

JERSF for 24C re-reco + prompt (ReReco24_V9M)

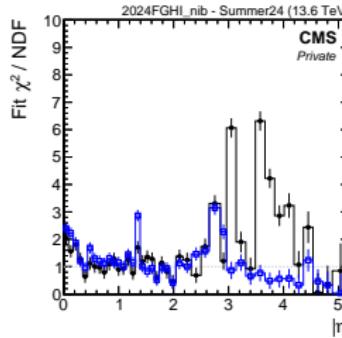
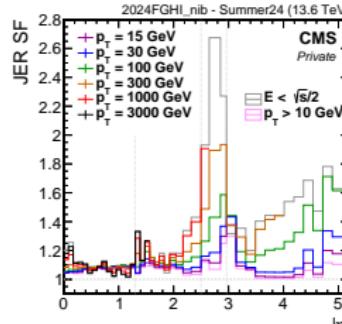
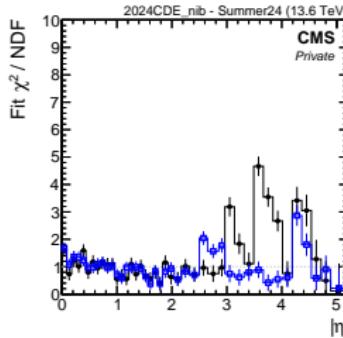
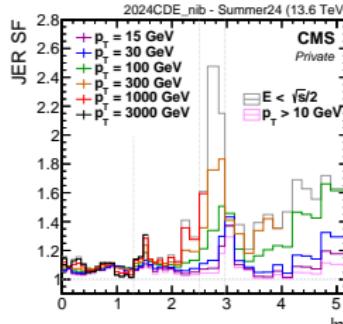
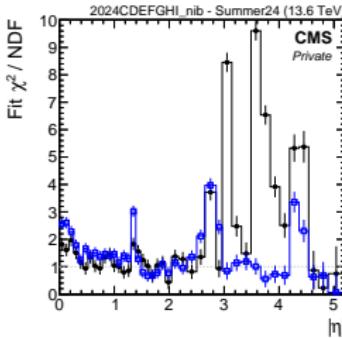
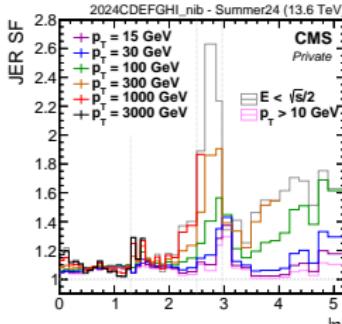
Date: June 9, 2025

- ▶ 24CDE re-reco + 24FGHI Prompt vs Summer24 MC
- ▶ Full 2024, plus split to CDE and FGHI
- ▶ Two step fitting: first data and MC separately at $p_T > 50$ GeV, with data having $SF_i=1$ for each of N,S,C, then refitting SF to data/MC ratio down to lower p_T . Helps with big noise term in FGHI
- ▶ To-do: ZeroBias / Random Cone data for low p_T

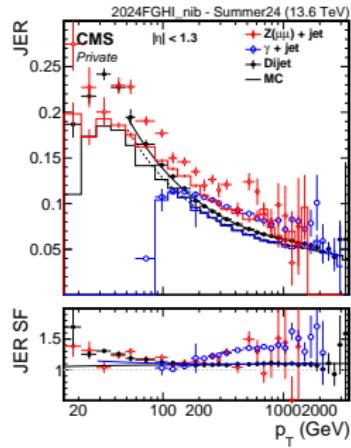
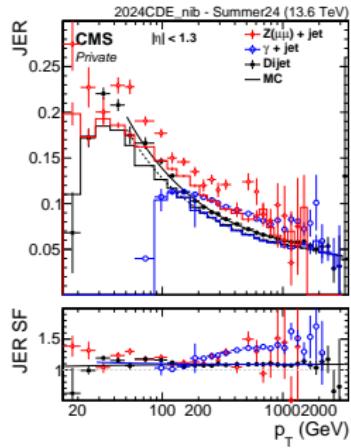
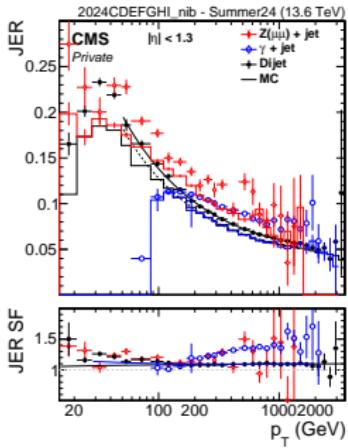
JER SF fits

- ▶ Summary plots of final fits vs $|\eta|$
- ▶ Summary plots of JER SF in barrel
- ▶ Data and MC in each bin
- ▶ Data / MC in each bin before and after refit

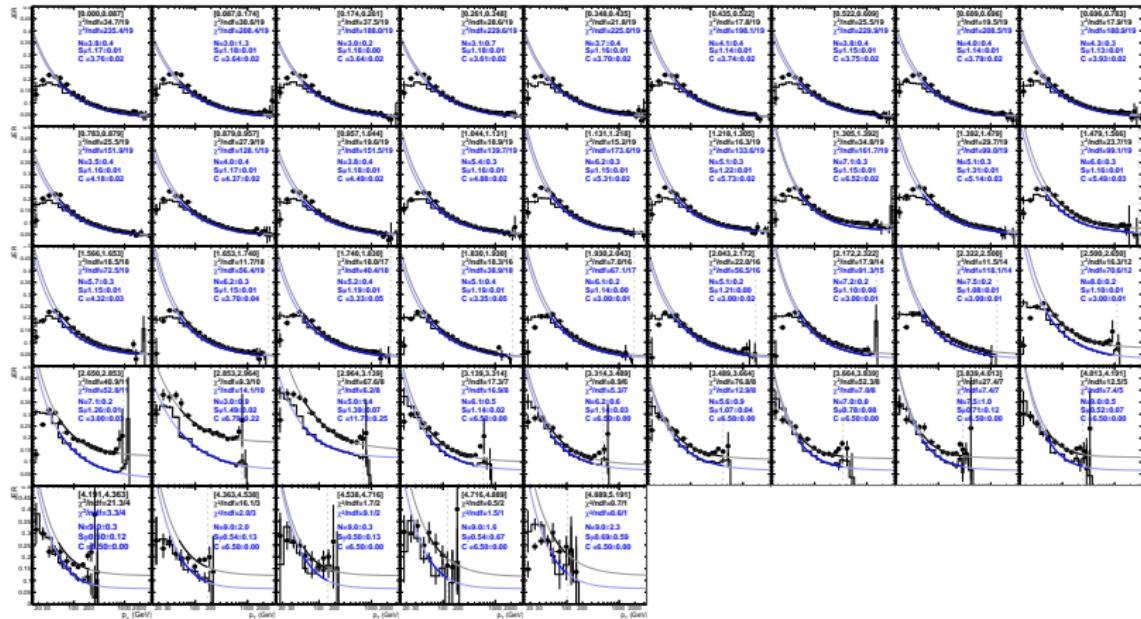
JER SF (ReReco24_V9M with V8M)



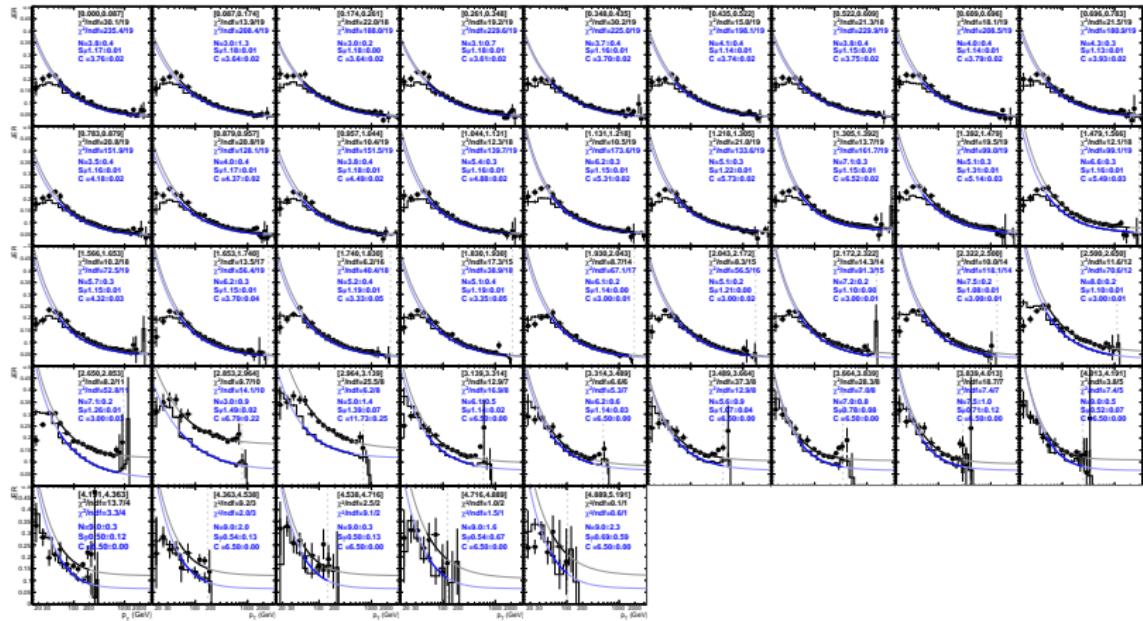
JER SF (ReReco24_V9M with V8M)



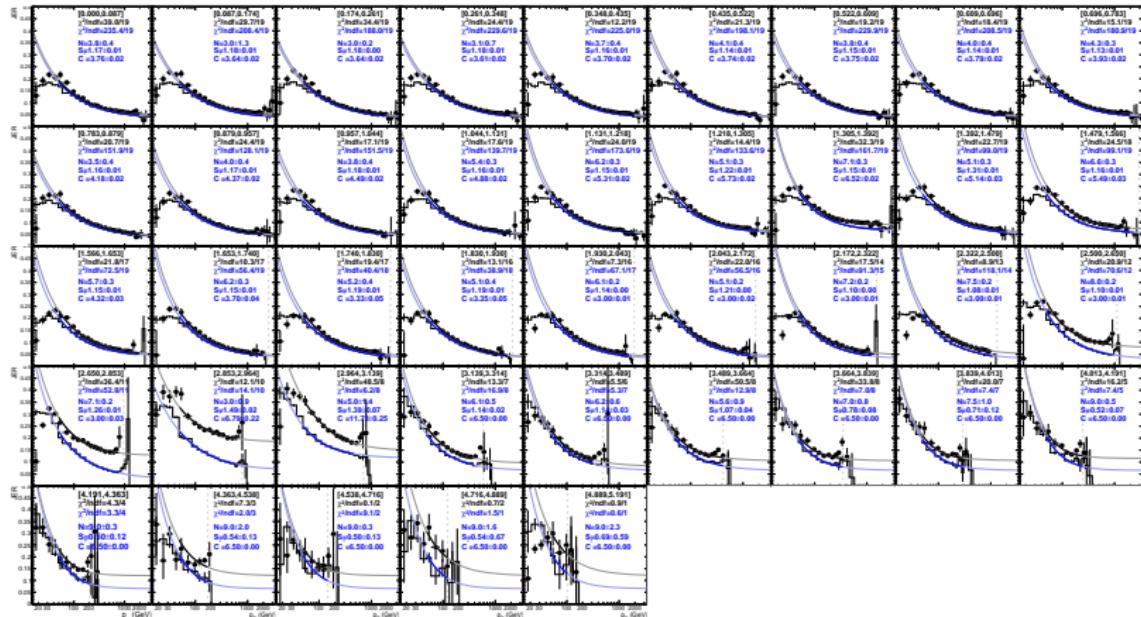
Data and MC (ReReco24_V9M): 2024CDEFGHI_nib



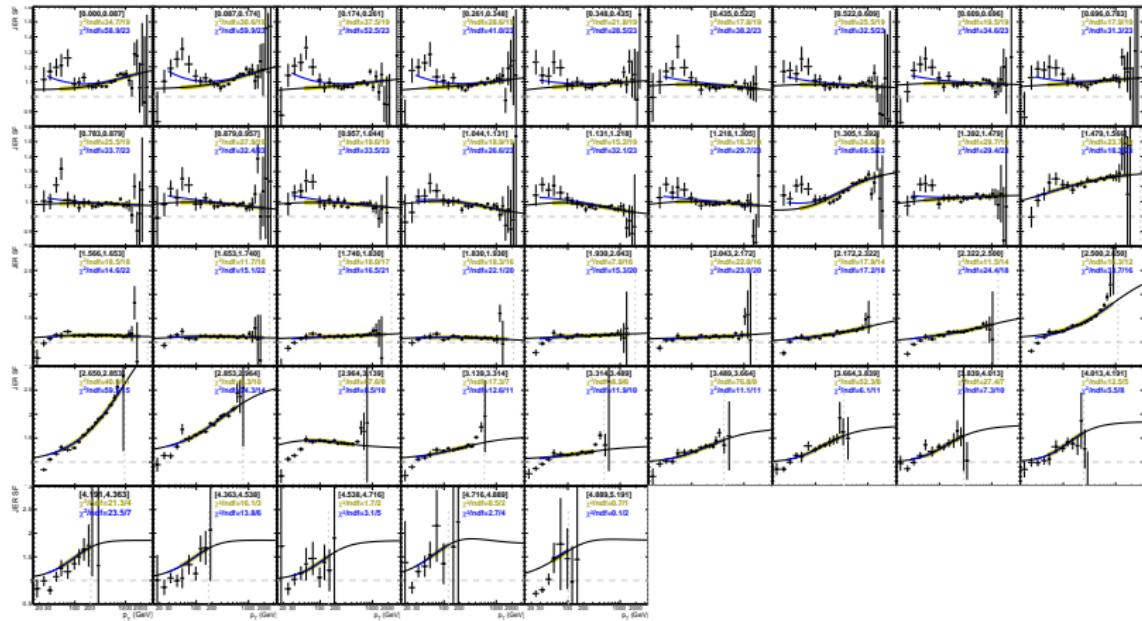
Data and MC (ReReco24_V9M): 2024CDE_nib



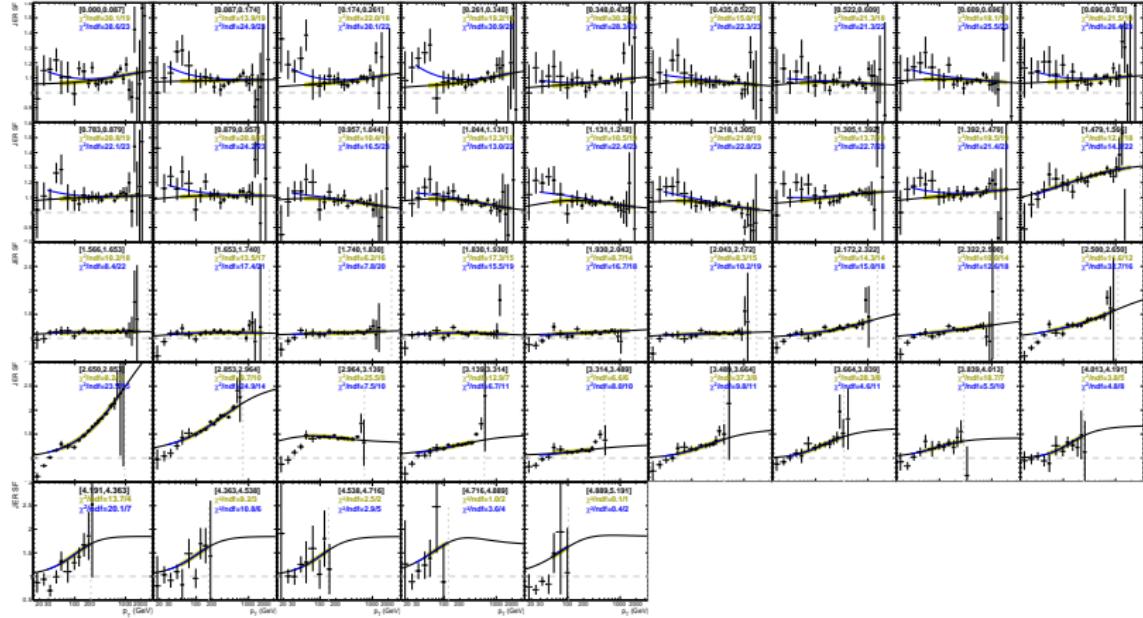
Data and MC (ReReco24_V9M): 2024FGHI_nib



Data over MC (ReReco24_V9M): 2024CDEFGHI_nib



Data over MC (ReReco24_V9M): 2024CDE_nib



Data over MC (ReReco24_V9M): 2024FGHI_nib

