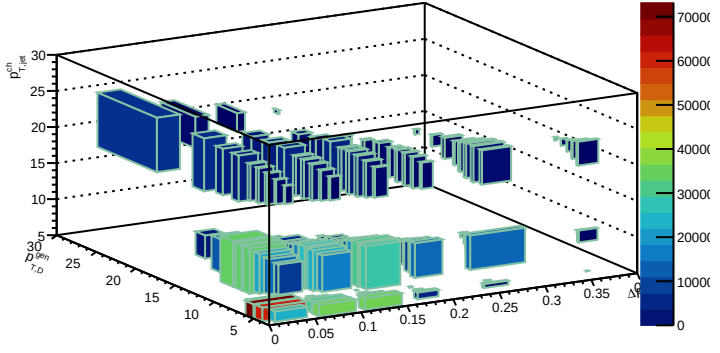
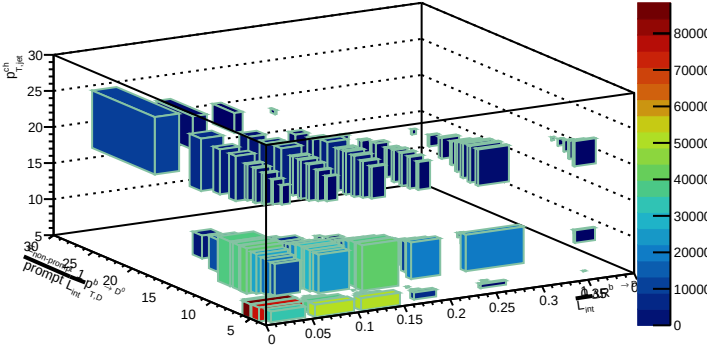
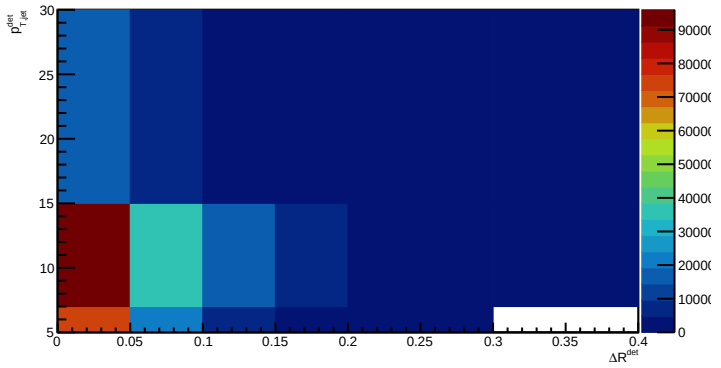
POWHEG + PYTHIA



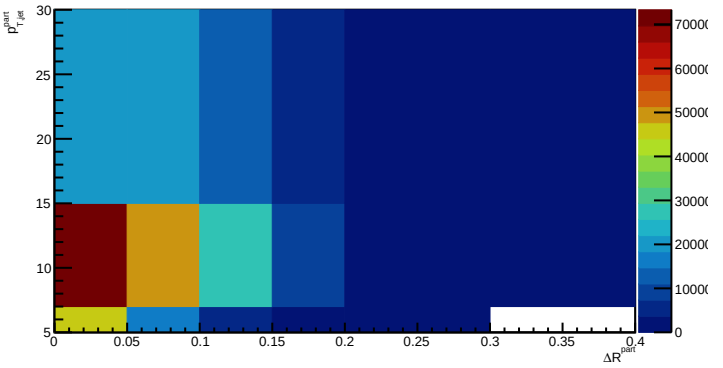
POWHEG + PYTHIA efficiency scaled



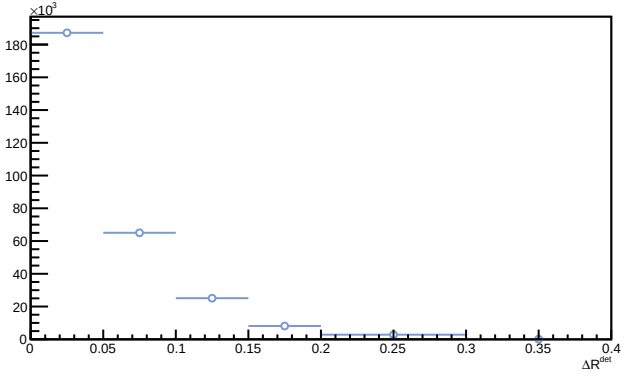
Inside response range measured data



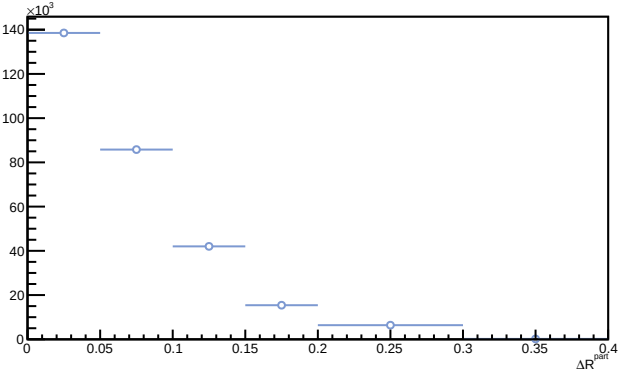
Inside response range truth data

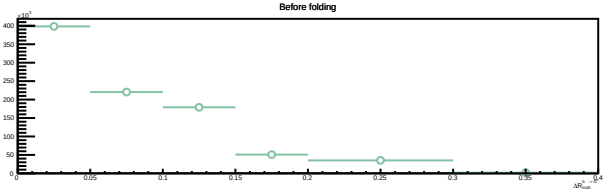


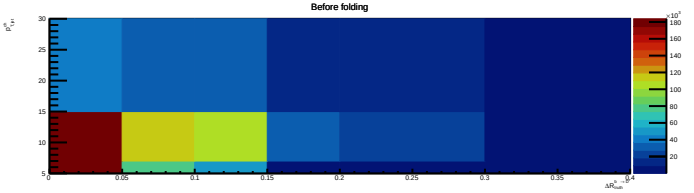
Measured

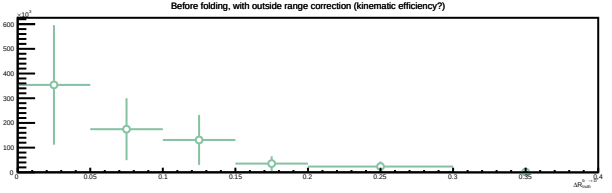


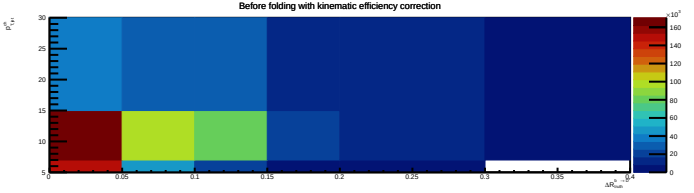
Truth

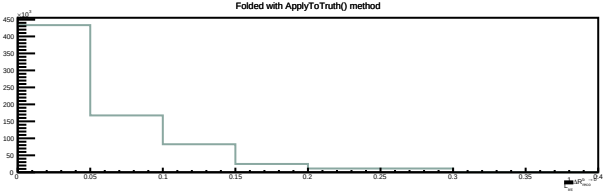


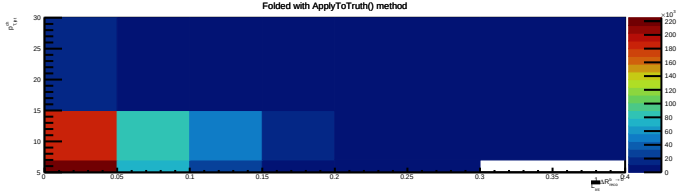

Before folding

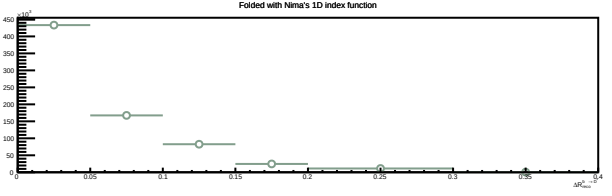

Before folding

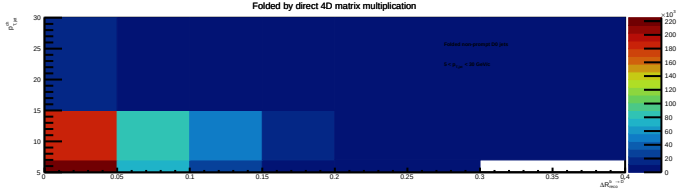

Before folding, with outside range correction (kinematic efficiency?)

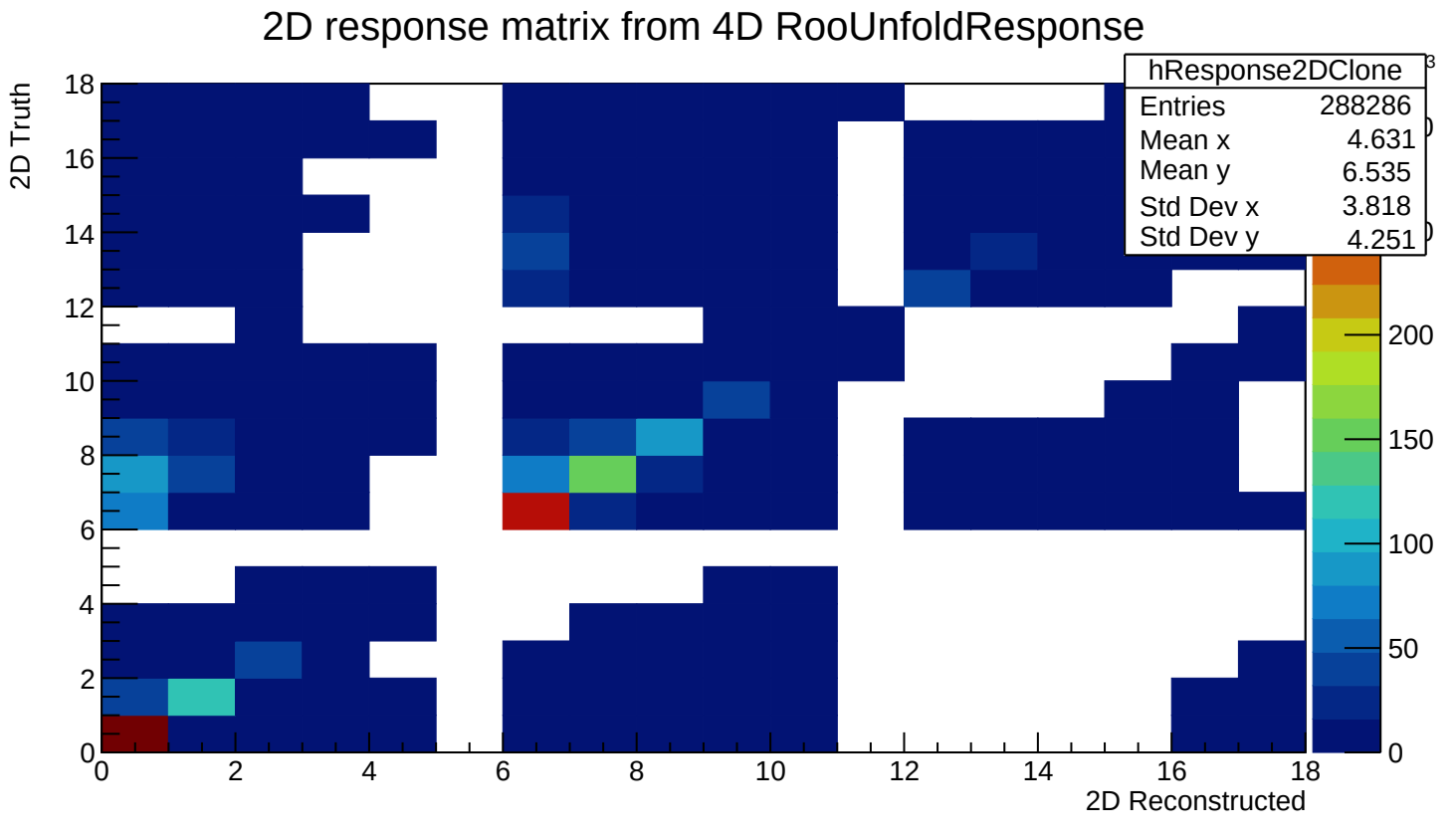

Before folding with kinematic efficiency correction

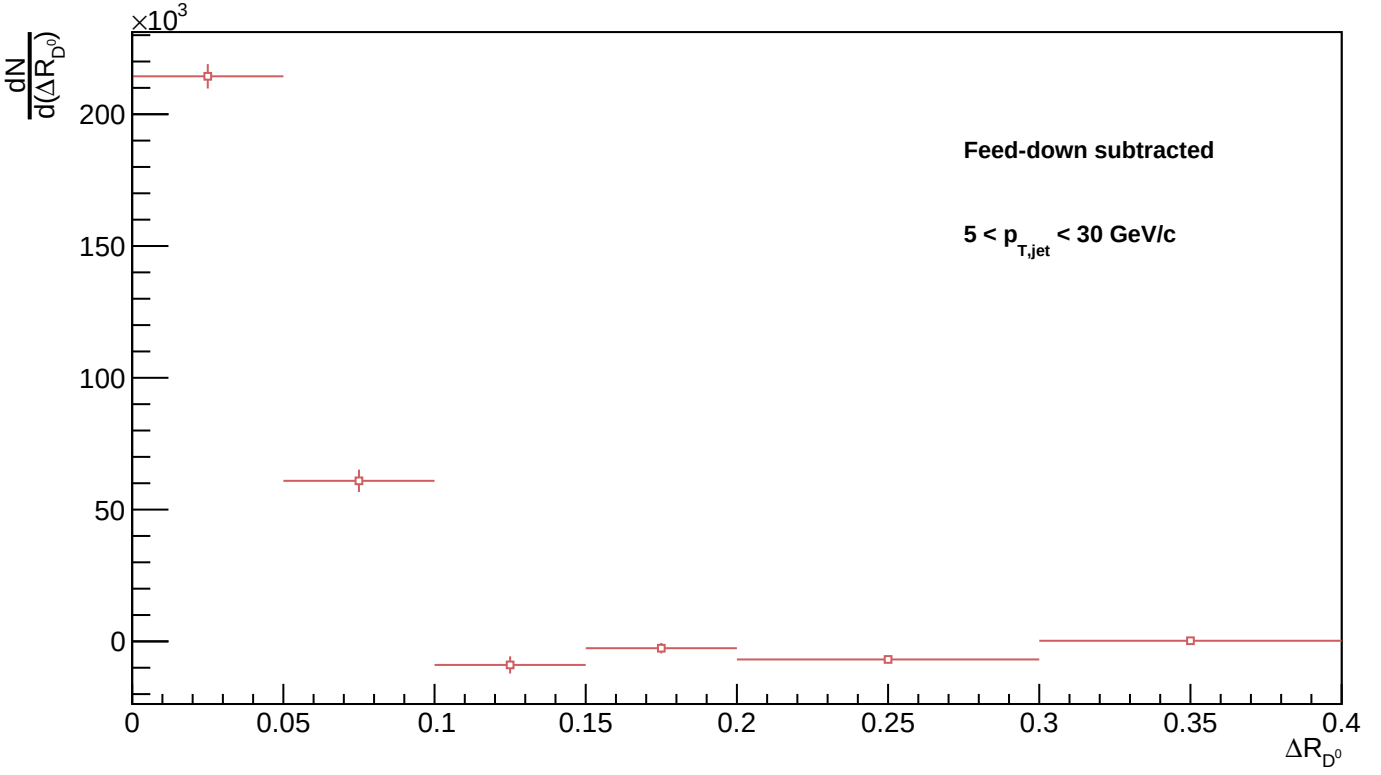

Folded with ApplyToTruth() method


Folded with ApplyToTruth() method


Folded with Nima's 1D index function


Folded by direct 4D matrix multiplication


2D response matrix from 4D RooUnfoldResponse
hResponse2DClone
Entries 288286
Mean x 4.631
Mean y 6.535
Std Dev x 3.818
Std Dev y 4.251
2D Truth
2D Reconstructed
0
2
4
6
8
10
12
14
16
18
50
100
150
200


$\frac{dN}{d(\Delta R_{D^0})}$
$\times 10^3$
200
150
100
50
0
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
ΔR_{D^0}
Feed-down subtracted
$5 < p_{T,jet} < 30$ GeV/c