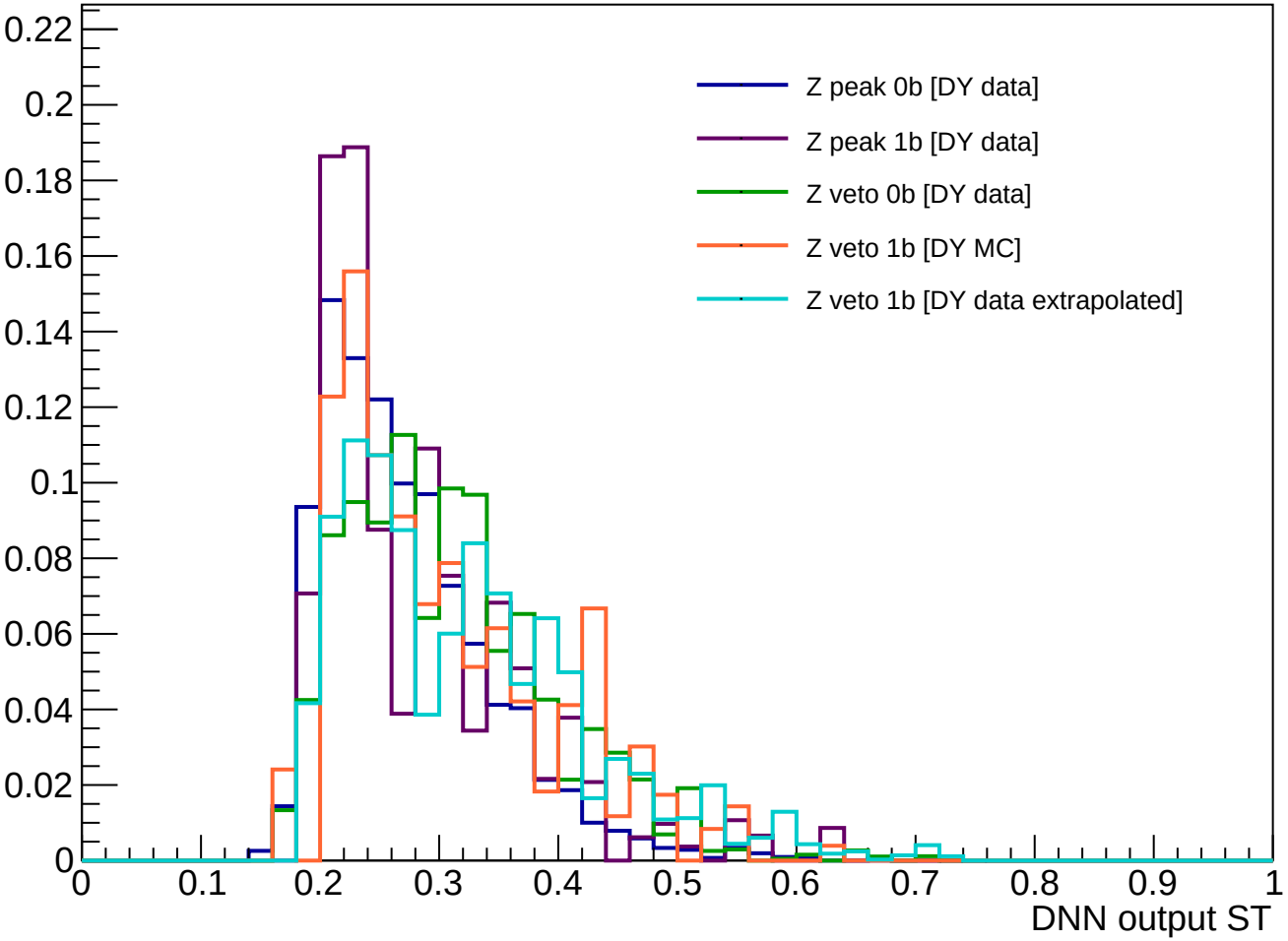
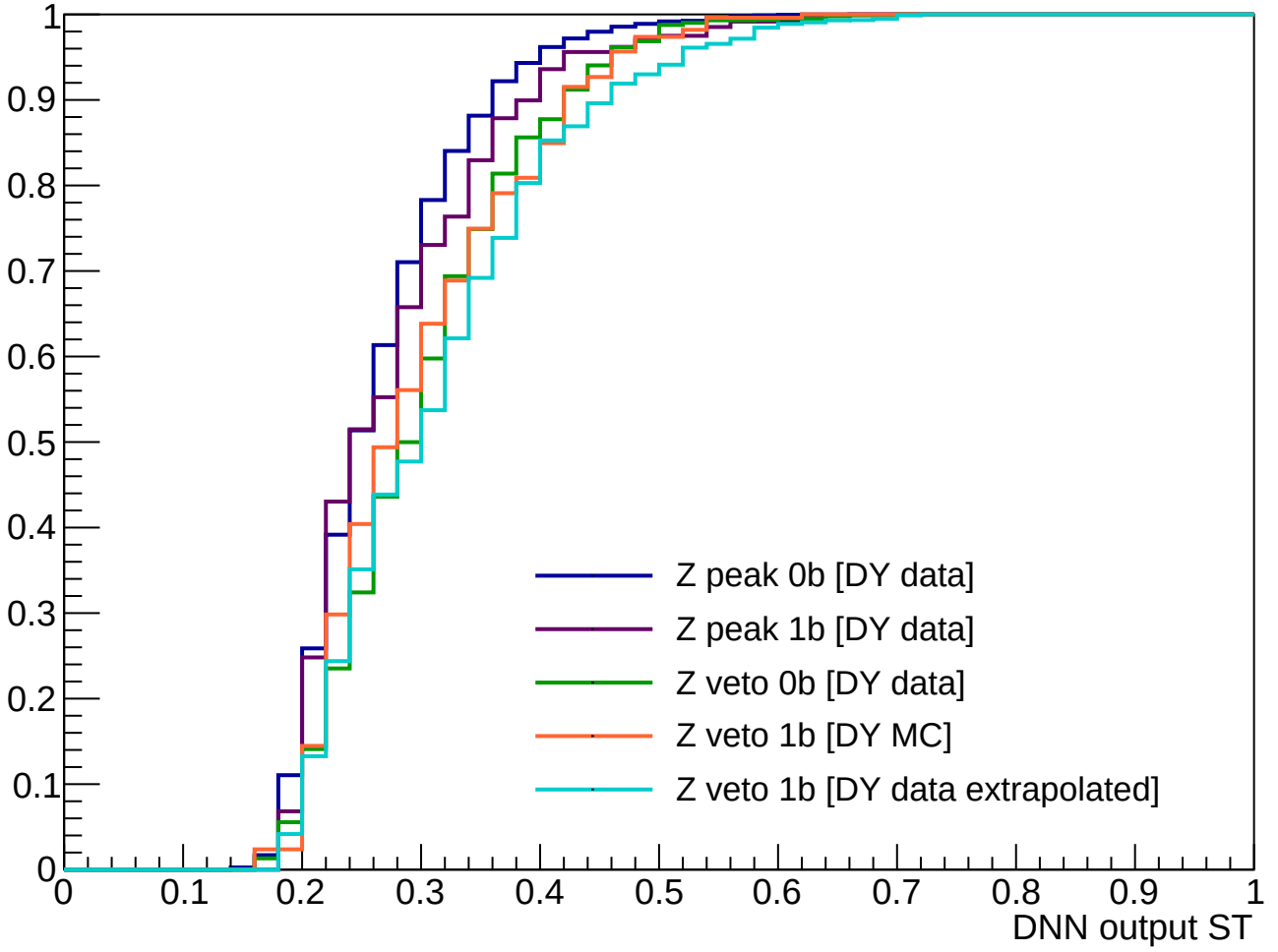
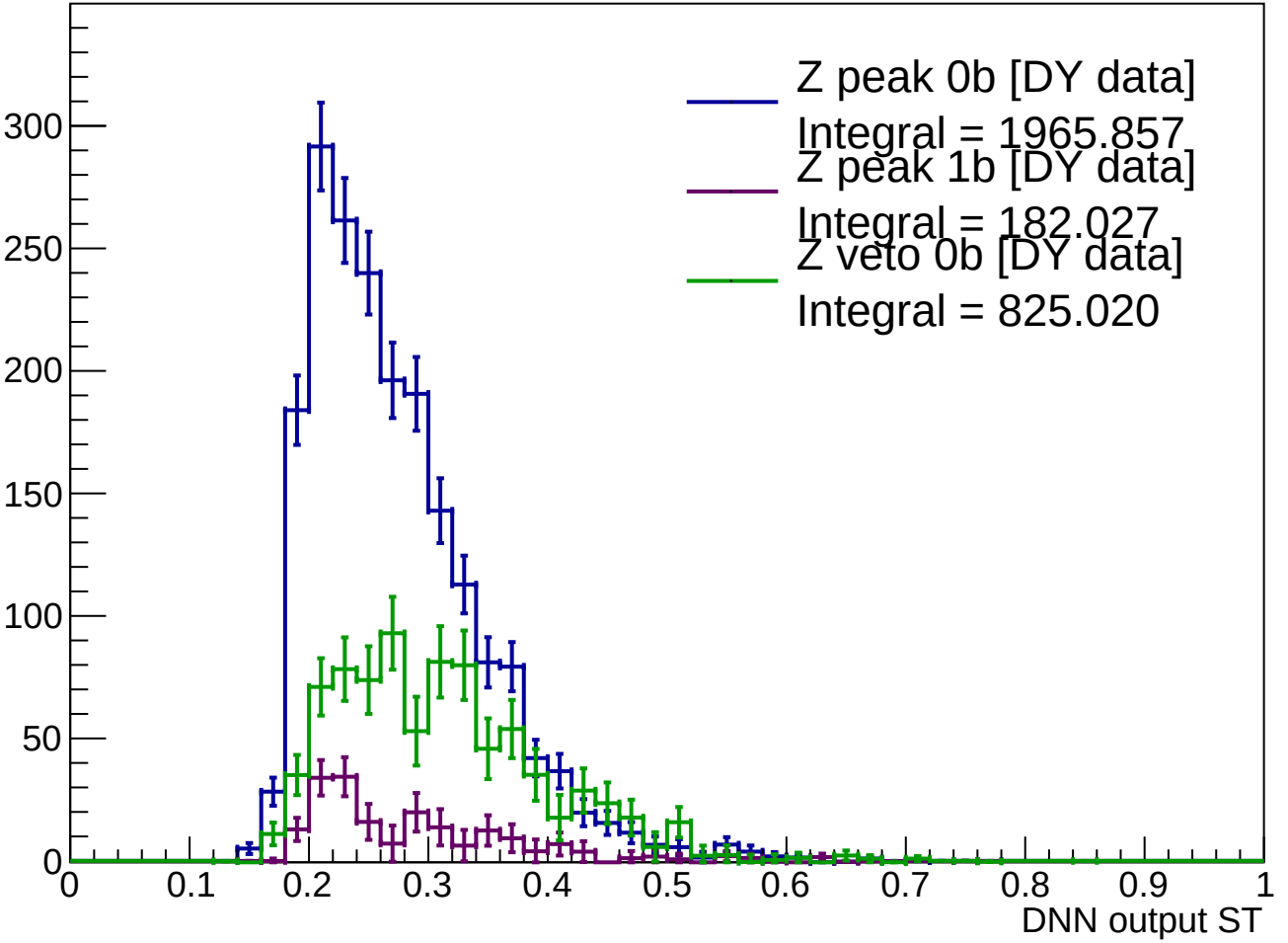
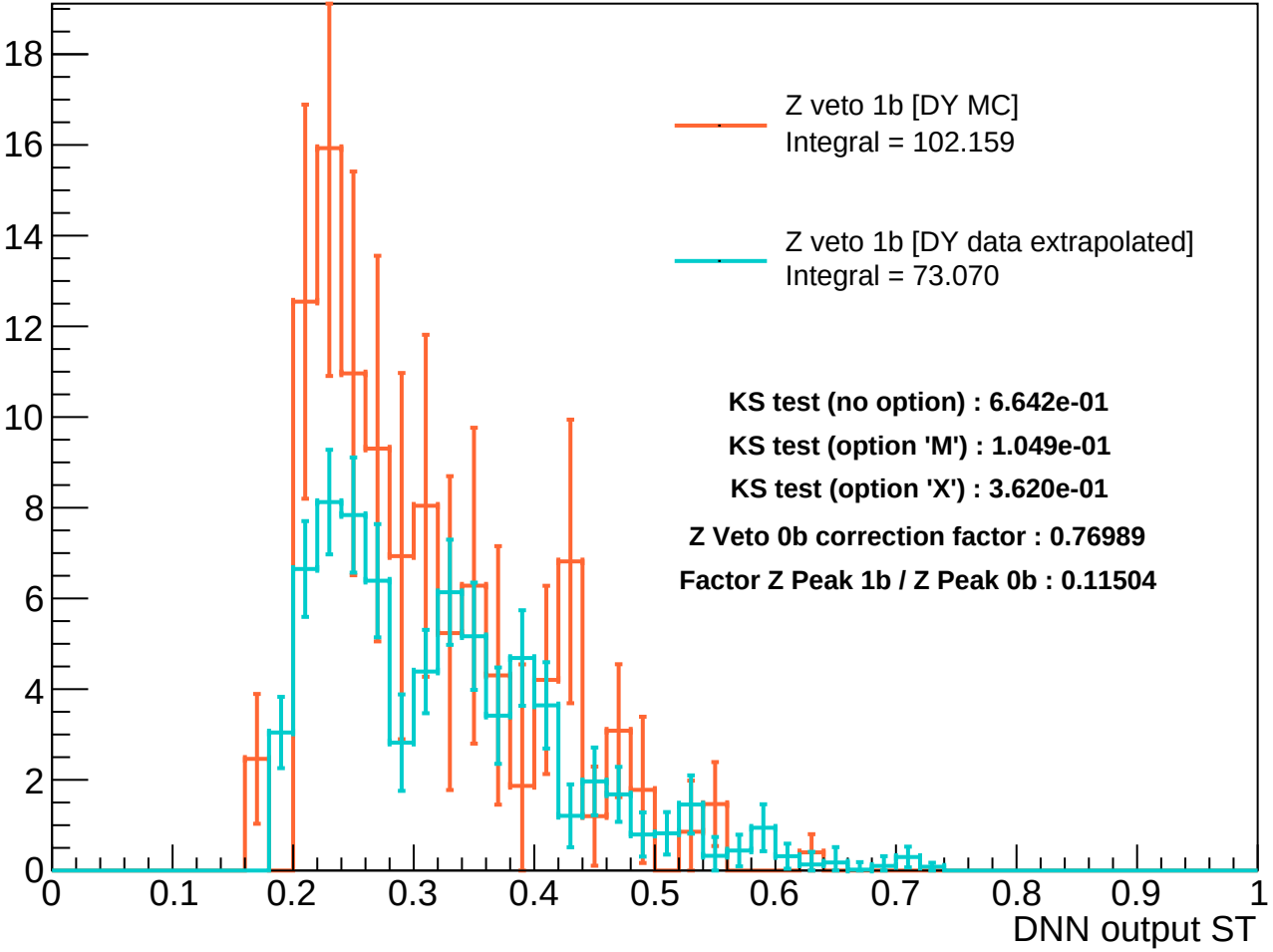
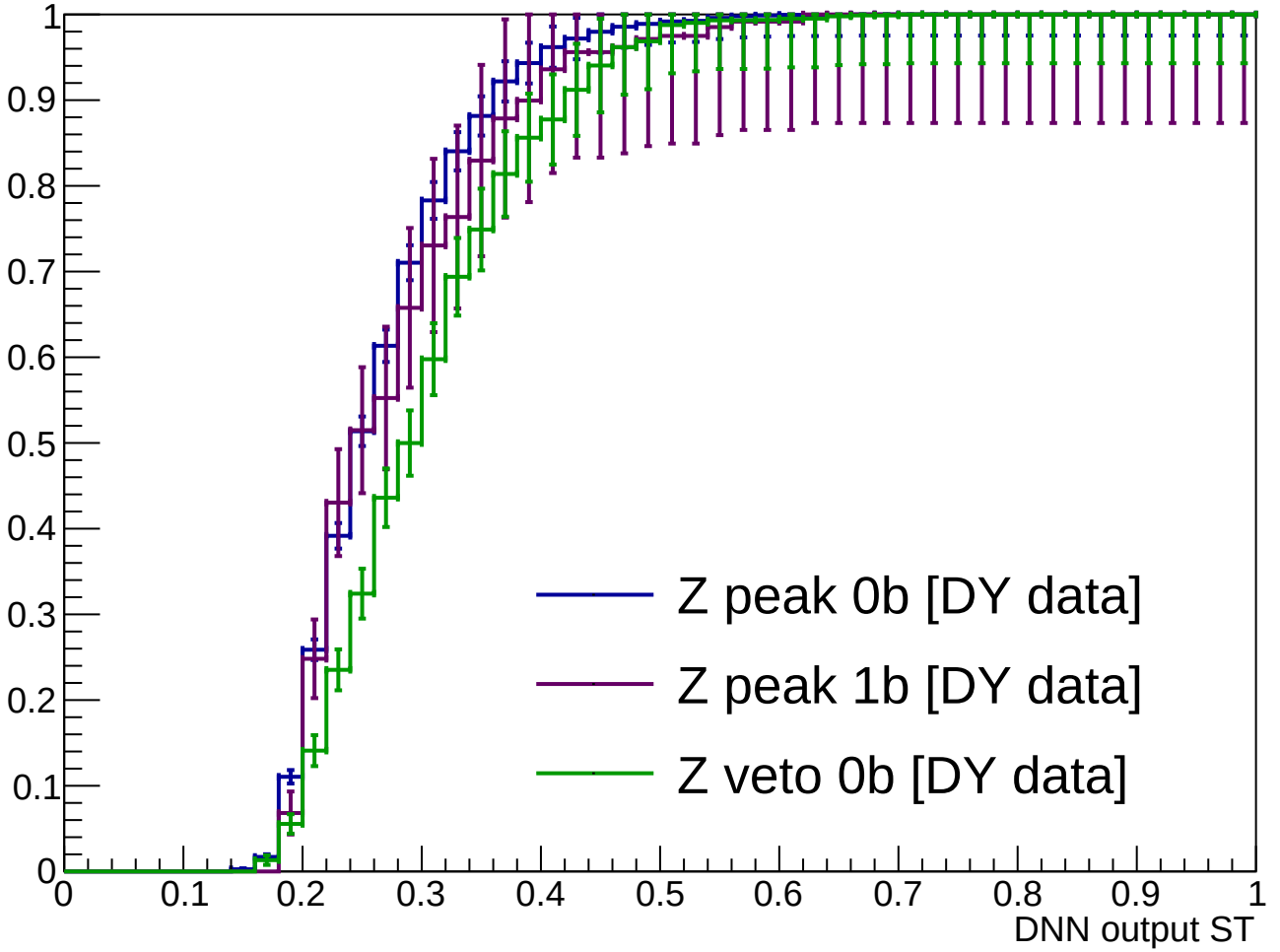
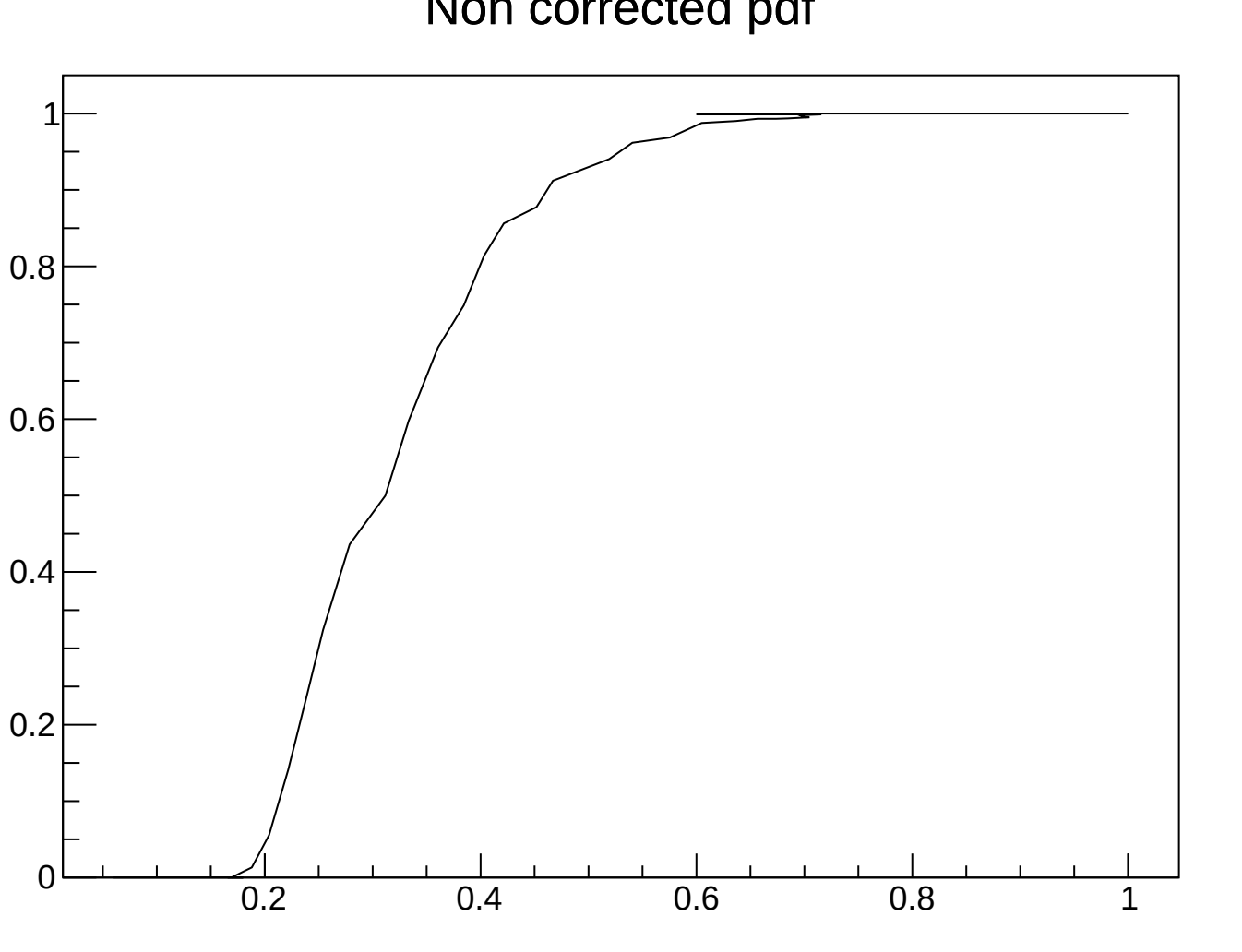

Z peak 0b [DY data]
Z peak 1b [DY data]
Z veto 0b [DY data]
Z veto 1b [DY MC]
Z veto 1b [DY data extrapolated]
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST

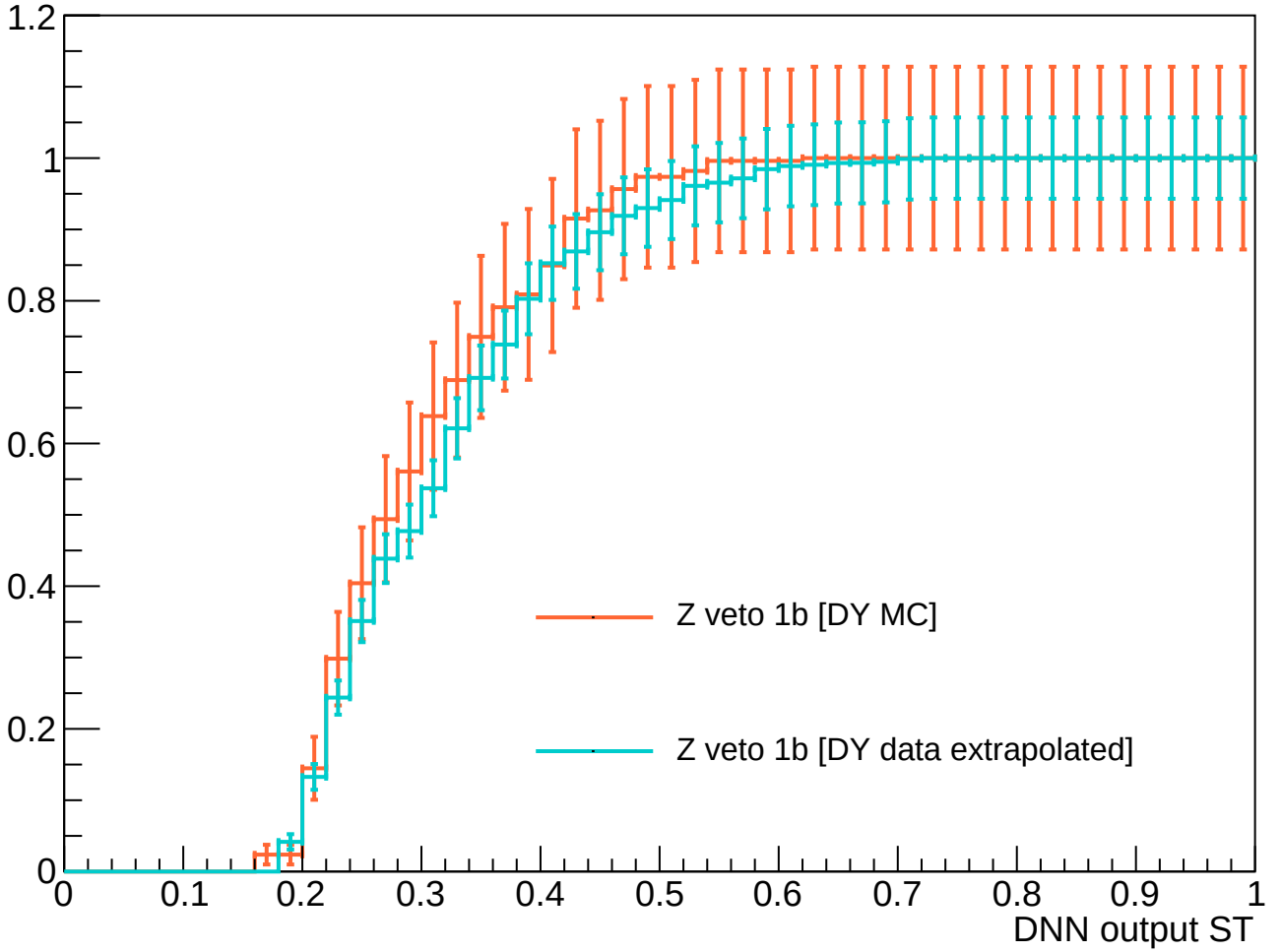

1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST
Z peak 0b [DY data]
Z peak 1b [DY data]
Z veto 0b [DY data]
Z veto 1b [DY MC]
Z veto 1b [DY data extrapolated]

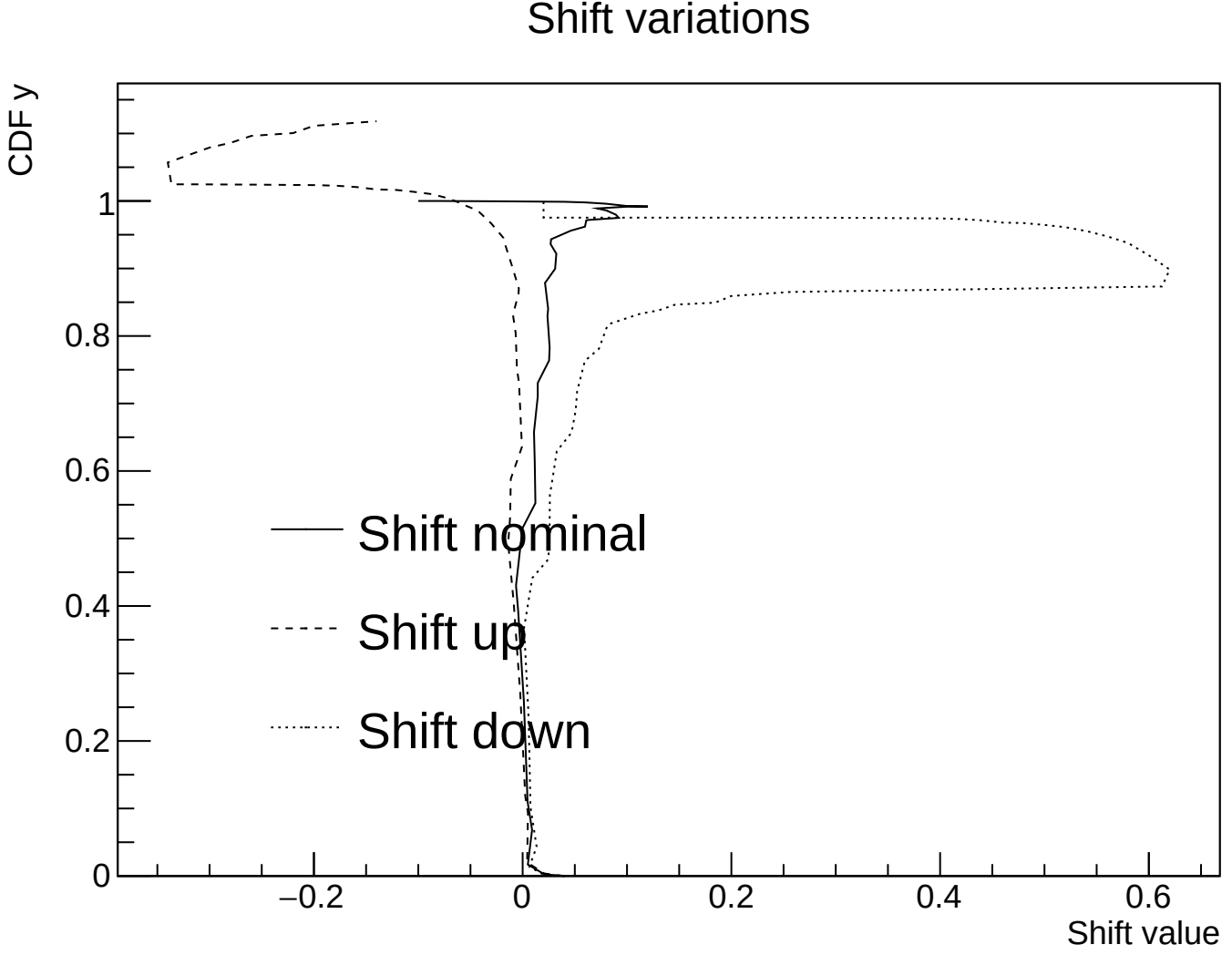

Z peak 0b [DY data]
Integral = 1965.857
Z peak 1b [DY data]
Integral = 182.027
Z veto 0b [DY data]
Integral = 825.020
300
250
200
150
100
50
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST

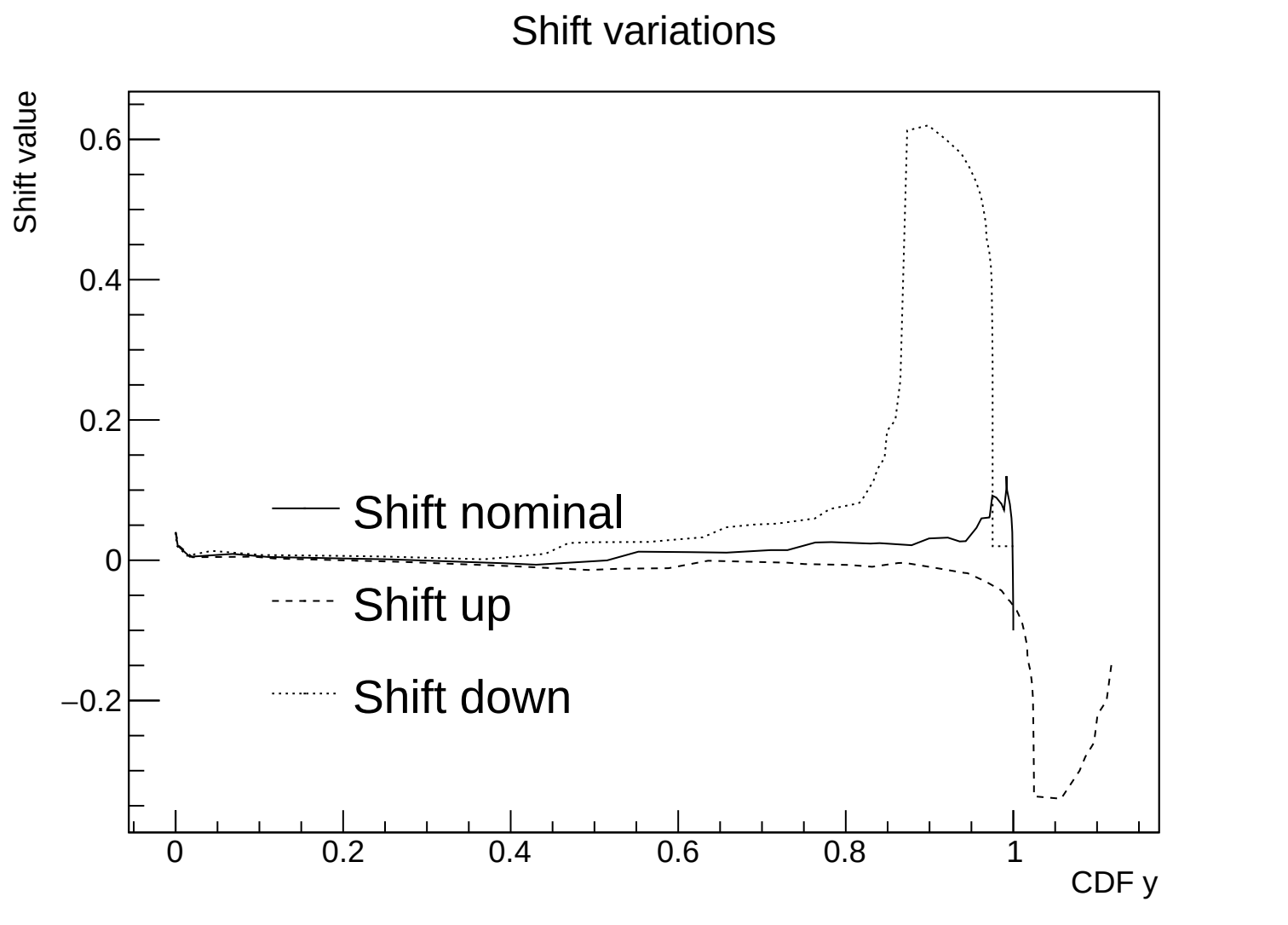

Z veto 1b [DY MC]
Integral = 102.159
Z veto 1b [DY data extrapolated]
Integral = 73.070
KS test (no option) : 6.642e-01
KS test (option 'M') : 1.049e-01
KS test (option 'X') : 3.620e-01
Z Veto 0b correction factor : 0.76989
Factor Z Peak 1b / Z Peak 0b : 0.11504
0
2
4
6
8
10
12
14
16
18
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST

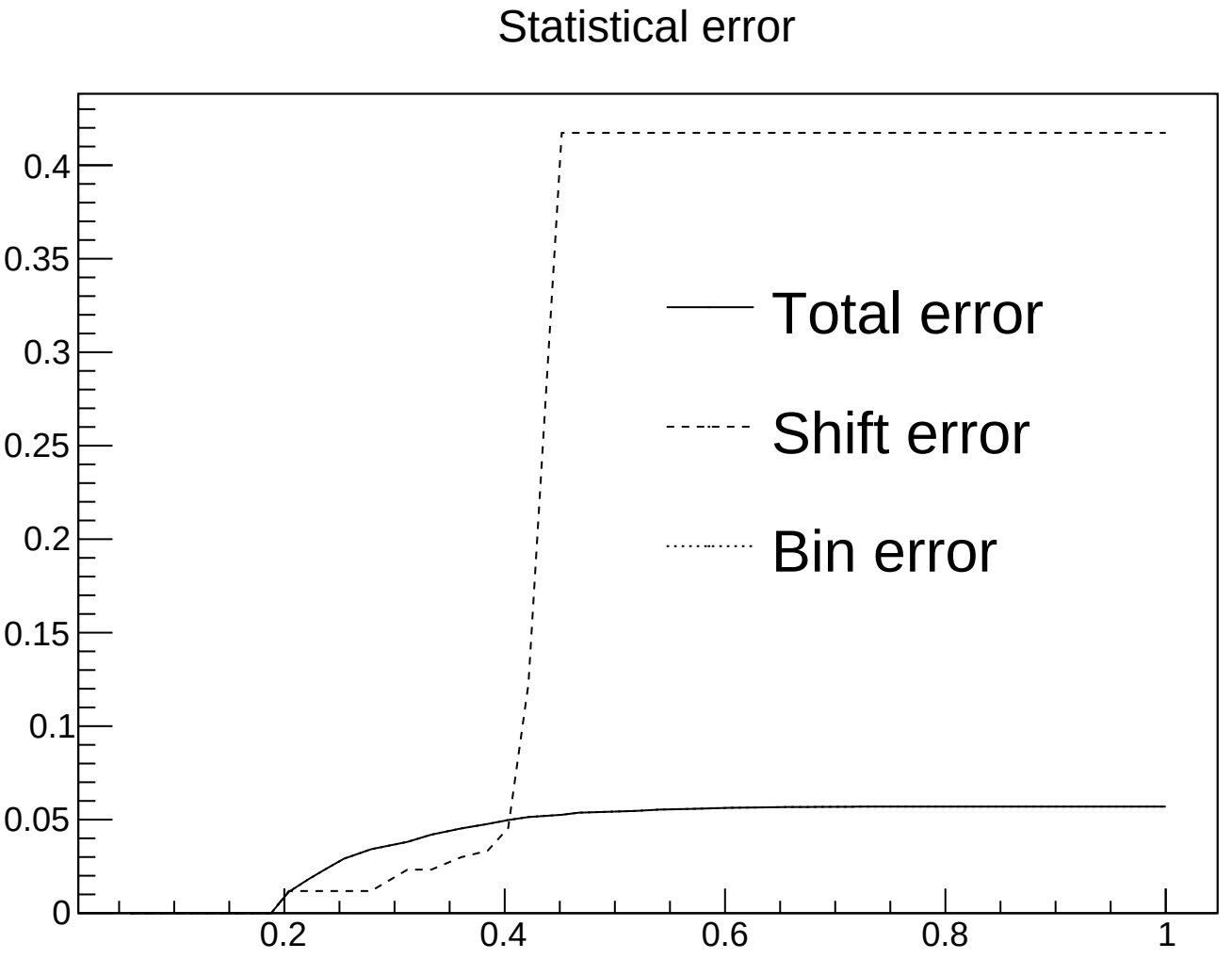

1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST
Z peak 0b [DY data]
Z peak 1b [DY data]
Z veto 0b [DY data]


Non corrected pdf
1
0.8
0.6
0.4
0.2
0
0.2
0.4
0.6
0.8
1


1.2
1
0.8
0.6
0.4
0.2
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST
Z veto 1b [DY MC]
Z veto 1b [DY data extrapolated]


Shift variations
CDF y
1
0.8
0.6
0.4
0.2
0
−0.2
0
0.2
0.4
0.6
Shift value
Shift nominal
Shift up
Shift down


Shift variations
Shift value
0.6
0.4
0.2
0
–0.2
Shift nominal
Shift up
Shift down
0
0.2
0.4
0.6
0.8
1
CDF y


Statistical error
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0.2
0.4
0.6
0.8
1
Total error
Shift error
Bin error