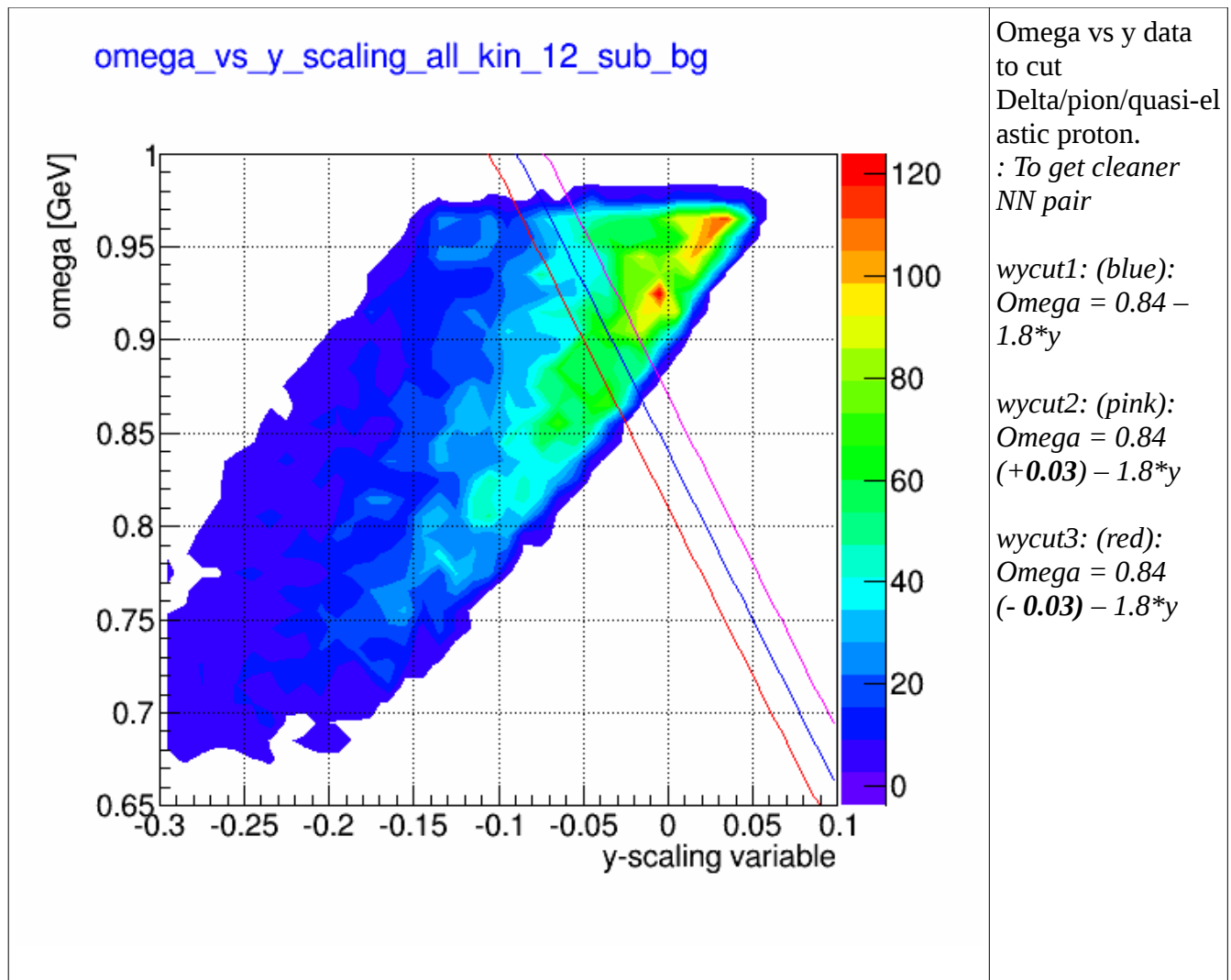
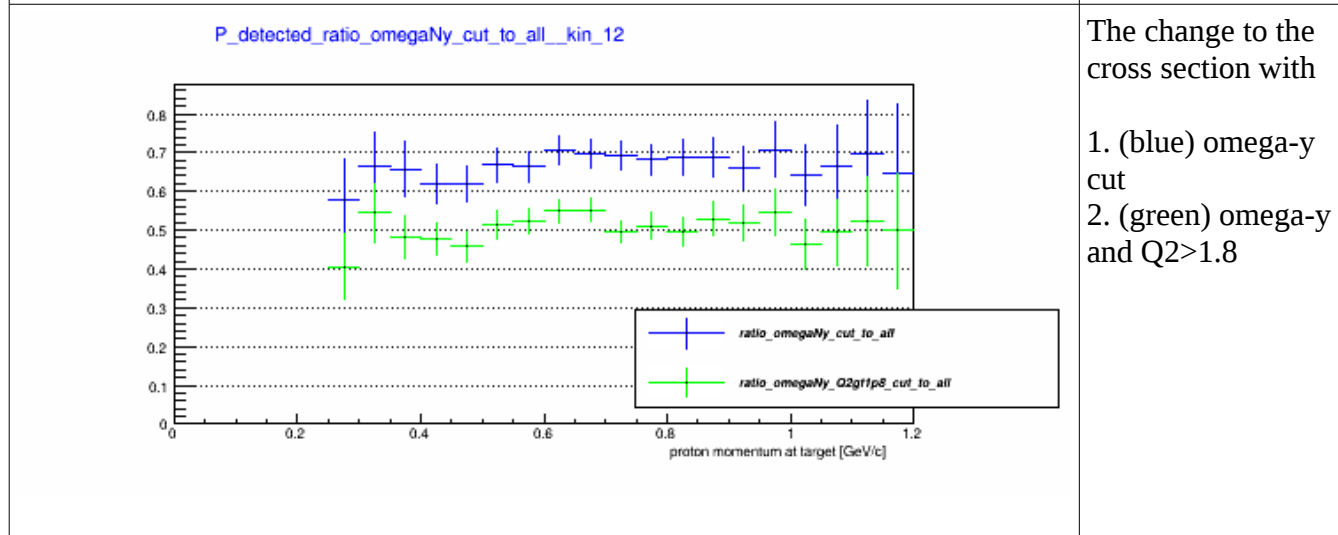
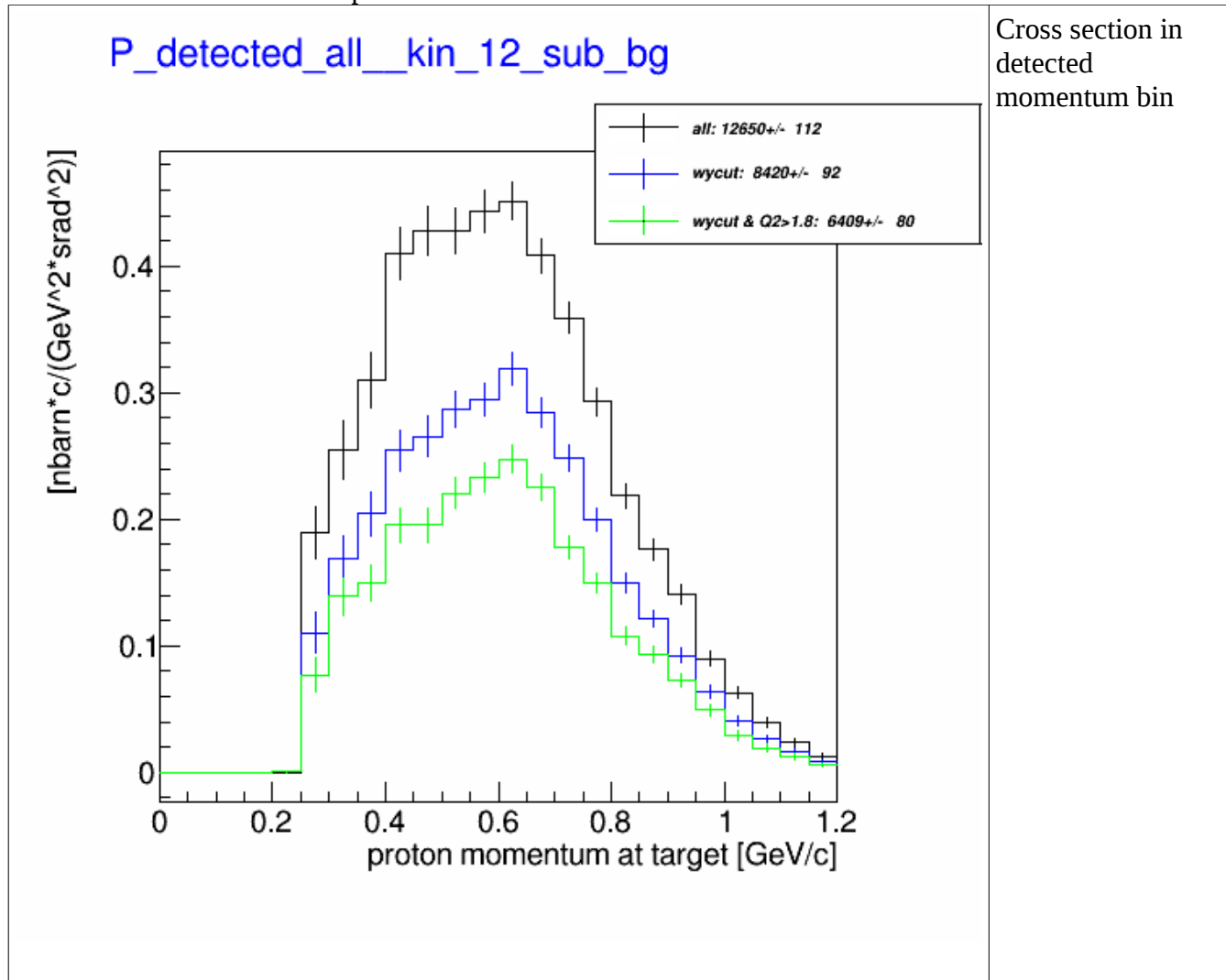


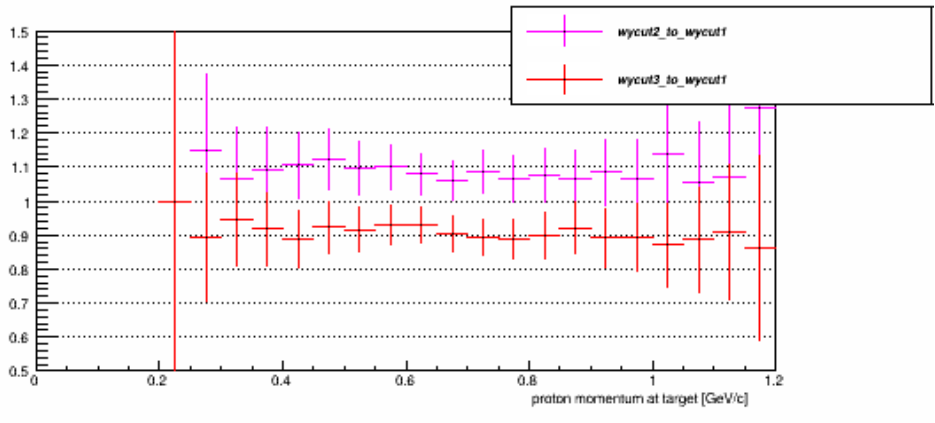
## Cross section before/after omega-y cut



Cross Section in variation of parameter bin.



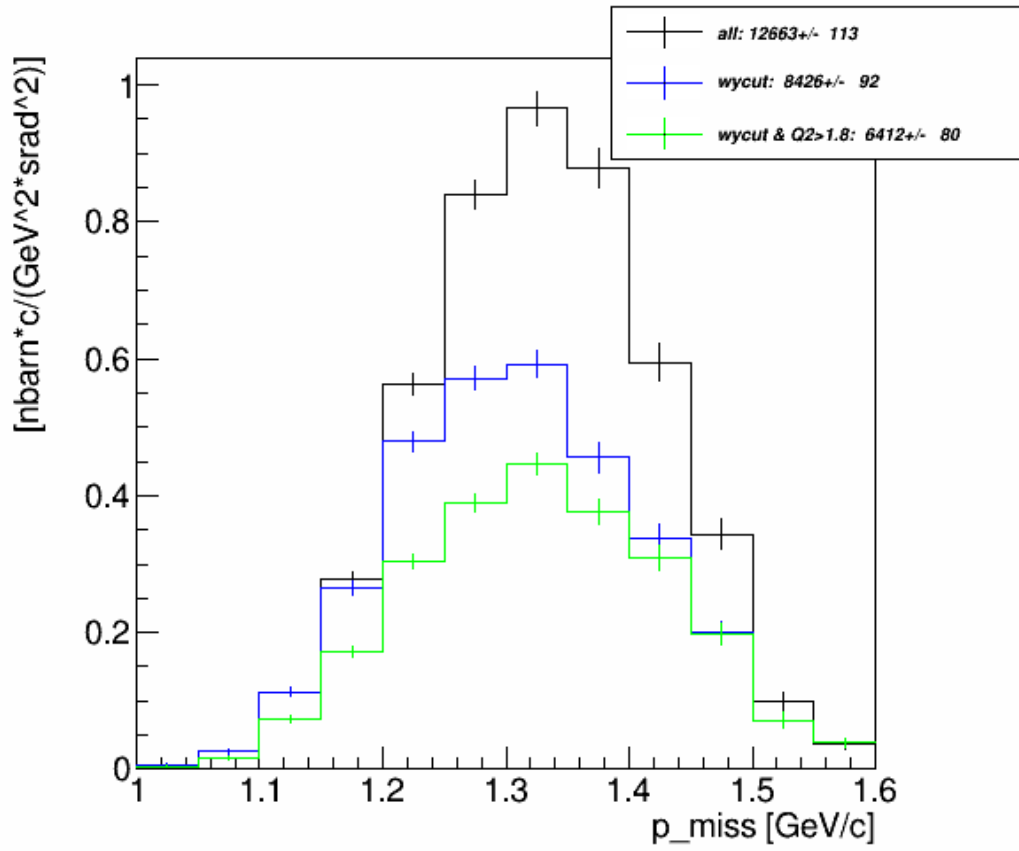
P\_detected\_wycut2\_to\_wycut1\_ratio



The uncertainty of the omega-y cut choice

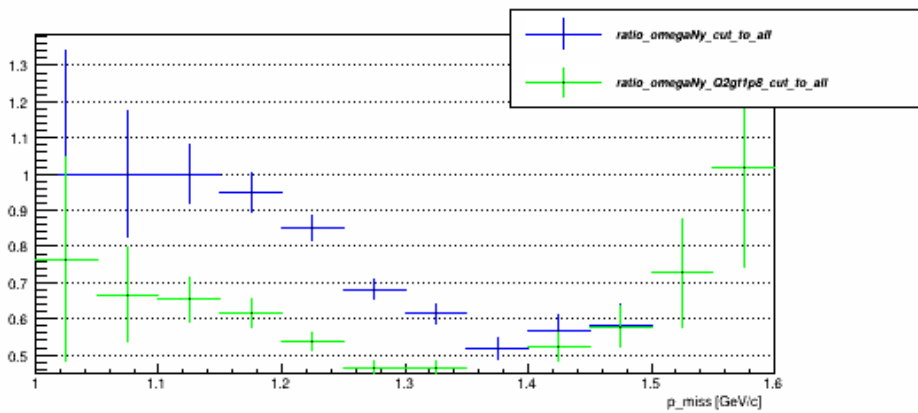
*The Effect on the choice of wycut is ~10% differ in momentum bin*

p\_miss\_all\_kin\_12\_sub\_bg



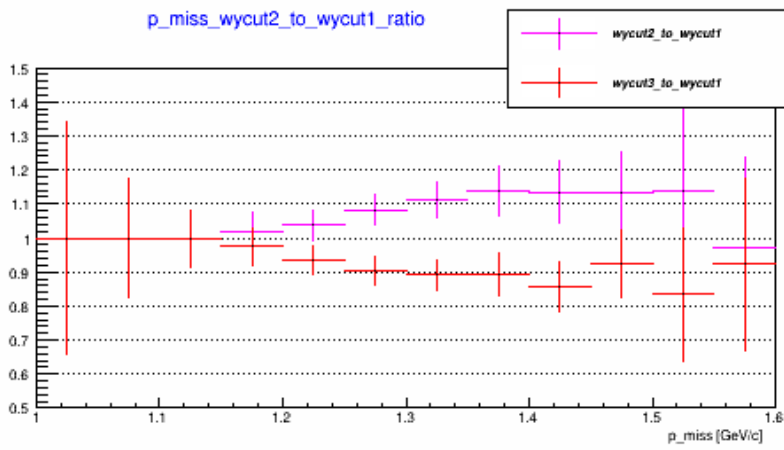
Cross section in missing momentum bin

p\_miss\_ratio\_omegaNy\_cut\_to\_all\_kin\_12



The change to the cross section with

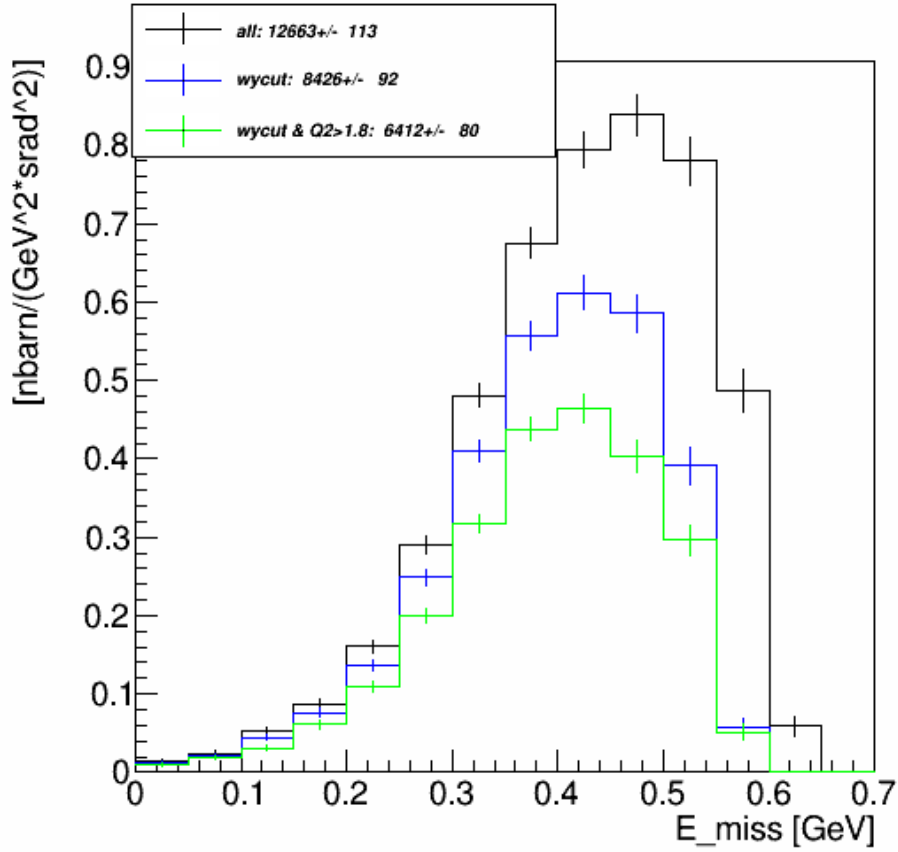
1. (blue) omega-y cut
2. (green) omega-y and  $Q^2 > 1.8$



The uncertainty of the omega-y cut choice.

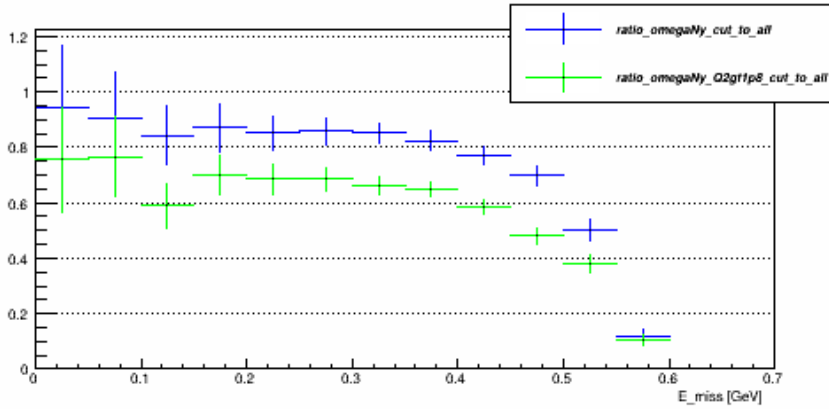
The choice of omega-y cut effect more in the high missing momentum.

### E\_miss\_all\_kin\_12\_sub\_bg



Cross section in missing energy bin

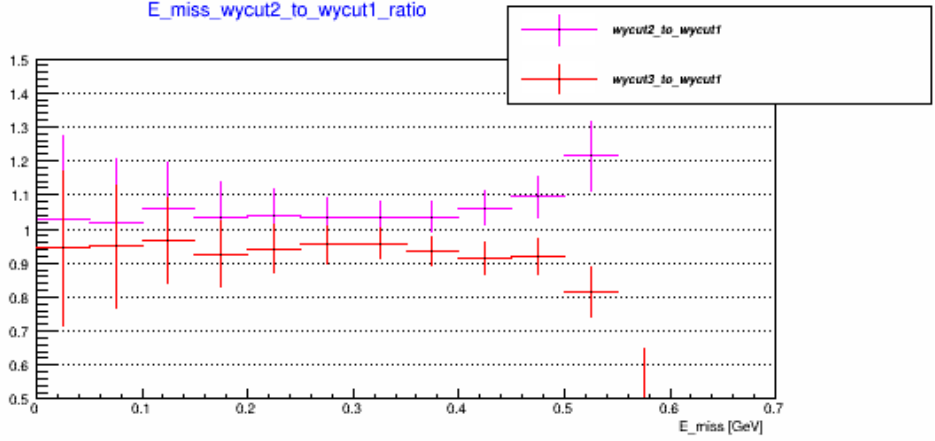
### E\_miss\_ratio\_omegaNy\_cut\_to\_all\_kin\_12



The change to the cross section with

1. (blue) omega-gamma cut
2. (green) omega-gamma and Q2 > 1.8

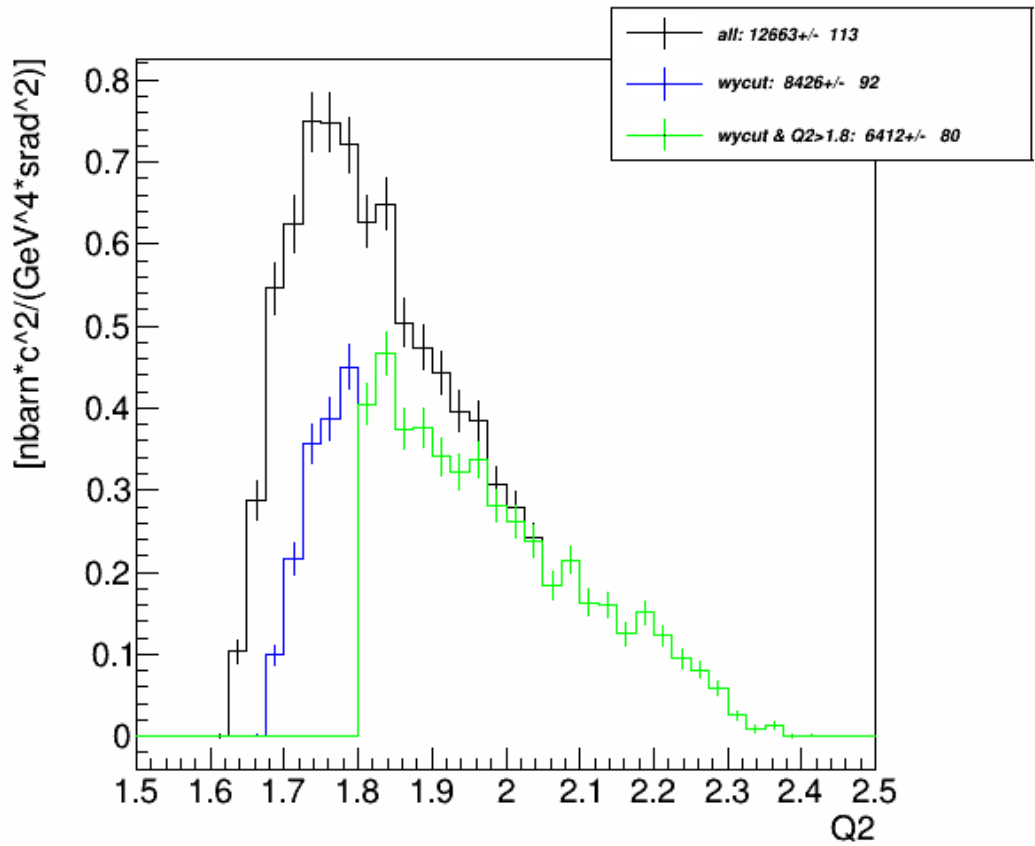
E\_miss\_wycut2\_to\_wycut1\_ratio



The uncertainty of the omega-y cut choice

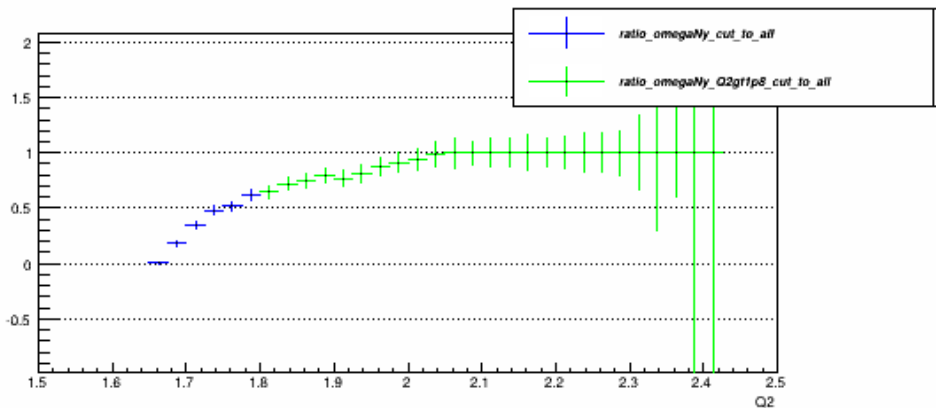
*The high E\_miss has more change with the choice of omega-y cut*

Q2\_all\_\_kin\_12\_sub\_bg



Cross section in  $Q^2$  bin

Q2\_ratio\_omegaNy\_cut\_to\_all\_kin\_12

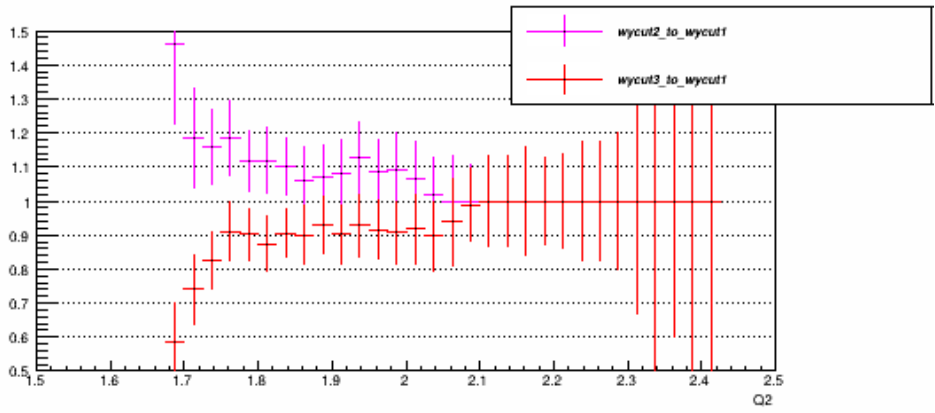


The change to the cross section with

1. (blue)  $\omega$ - $\gamma$  cut
2. (green)  $\omega$ - $\gamma$  and  $Q^2 > 1.8$

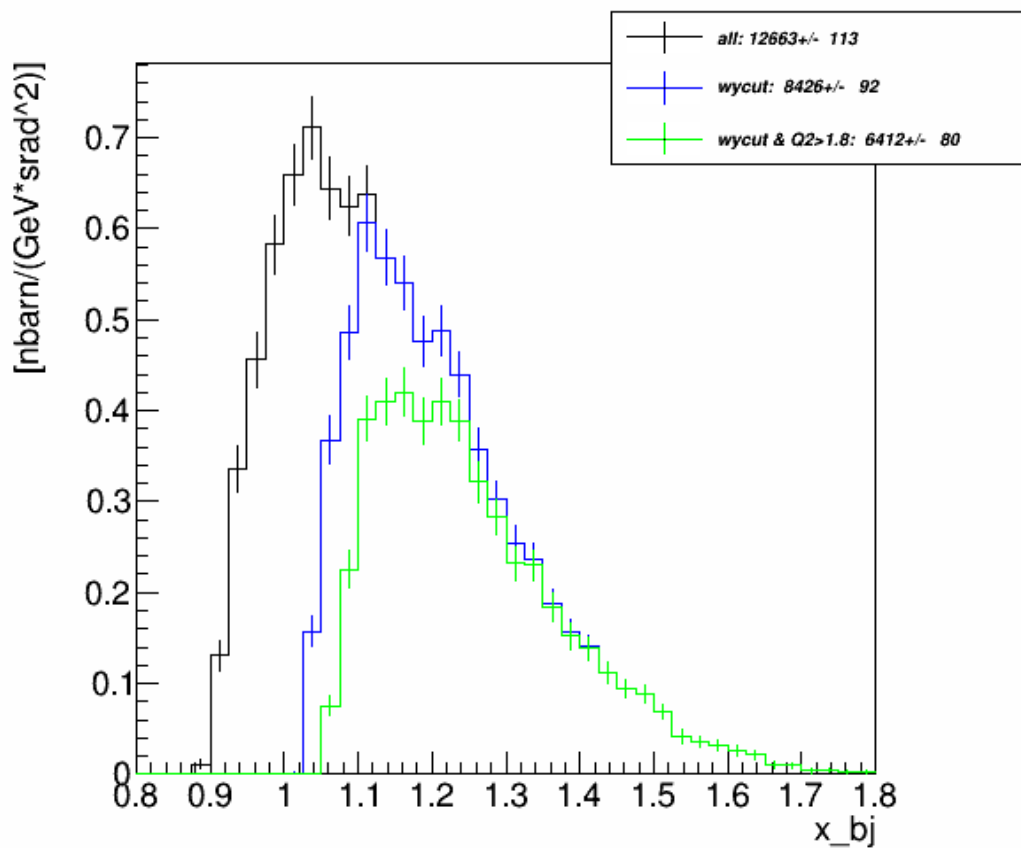


Q2\_wycut2\_to\_wycut1\_ratio



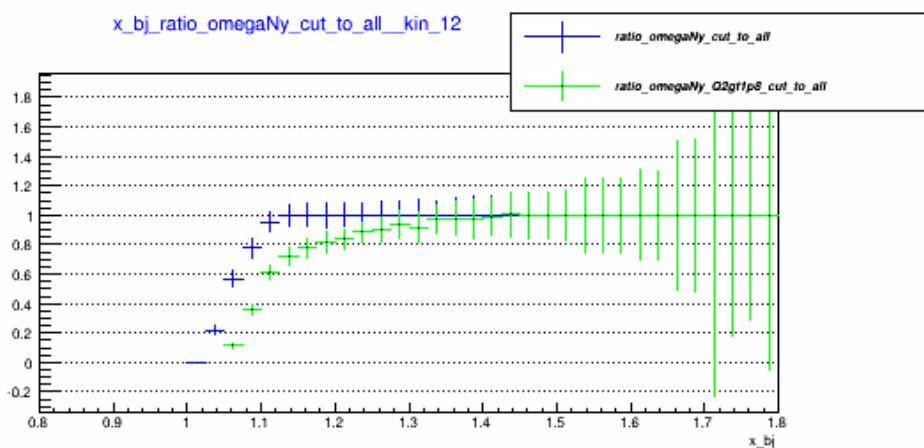
The uncertainty of the omega-y cut choice

x\_bj\_all\_kin\_12\_sub\_bg



Cross section in  $x_{bj}$  bin

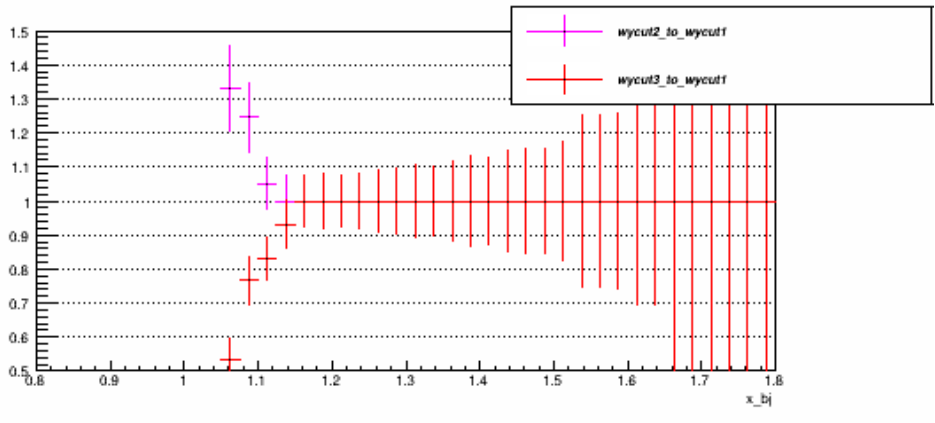
x\_bj\_ratio\_omegaNy\_cut\_to\_all\_kin\_12



The change to the cross section with

1. (blue) omega-y cut
2. (green) omega-y and  $Q^2 > 1.8$

x\_bj\_wycut2\_to\_wycut1\_ratio



The uncertainty of the omega-y cut choice