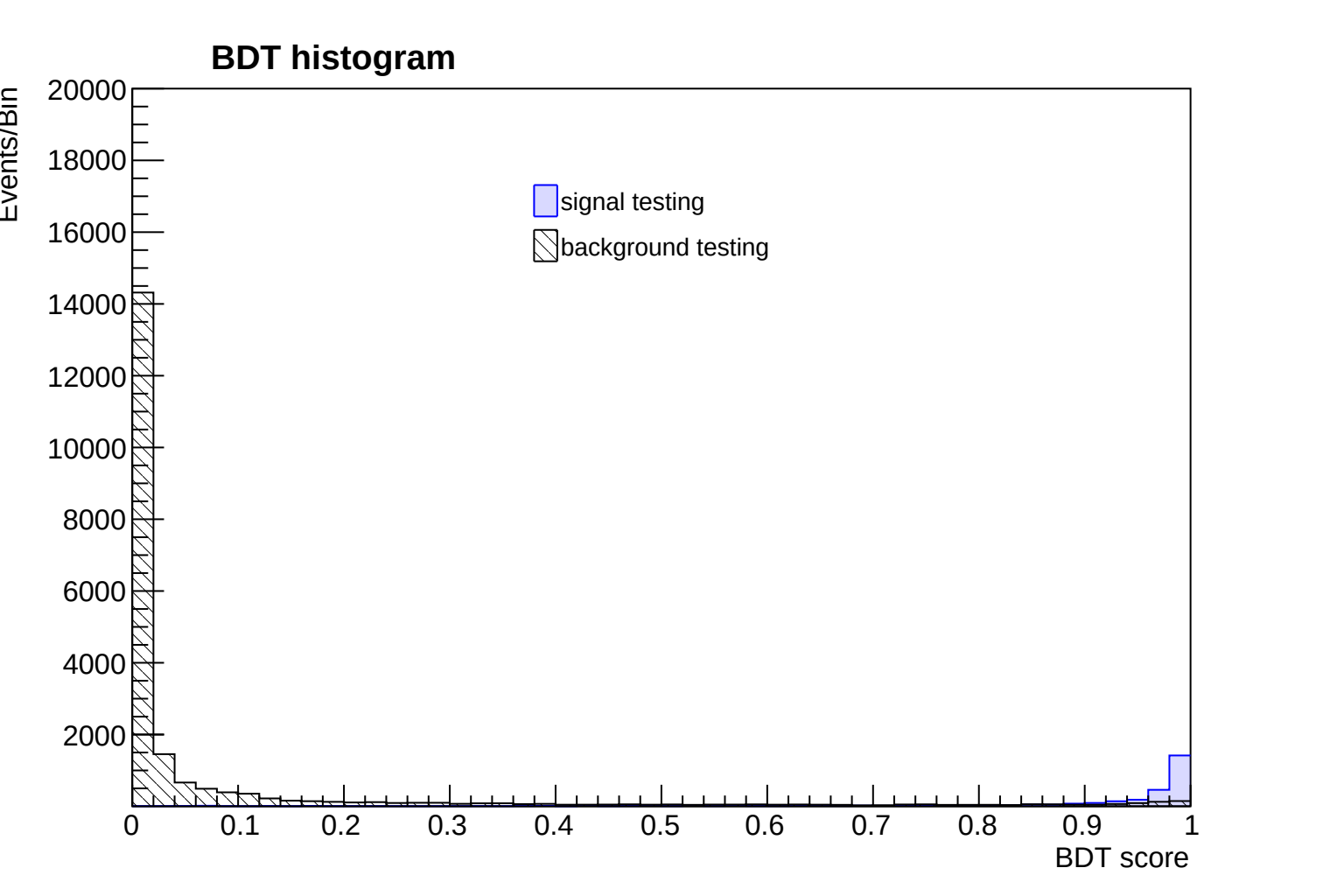
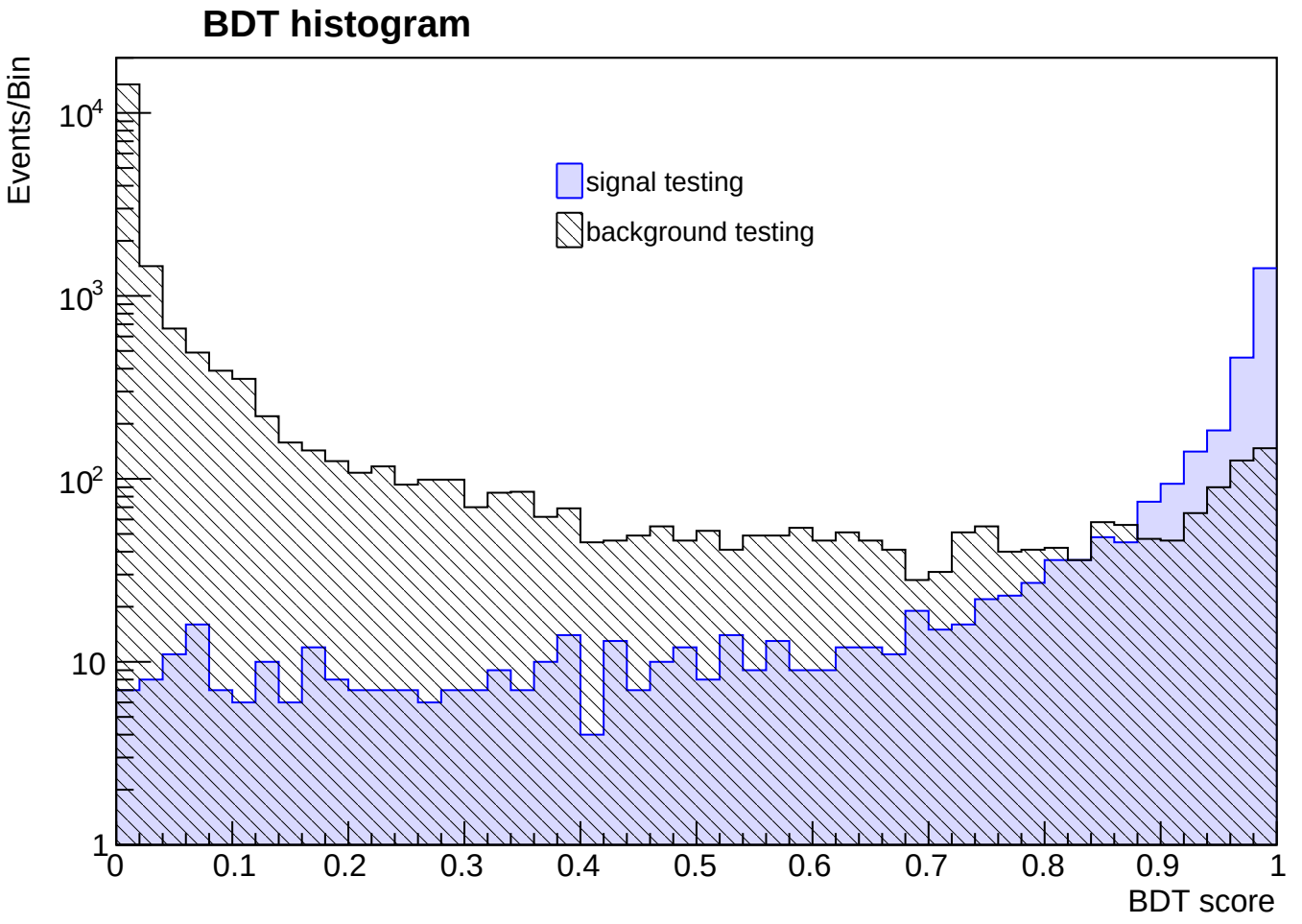
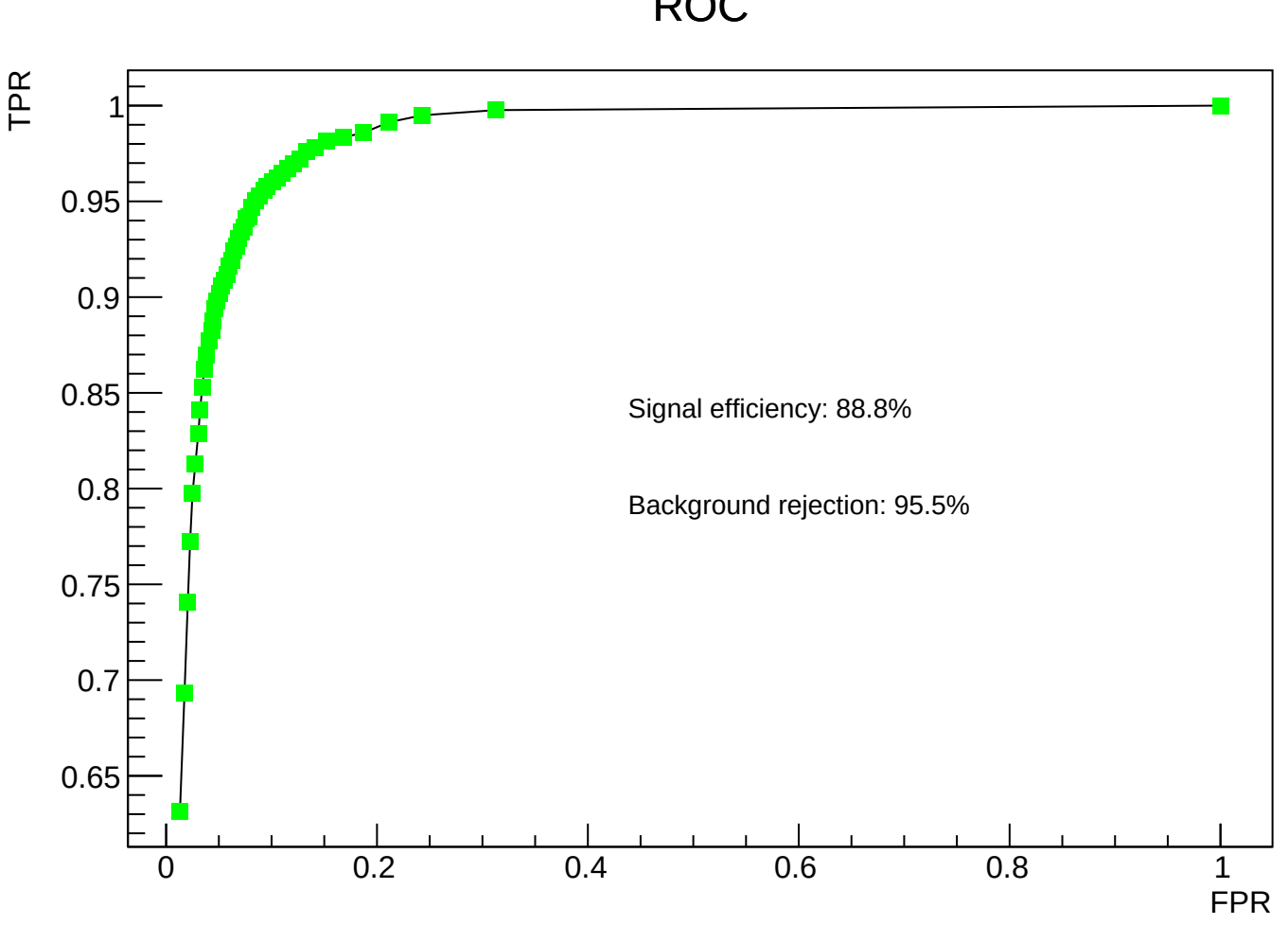
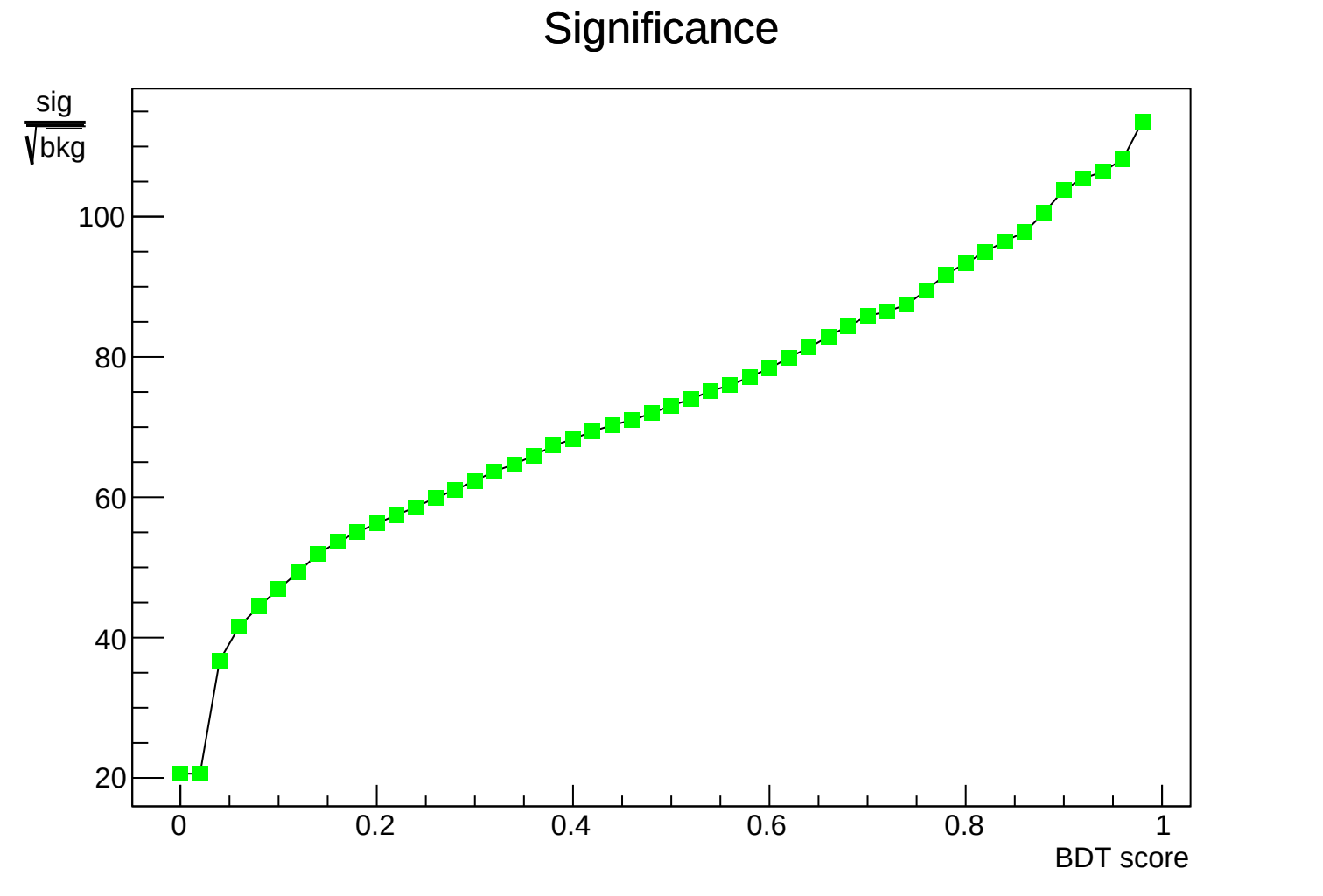
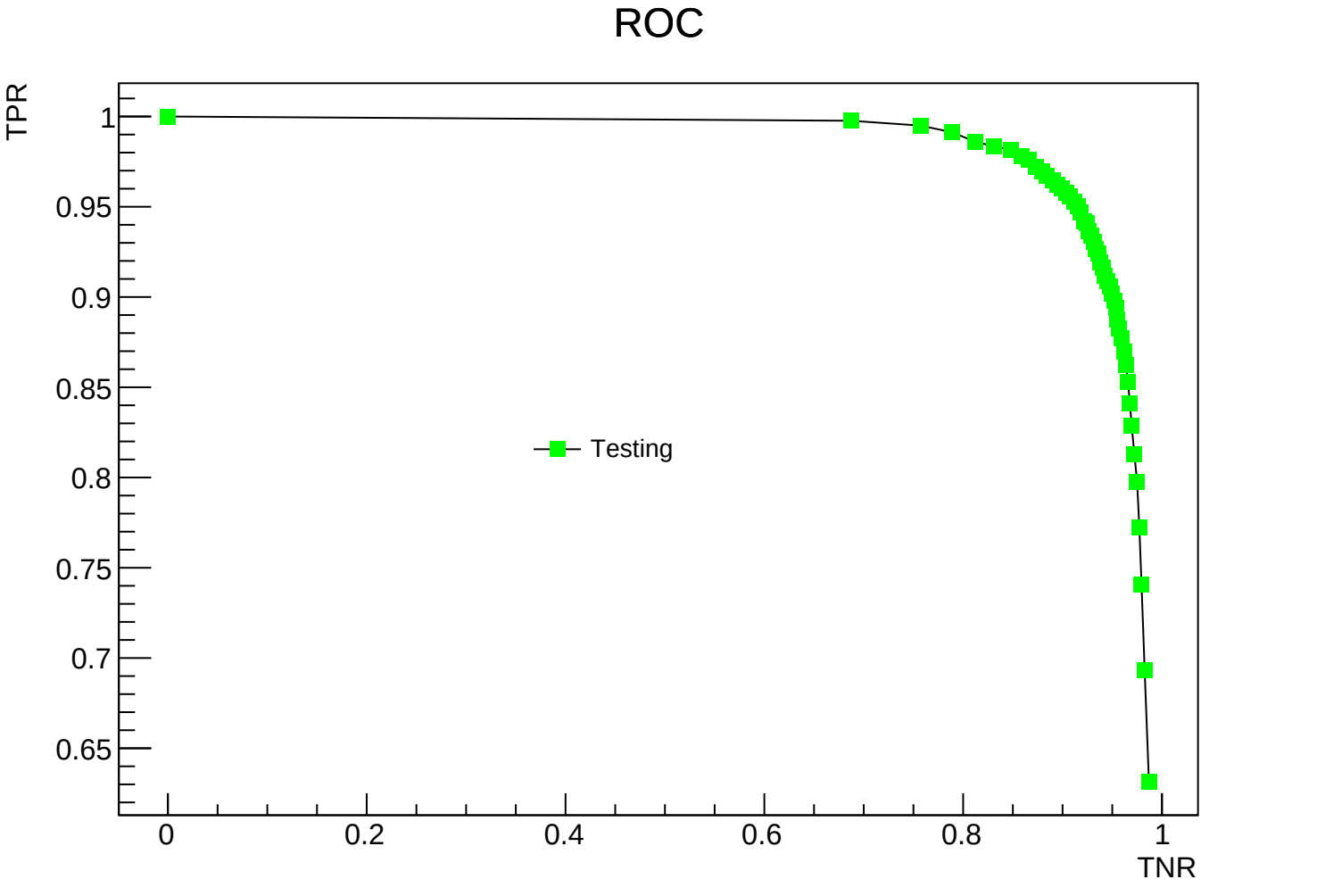
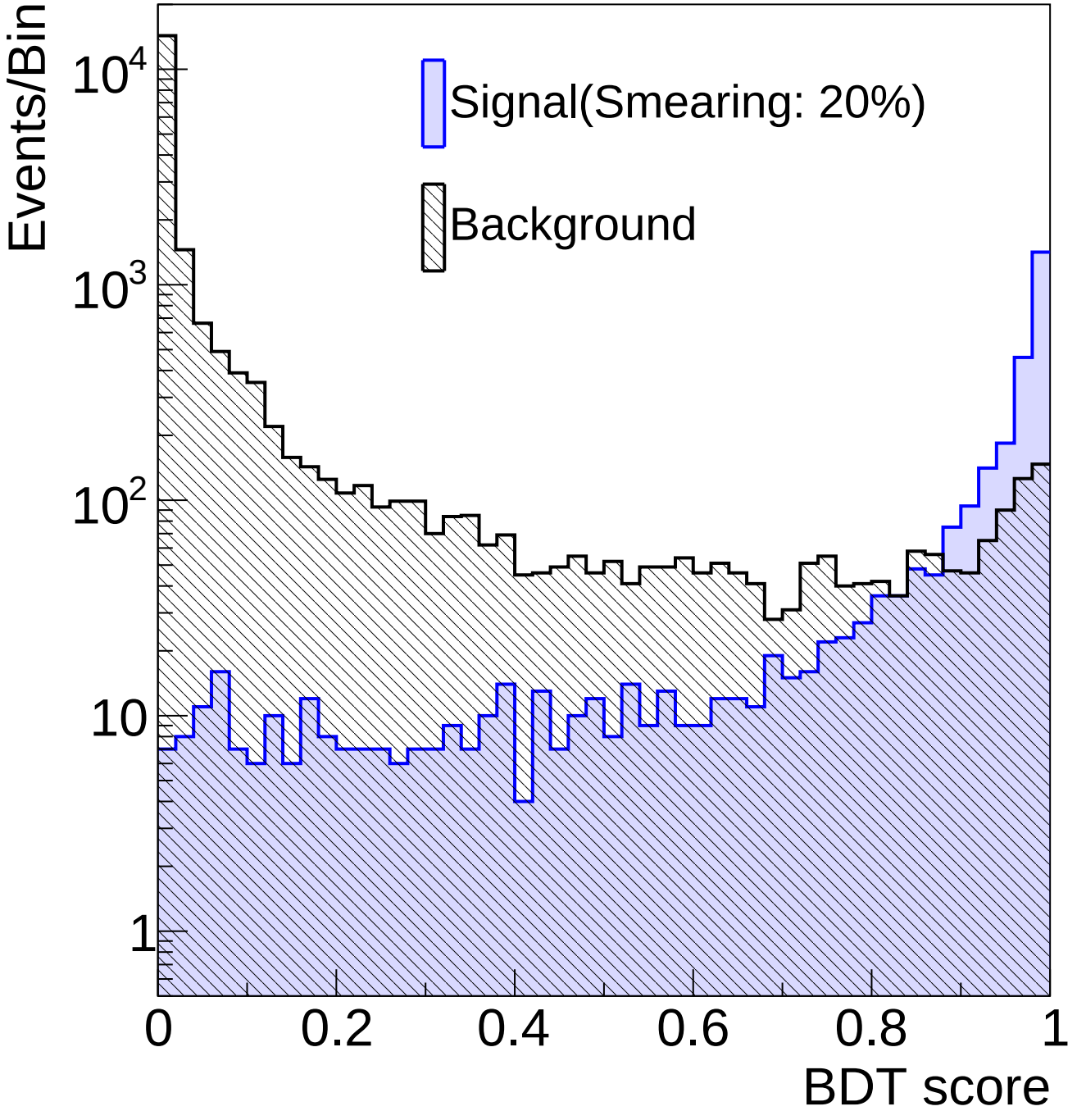

BDT histogram
Events/Bin
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
signal testing
background testing
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
BDT score


BDT histogram
Events/Bin
10^4
10^3
10^2
10
1
signal testing
background testing
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
BDT score


ROC
TPR
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
0
0.2
0.4
0.6
0.8
1
FPR
Signal efficiency: 88.8%
Background rejection: 95.5%


Significance
sig
√bkg
100
80
60
40
20
0
0.2
0.4
0.6
0.8
1
BDT score


ROC
TPR
1
0.95
0.9
0.85
0.8
0.75
0.7
0.65
Testing
0
0.2
0.4
0.6
0.8
1
TNR


Events/Bin
10^4
10^3
10^2
10
1
Signal(Smearing: 20%)
Background
0
0.2
0.4
0.6
0.8
1
BDT score