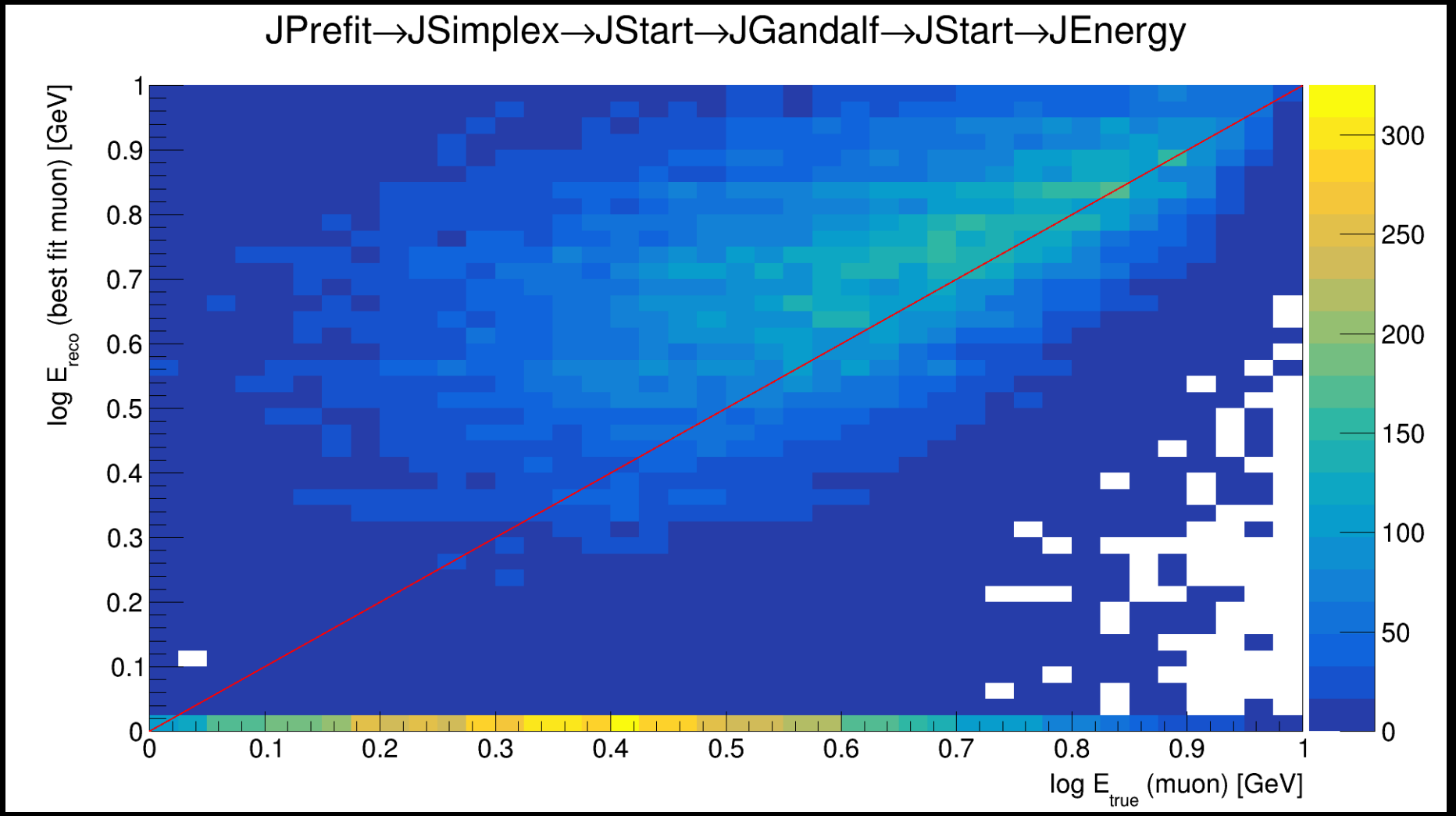
JGuinness™

JEnergy

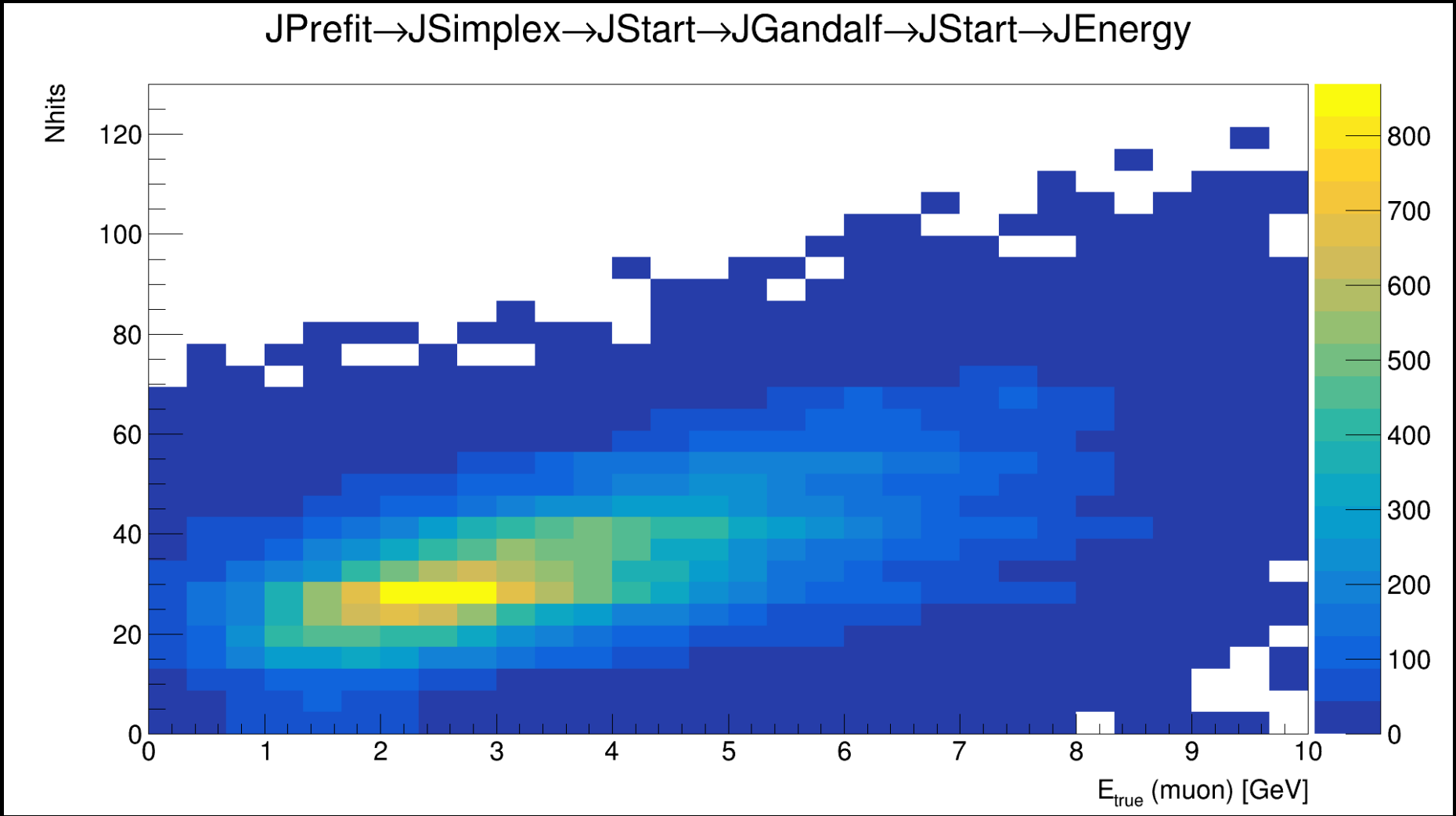
- Want to address the energy “correction” in ORCA.
- Currently, one manually applies a correction to files that come out of the reco chain.*
- Whereas for ARCA, there is a formula that is entered as an input when running JEnergy.

*Written by Liam Quinn.

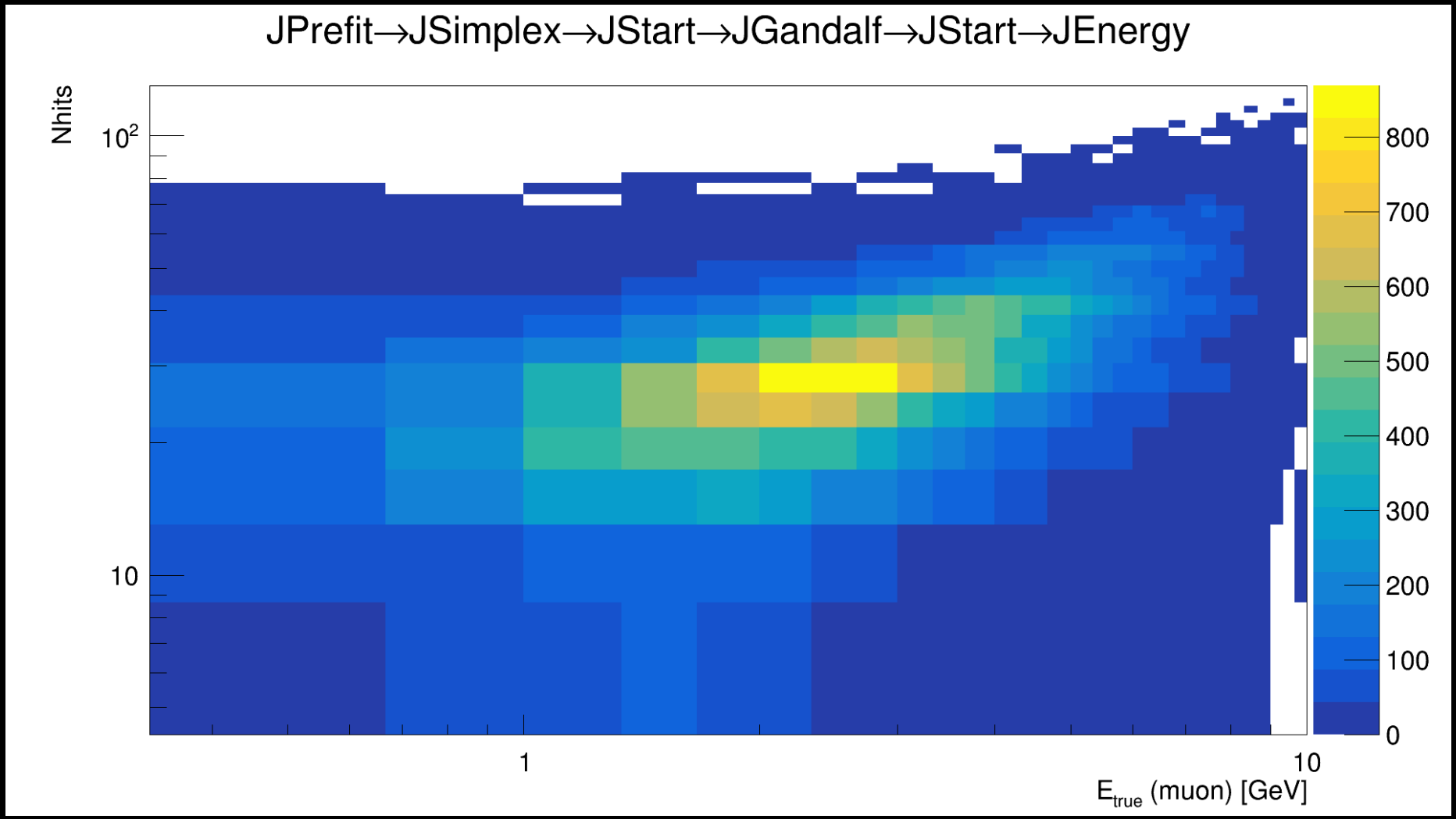
Current status: ORCA 1-10 GeV



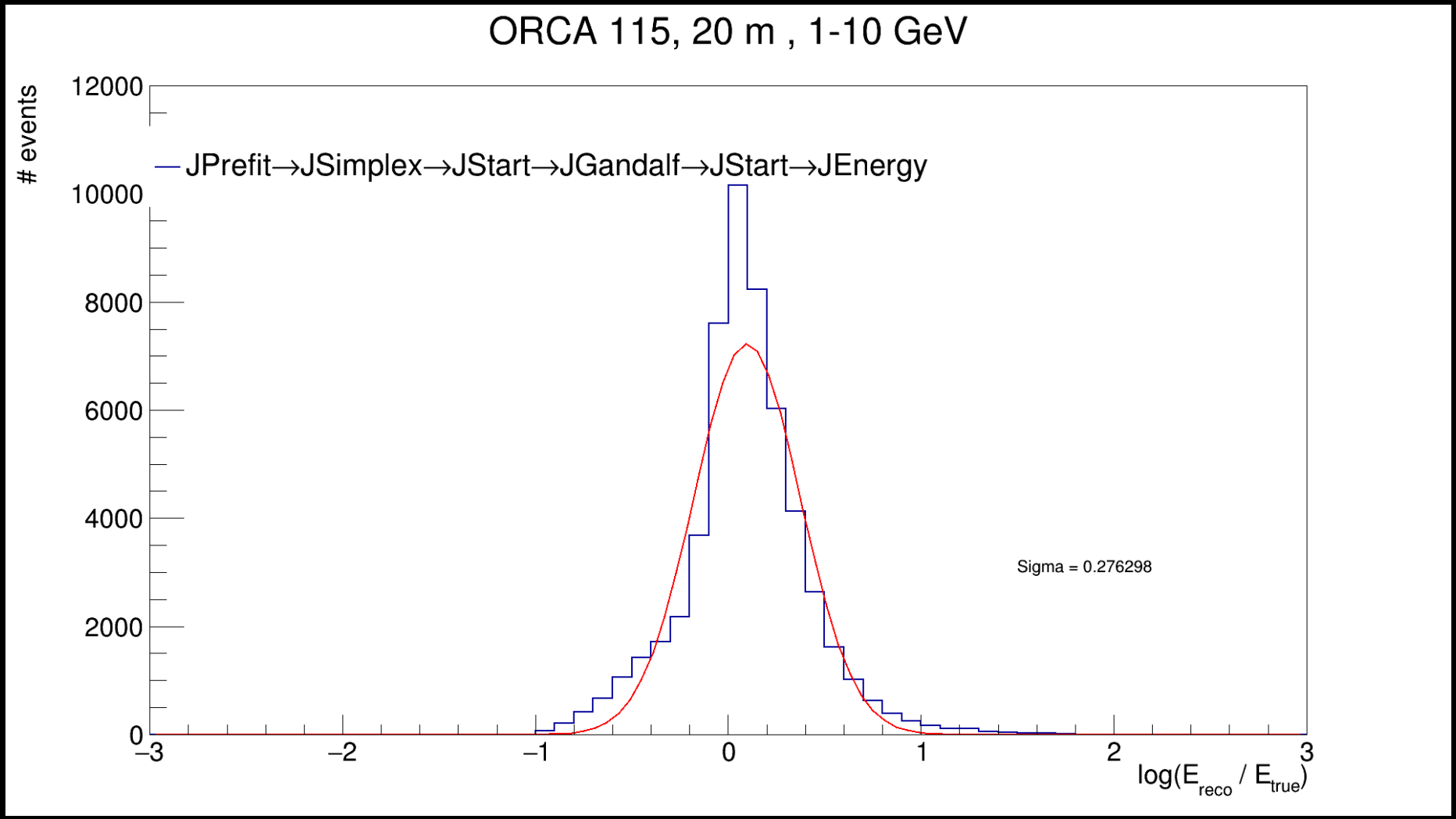
ORCA 1-10 GeV


JPrefit→JSimplex→JStart→JGandalf→JStart→JEnergy
Nhits
0
20
40
60
80
100
120
0
1
2
3
4
5
6
7
8
9
10
E_true (muon) [GeV]
0
100
200
300
400
500
600
700
800

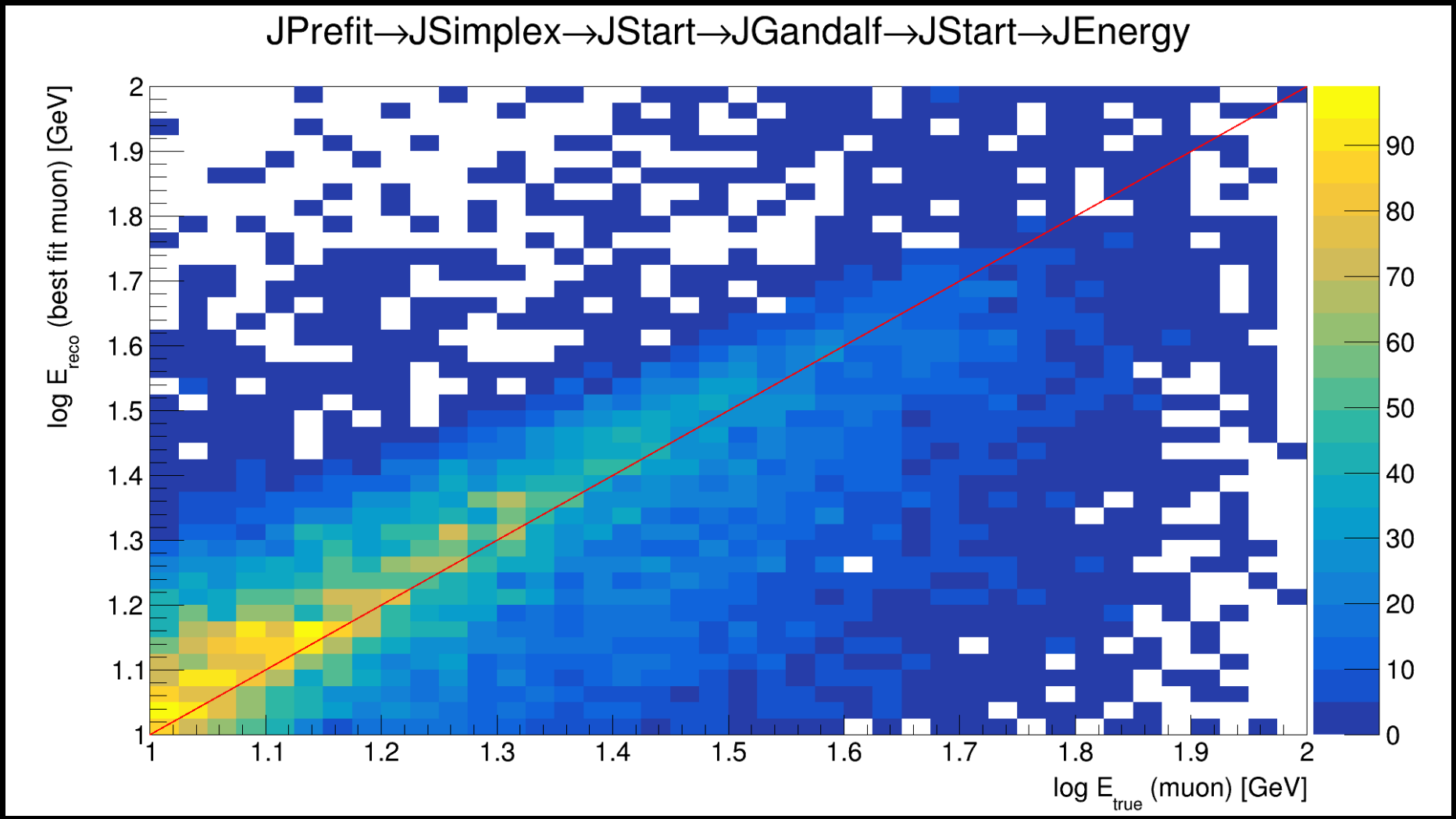
ORCA 1-10 GeV


JPrefit→JSimplex→JStart→JGandalf→JStart→JEnergy
Nhits
10^2
10
1
10
E_{true} (muon) [GeV]
800
700
600
500
400
300
200
100
0

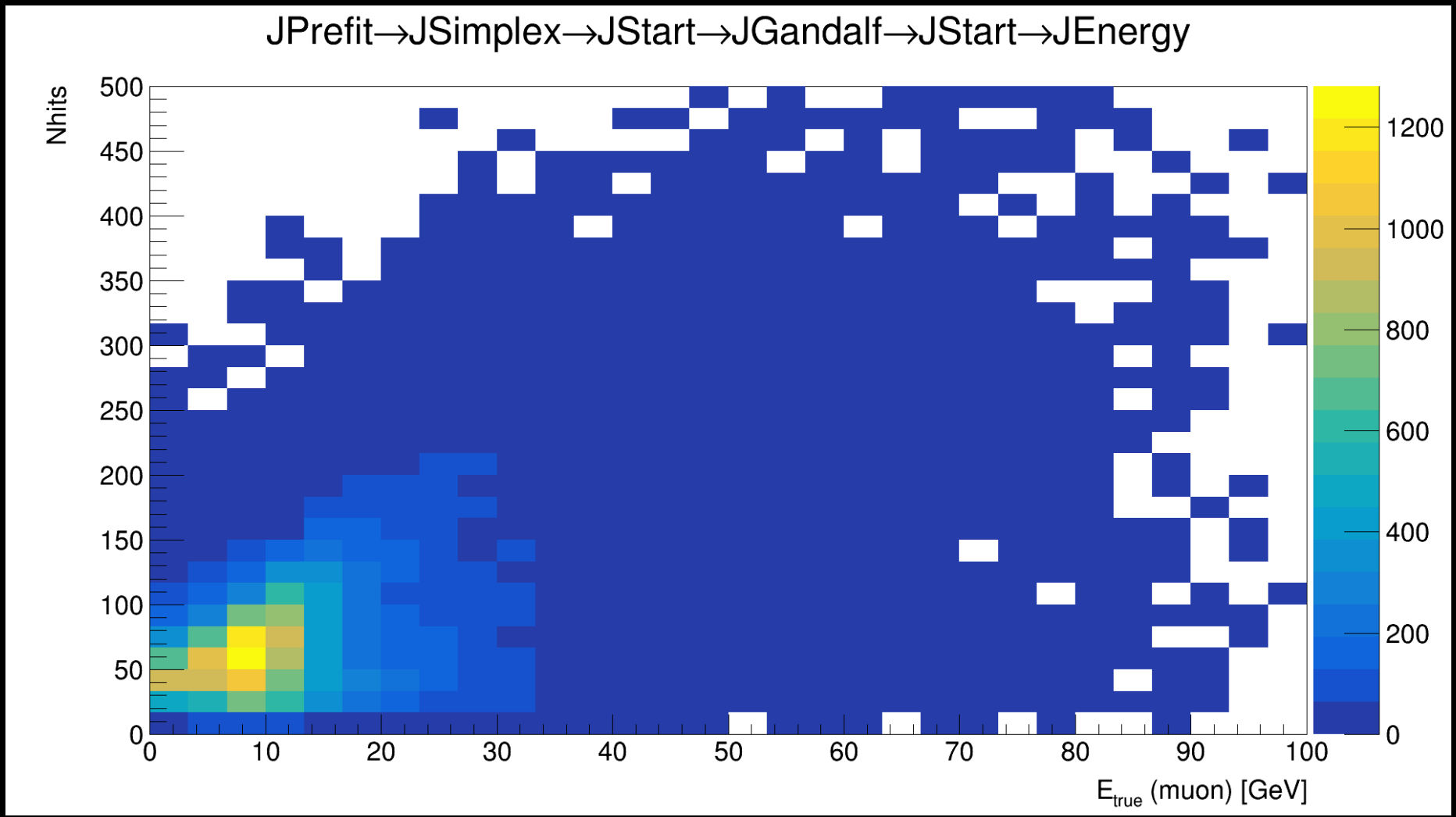
ORCA 1-10 GeV


ORCA 115, 20 m , 1-10 GeV
events
12000
10000
8000
6000
4000
2000
0
JPrefit→JSimplex→JStart→JGandalf→JStart→JEnergy
Sigma = 0.276298
−3
−2
−1
0
1
2
3
log(E_reco / E_true)

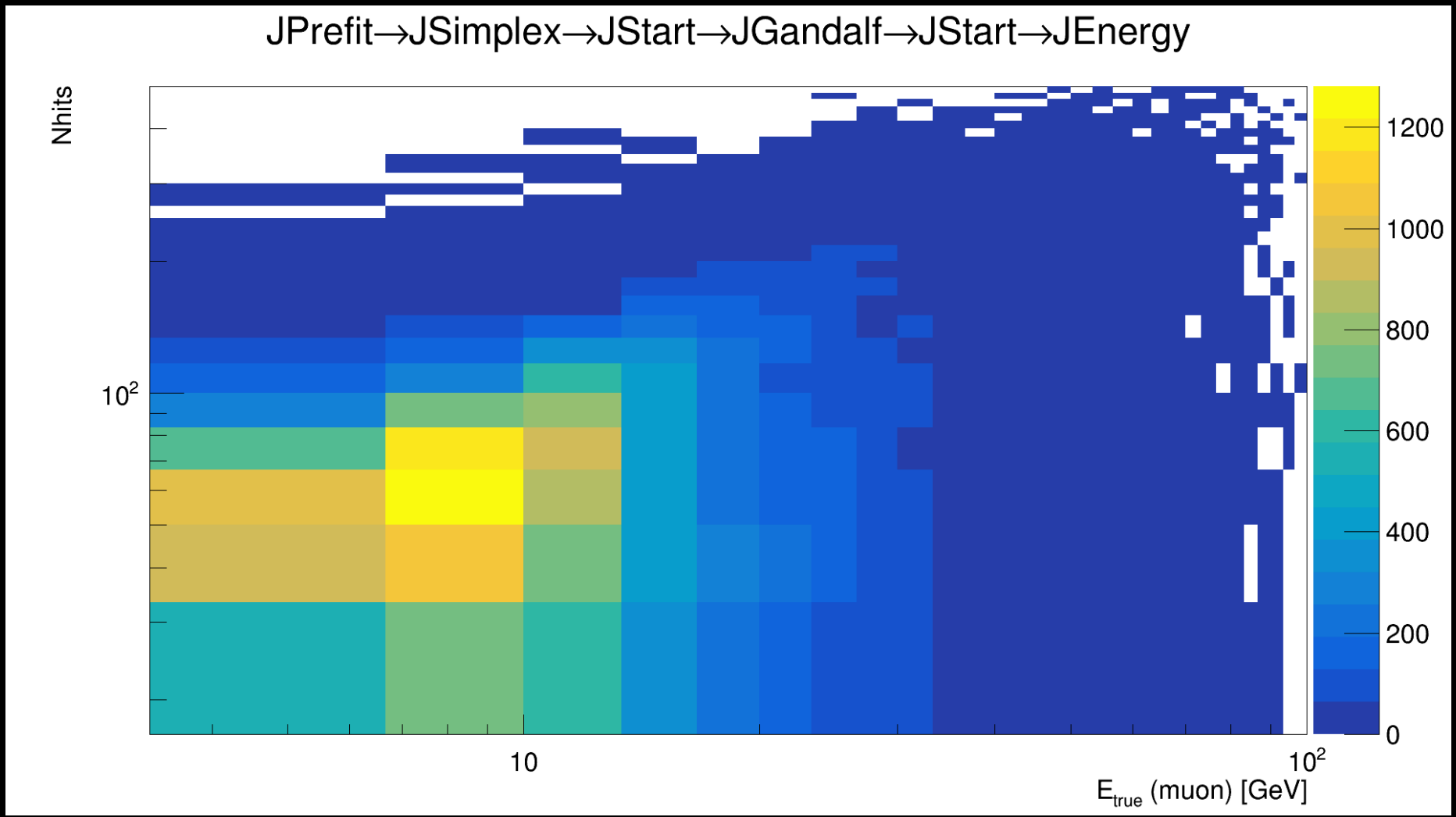
ORCA 10-100 GeV



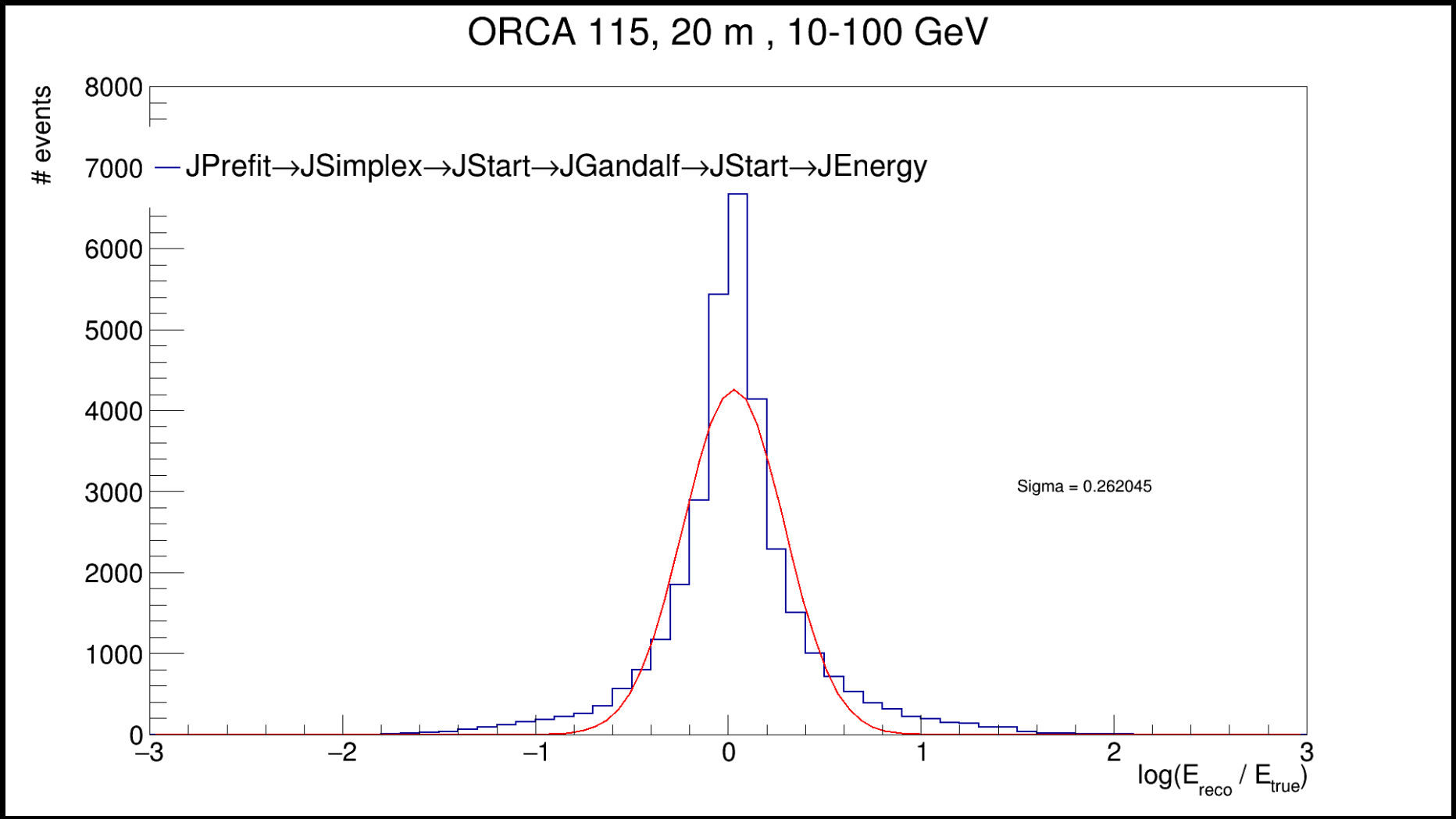
ORCA 10-100 GeV



ORCA 10-100 GeV



ORCA 10-100 GeV



- Energy correction issue raised here: https://git.km3net.de/common/data_processing/issues/11