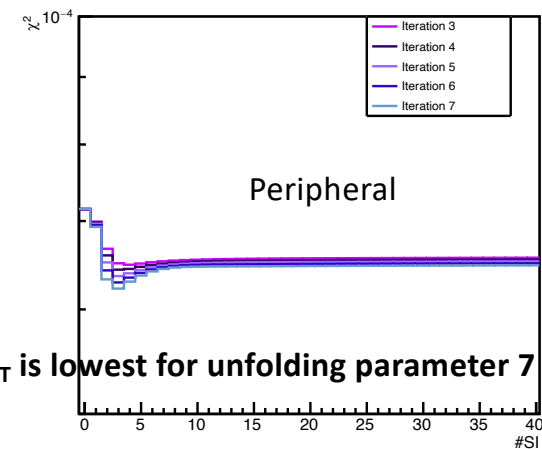
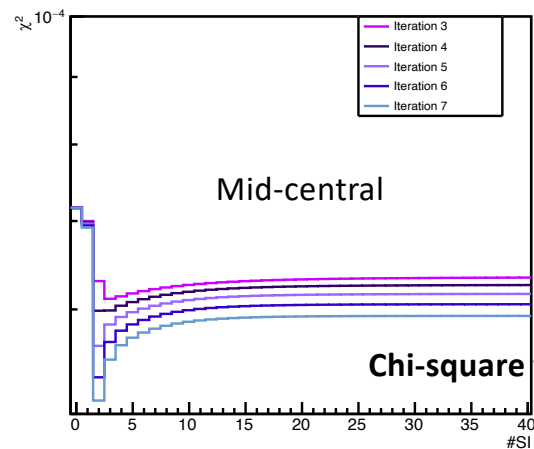
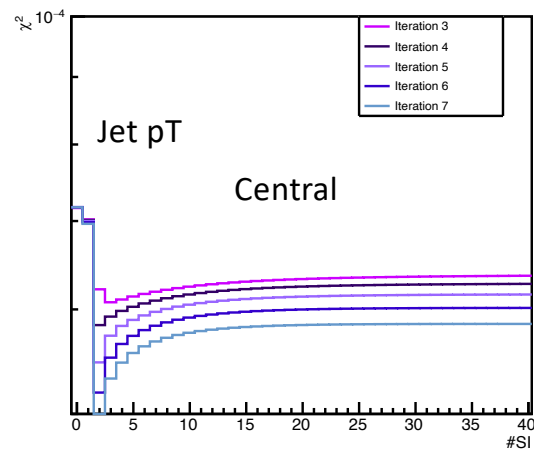


Steps for unfolding data:

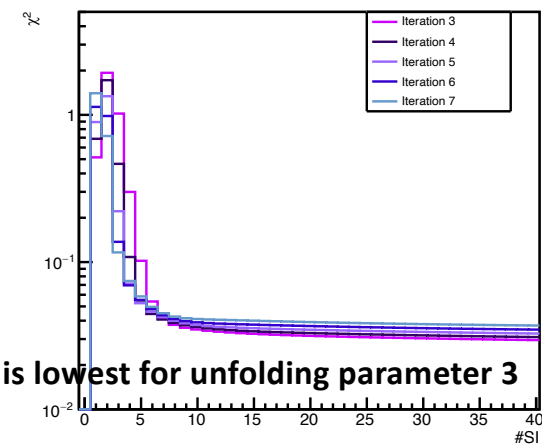
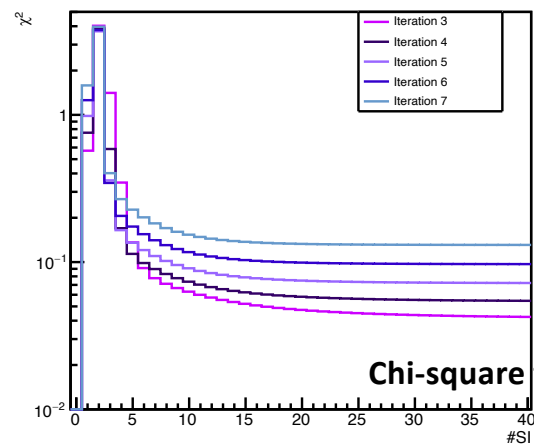
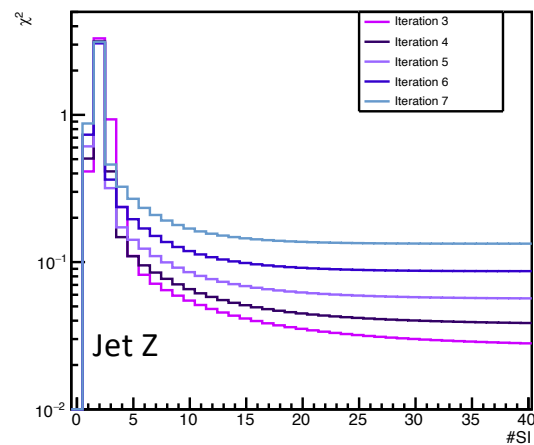
For Each Centrality Bin

1. Make 4D response matrix (p_T vs Z) from 0-3 and 3-inf $p_{T, \text{had}}$ bins, and combine them with cross-section weights
2. Reweight fragmentation function distribution
 - **Hist1**: Normalise the uncorrected z -distribution from data to have integral 1.
 - **Hist2**: Normalise the detector side PYTHIA z -distribution to have integral 1.
 - Weight $\rightarrow \text{Hist2}/\text{Hist1}$
3. Repeat Steps 1 and 2 \rightarrow **Superiteration** (SI)
4. After unfolding, scale p_T distribution by T_{AA}

Chi-Square after superiterations:

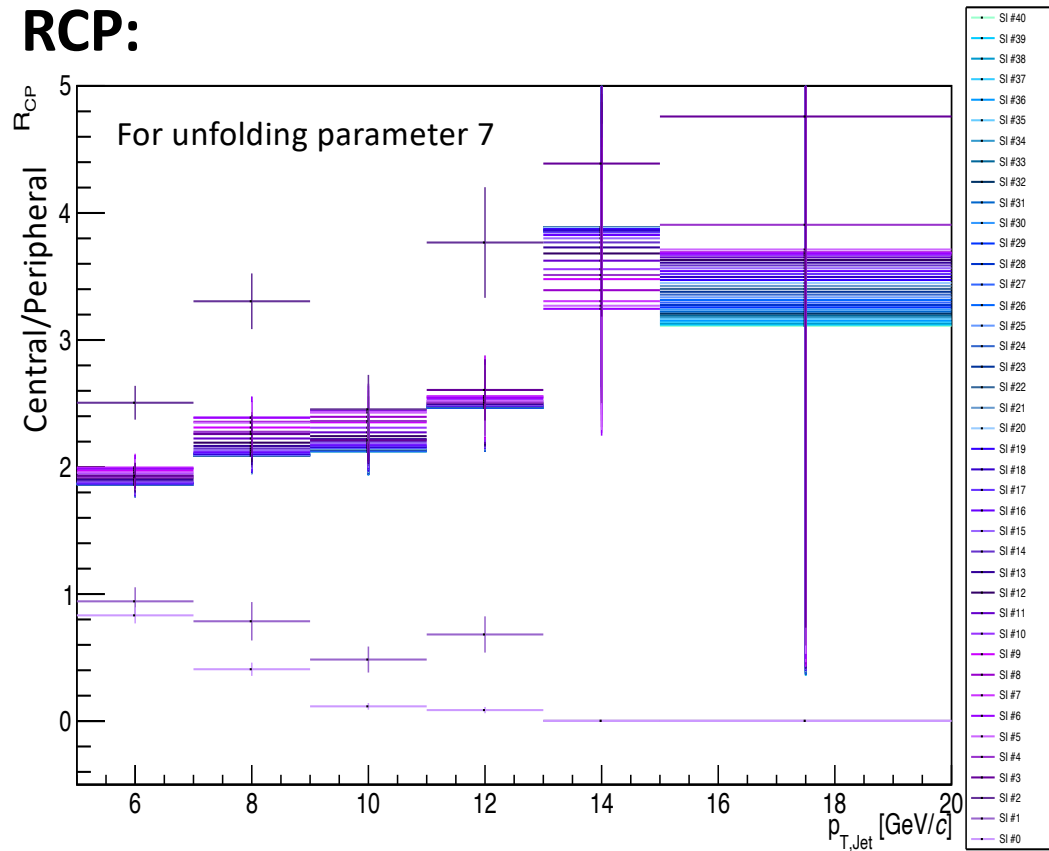


Chi-square for p_T is lowest for unfolding parameter 7



Chi-square for z is lowest for unfolding parameter 3

RCP:



- RCP stabilizes to values after ~10 Superiterations, same as chi2
- The RCP shows the correct trend for superiterations ~5 and above, but **it's greater than 2.**

- I checked all the normalisations we were doing earlier, and I am applying them correctly.
 - It still seems like I am missing some normalization, and I am stuck on what test I can run to figure this out.
- I checked RCP for self-similar and test-train samples with this method, and they are around 1 with some fluctuations (~20%).