

# Calo Simulation Pythia8 MB

Jaebeom Park

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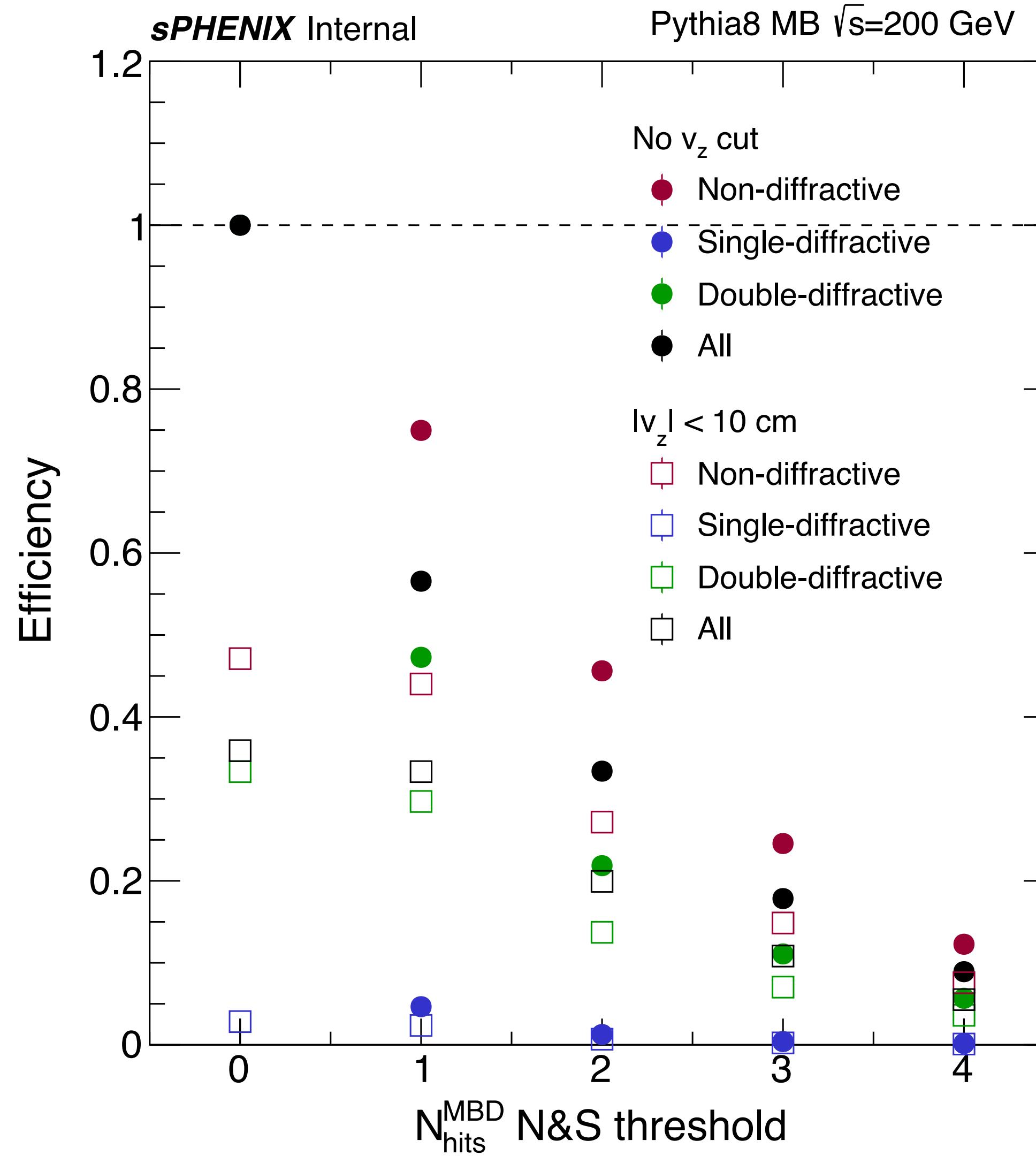
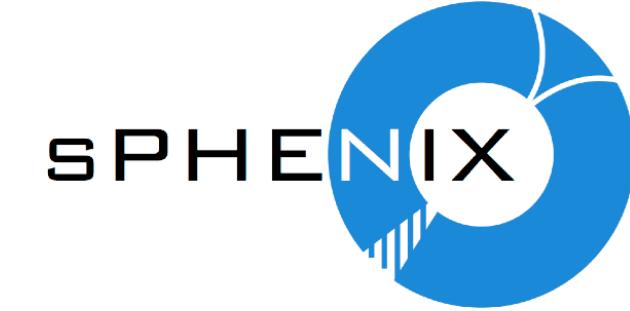
Boulder





Boulder

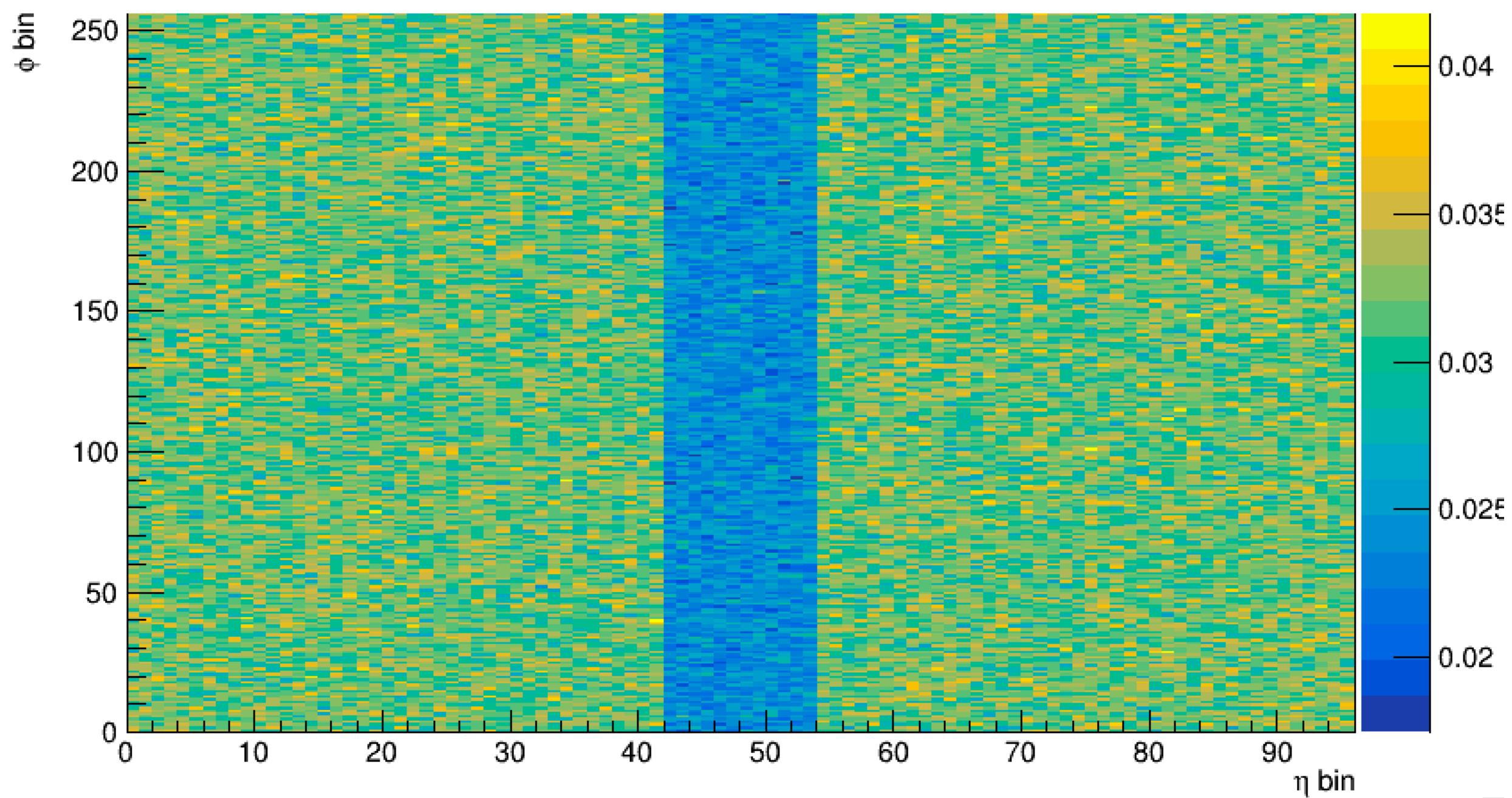
# Inelastic cross section efficiency with MBD



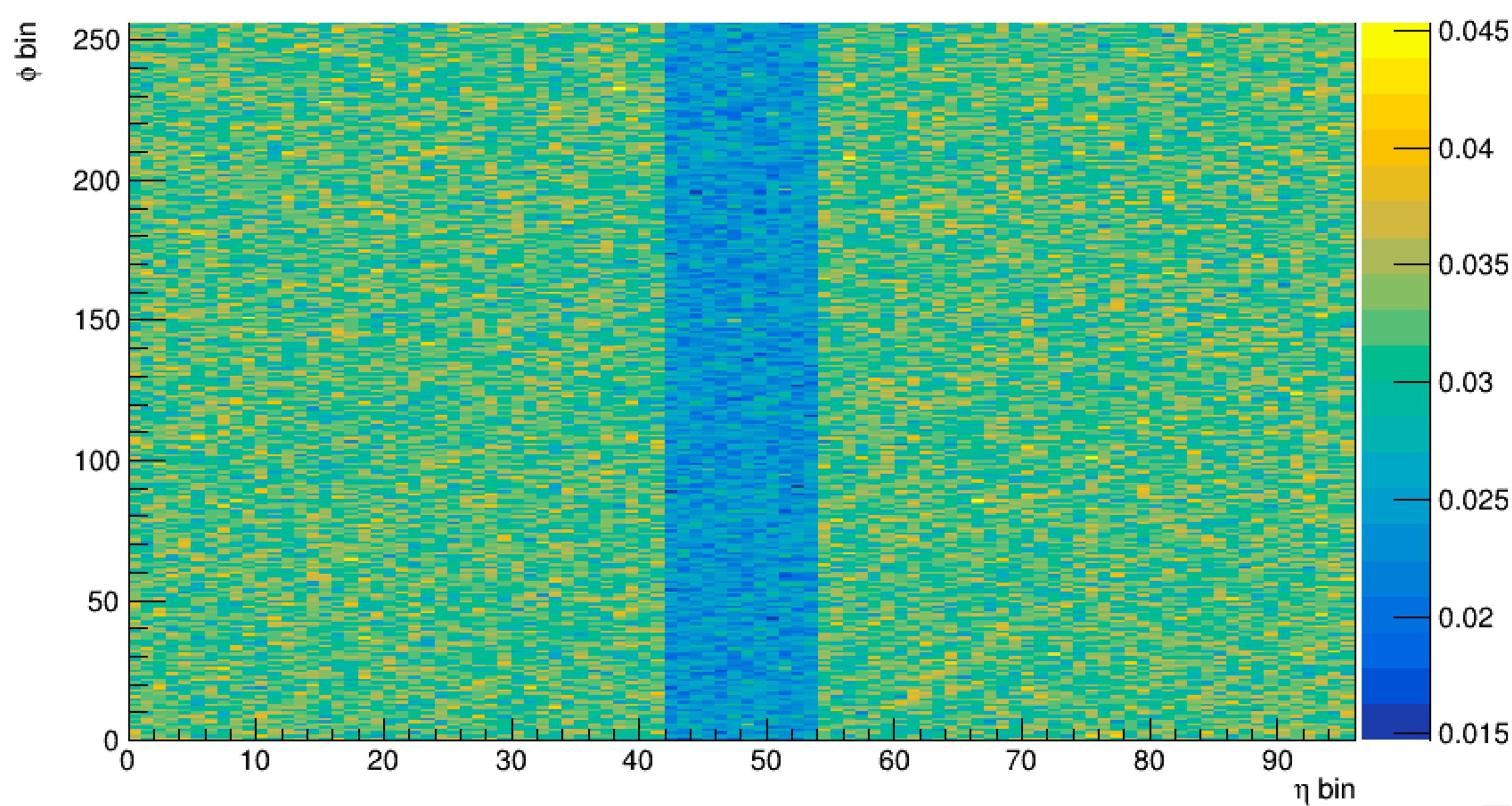
- Without vtx cut : Nhits  $\geq 1 \sim 56\%$ , Nhits  $\geq 2 \sim 33\%$
- Nhits  $\geq 1$  vs Nhits  $\geq 2$ 
  - :  $\sim 40\%$  drop of eff (= 70% larger rejection factor)
- Huge rejection for single-diffractive events

# Expected occupancy - EMCal

Nhits N&S  $\geq 1$



Nhits N&S  $\geq 2$



Used NoZS DST from Run11 pp – Energy cut per tower > 130 MeV

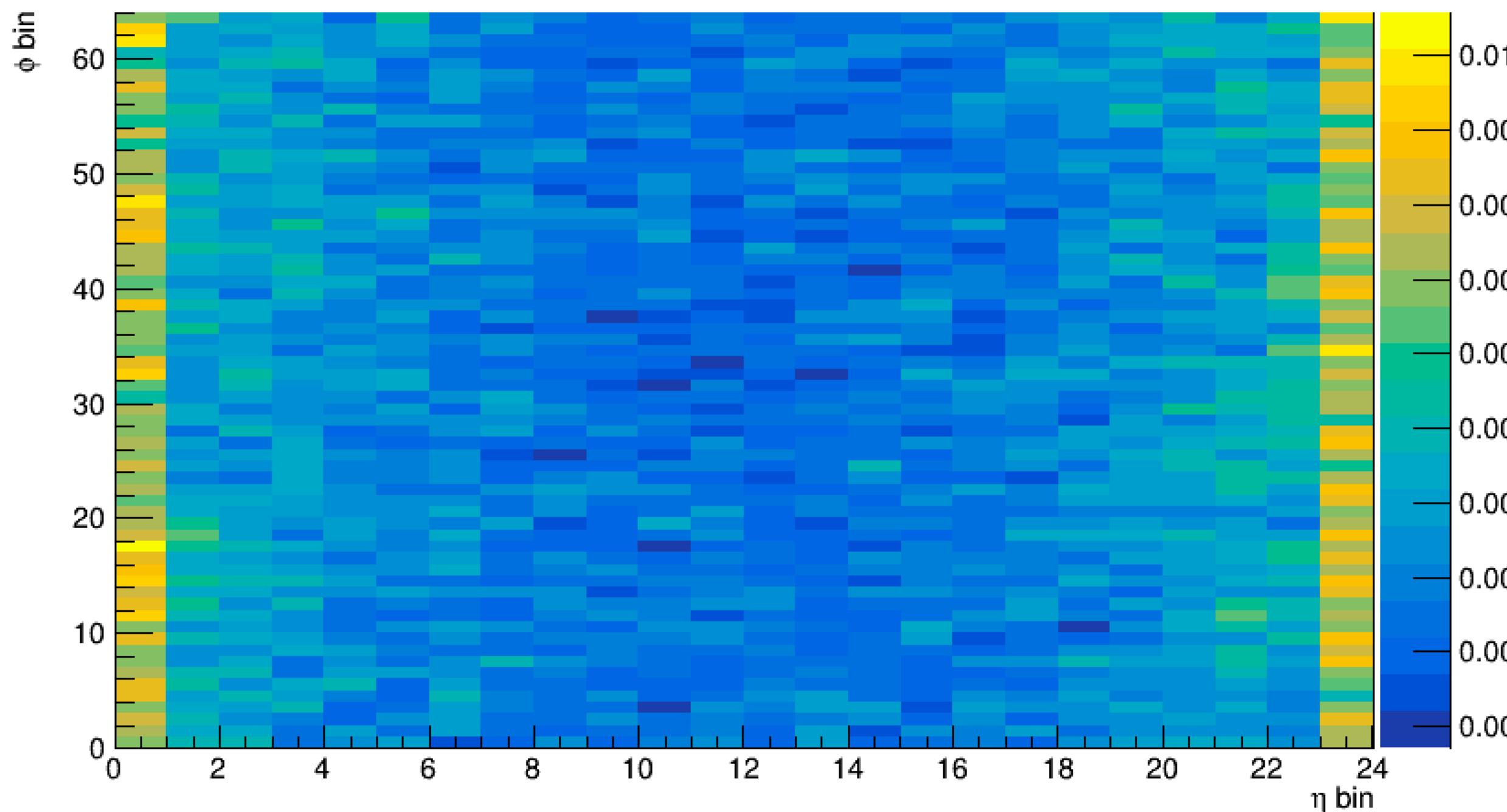


Boulder

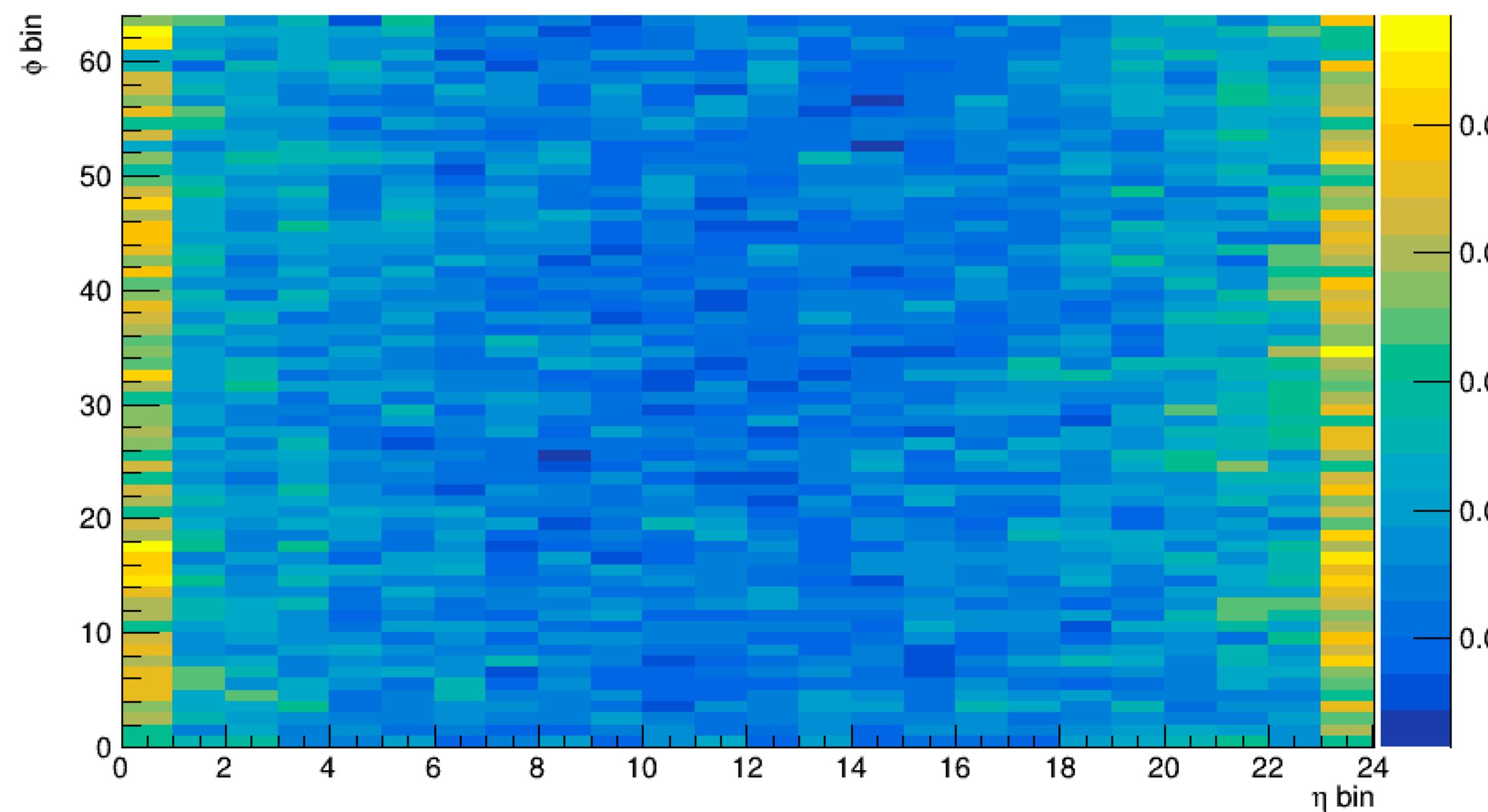
# Expected occupancy - IHCAL



Nhits N&S  $\geq 1$



Nhits N&S  $\geq 2$



Used NoZS DST from Run11 pp – Energy cut per tower > 10 MeV

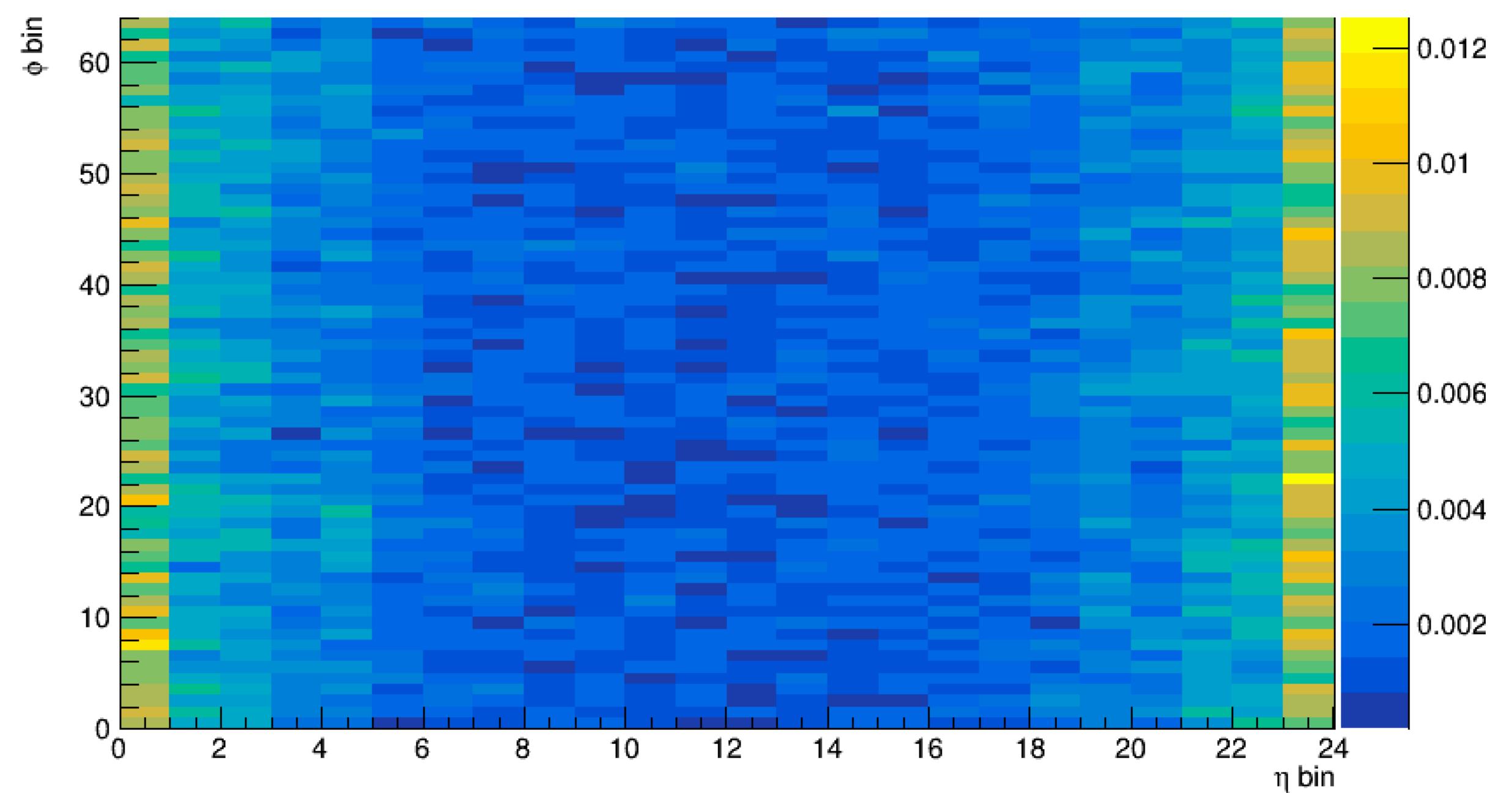


Boulder

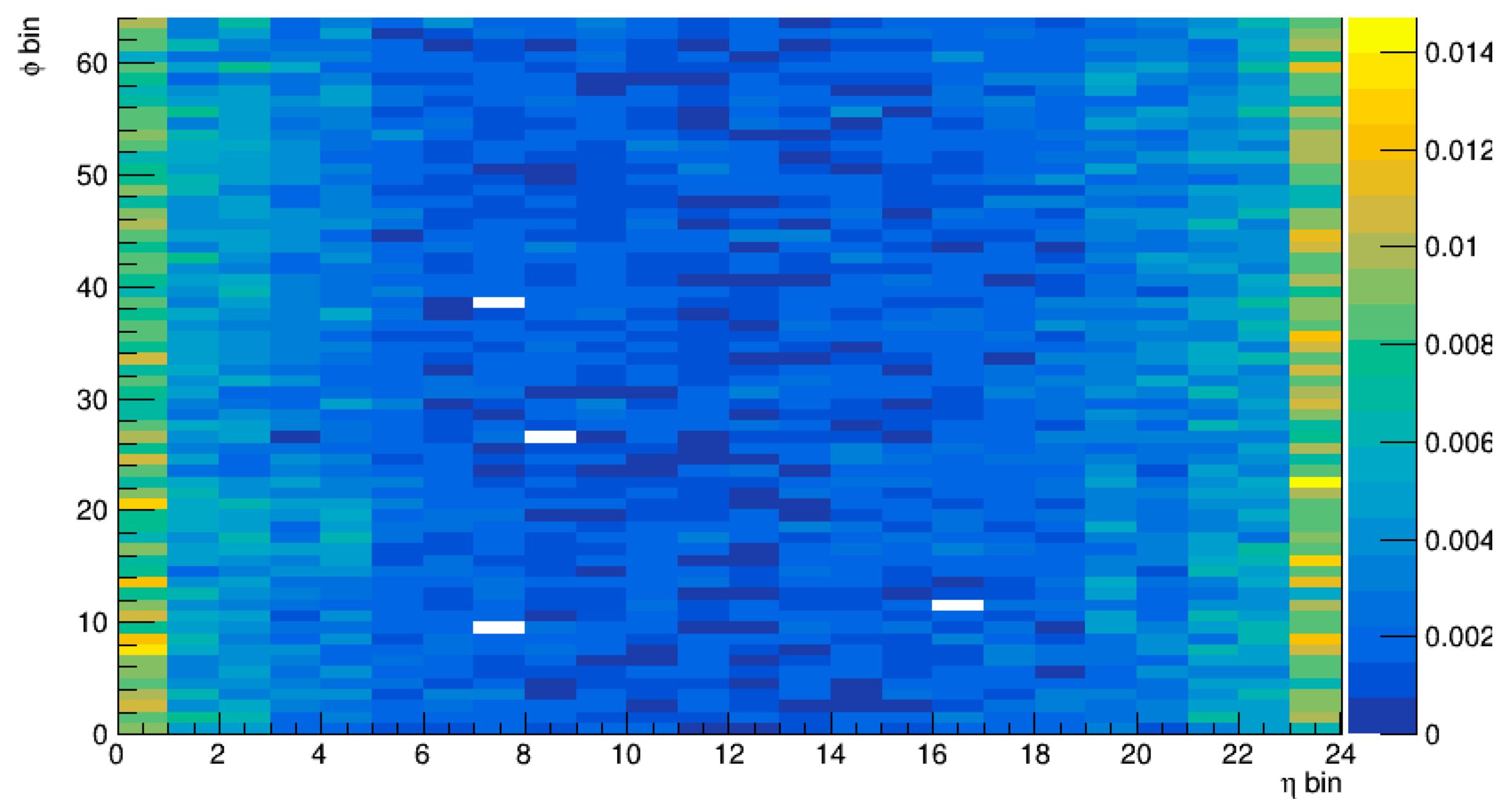
# Expected occupancy - OHCal



Nhits N&S  $\geq 1$



Nhits N&S  $\geq 2$



Used NoZS DST from Run11 pp – Energy cut per tower > 50 MeV

# Back-up