

Background + Signal

based on fast simulation & IPstrong G4

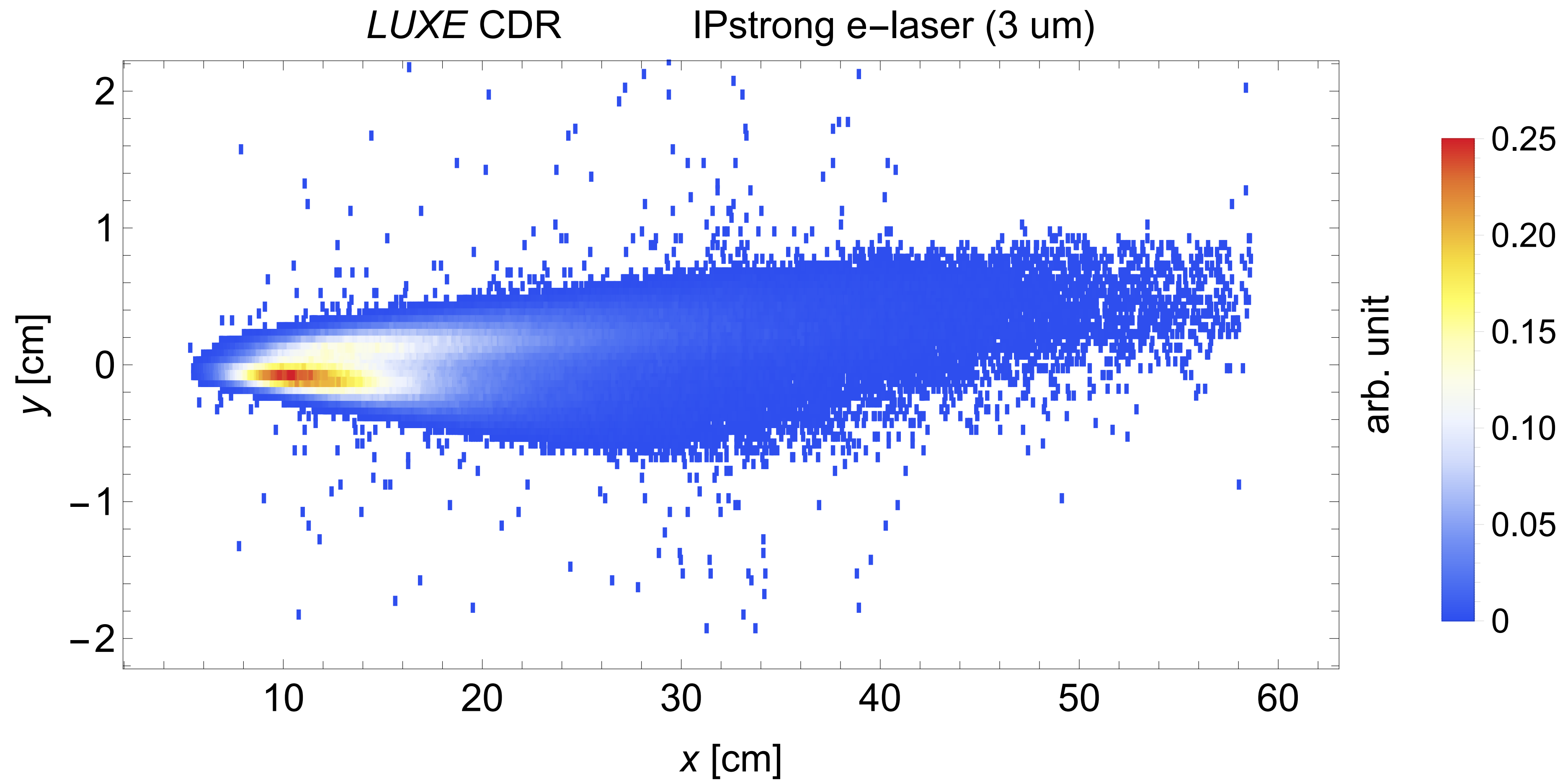
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Tel Aviv University

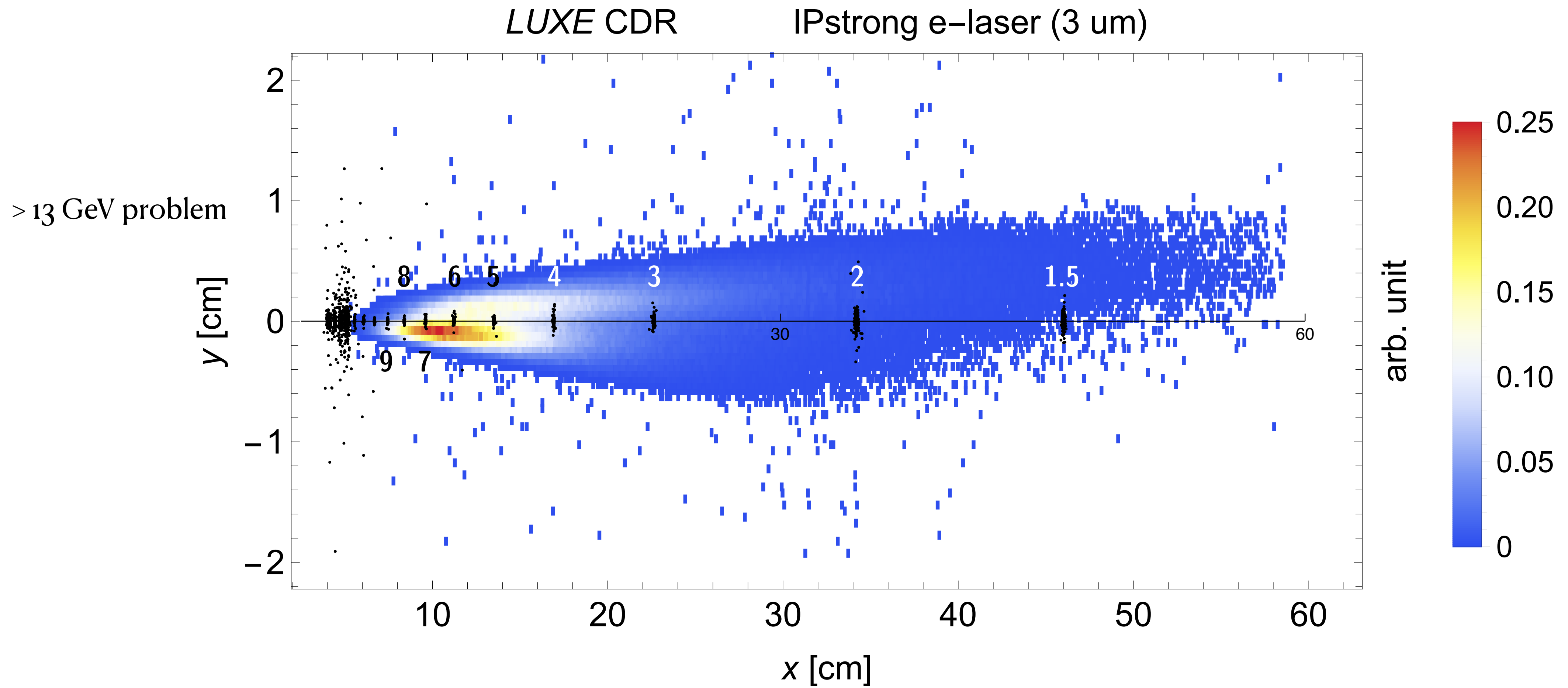
21 January 2021

Signals coverage

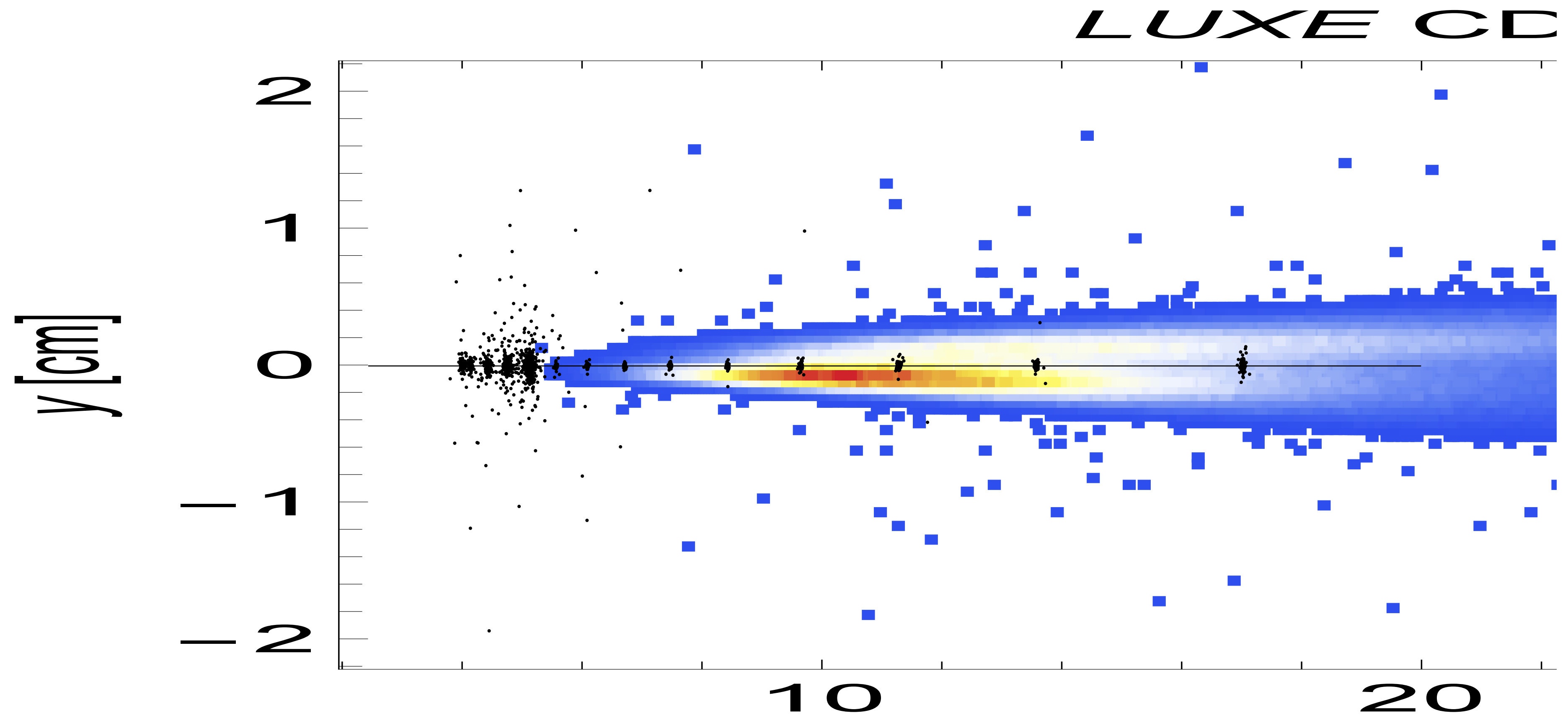
where did signal particles hit?

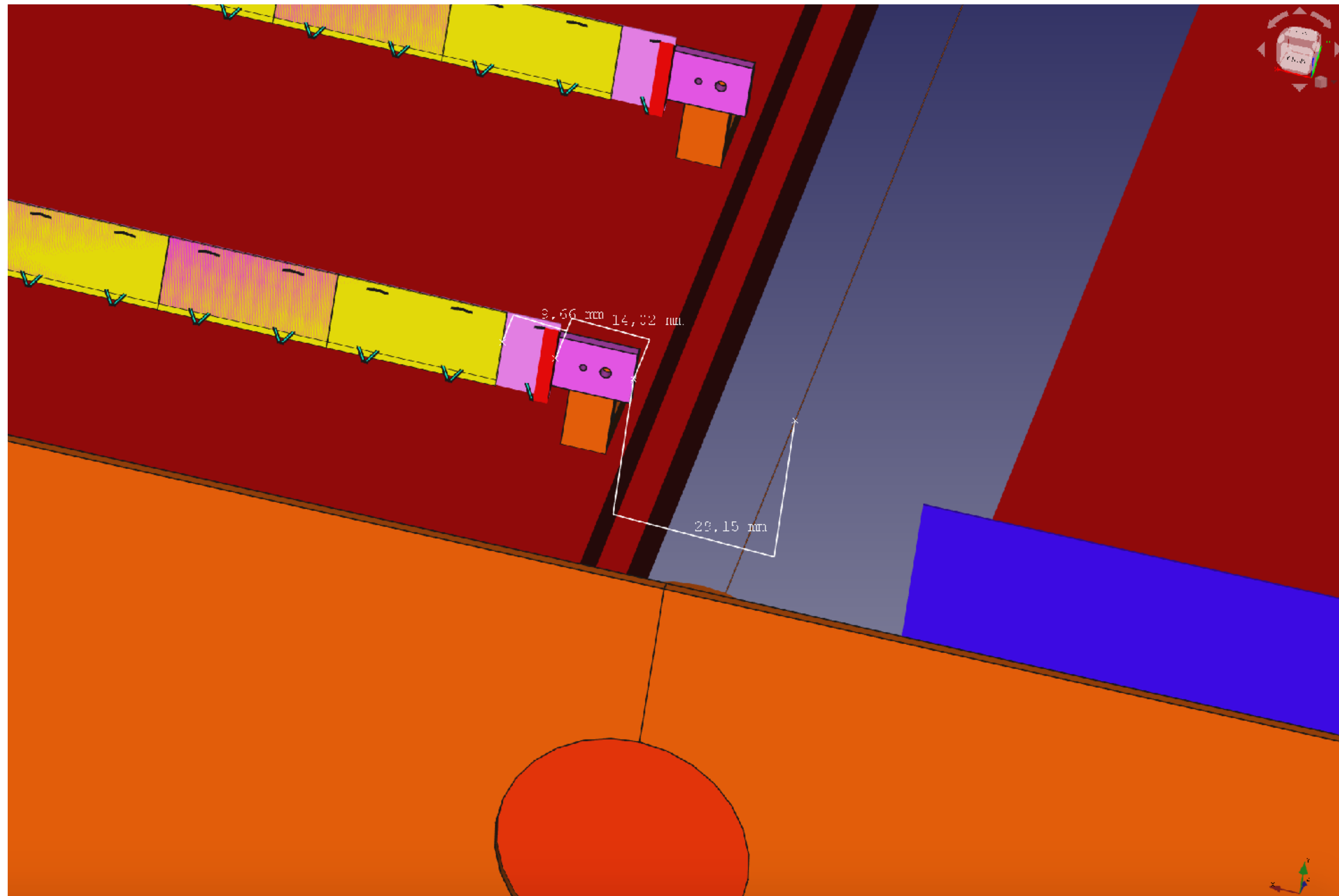


Signals coverage

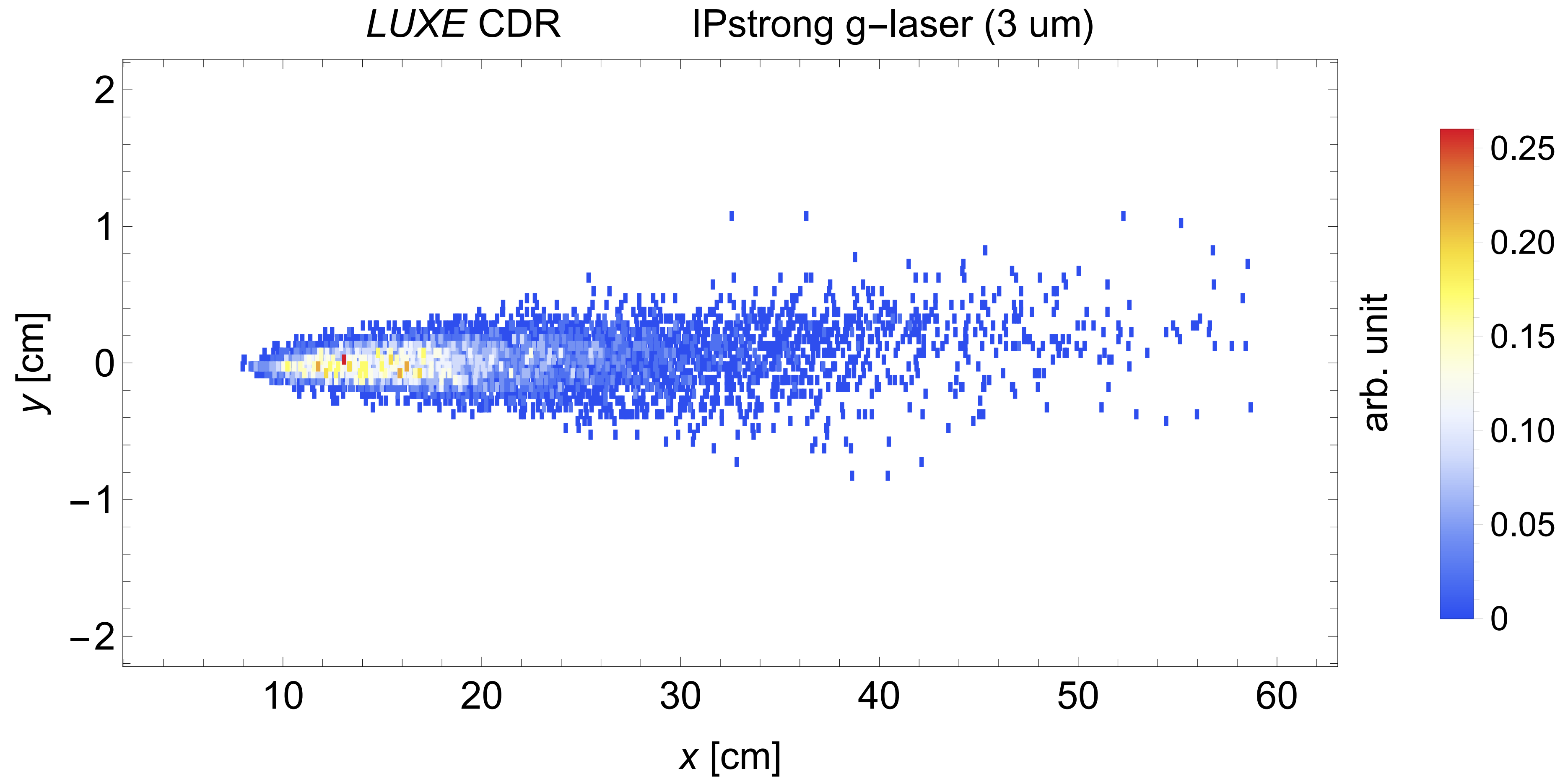


Signals coverage

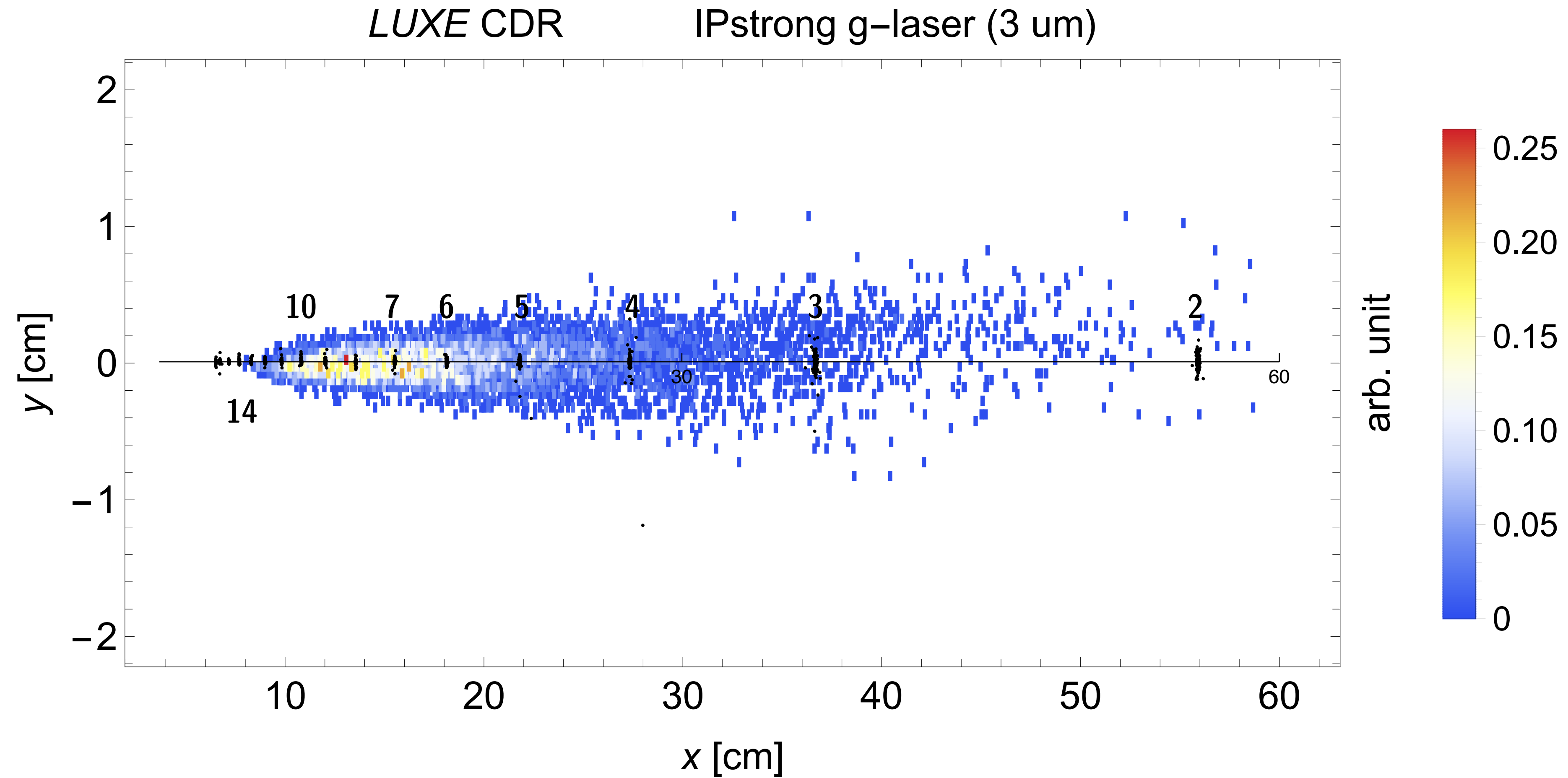




Signals coverage

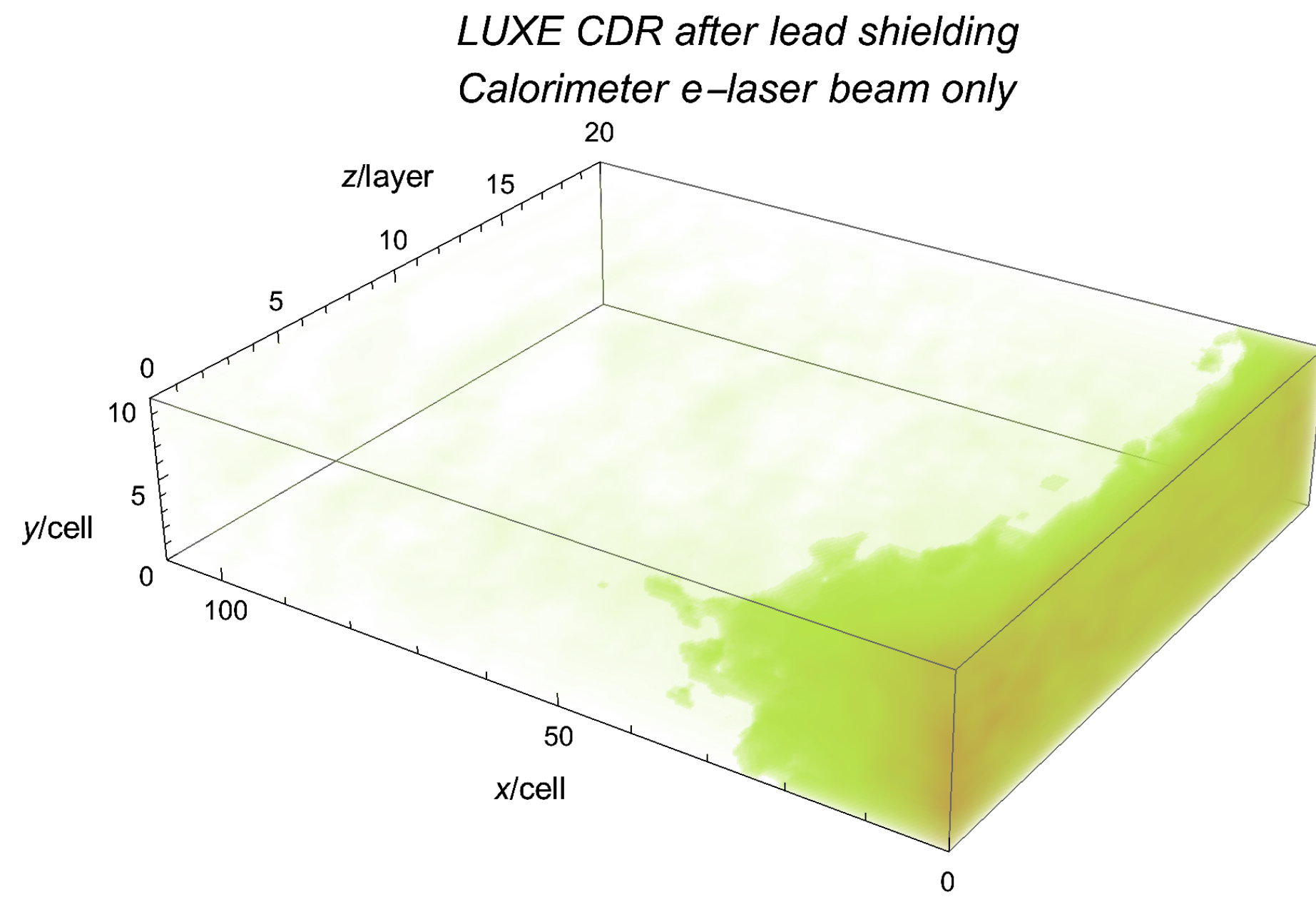


Signals coverage

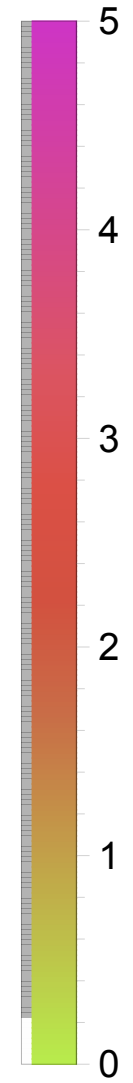


e-laser

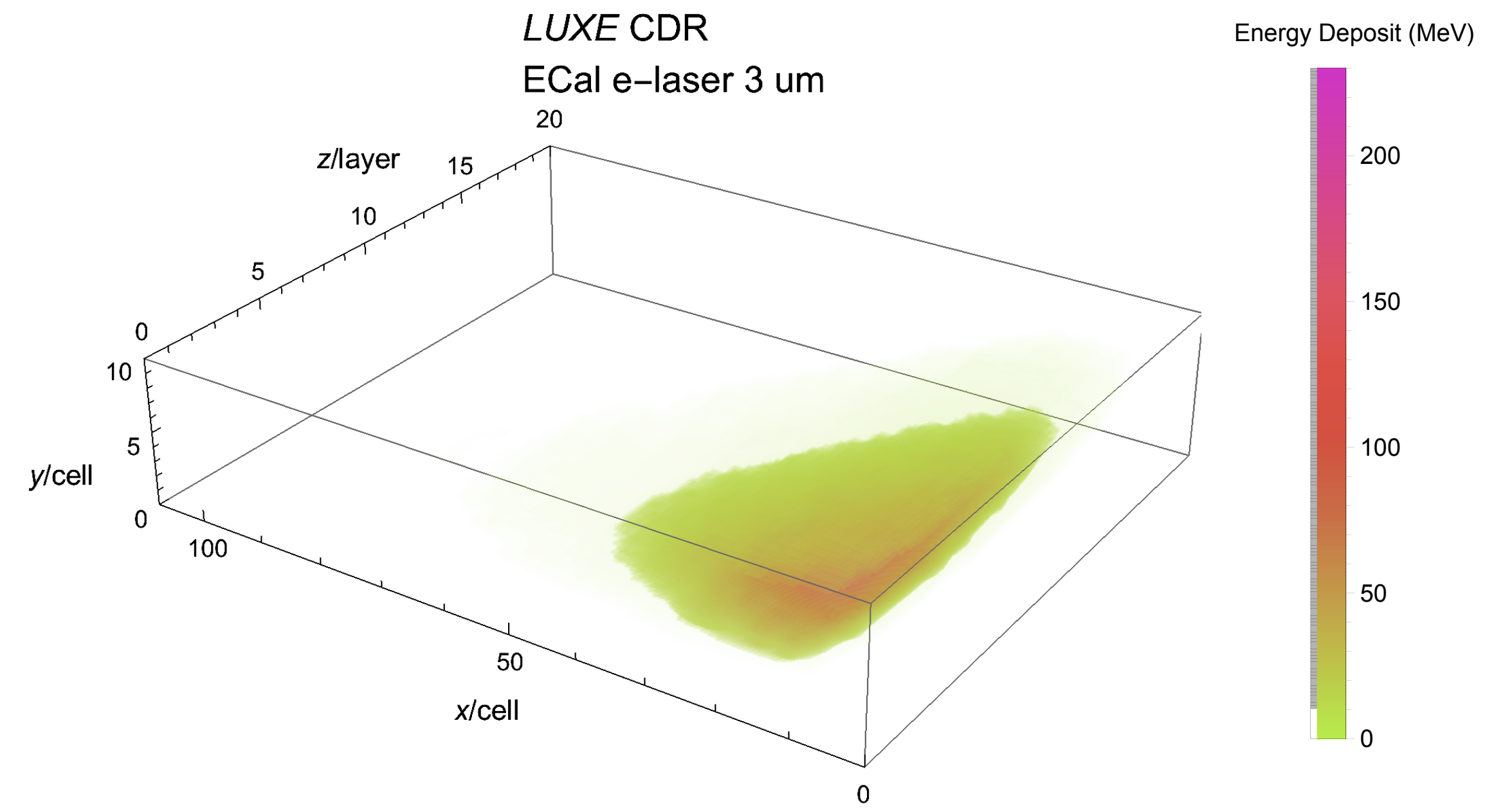
Background



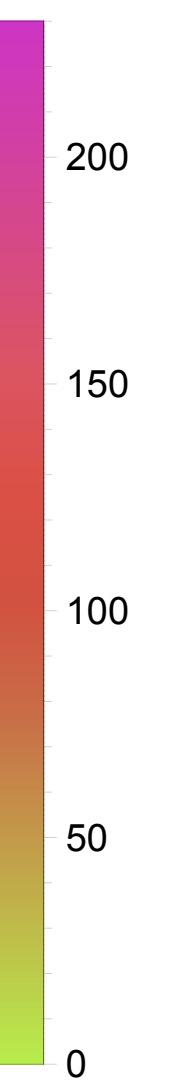
Energy Deposit (MeV)



Signal

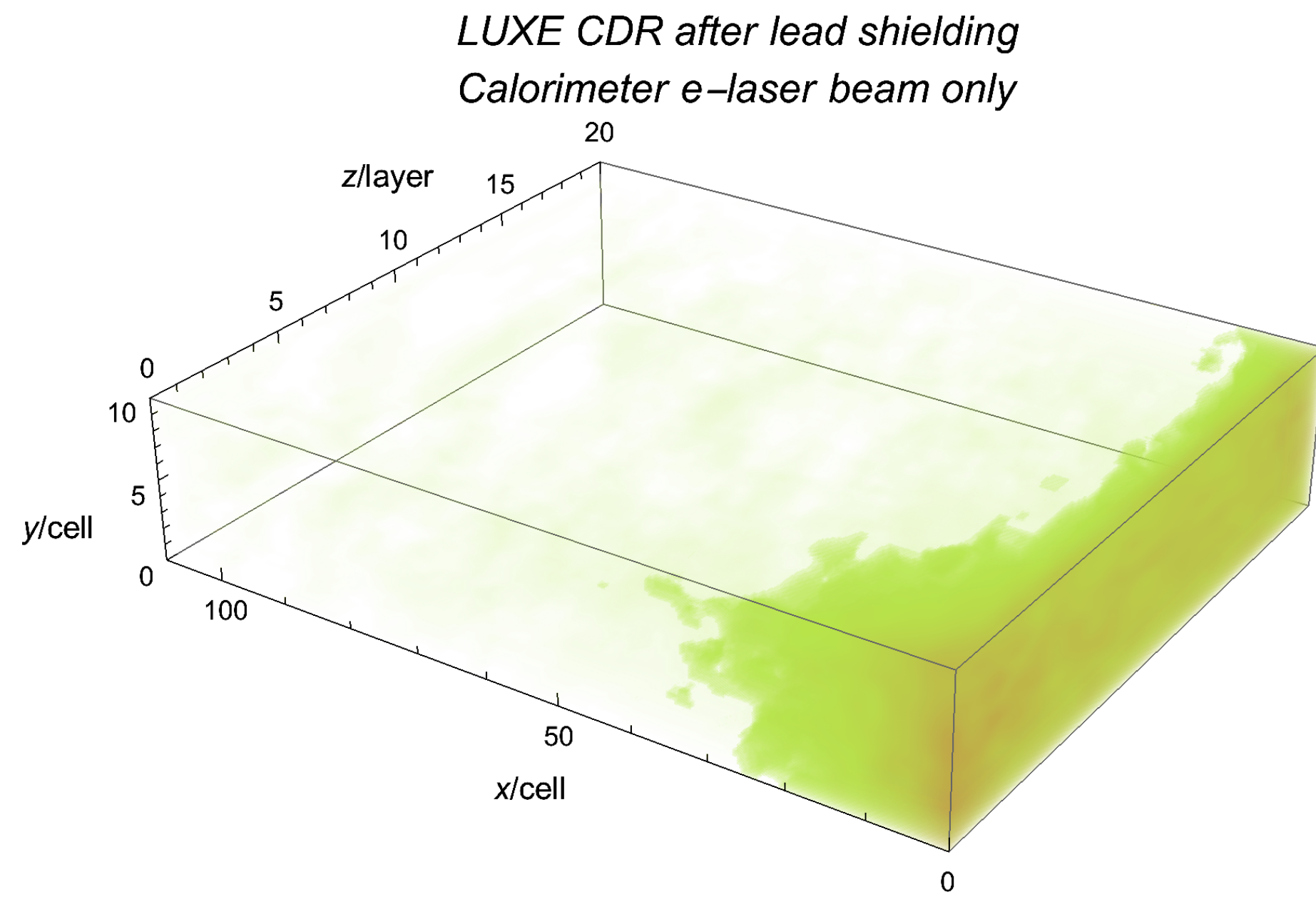


Energy Deposit (MeV)

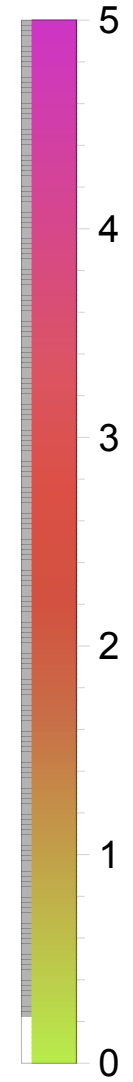


e-laser

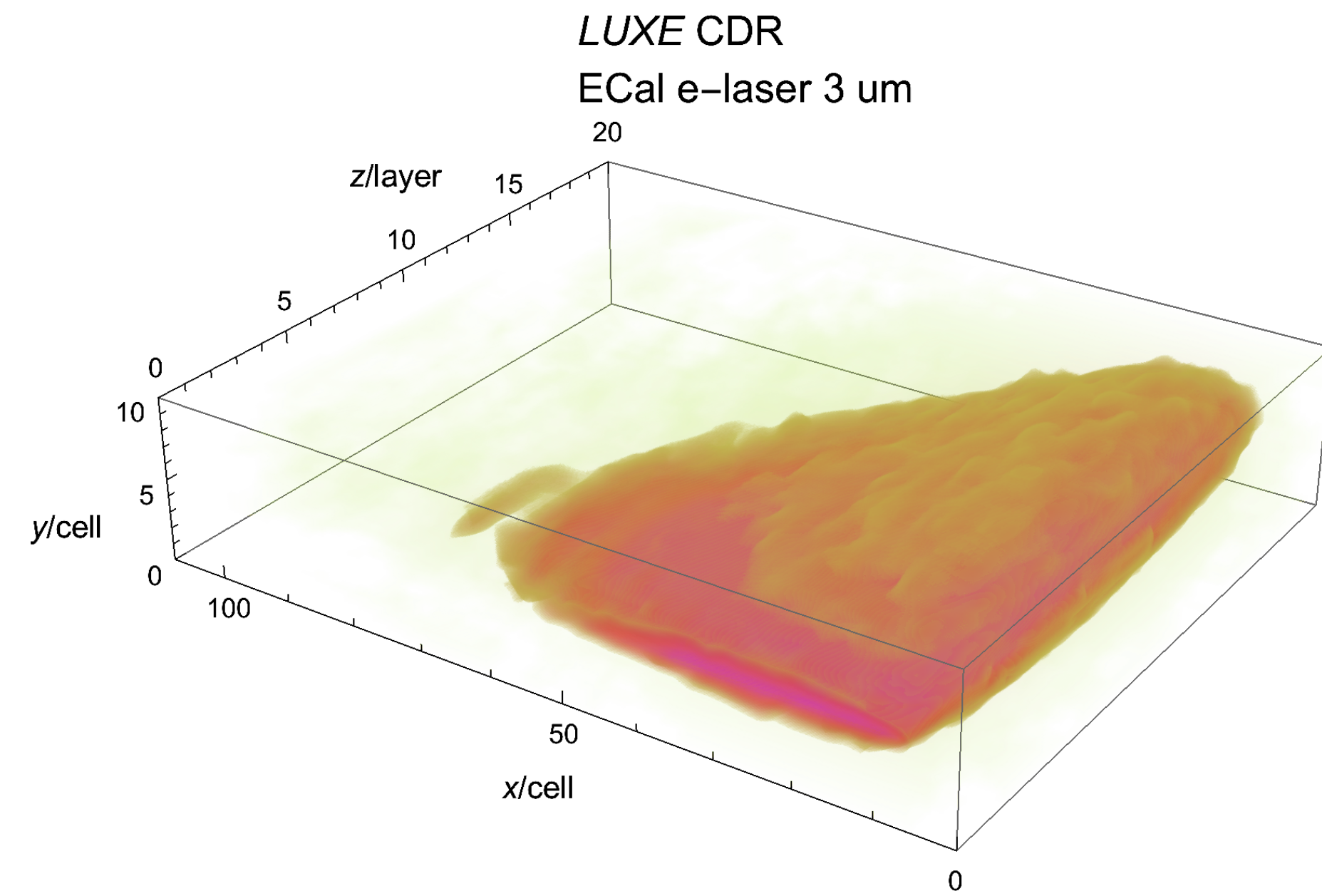
Background



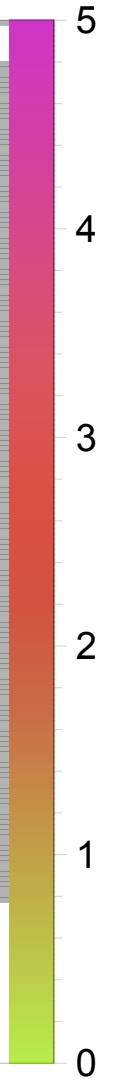
Energy Deposit (MeV)



Signal

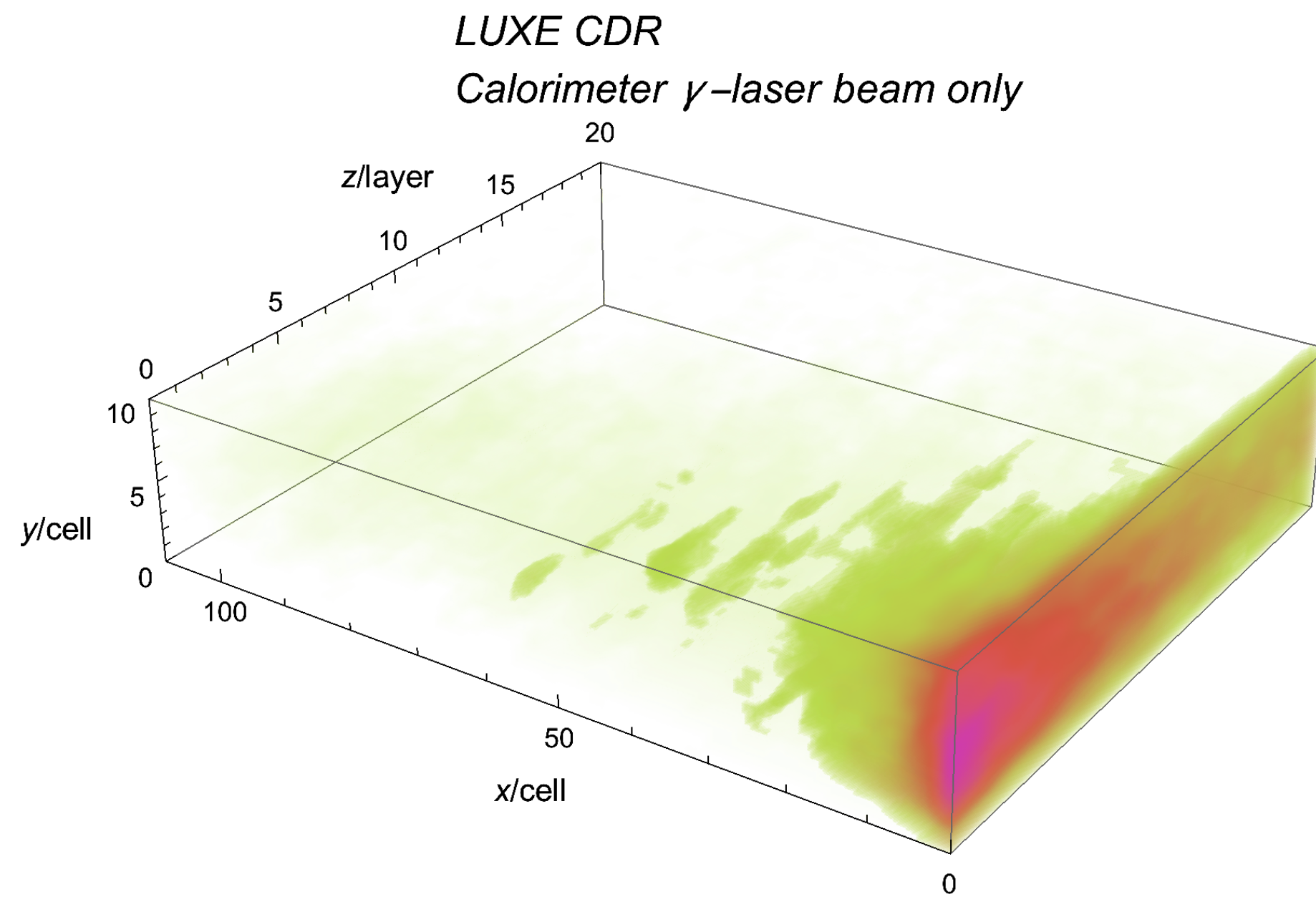


Energy Deposit (MeV)

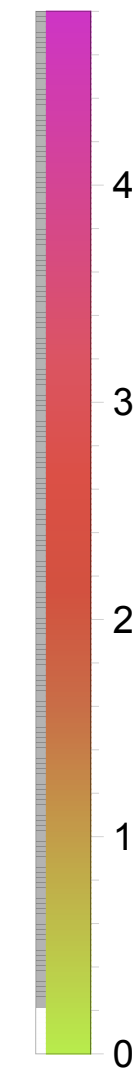


g-laser

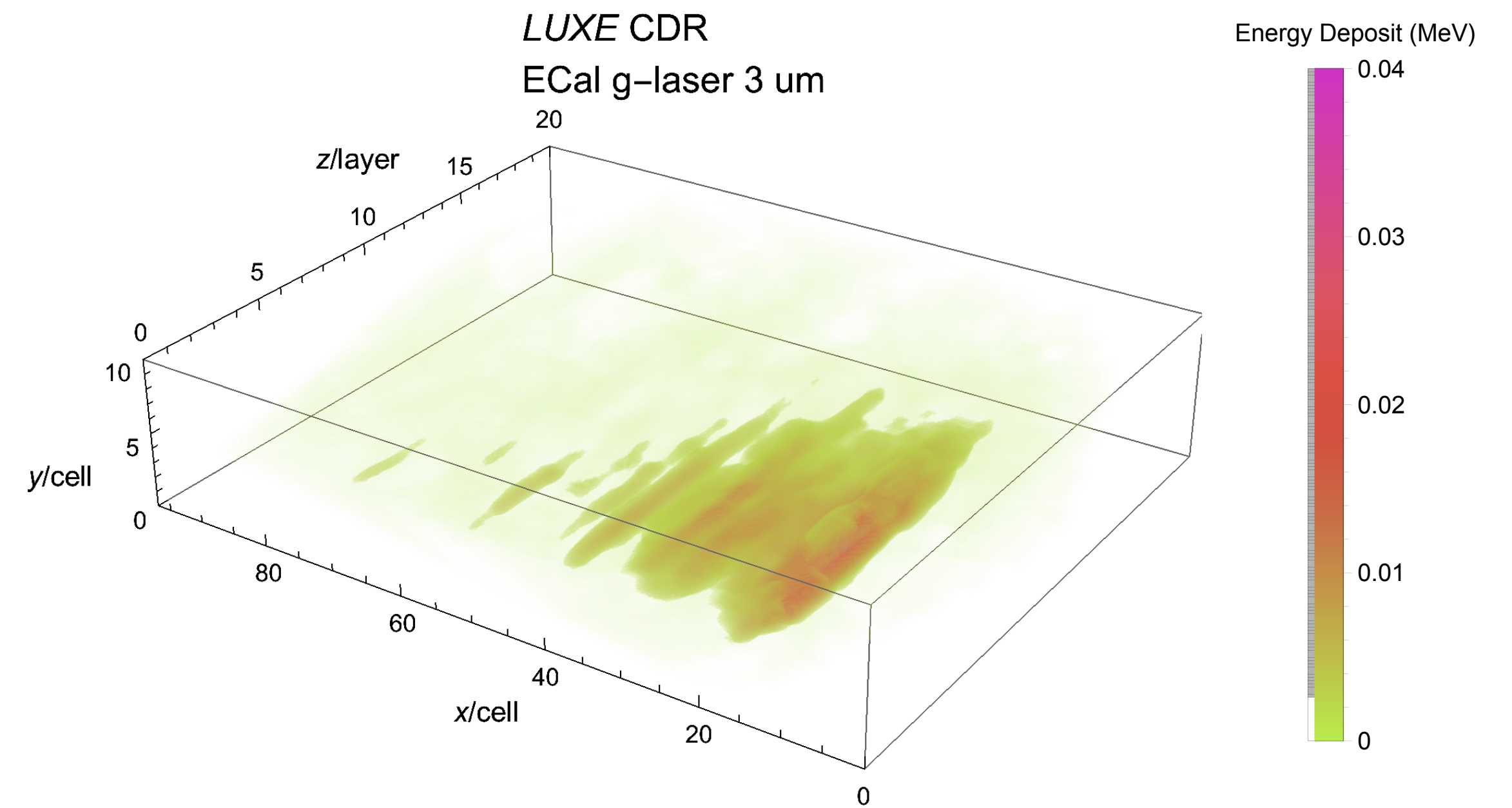
Background



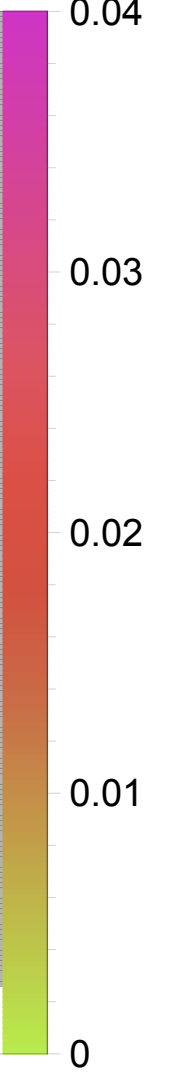
Energy Deposit (MeV)



Signal



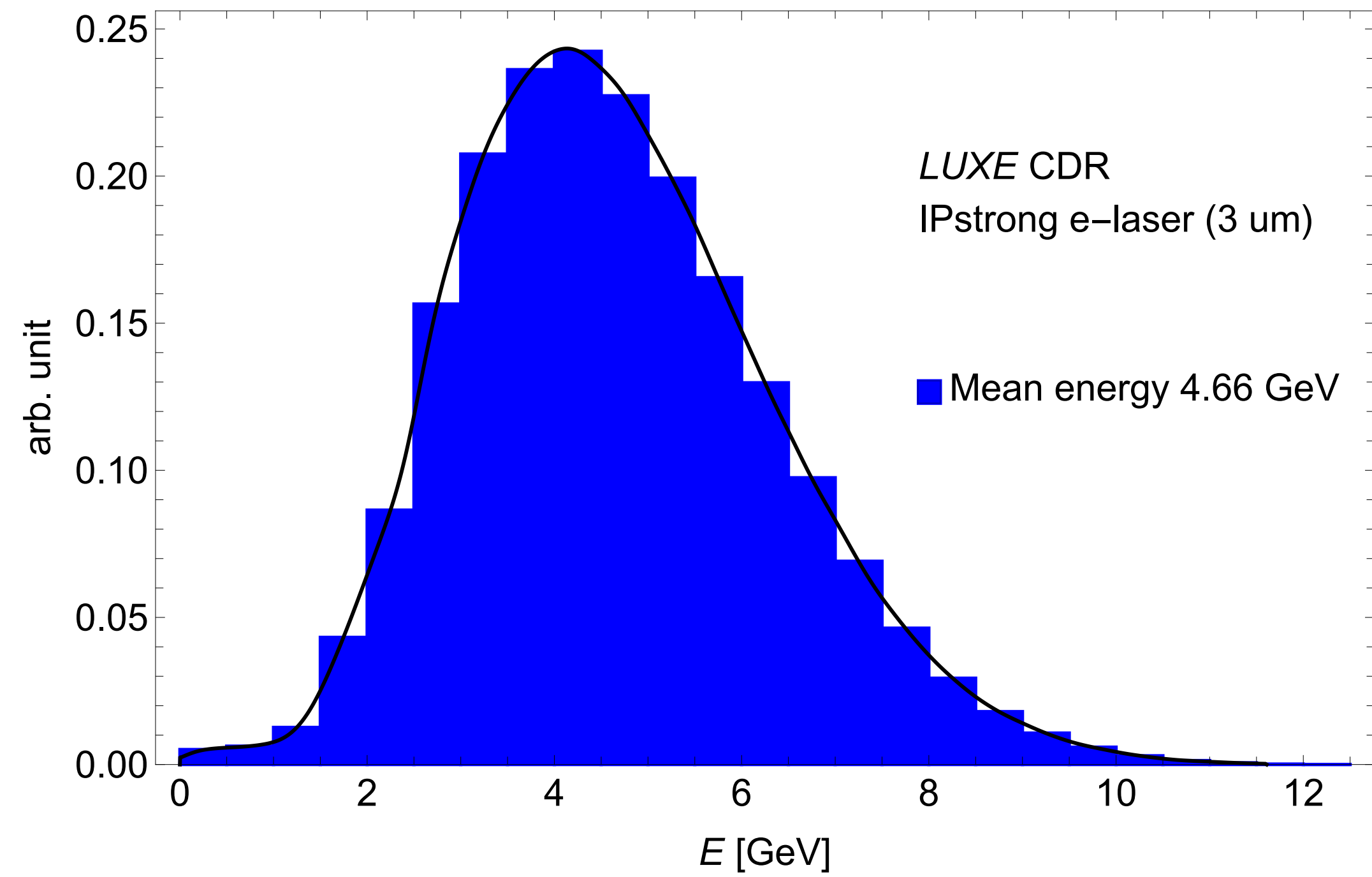
Energy Deposit (MeV)



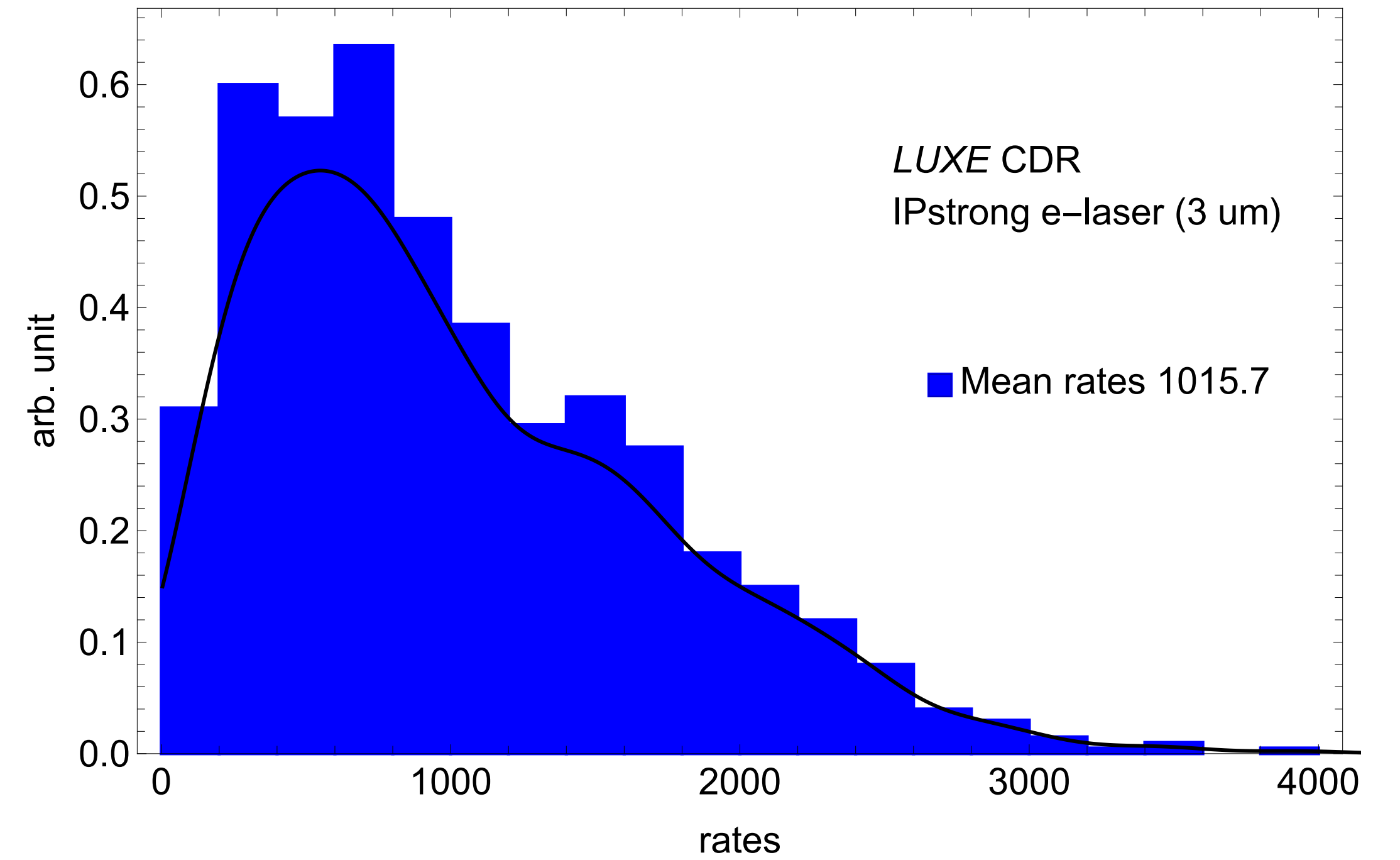
Rates too low...

e-laser

Energy spectrum

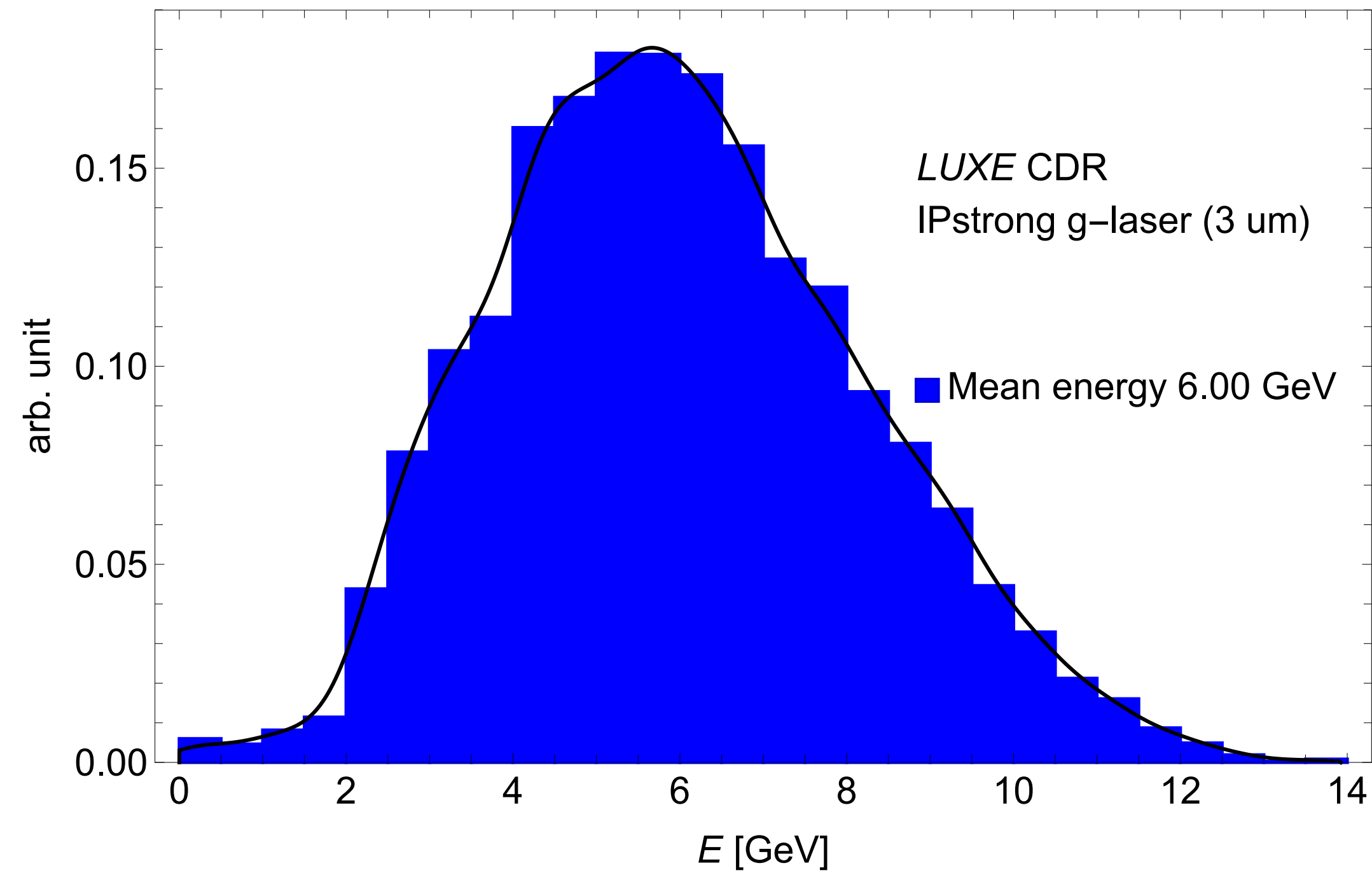


Rate distribution

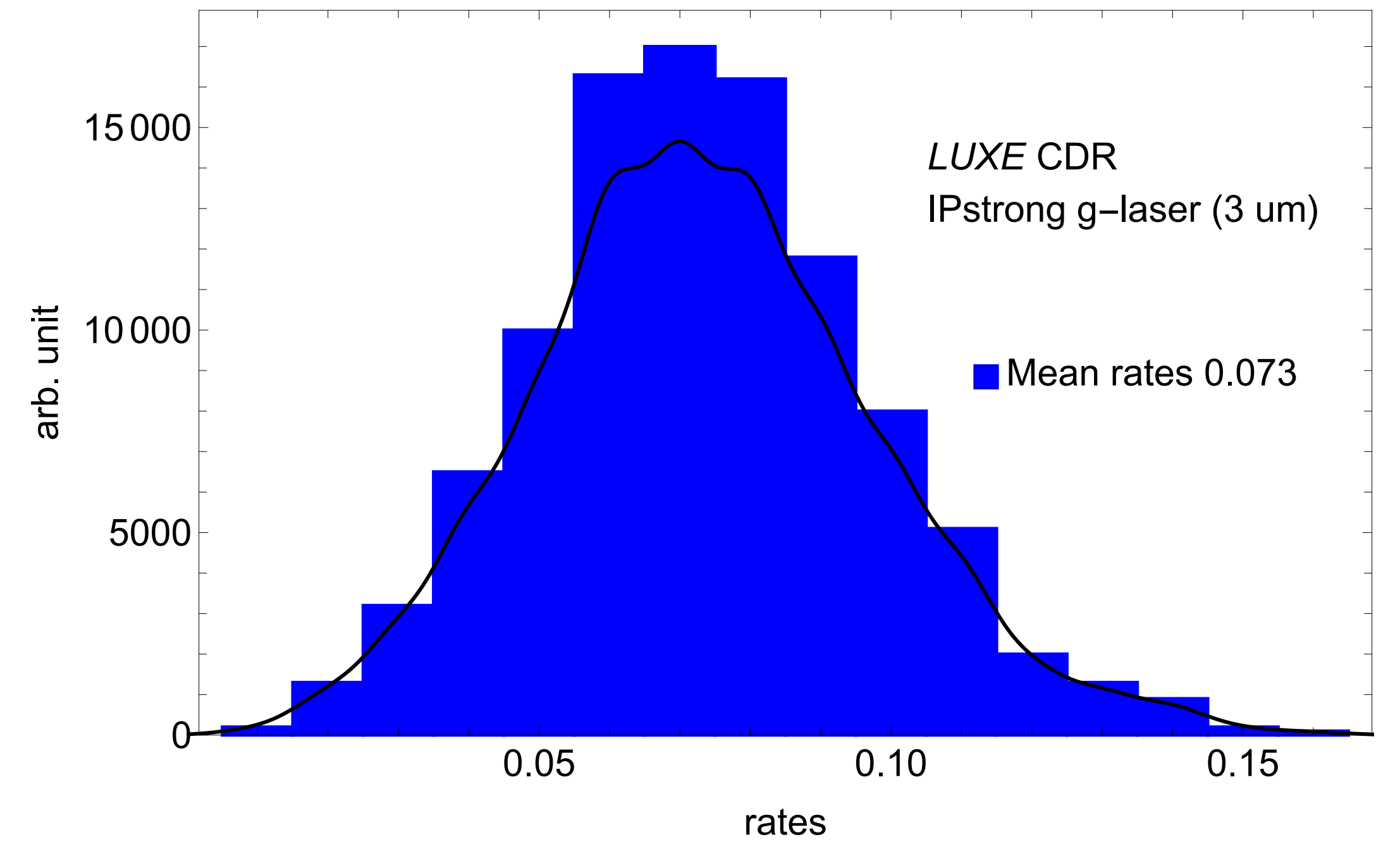


g-laser

Energy spectrum



Rate distribution



Signal Reconstruction

- Signal = non background? (for e-laser eventid < 2000)
 - Compton photons (high weight)
 - **bw/trident pairs**
 - photons (with low weight)

