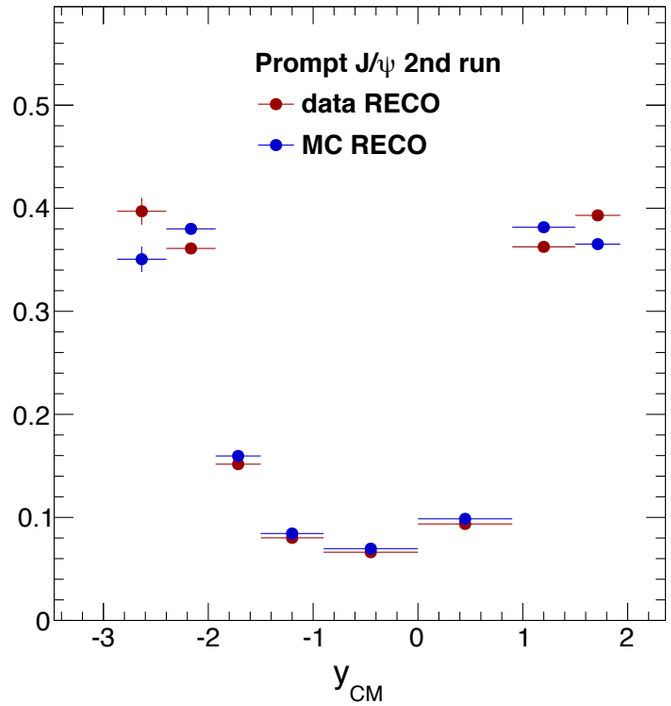


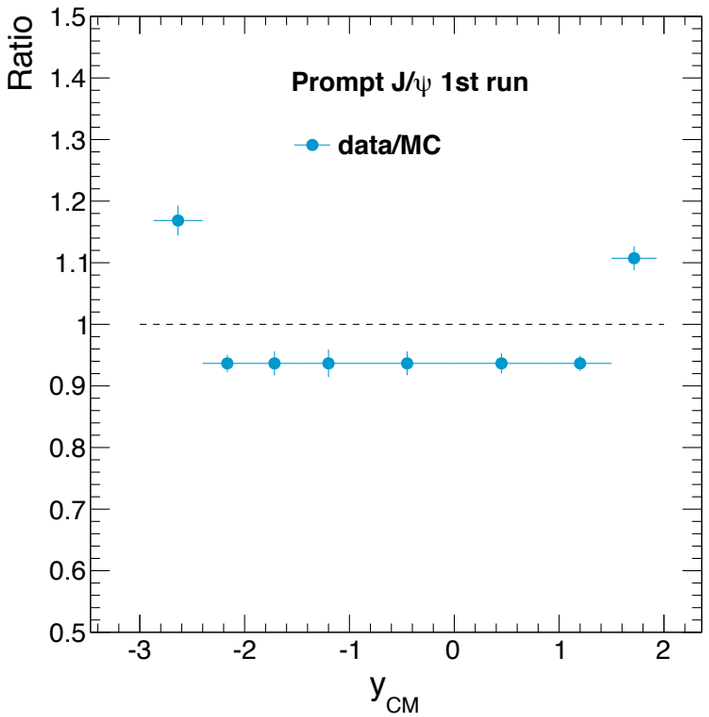
Data vs MC reco dist.

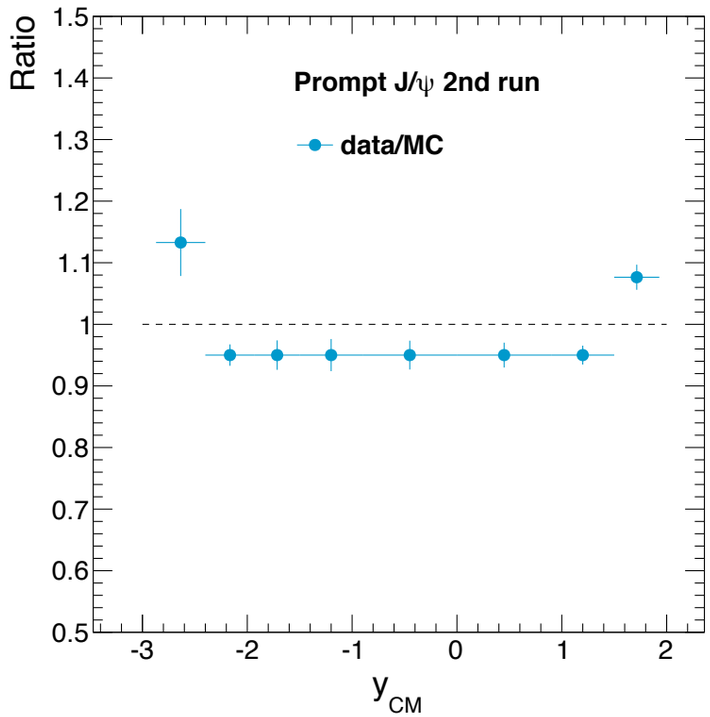
- **prompt**

all bins
used for the analysis





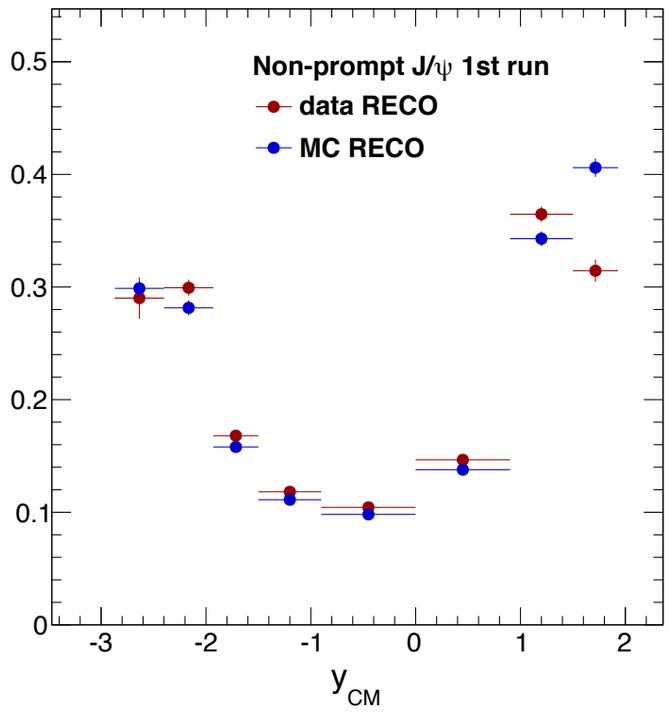


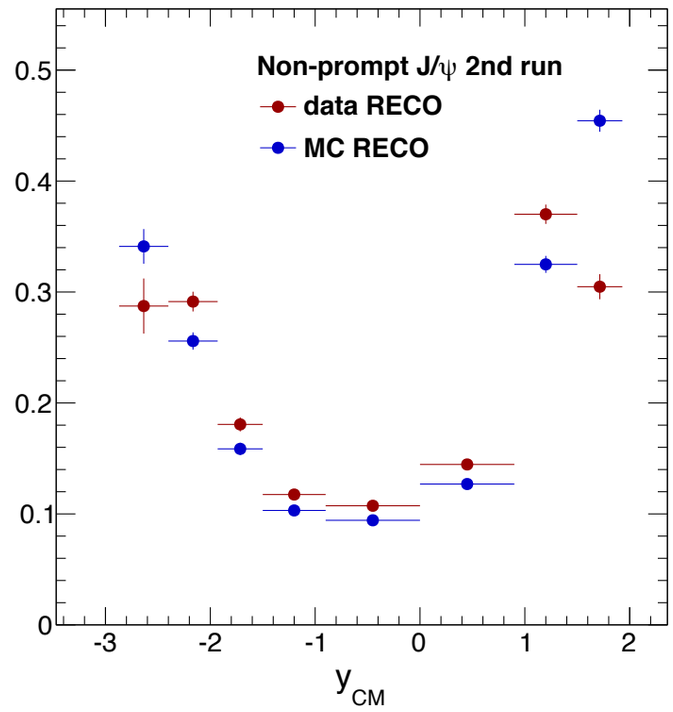


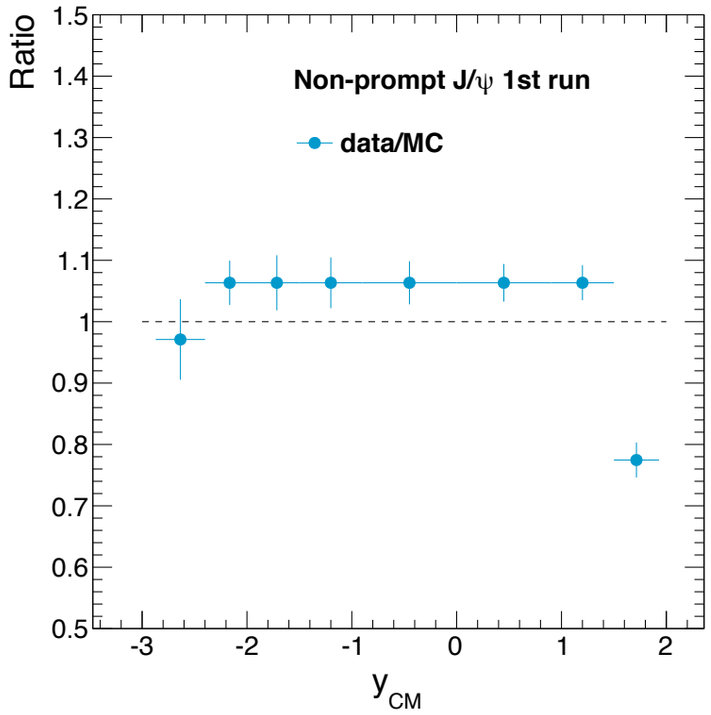
Data vs MC reco dist.

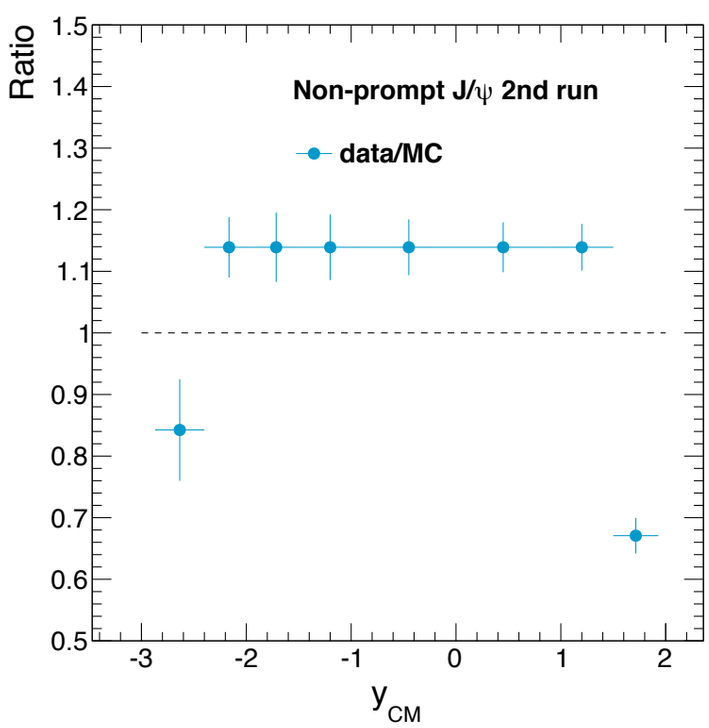
- **non-prompt**

all bins
used for the analysis





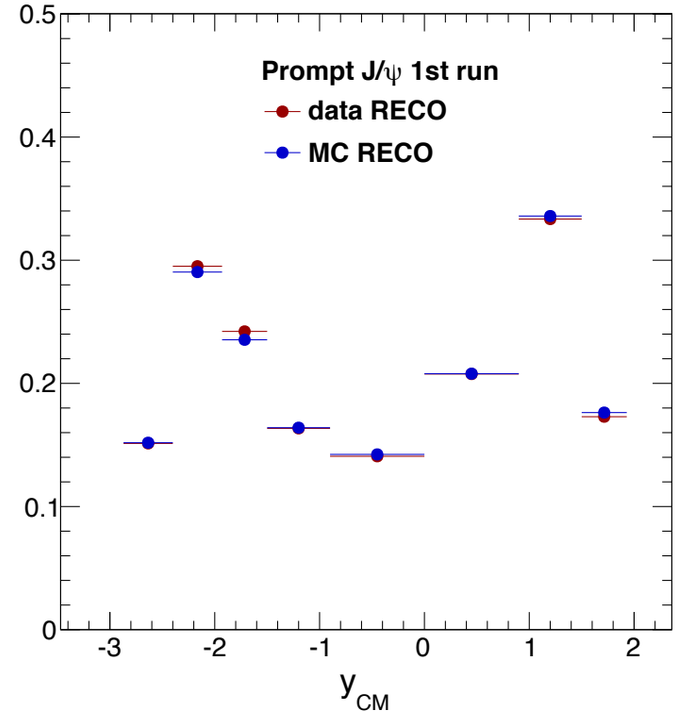


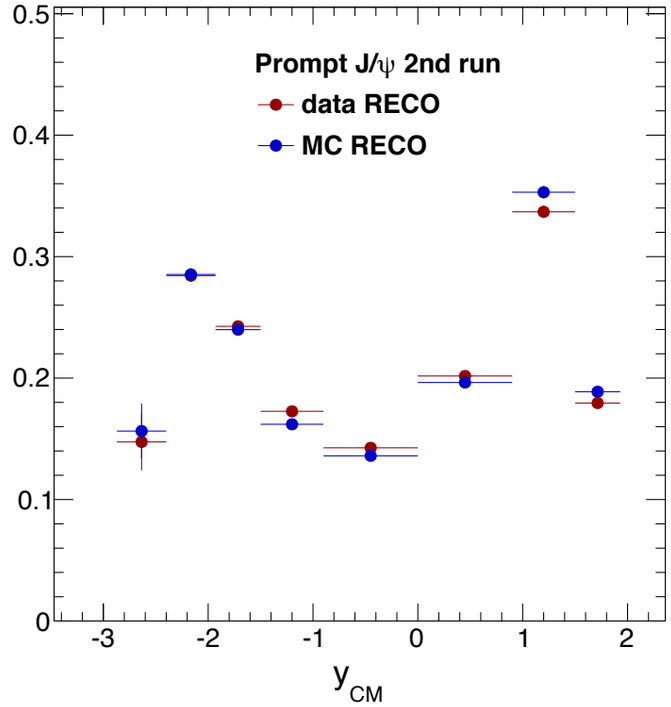


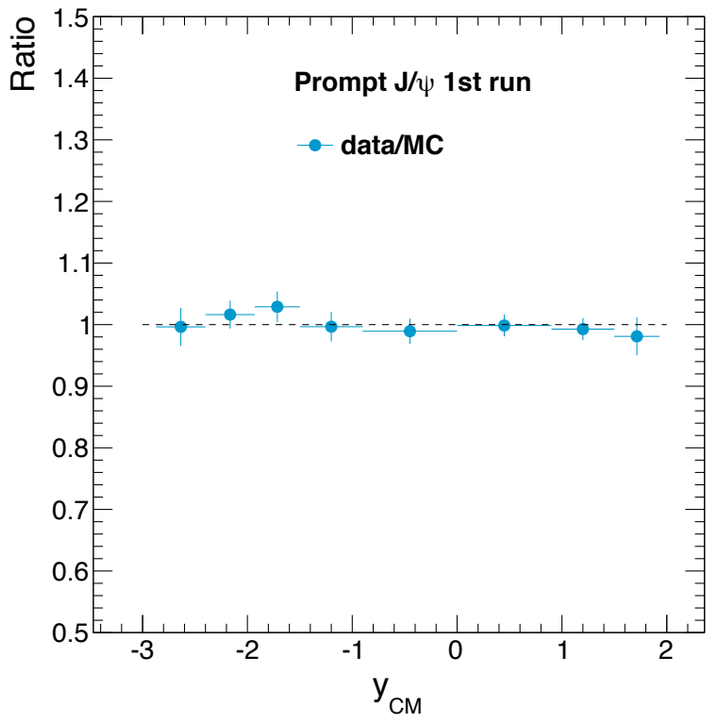
Data vs MC reco dist.

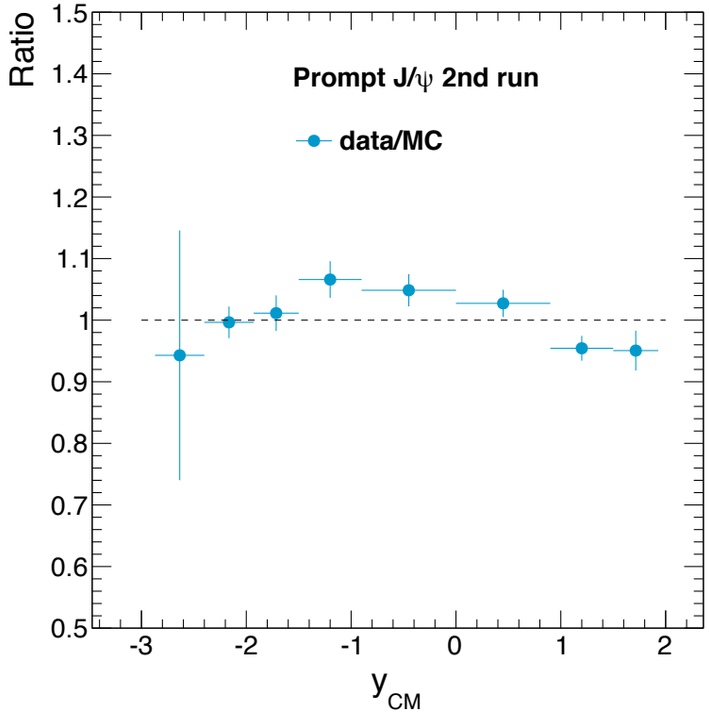
- **prompt**

only for pT > 6.5 GeV



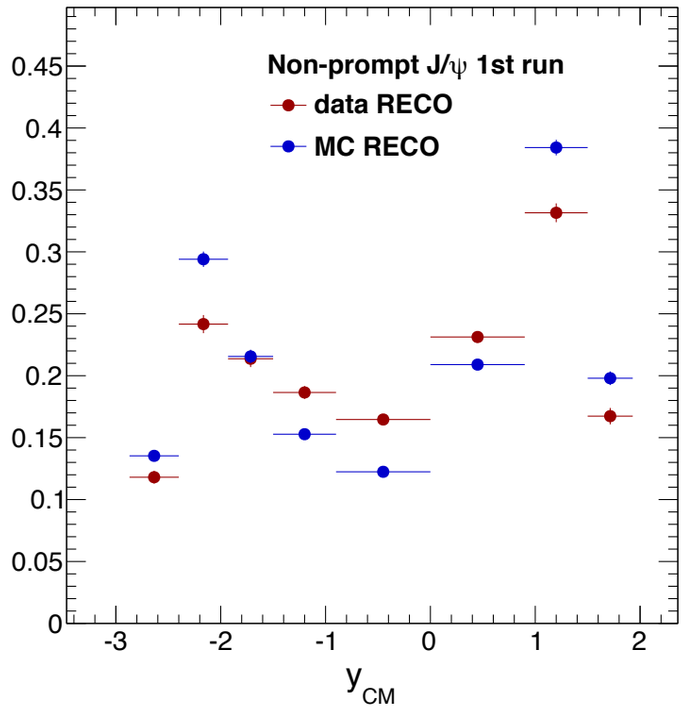


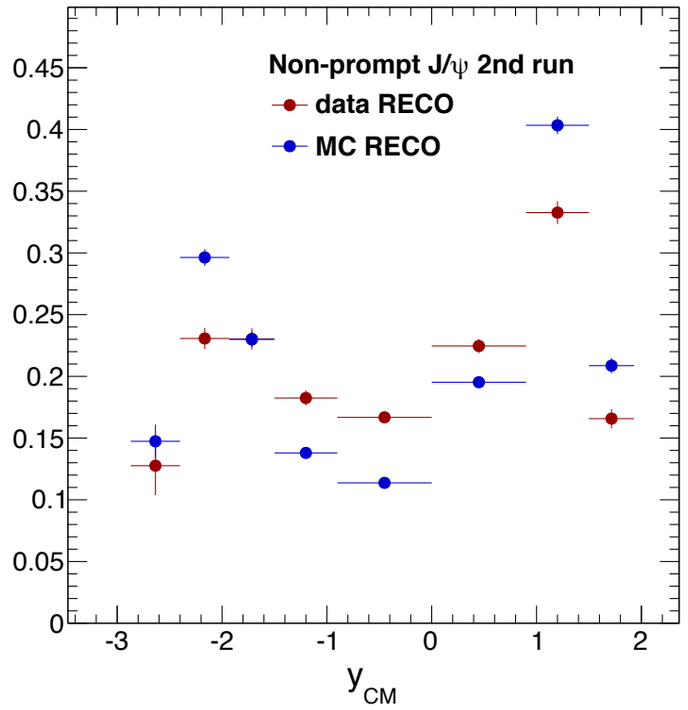


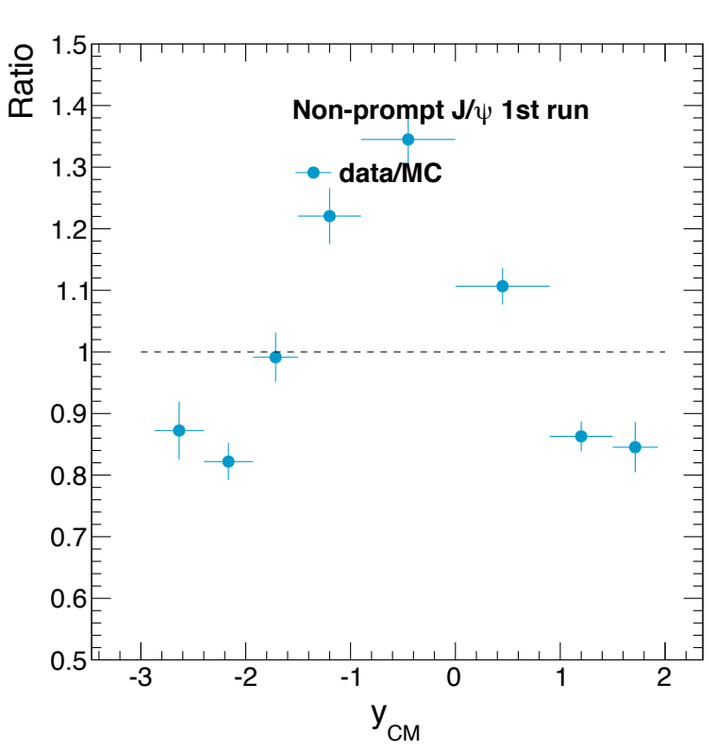


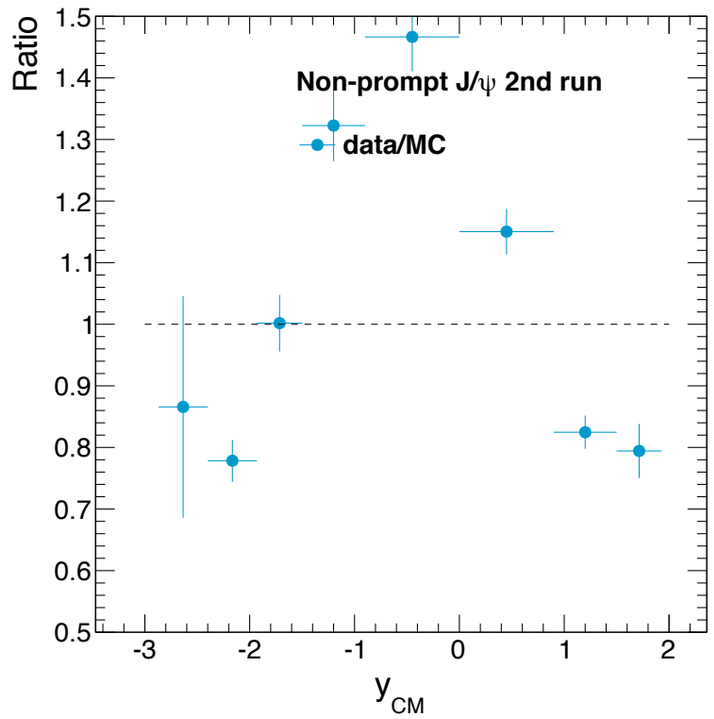
Data vs MC reco dist.

only for pT > 6.5 GeV









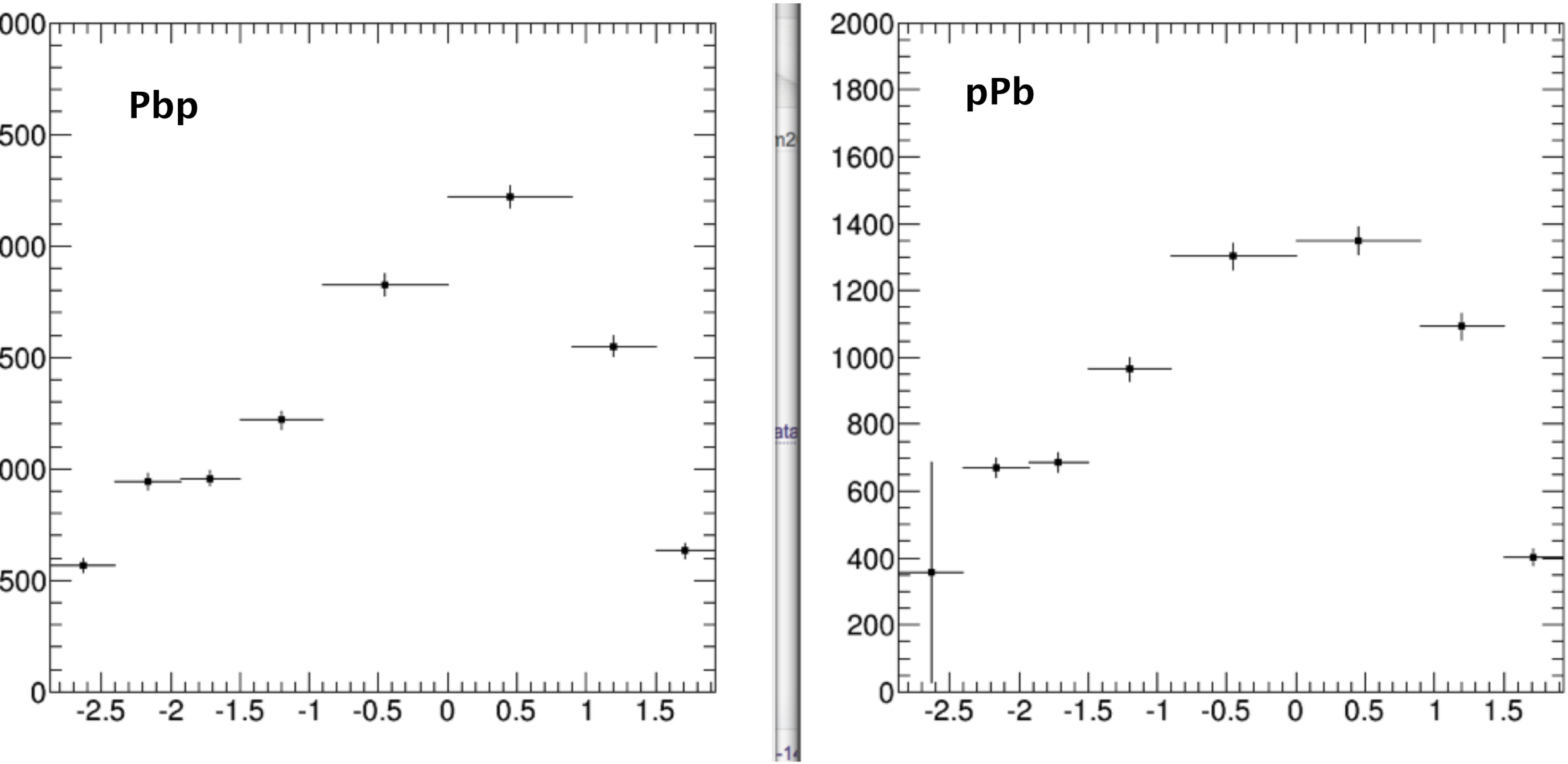
Non-prompt

피팅 다시해야할 부분!!

크로스에서.. pPb?

ipt==7 이면 10-14 GeV??

```
for (Int_t ipt = 0; ipt <
  if (ipt !=7) continue;
```



Non-prompt

일단 내일까지 :

vs 옛날 with TNP vs w.o TNP vsLHCb 플랏 ㅋ

발표 슬라이드 만들장!

TO do :

- 피팅 이상한애들은 마무리하고
- 다 정리되면 피팅 systematics 돌리는거
- mean pT calculation!
- bfraction 등 fit variable 디스트리뷰션도 그려봐야한당
- TDR & wiki 정리!!
- 코드전체적으로 정리하고 TGraphError로 바꾸장!!!