p_{T} spectra as a function of Multiplicity and Transverse Spherocity in pp collisions using a Bayesian Unfolding

J. David Romo

26/02/21

Invariant Yield Closure Test (Trees)

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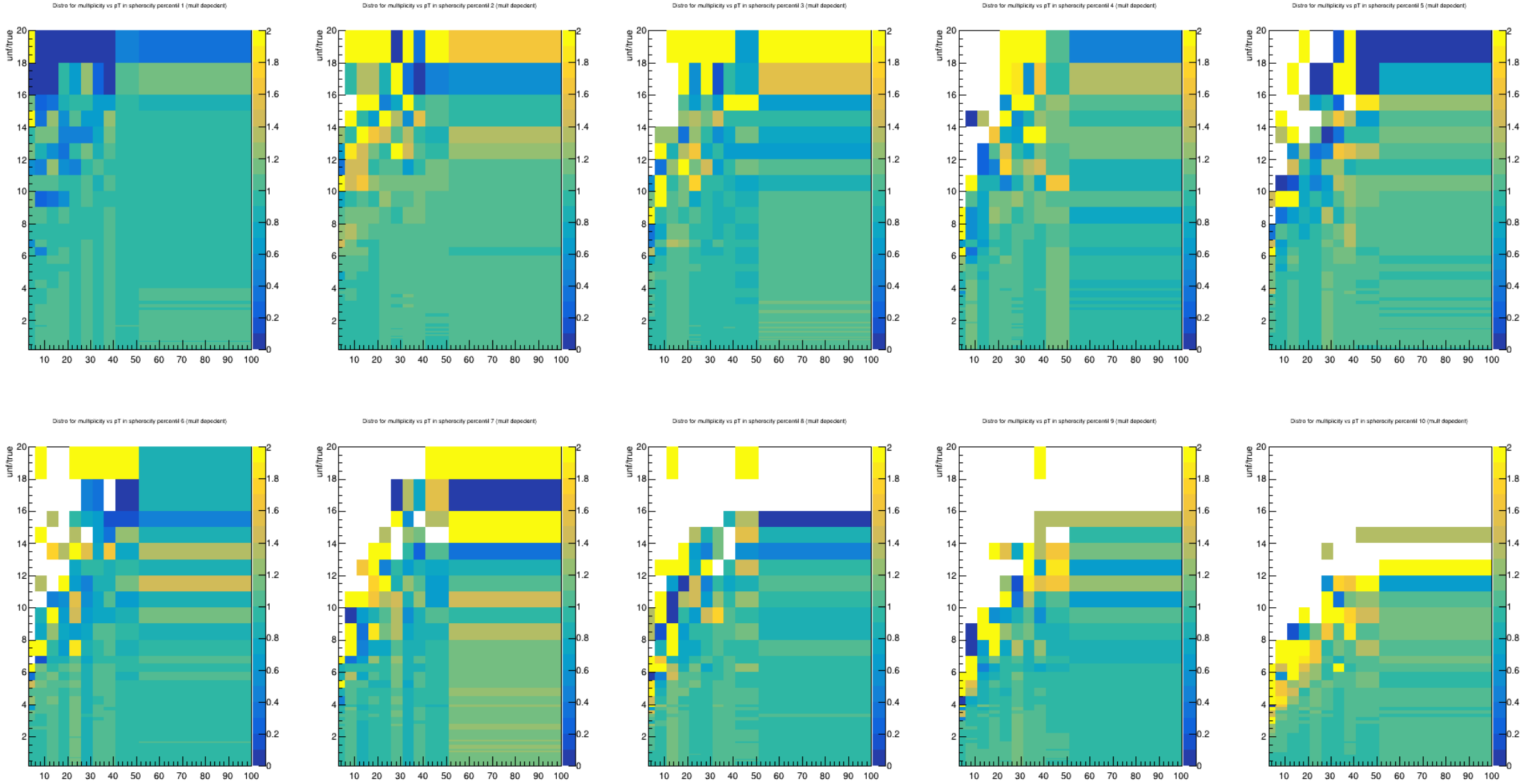
multipads

File Edit View Options Tools Help



30 M events

Particle Production True (Trees)

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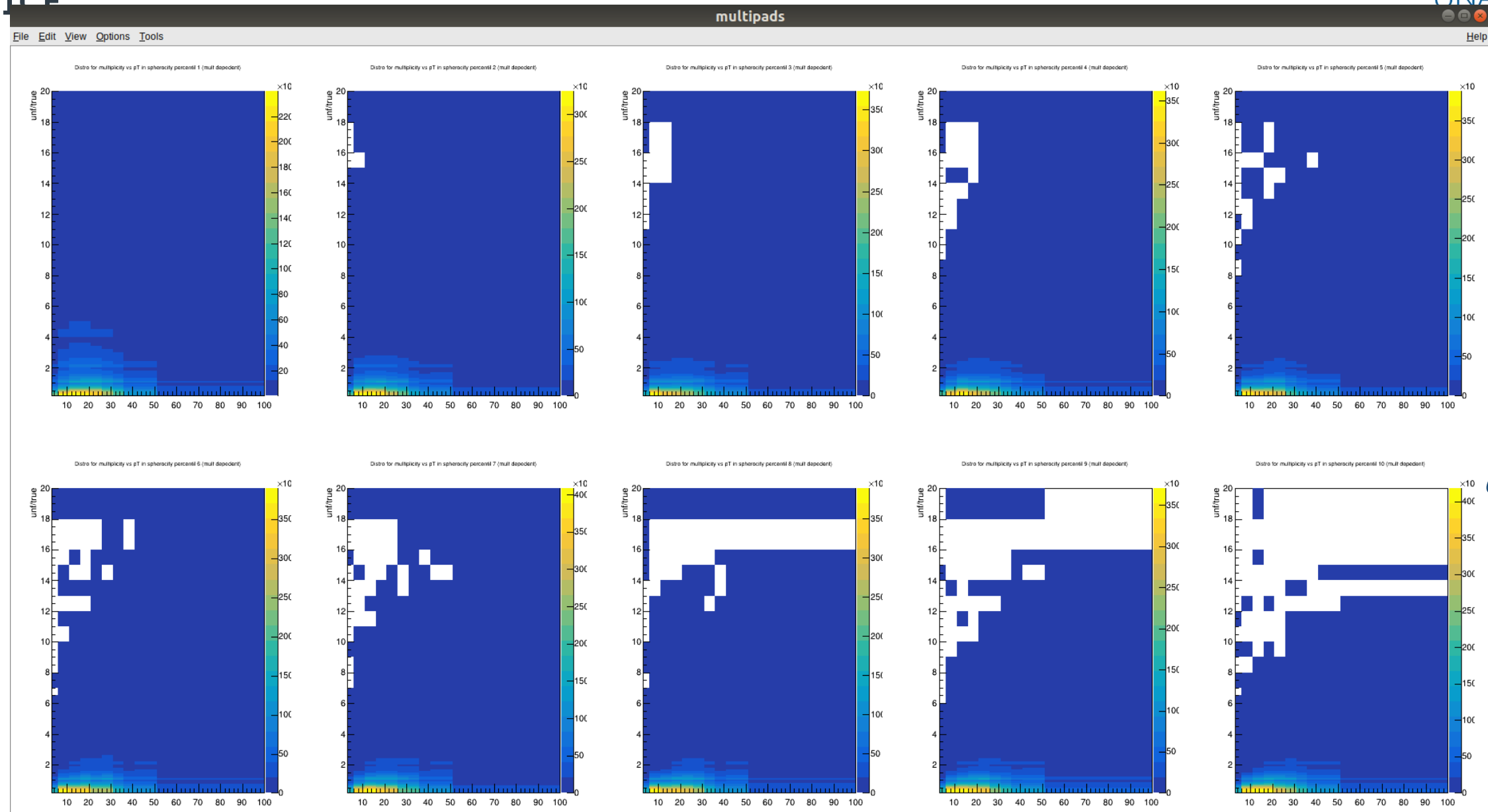


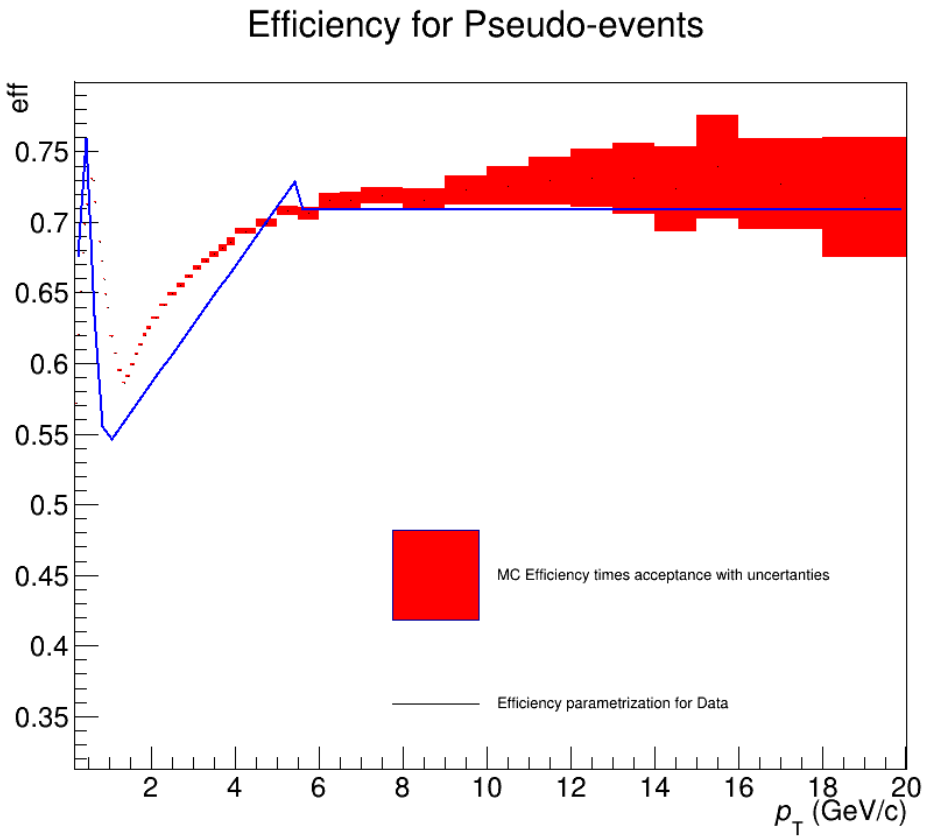
30 M events

Pseudoevents

They are some of the regions with **the least** statistics at MC level!

We need **more** data!
(Pythia simulations)

We propose to generate pseudo-events (approximating the response of the detector) using the efficiency times acceptance parametrization (taken from Antonio, Ahsan, Gyula's work)



Particle Production (Pseudoevents)

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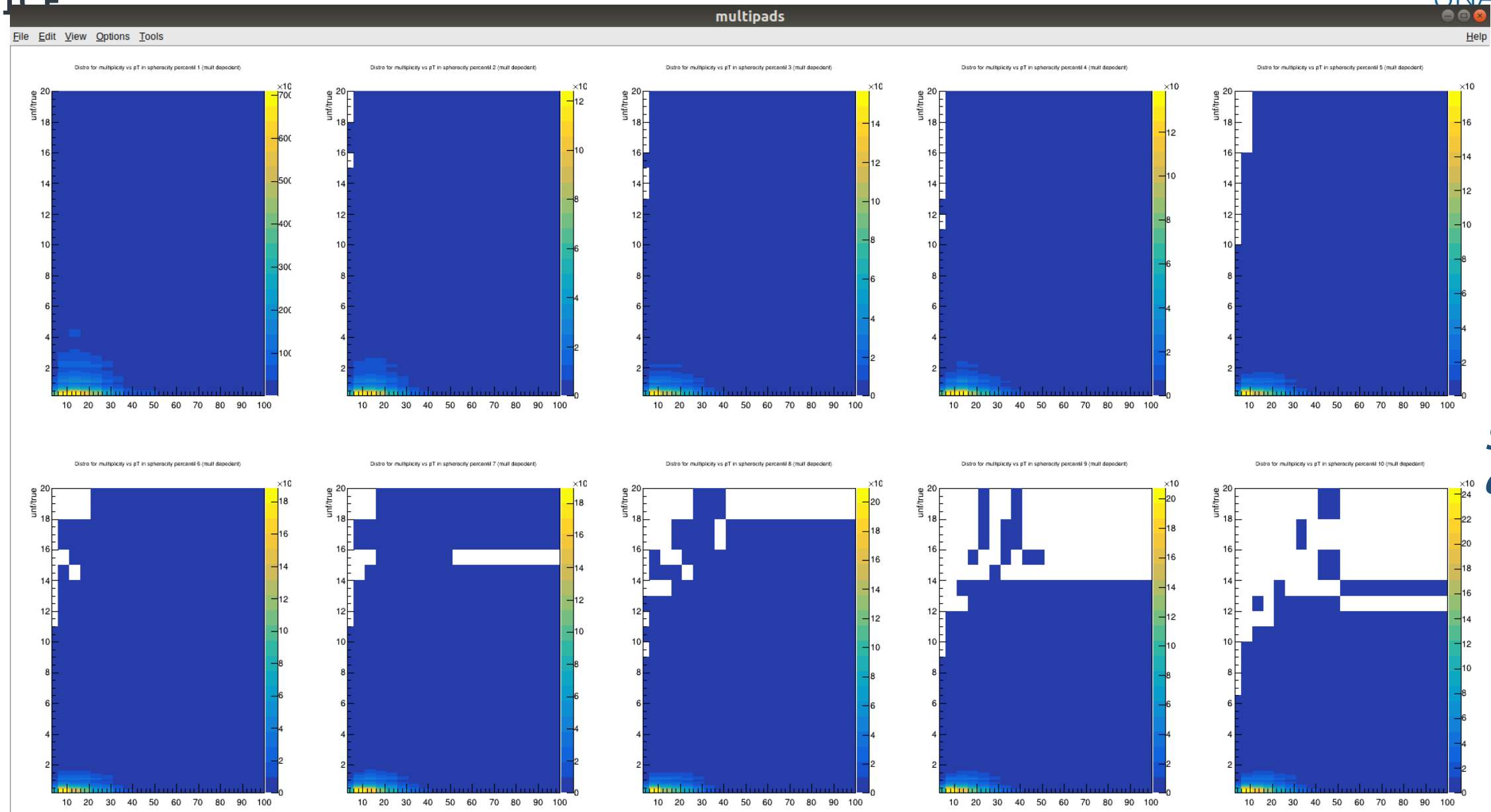

900 M events

Particle Production (Pseudoevents) log scale

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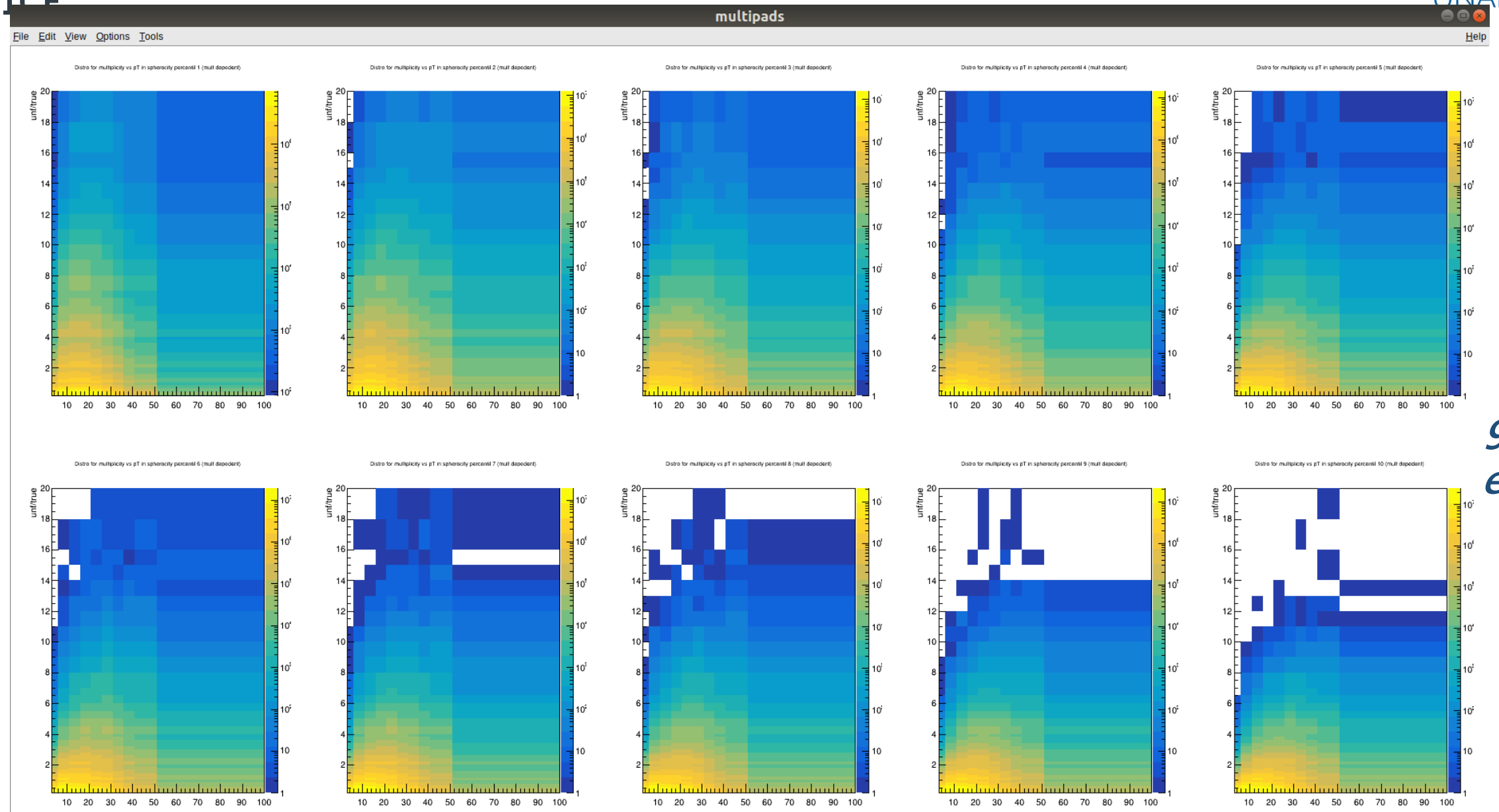

900 M events

Spherocity Percentiles (Multiplicity Dependent) Preprocessing

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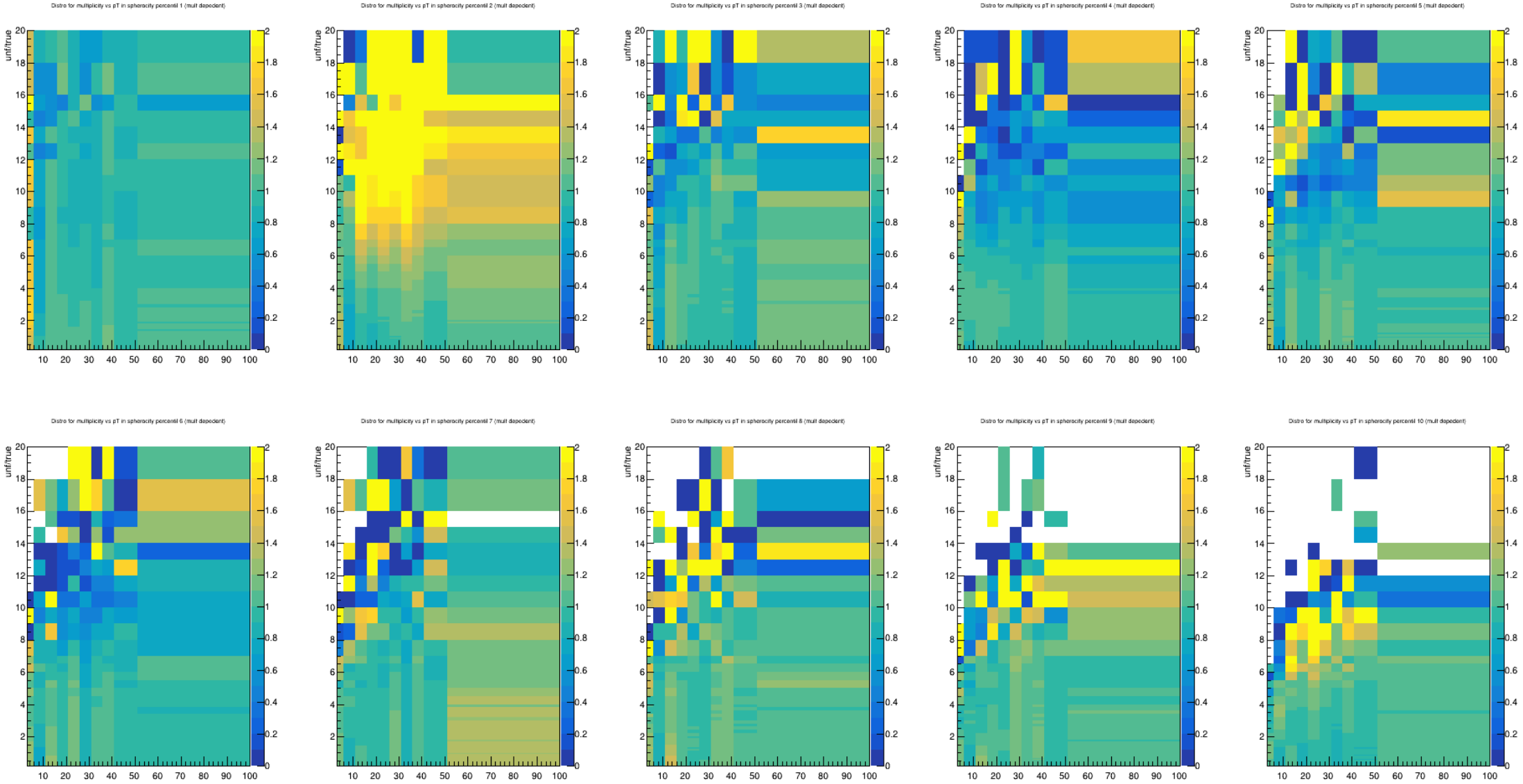
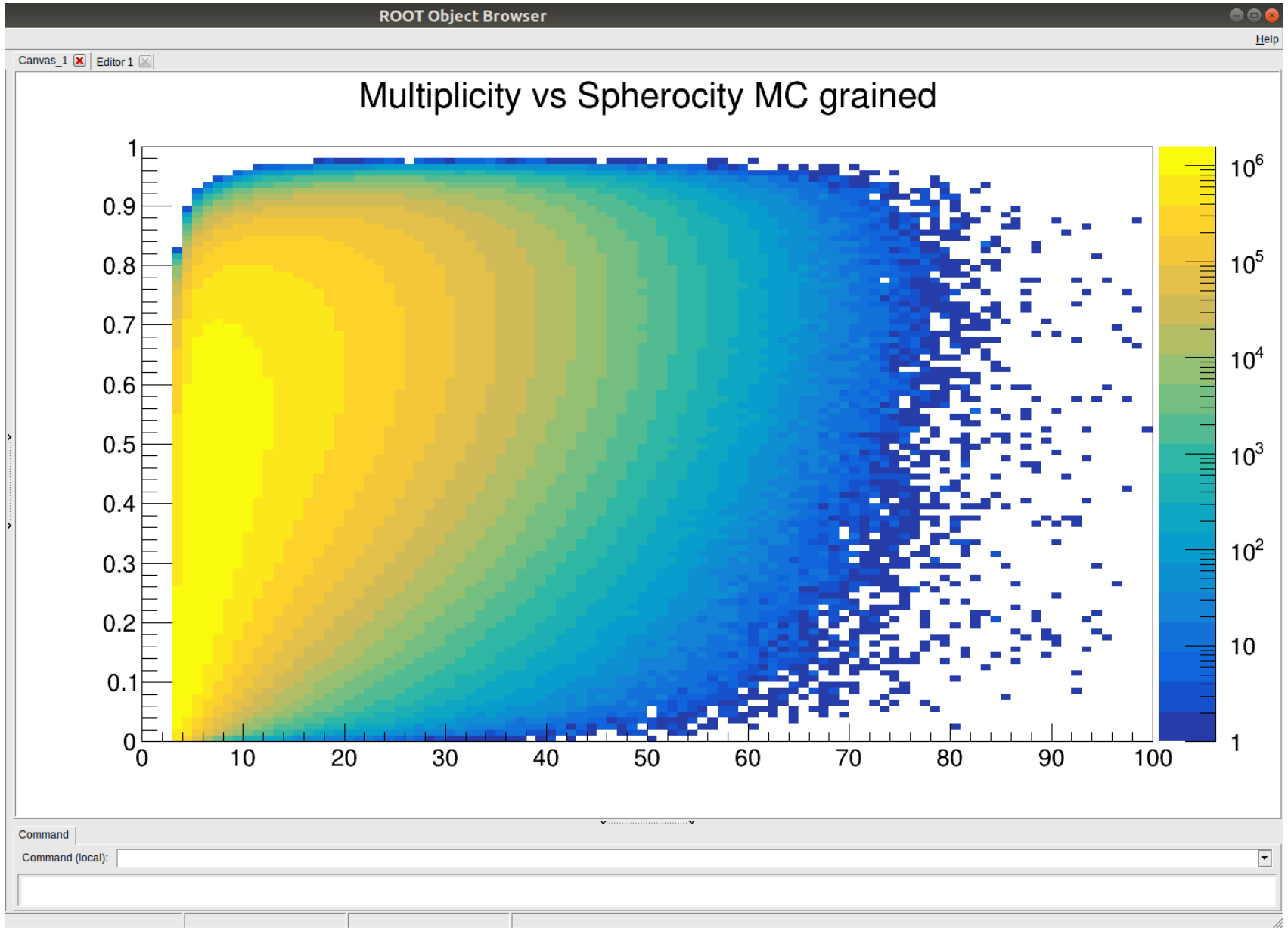
File Edit View Options Tools Help



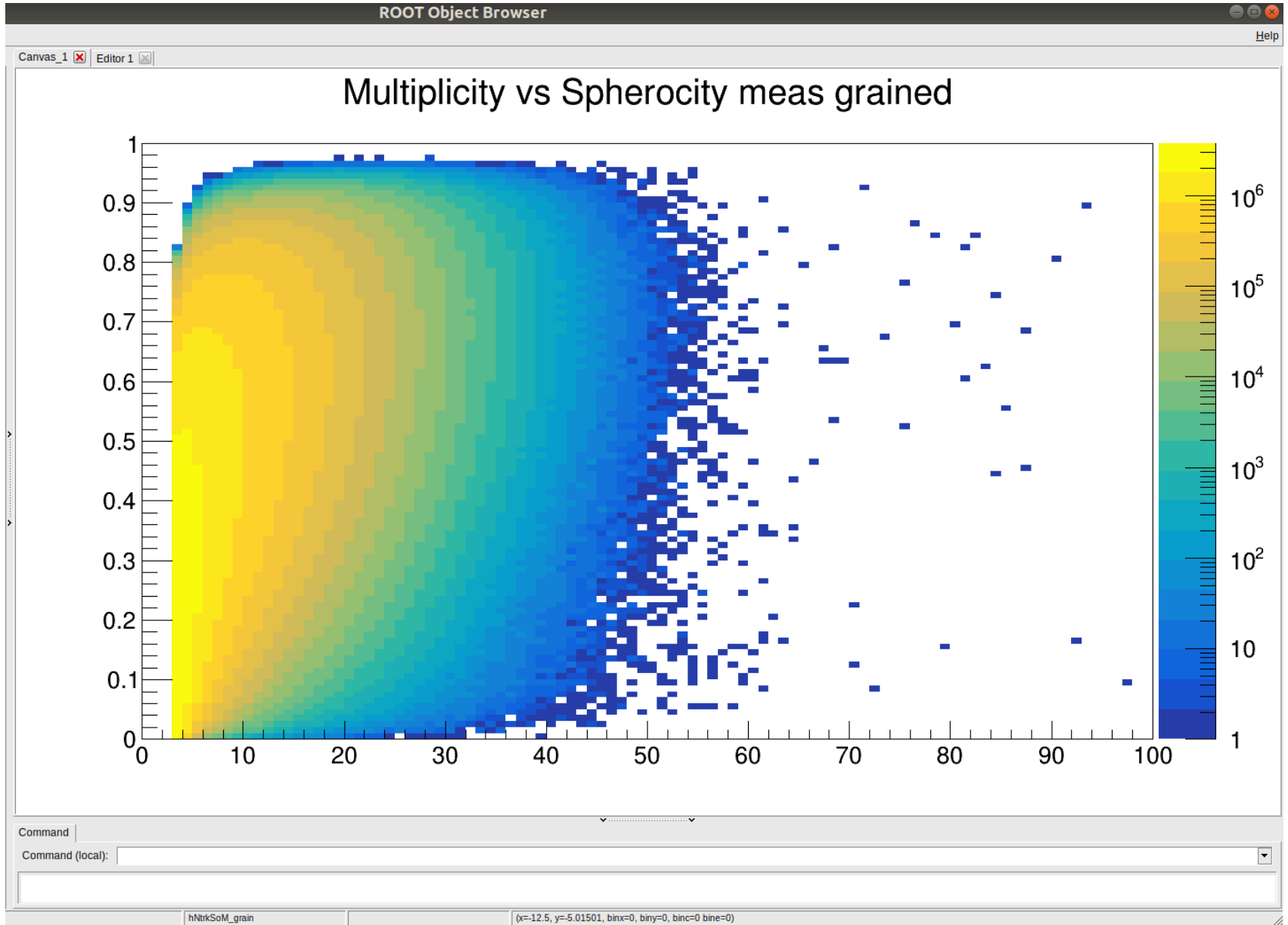
900 M events

Spherocity vs Mult MC (Pseudoevents)



900 M events

Spherocity vs Mult meas(Pseudoevents)



900 M events