

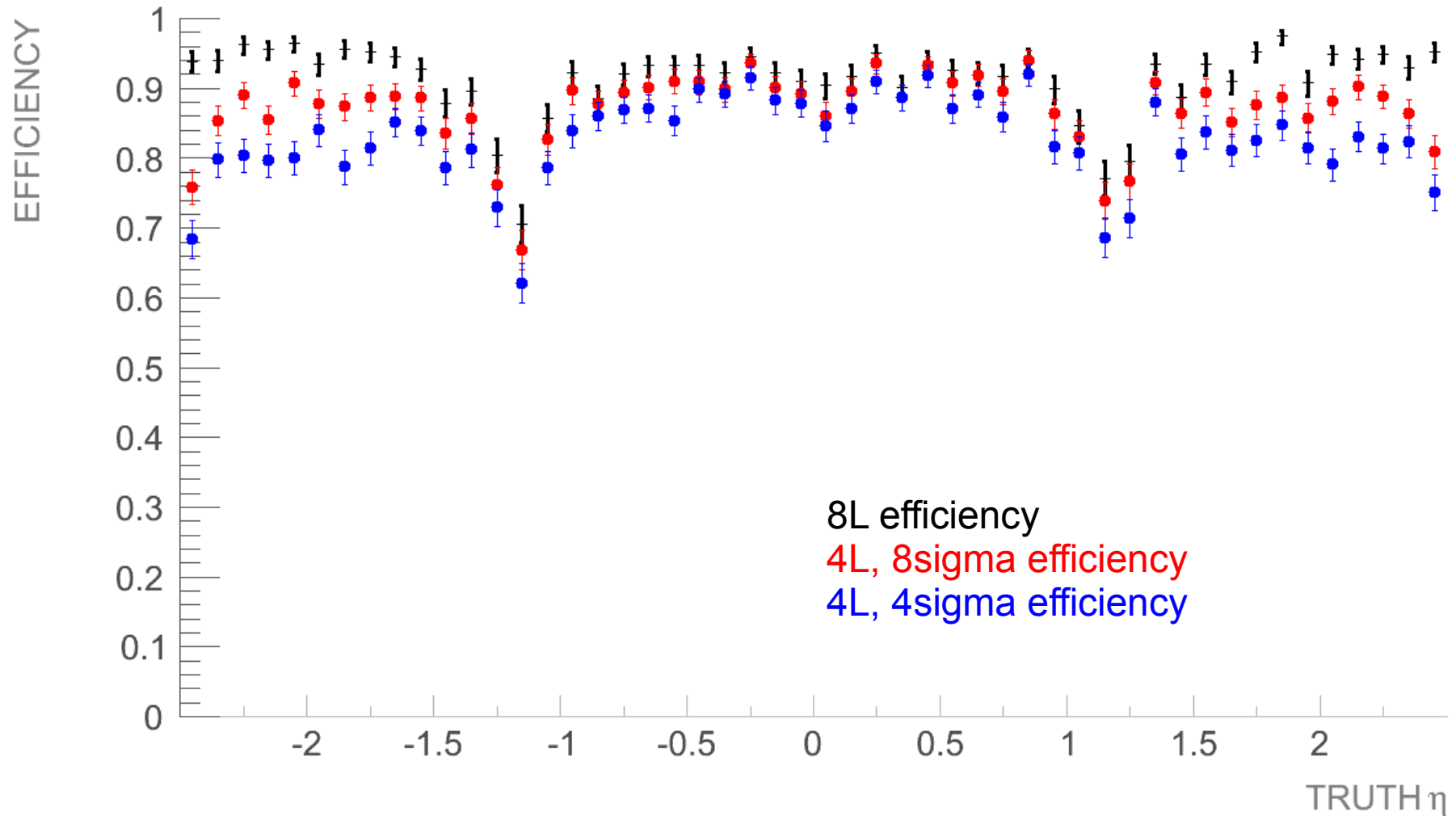
# New split-arch banks

- All patterns use  $300+300+500=1.1\text{B}$  muons
- Banks cover all 8 regions
- 8L: SS=16
  - Available 160M patts/region; using ~64M
- 4L: pixel =  $25 \times 36$ ; pseudo = 8sig, 6sig, 4sig
  - Per-region size: 9M (8sig), 15M (6sig), 20M (4sig)
  - Usually using all 4L patterns
- 4L constants are also available, but code not finalized to use 8L fit params directly
  - But lookup-based simulation already works

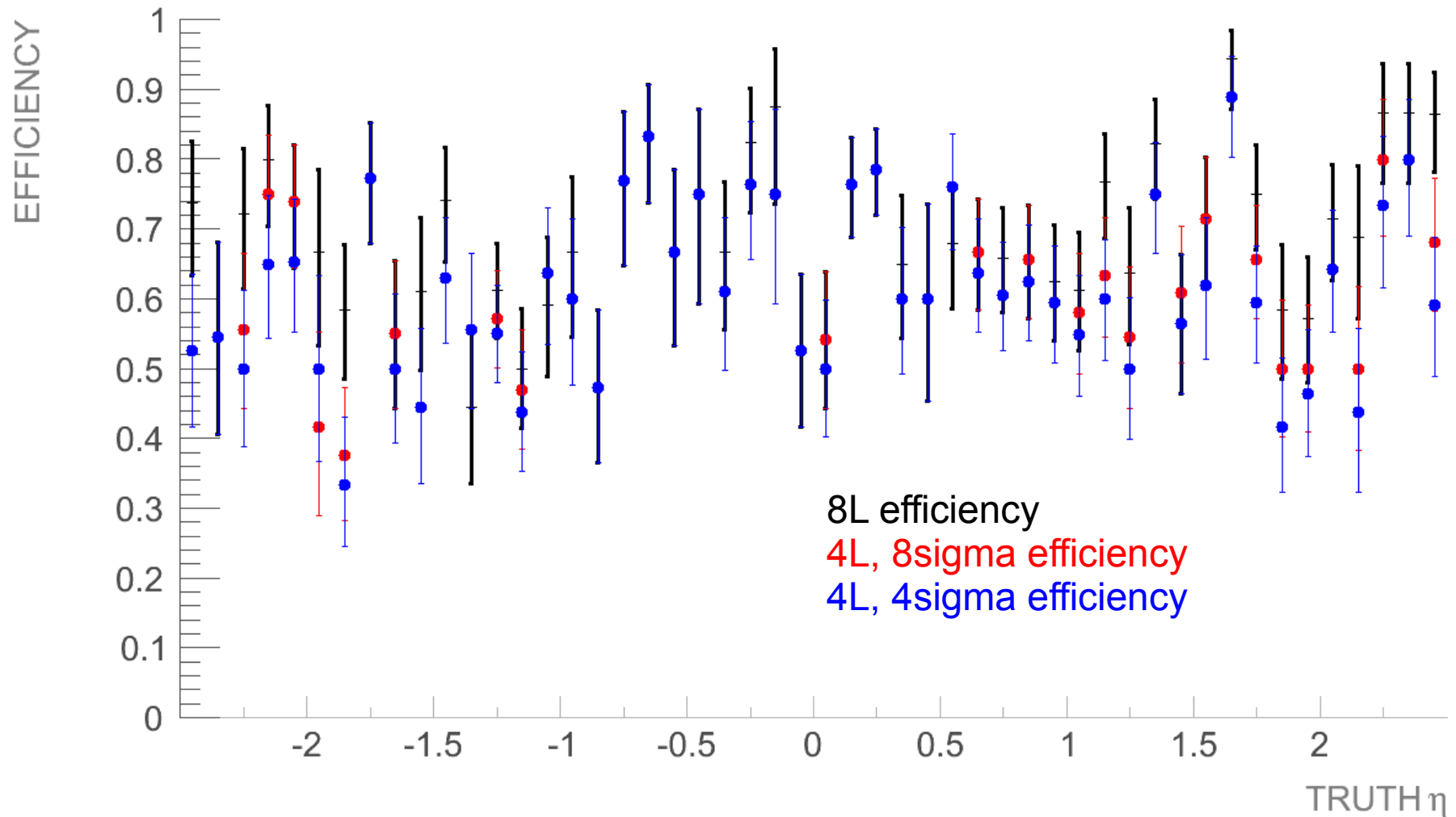
# Run parameters

- $\chi^2/\text{dof} = 4$  everywhere
- 8L has roadwarrior and *in-road hitwarrior*
  - HW\_NDIFF=3
- 4L/11L does not have roadwarrior, but has final *global hitwarrior*
  - HW\_NDIFF=6
- No fit optimizations: all fits are done in all roads independent of 11/11  $\chi^2$ .
  - Only exception: majority recovery is skipped in all superstrips with  $>3$  hits

# Single muon efficiency



# Whbb @ 3E34: b-daughter eff



# Some dataflow numbers

- In an efficiency-maximizing configuration
- 8L: 45k roads (AM), 30k roads (RW), 290k fits (incl. Majority), 20k 8/8 fits, 120k 7/8 road fits
- 4L: 3 numbers are for *8sigma*, *6sigma*, *4sigma*
- # roads out of AM:
  - 120k, 77k, 47k
- # of fits (total, including majority)
  - 364k, 190k, 105k
- # of 11/11 fits
  - 11.5k, 6.5k, 3k
- # of 10/11 fits in 10/11 roads
  - 243k, 126k, 68k

# Timing per 100 events

- How long 3E34 jobs took on tier3 using fairly large 8L and 4L banks?
- 8L is split into 16 subregions:
  - RF=13min, TF=3min
  - RF jobs run in parallel on tier3, but would run sequentially on the grid (so RF=13\*16=200min)
- 4L (4sigma) is split into 1 subregion:
  - RF=30min, TF=3min
- 4L (8sigma) is split into 1 subregion:
  - RF=50min, TF=7min