

INTT Preliminary in Sep 2024

Updates on event displays

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Minor change + treasure hunting

Minor change

A requirement of a small difference between cluster θ_{in} and θ_{out} was newly added. It affects a selection of tracklet candidates, which share the same cluster.

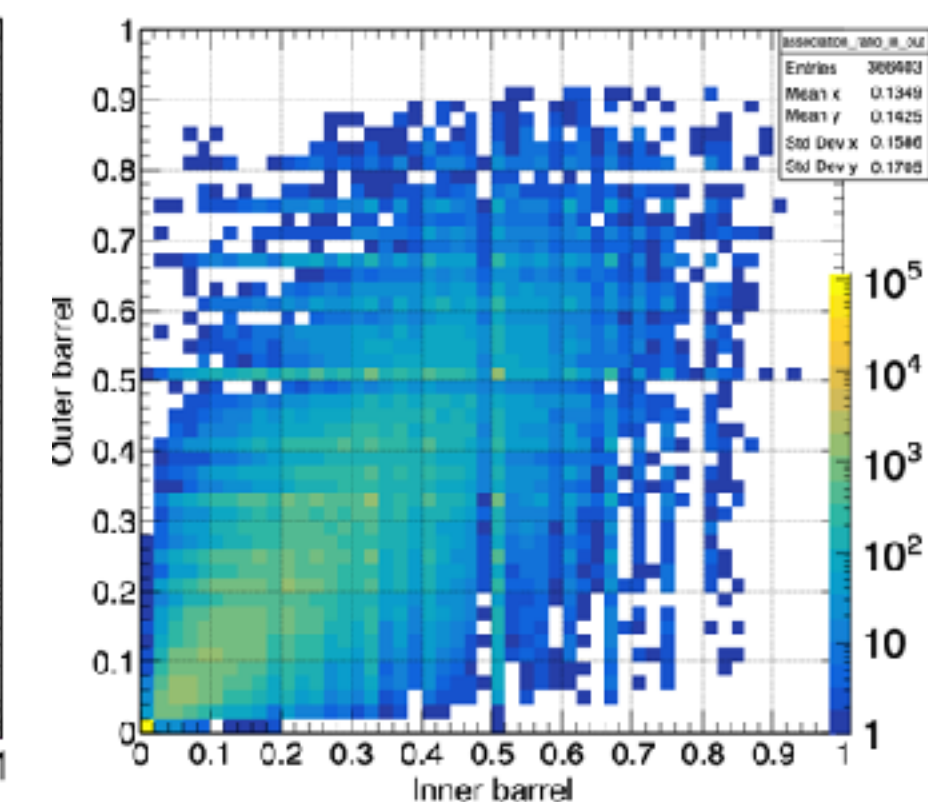
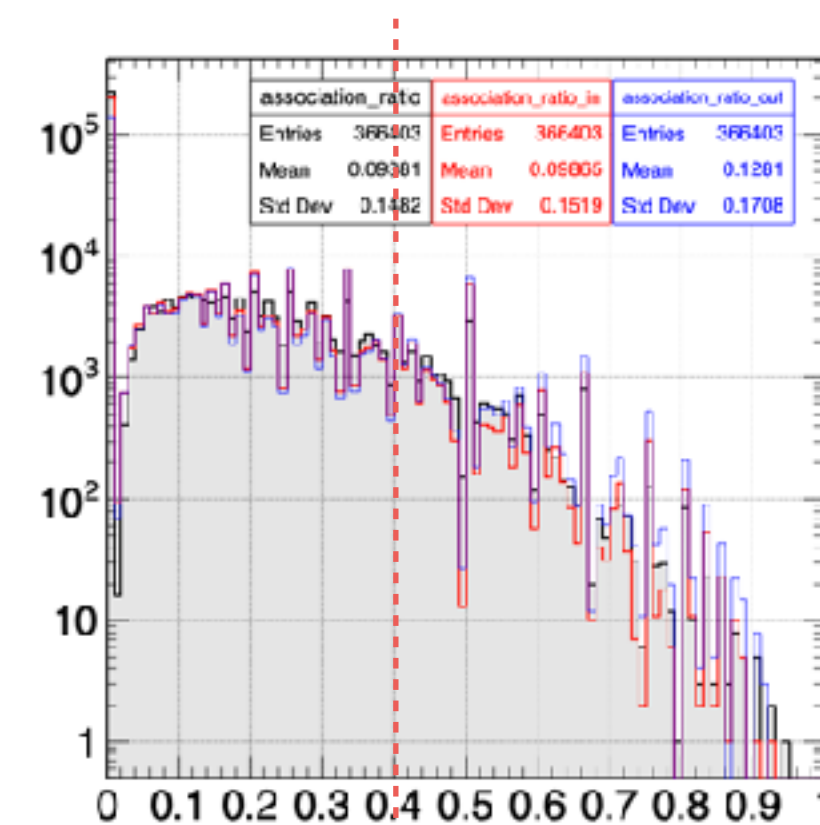
Treasure hunting from huge statistics

I normally used only FPHX BCO 63 and took 100k events. As I demonstrated, all FPHX BCO values are useful, I took FPHX BCOs 5–115 for 10k events. It means 11 times more statistics. It allows me to apply very tight cut for event selection.

Event selection cuts:

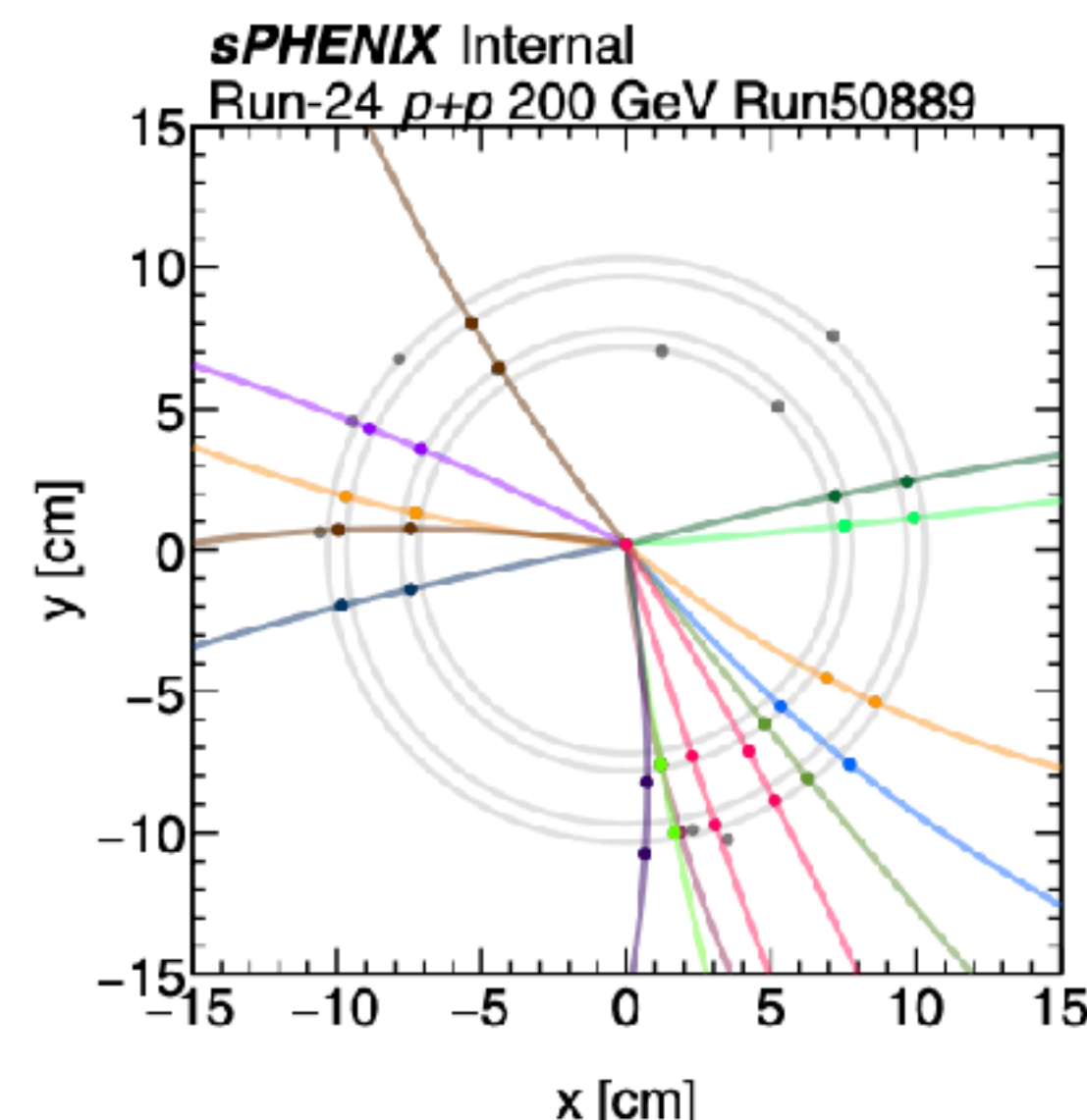
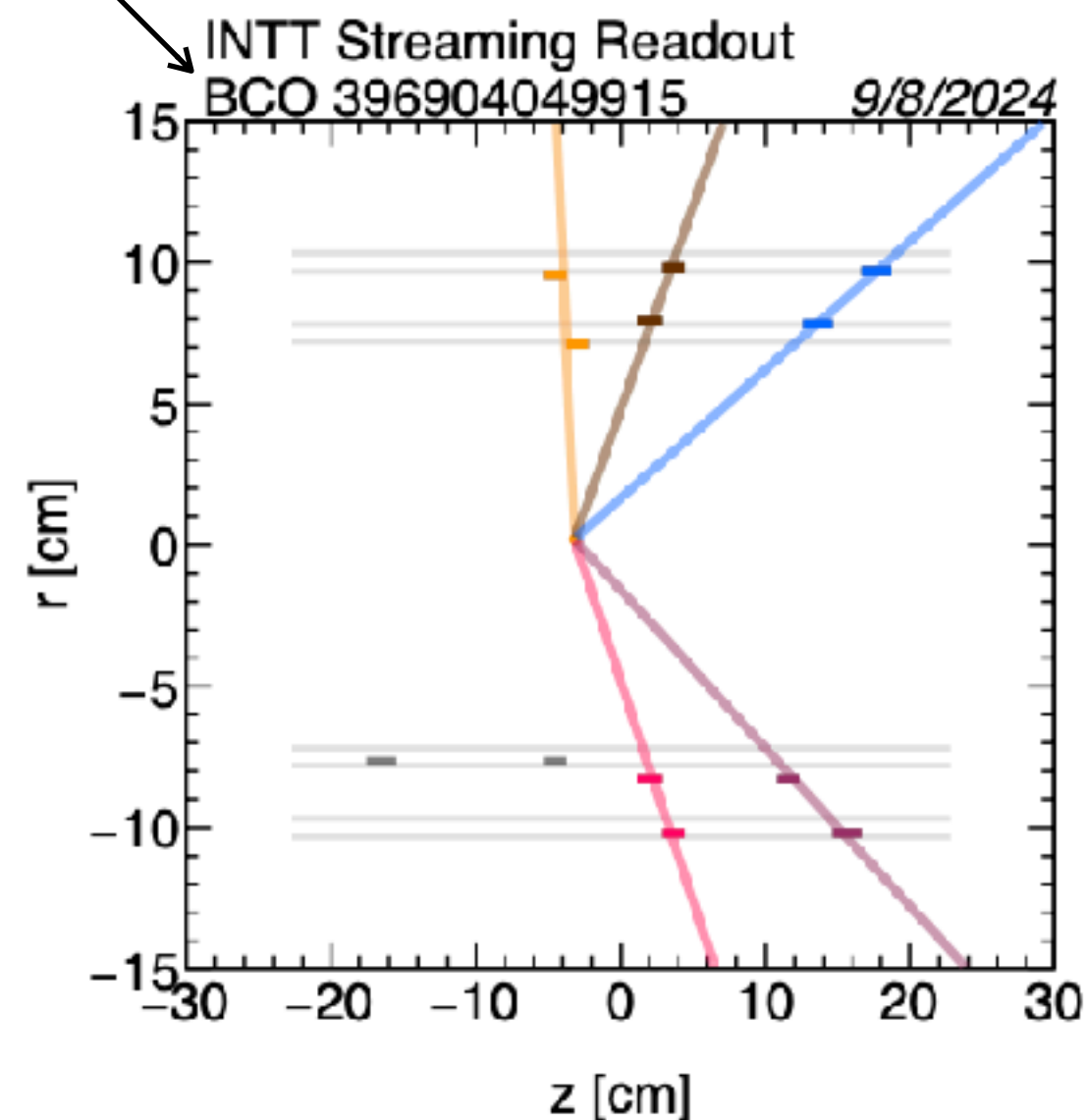
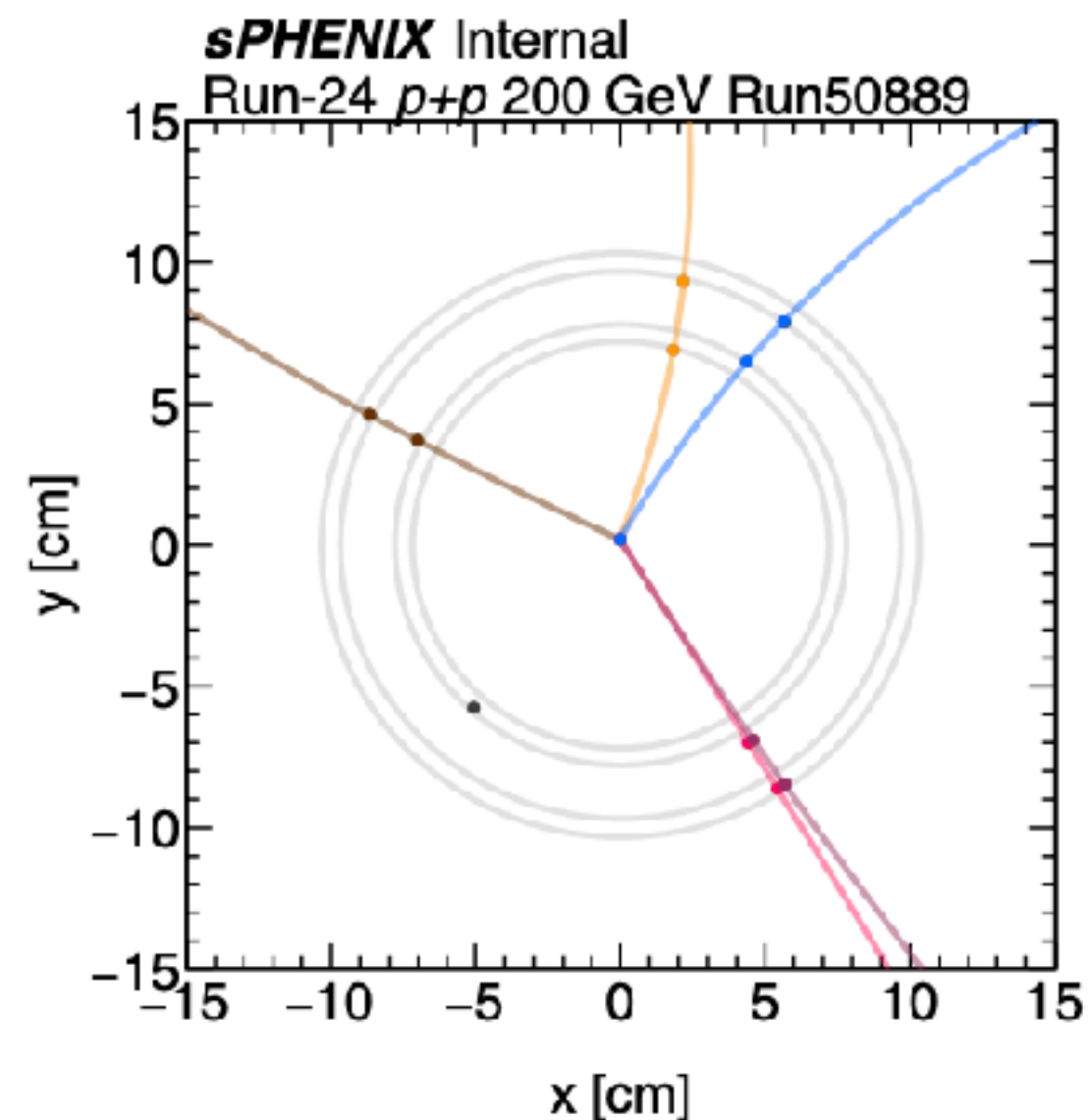
- $N_{\text{associated}}/N > 0.4$
- $N_{\text{associated, inner}}/N_{\text{inner}} > 0.4$
- $N_{\text{associated, outer}}/N_{\text{outer}} > 0.4$

Clusters not associated to INTT tracklets should be minor in an event.

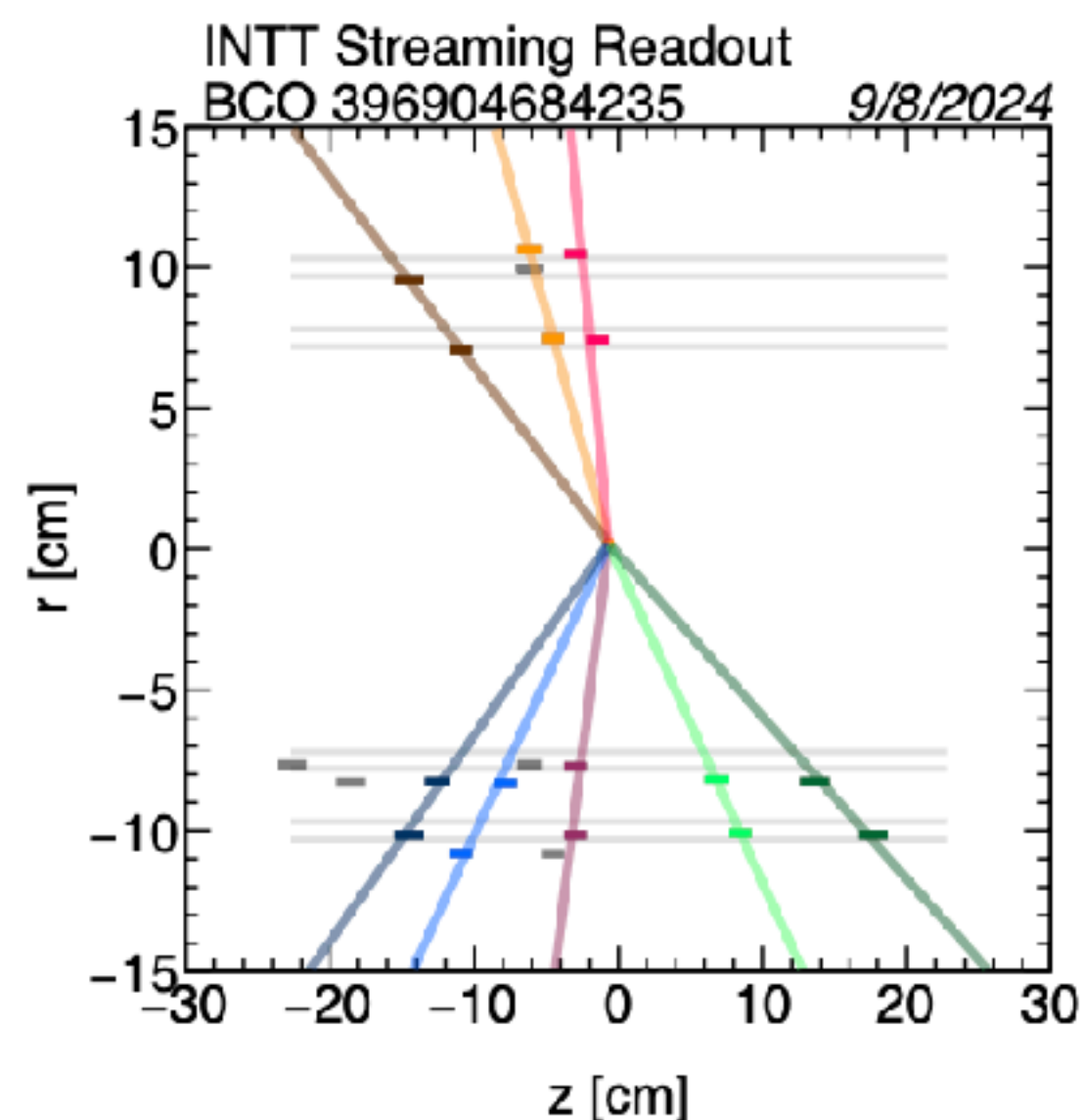
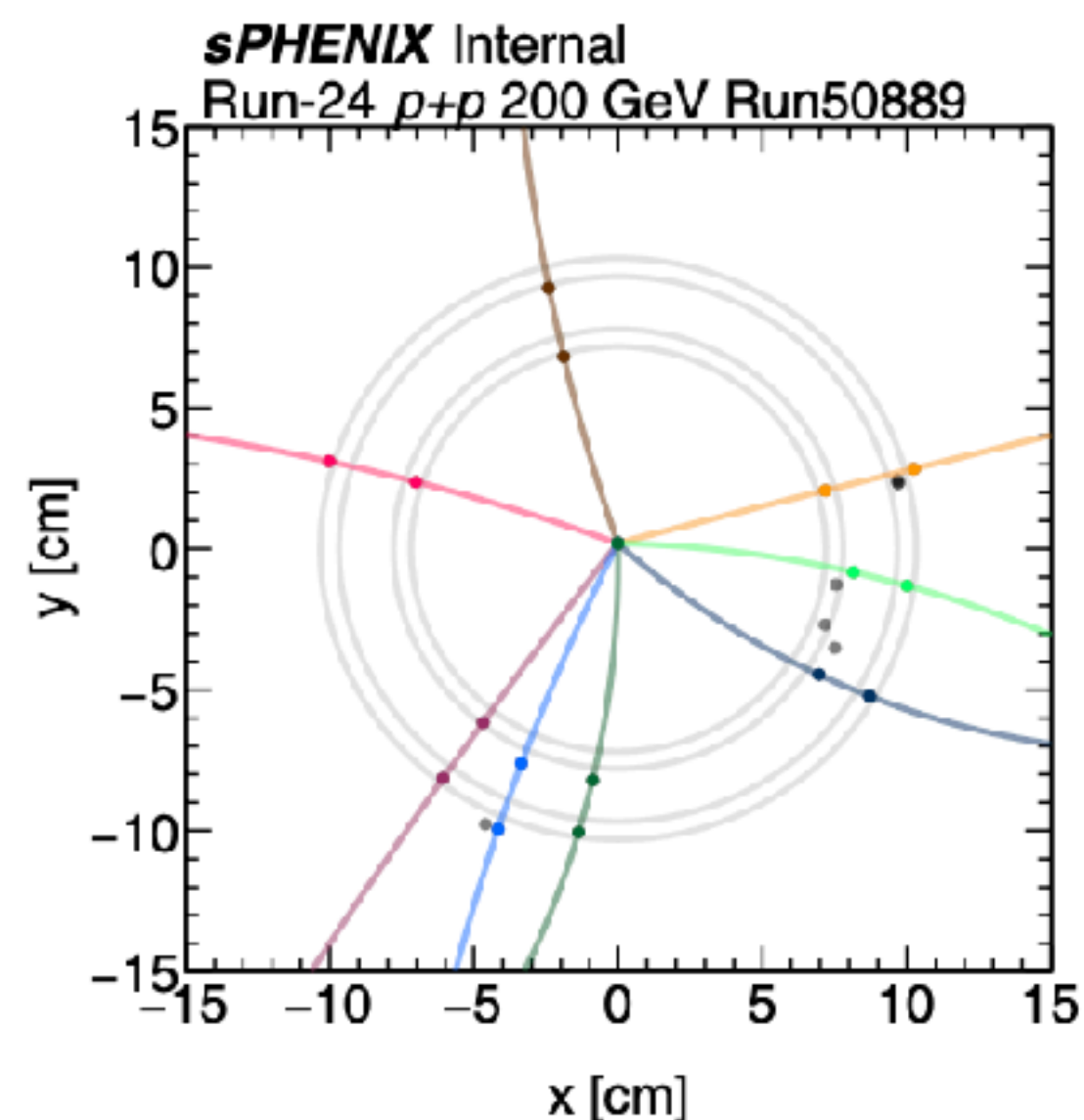
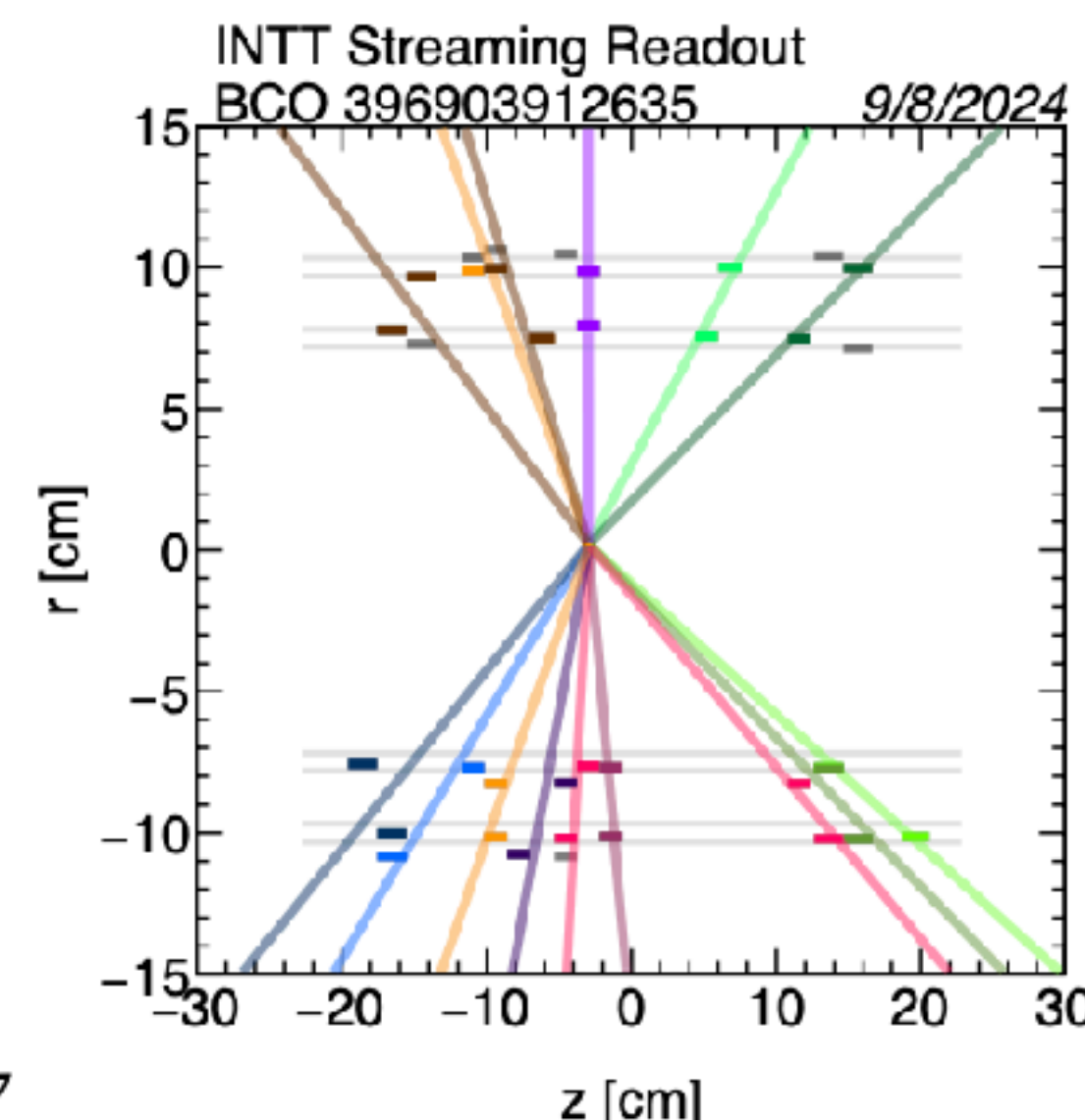


Event displays for preliminary

INTT GTM BCO (strobe BCO)



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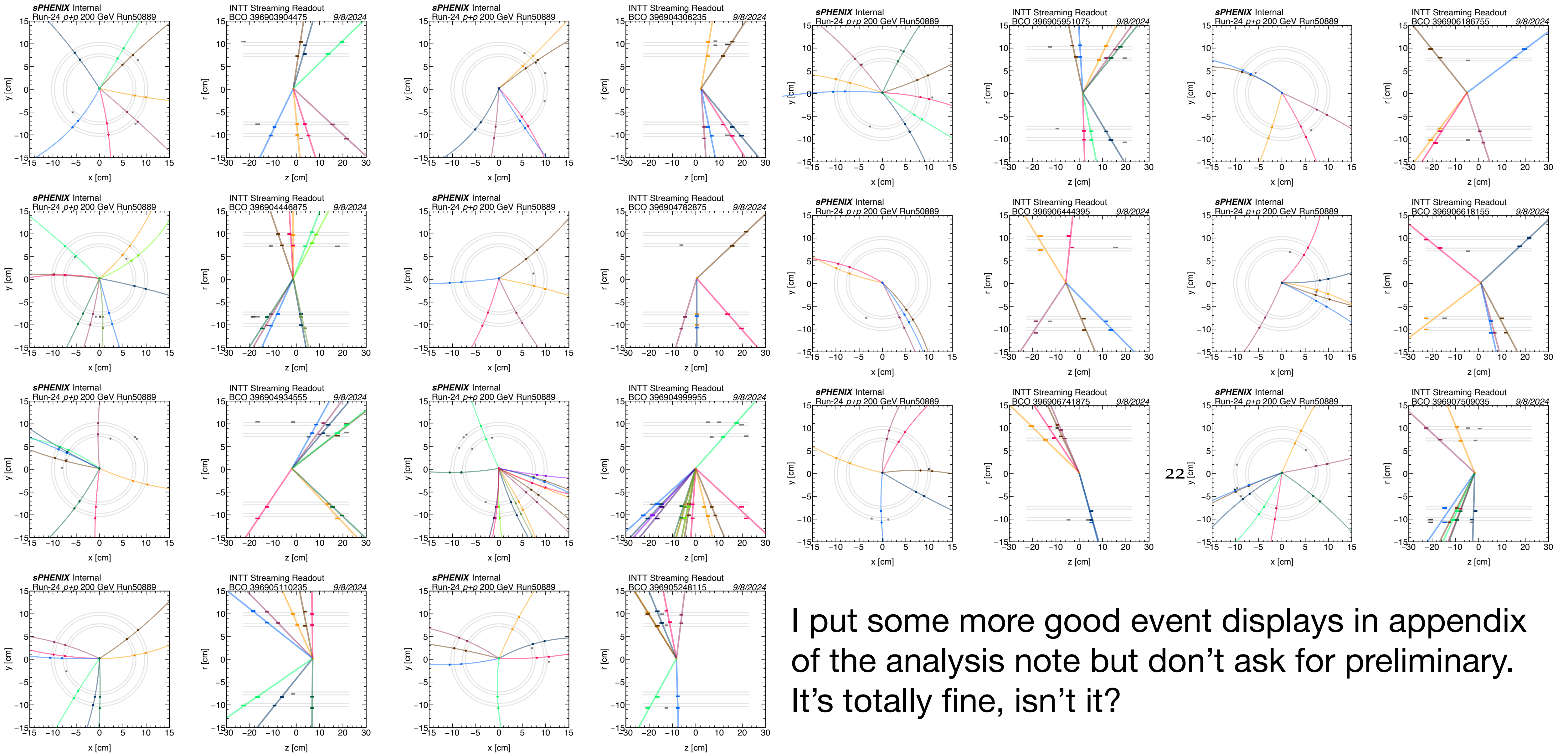


I picked up 3 nice event displays. As they will be preliminary plots, we have to assume that anybody in sPHENIX will use them, so making some be a preliminary is good. Speakers can select as they want.

Since they are toooo perfect cases, probably the new $\Delta\theta$ requirement doesn't change the plots.

Take 3 minutes without saying anything to give people time to see the plots

Event displays collection in the analysis note



I put some more good event displays in appendix of the analysis note but don't ask for preliminary. It's totally fine, isn't it?