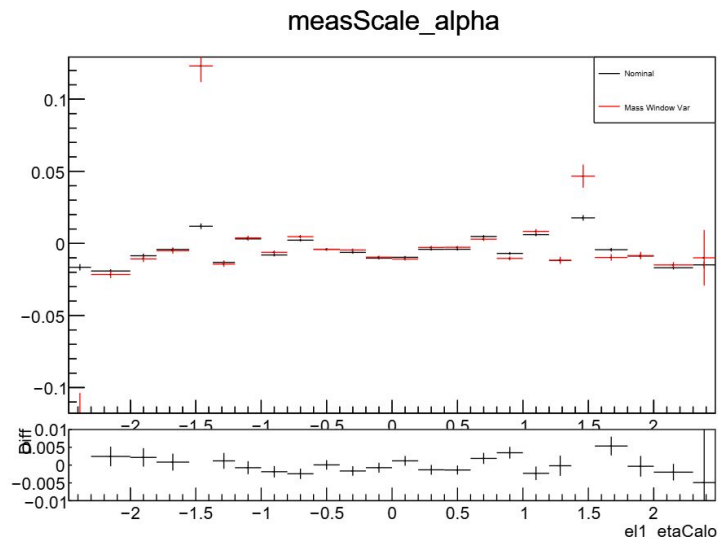


Low μ W-mass Electron calibration model SYS

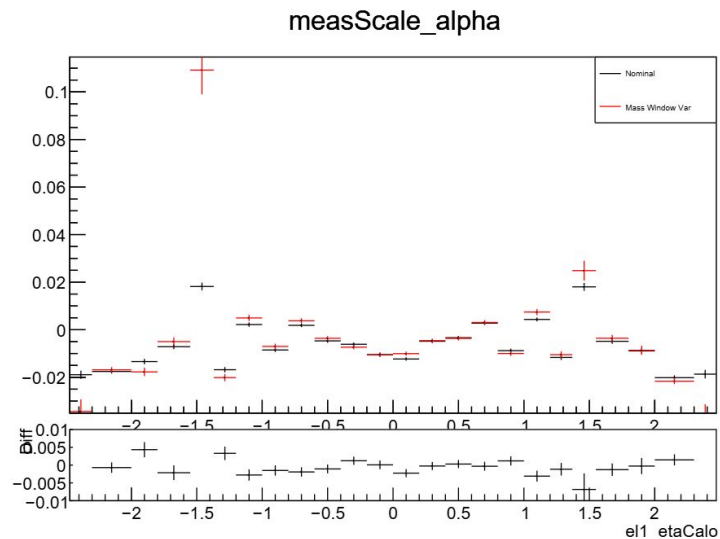
24/4/2025

Current Latest Mass Window Sys Results - Pre Accordion

5 TeV



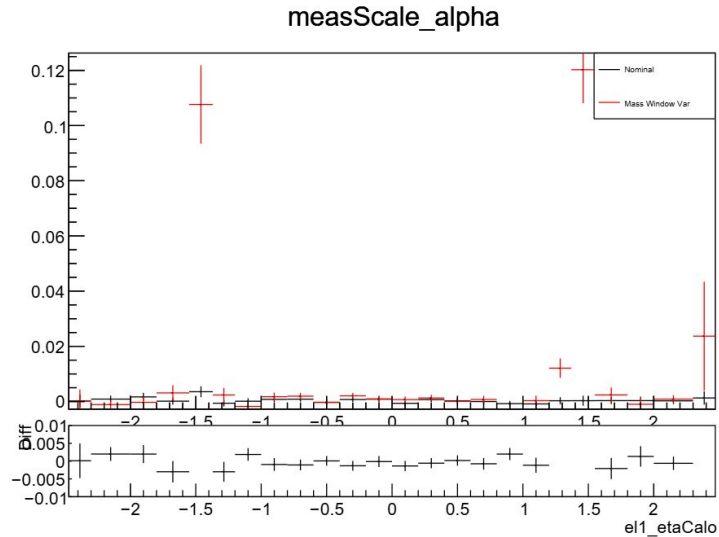
13 TeV



Mass Window: 87 - 94.5

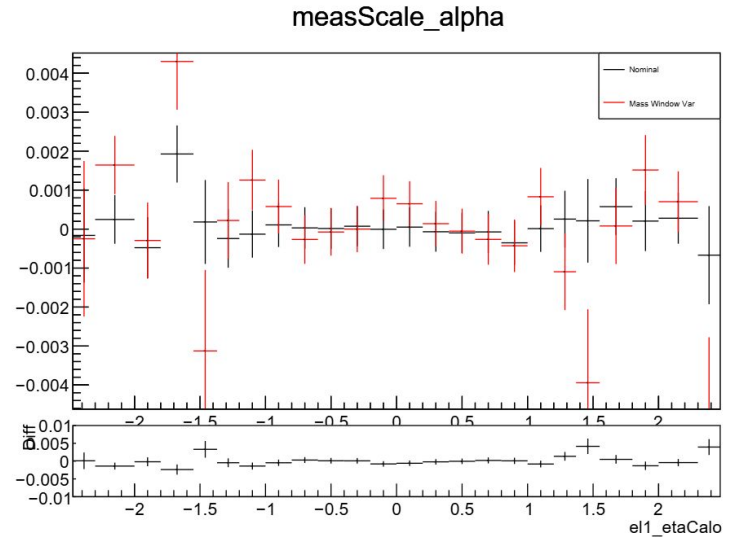
Current Latest Mass Window Sys Results - Post Accordion

5 TeV



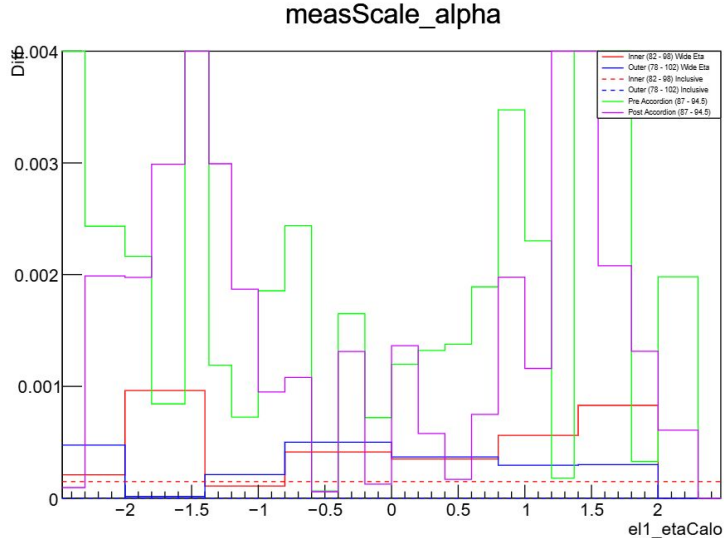
Mass Window: 87 - 94.5

13 TeV

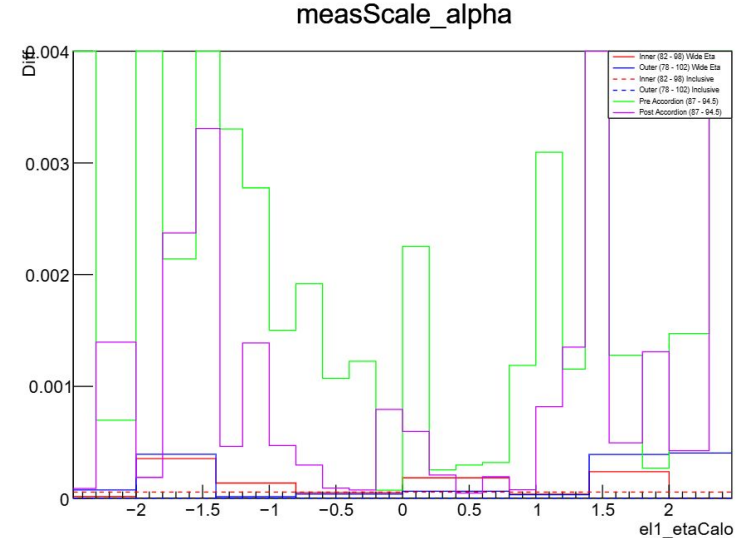


Current Latest Mass Window Sys Results - Delta Alpha

5 TeV



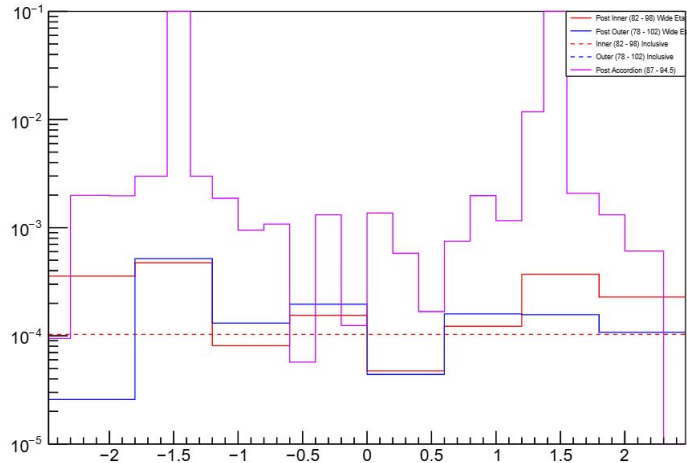
13 TeV



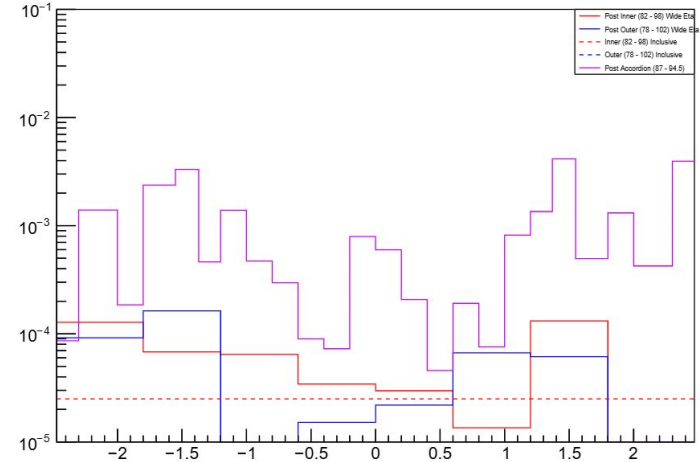
- Old mass window compared to new (82 - 98 and 78 - 102)
- Wide eta and inclusive eta applied to new mass window (wide eta bins are wrong for this iteration)

Current Latest Mass Window Sys Results - Delta Alpha

5 TeV



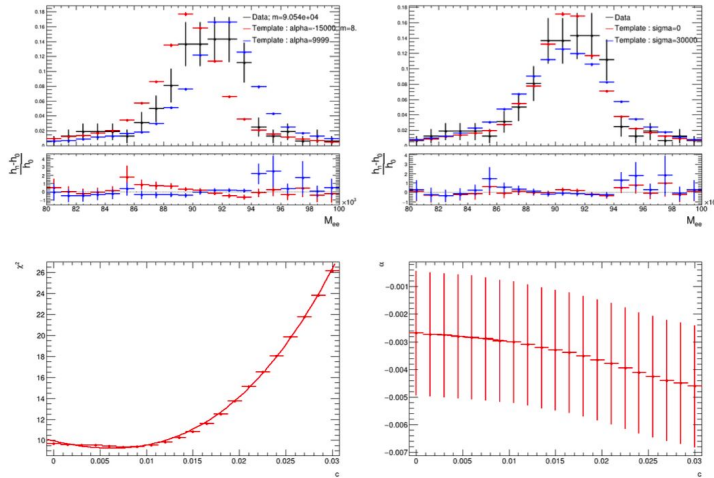
13 TeV



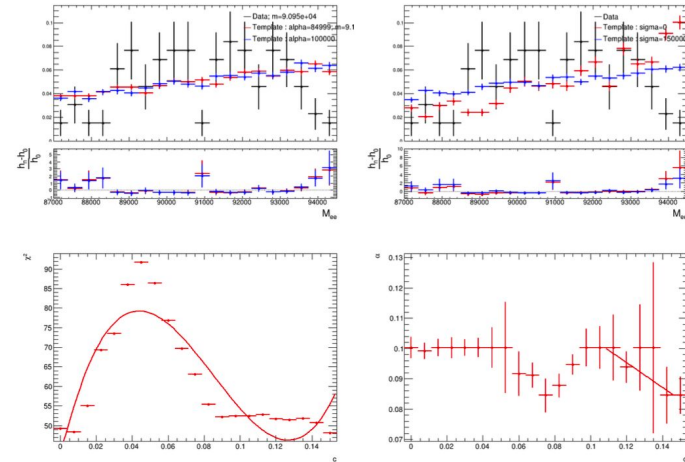
- All post accordion variations compared
- Wide eta and inclusive eta applied to new mass window (wide eta with correct bins: [0, 0.6, 1.2, 1.8, 2.47])

Current Latest Mass Window Sys Results - Fit Results ($0 < \eta < 0.2$)

5 TeV - Nominal

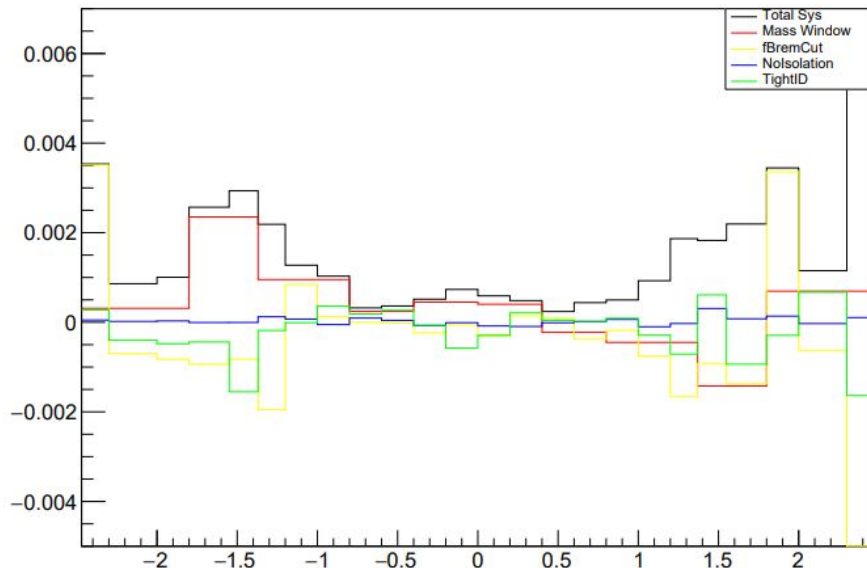


5 TeV - Mass Window



Chi2 fit results compared for eta bin 0.0 - 0.2 - nominal vs mass window

Previous “Final” Systematics Results - 01/03/2024

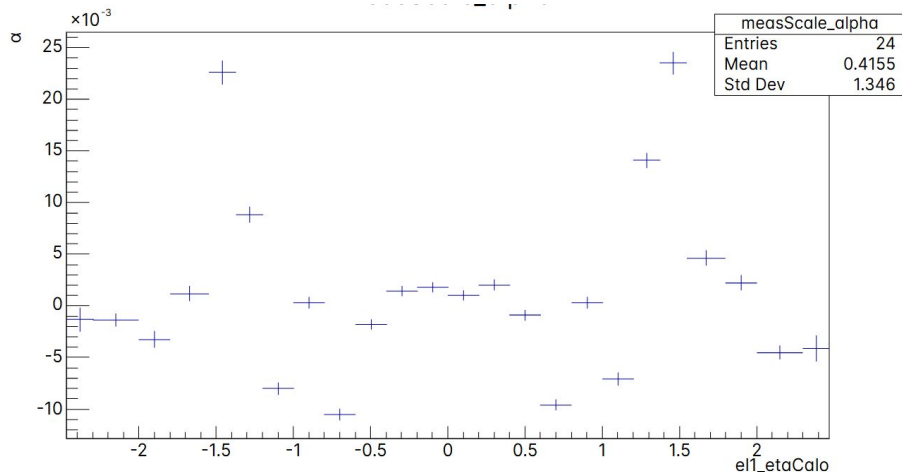


Notes:

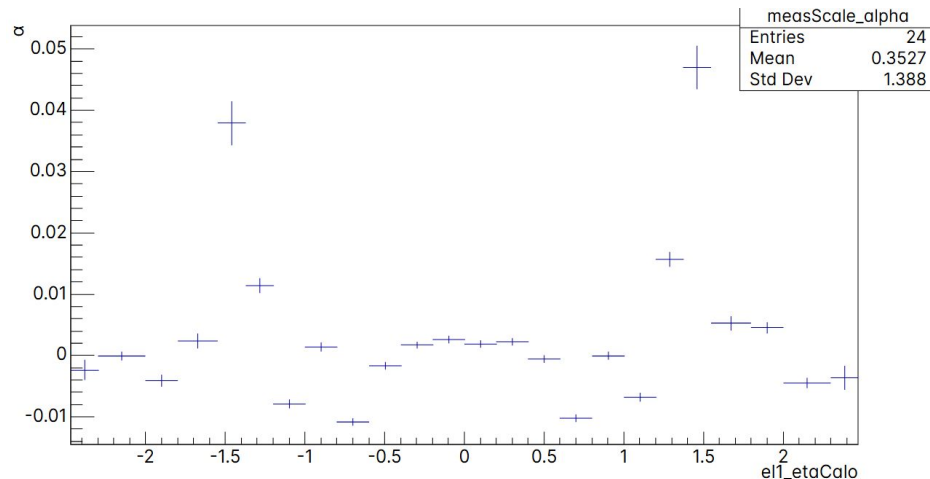
- Only 13 TeV done (for some reason)
- Mass window has wide (but different) eta binning
- Much better results - ~ 2 per mille

First/Old Alpha Nominal vs Mass window - 07/02/2024 - 13 TeV

Nominal



Mass Window

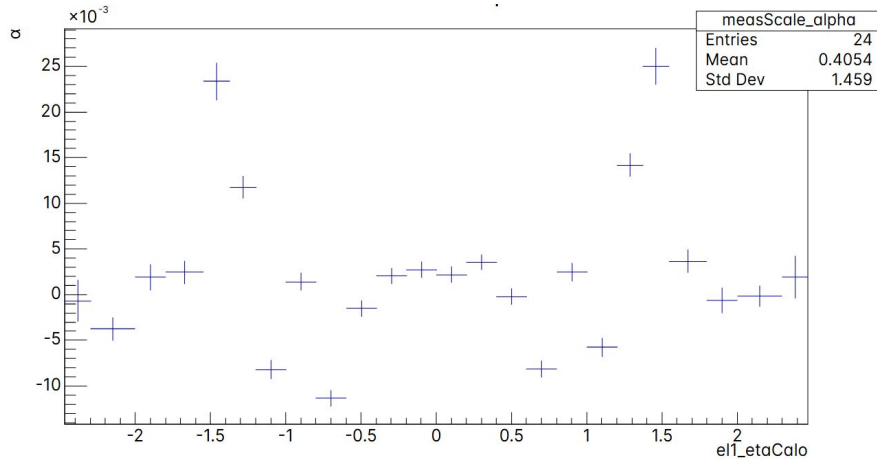


Notes:

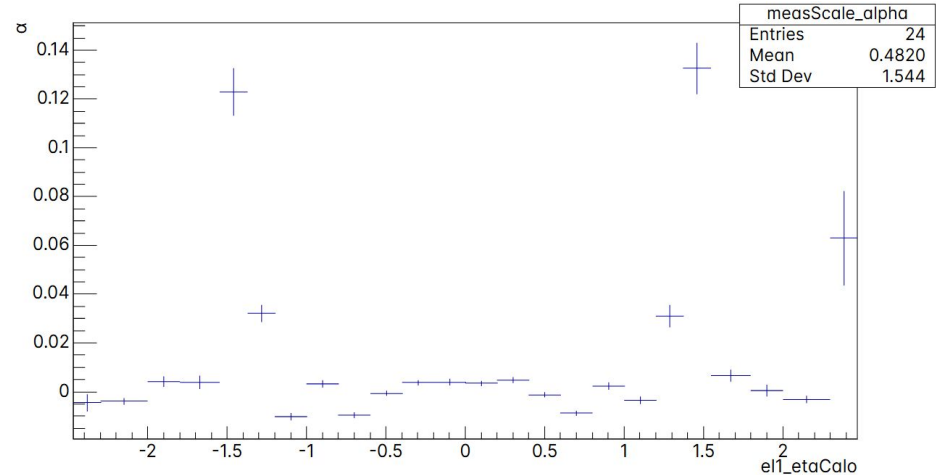
- Older mass window sys than in previous slide (variation seems much larger than “final” result)

First/Old Alpha Nominal vs Mass window - 07/02/2024 - 5 TeV

Nominal



Mass Window

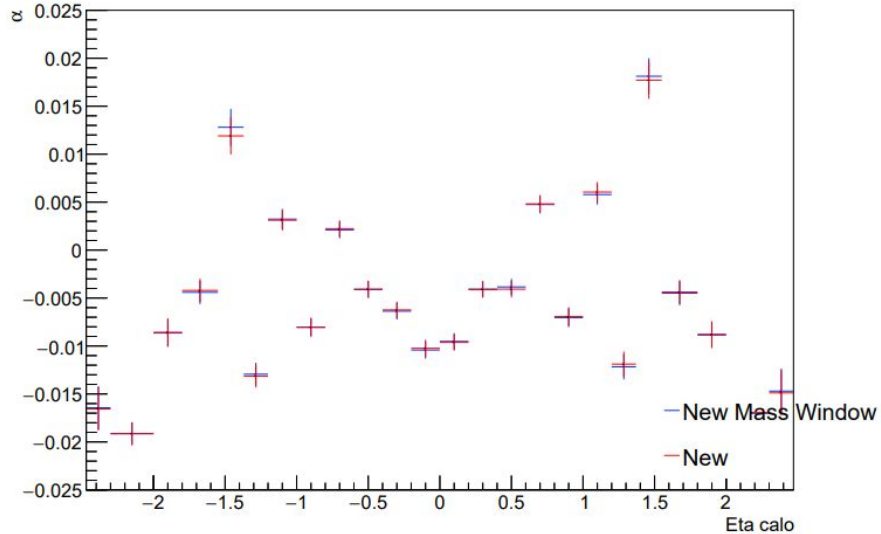


Notes:

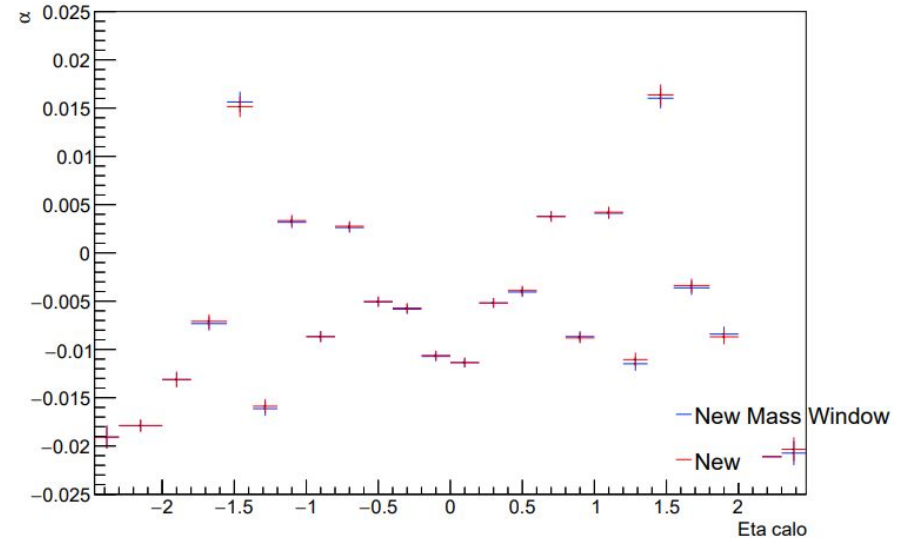
- Older mass window sys than in previous slide (variation seems much larger than “final” result)

More Recent Alpha Nominal vs Mass window - 29/10/2024

5 TeV



13 TeV



Notes:

- Results look much more as expected
- Not presented in any mW workshop (?)