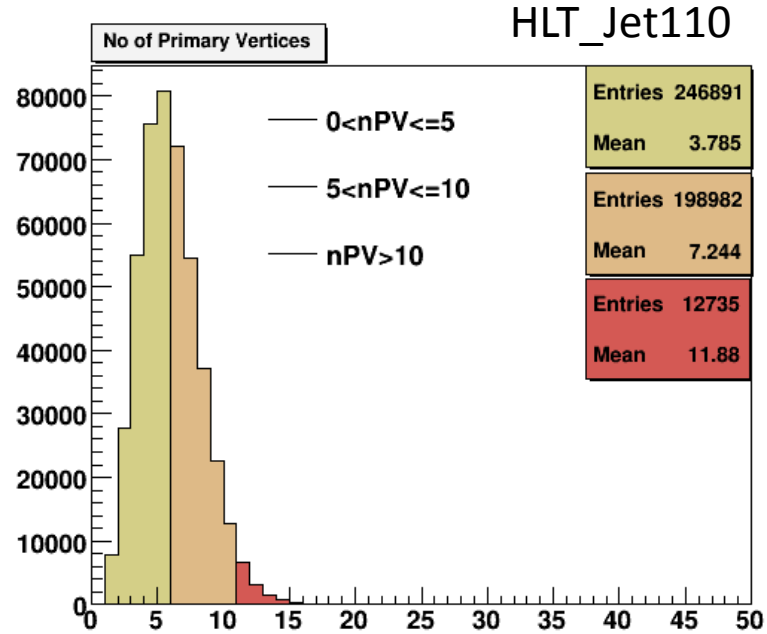
Pile Up Study for Dijet Angular (χ)

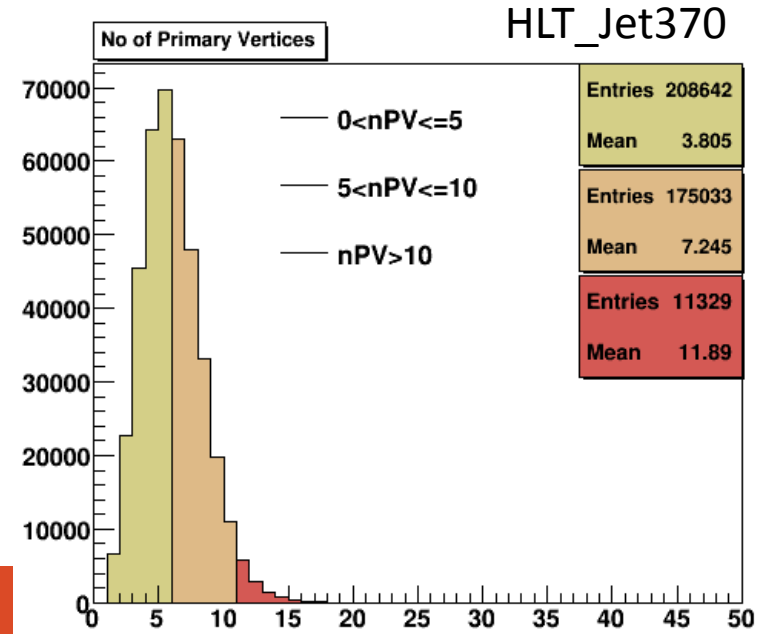
All the plots are done with 2011 Data
May10ReReco: L = 206 pb^{-1}
PromptReco: L = 500 pb^{-1}
Total : 706 pb^{-1} of data
JEC=**L1FastL2L3**
(and only L2L3 for comparison)
Jet Algo: **AK5 PFlow**

<u>For Mass Bins:</u>
500-650 use HLT_Jet110
650-850 use HLT_Jet150
850-1000 use HLT_JET190
1100-1400 use HLT_Jet230
1400-1800 use HLT_Jet300
1800-2200 use HLT_Jet370
>2200 use HLT_Jet370

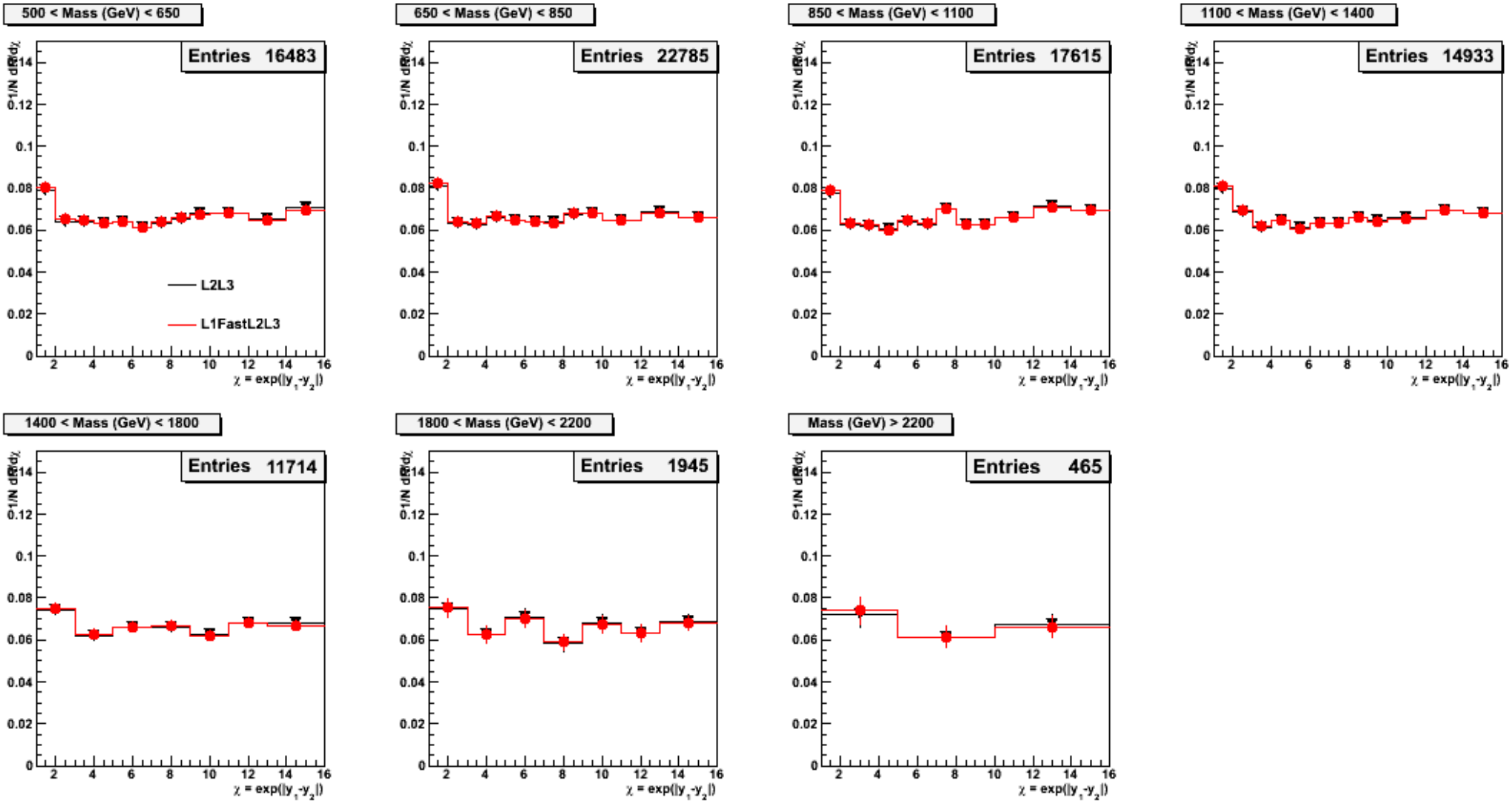
HLT_Jet110



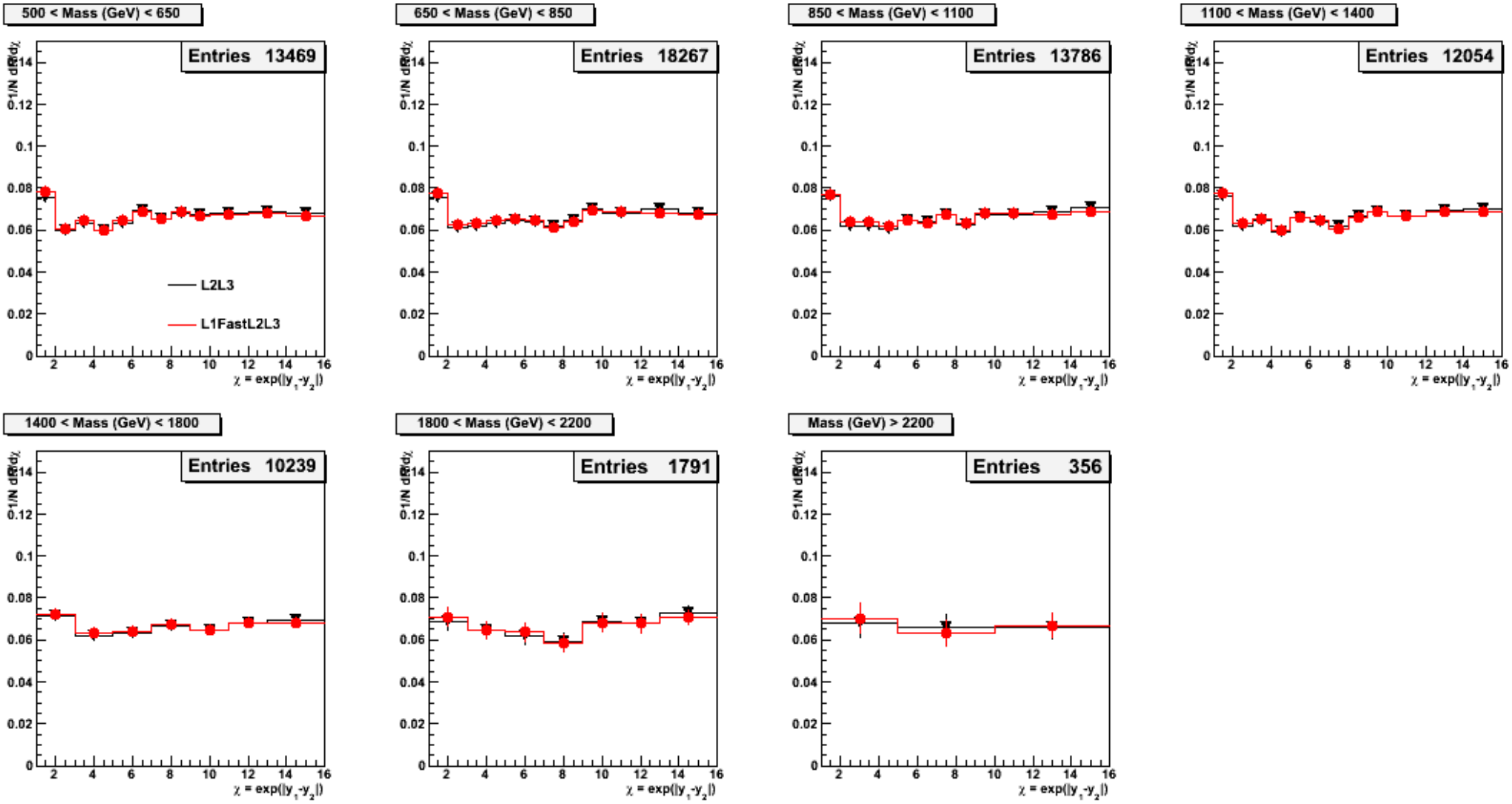
HLT_Jet370



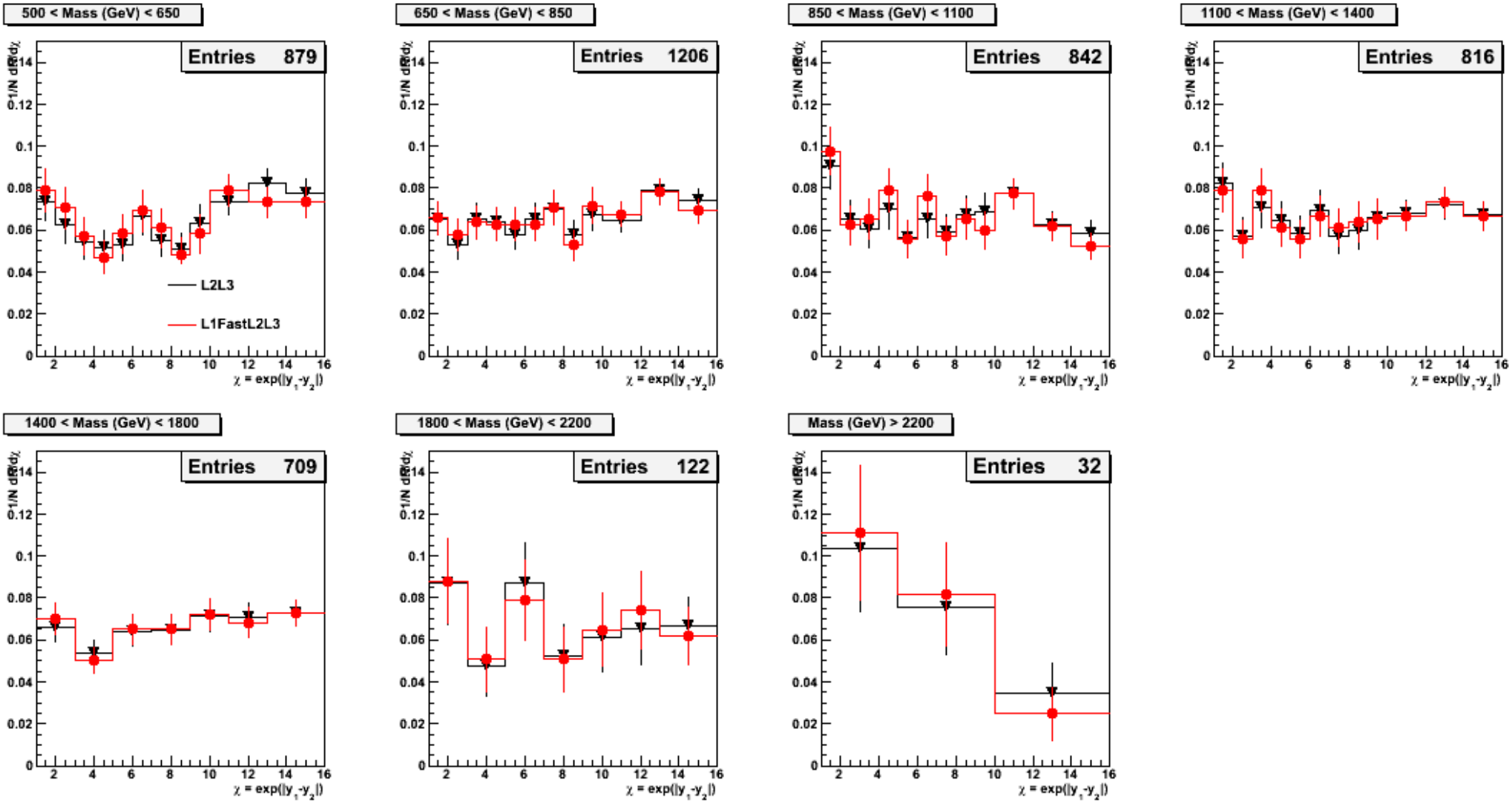
0<PV<=5: with and without L1 correction



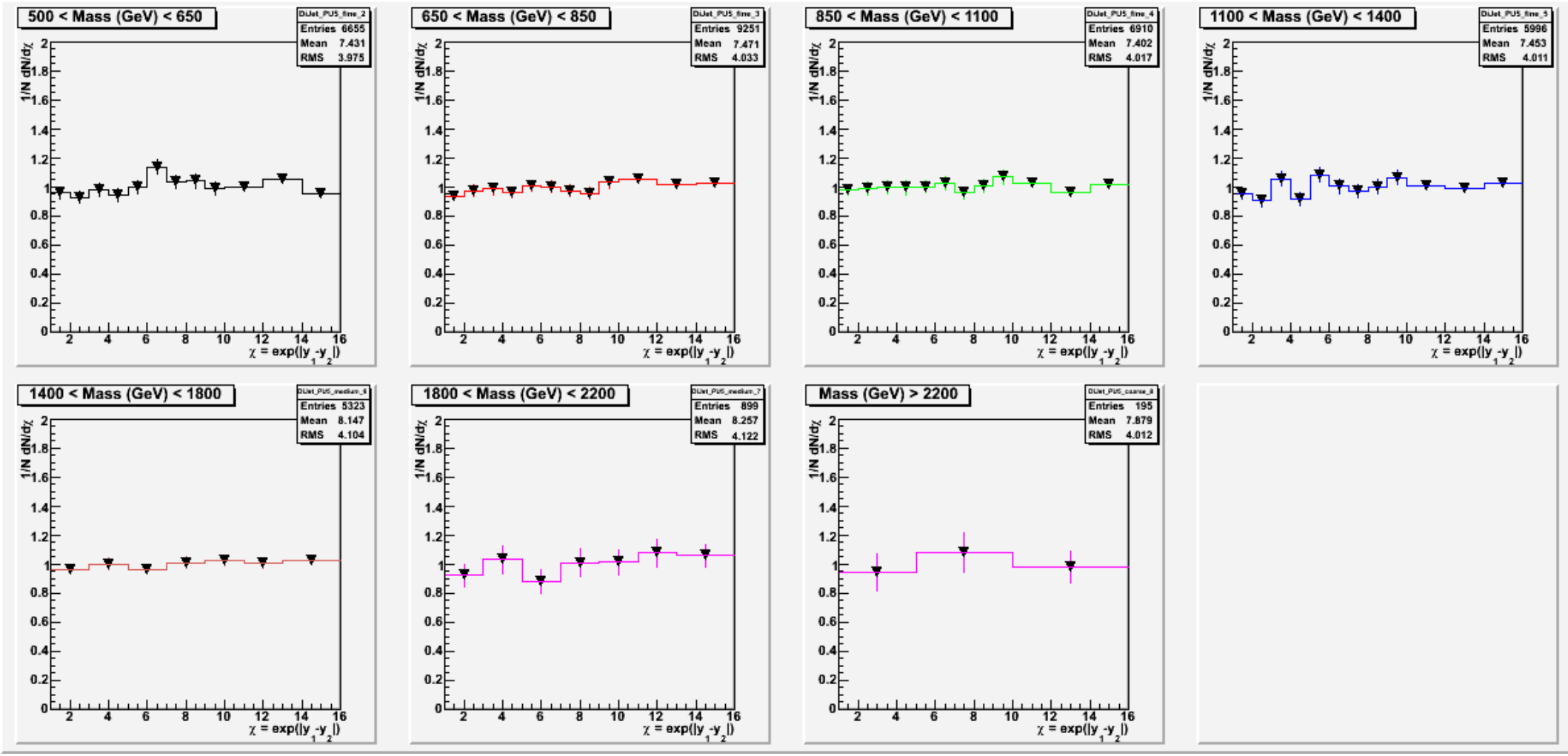
5<PV<=10: with and without L1 correction



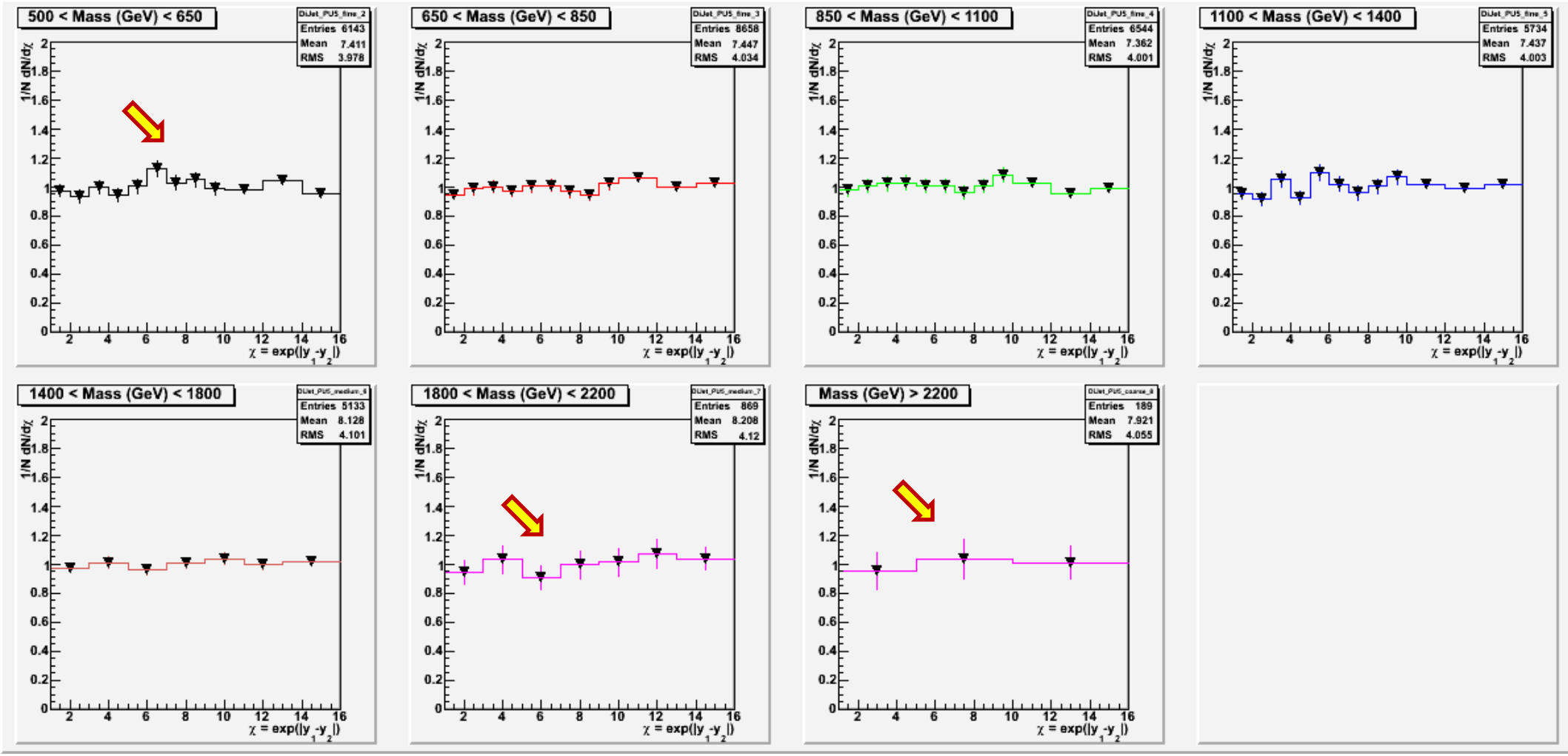
PV>10: with and without L1 correction



Ratio:(5<PV<=10)/(0<PV<=5) (JEC: L2L3)

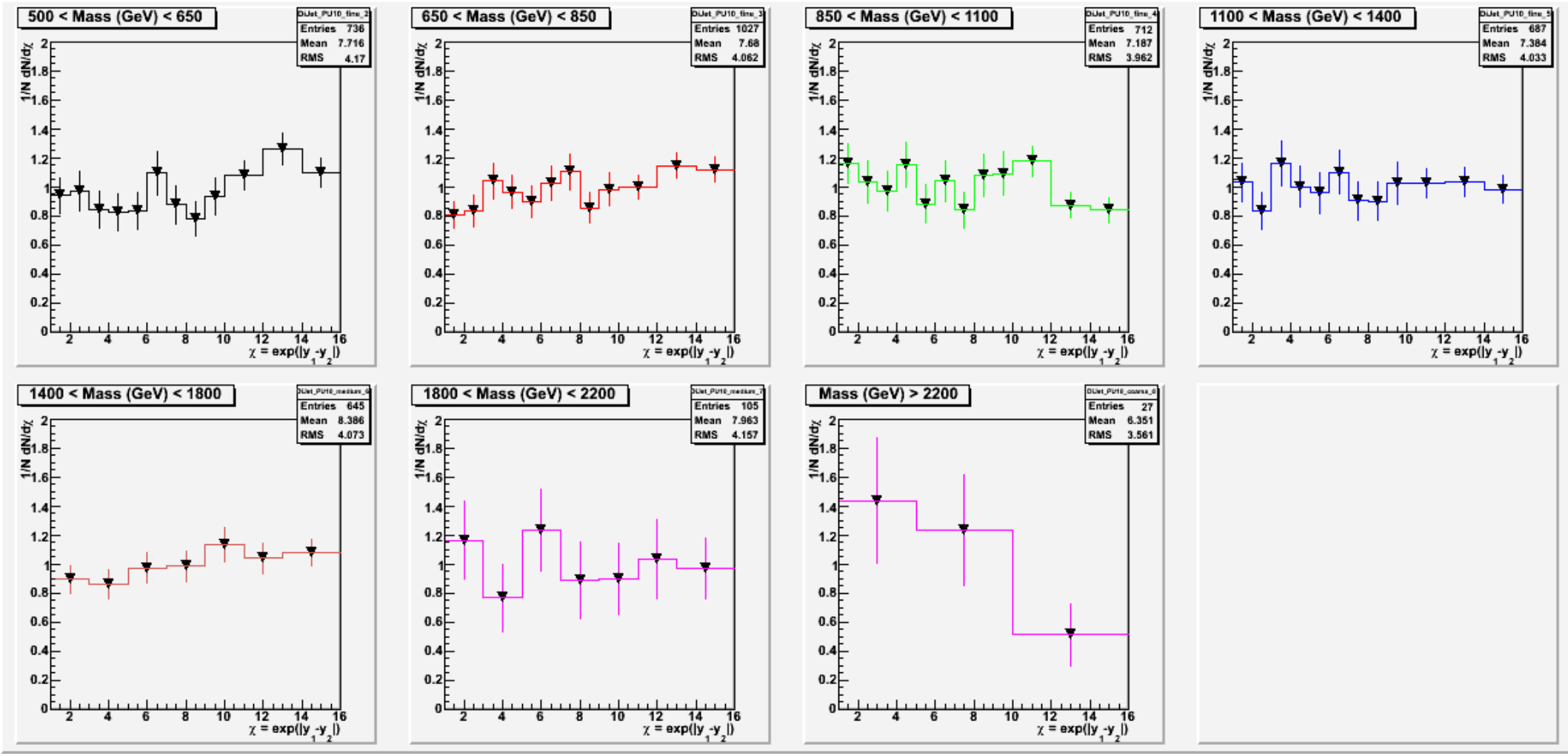


Ratio:(5<PV<=10)/(0<PV<=5) (JEC: L1FastL2L3)

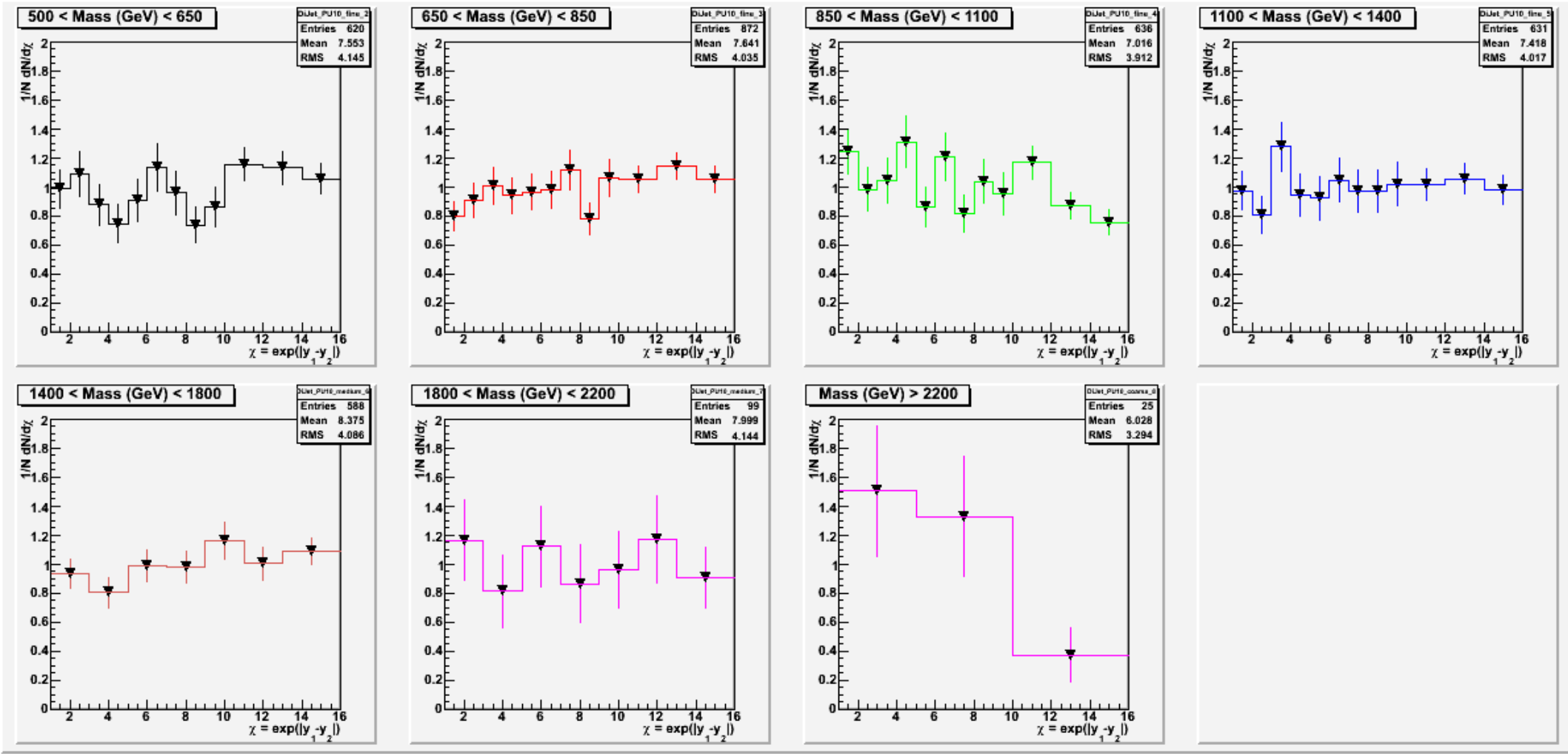


If you flip back and forth, slide 5 & 6 – you see applying L1Fast correction reduces the fluctuation (more closer to 1). A zoomed plot shows it better.

Ratio:(PV>10)/(0<PV<=5) (JEC: L2L3)



Ratio:(PV>10)/(0<PV<=5) (JEC: L1FastL2L3)



If you flip back and forth, slide 7 & 8 – you see applying L1Fast correction reduces the fluctuation (more closer to 1). A zoomed plot shows it better.