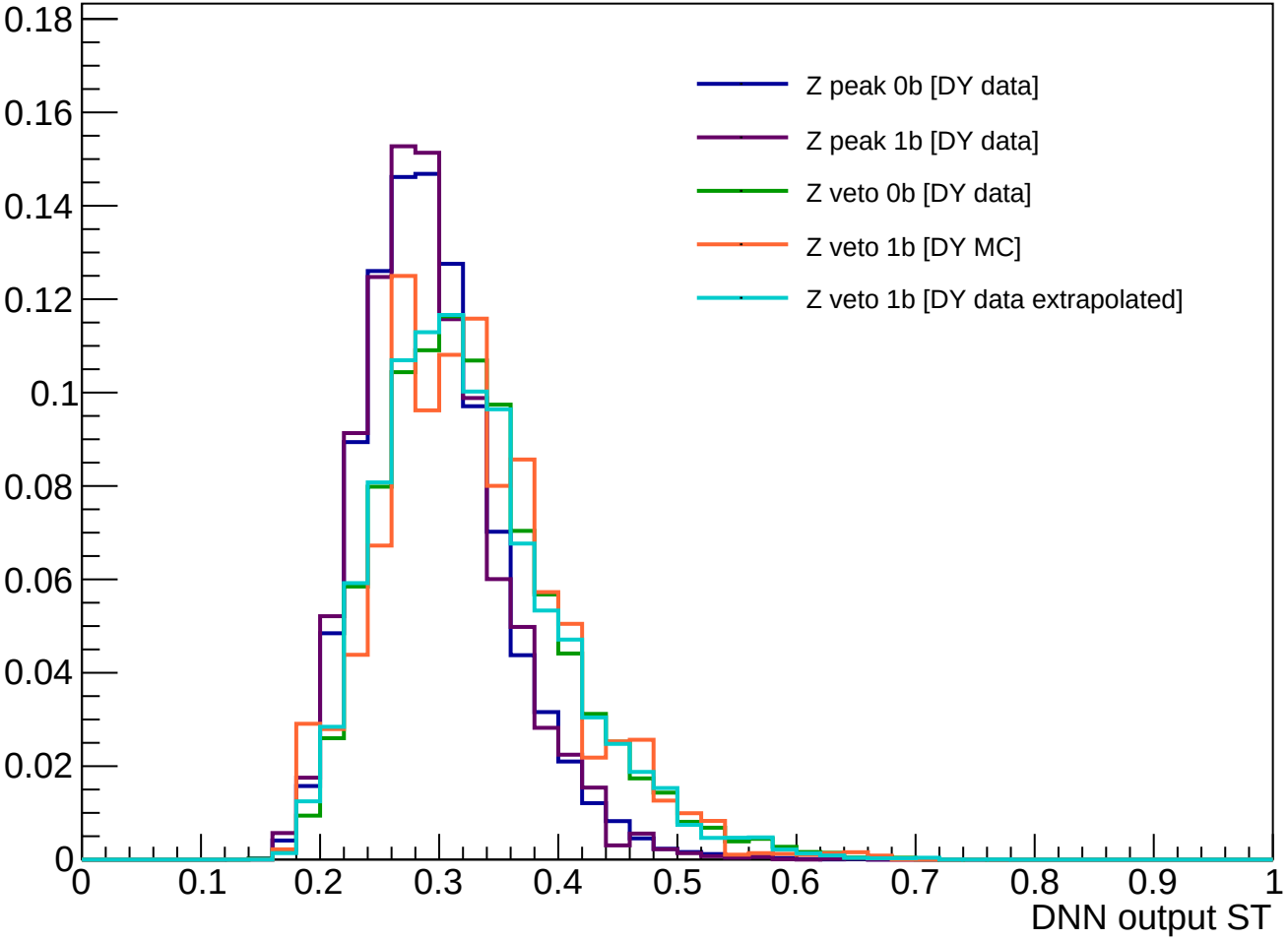
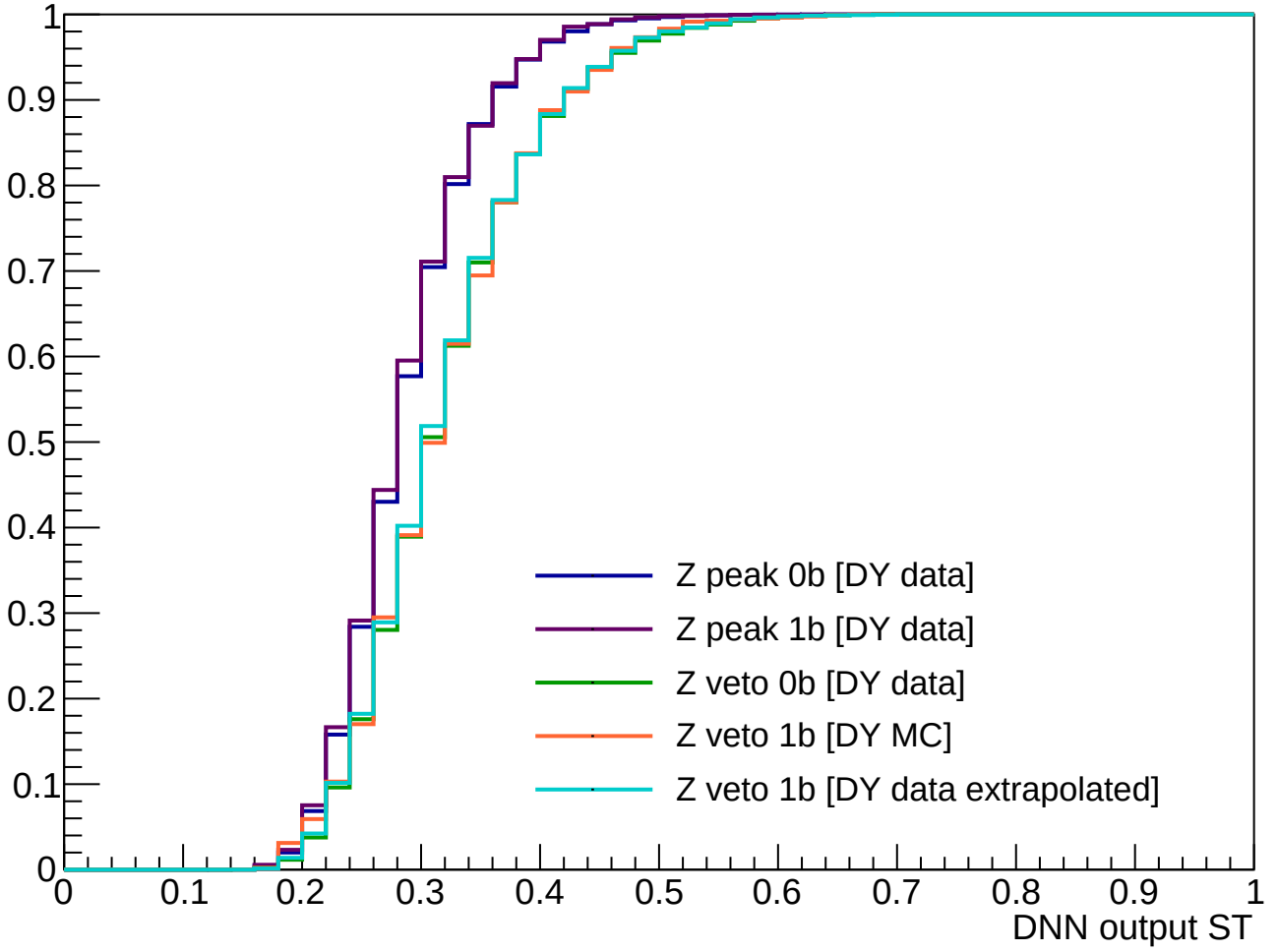
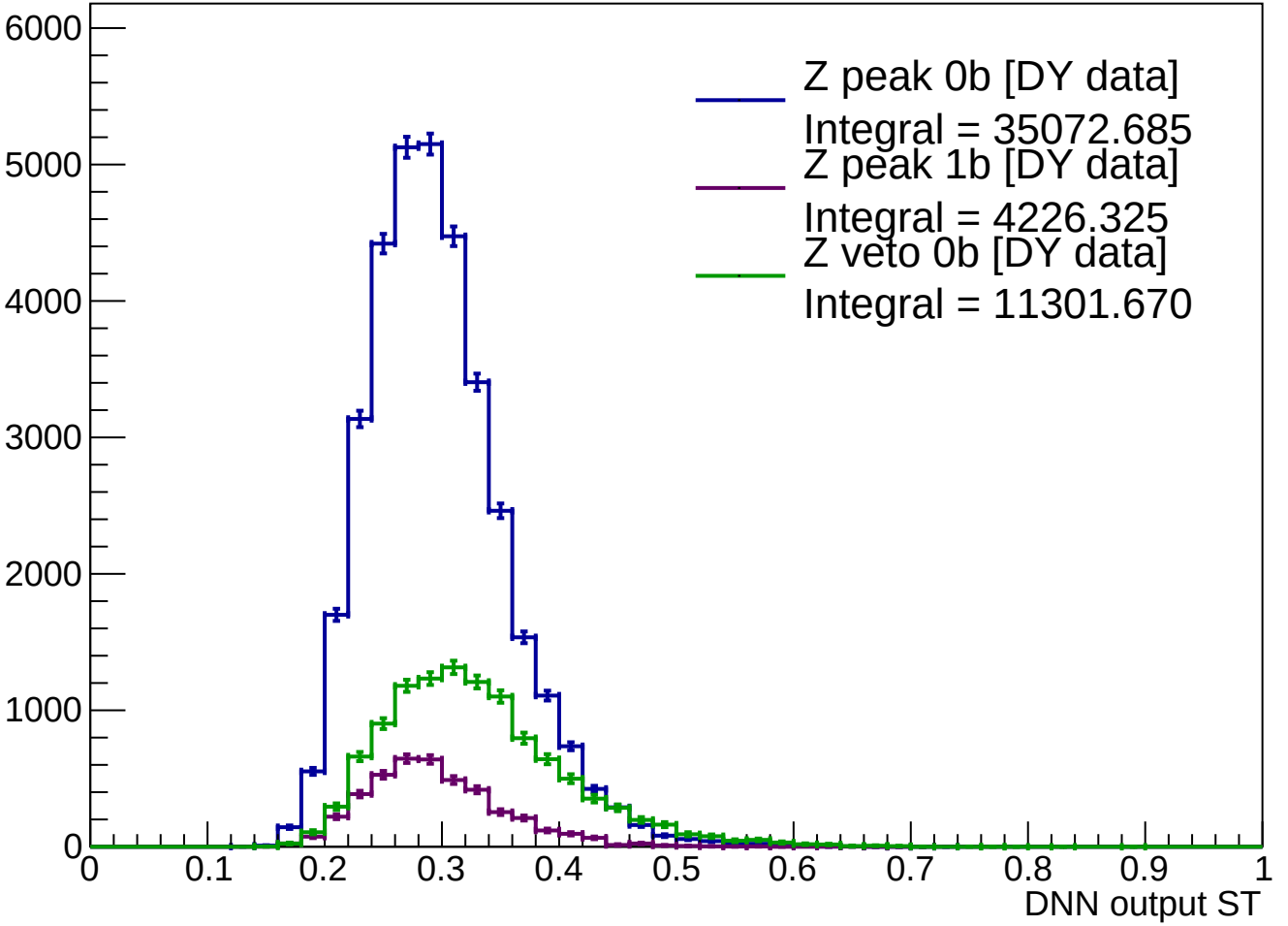
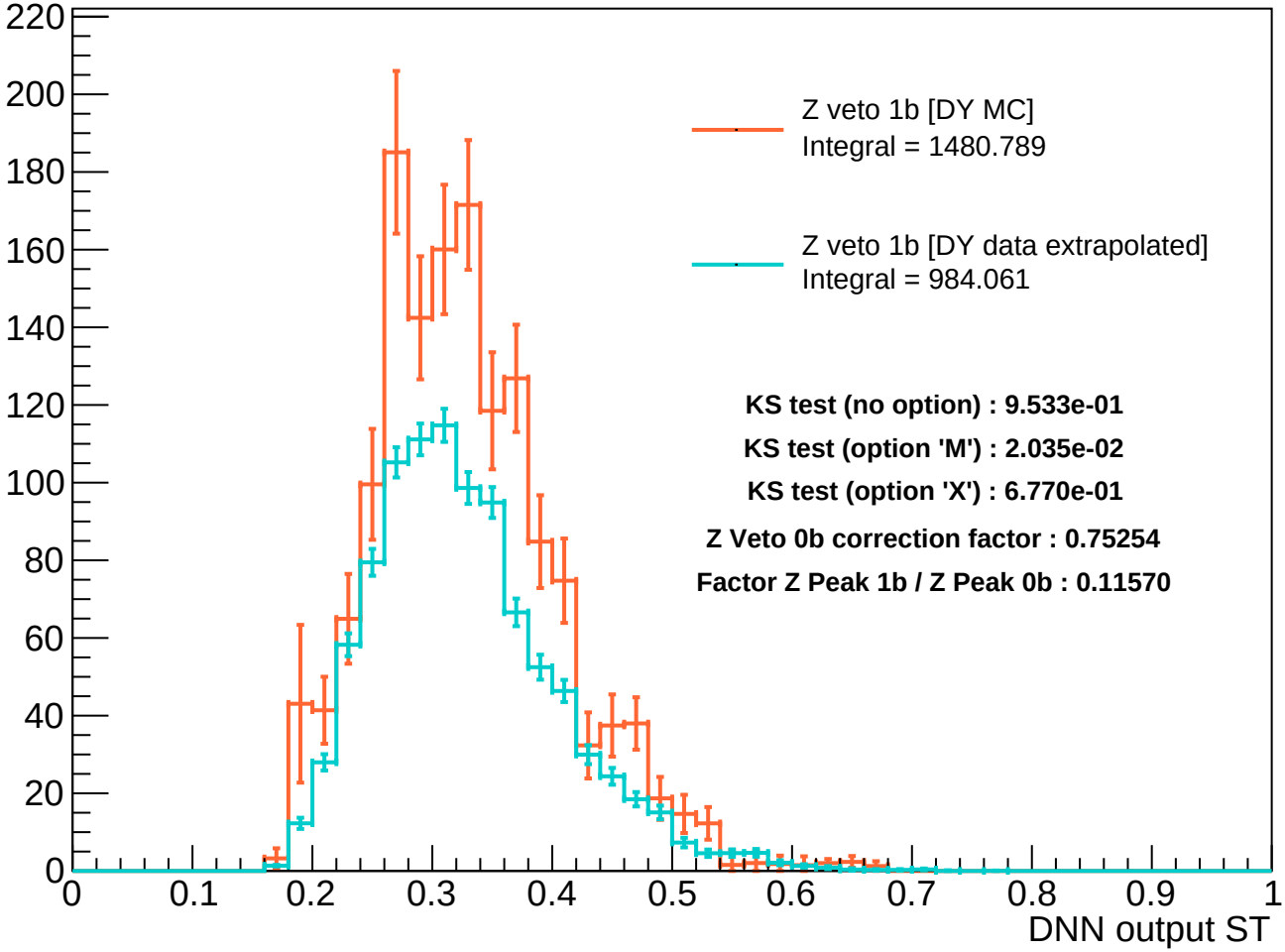
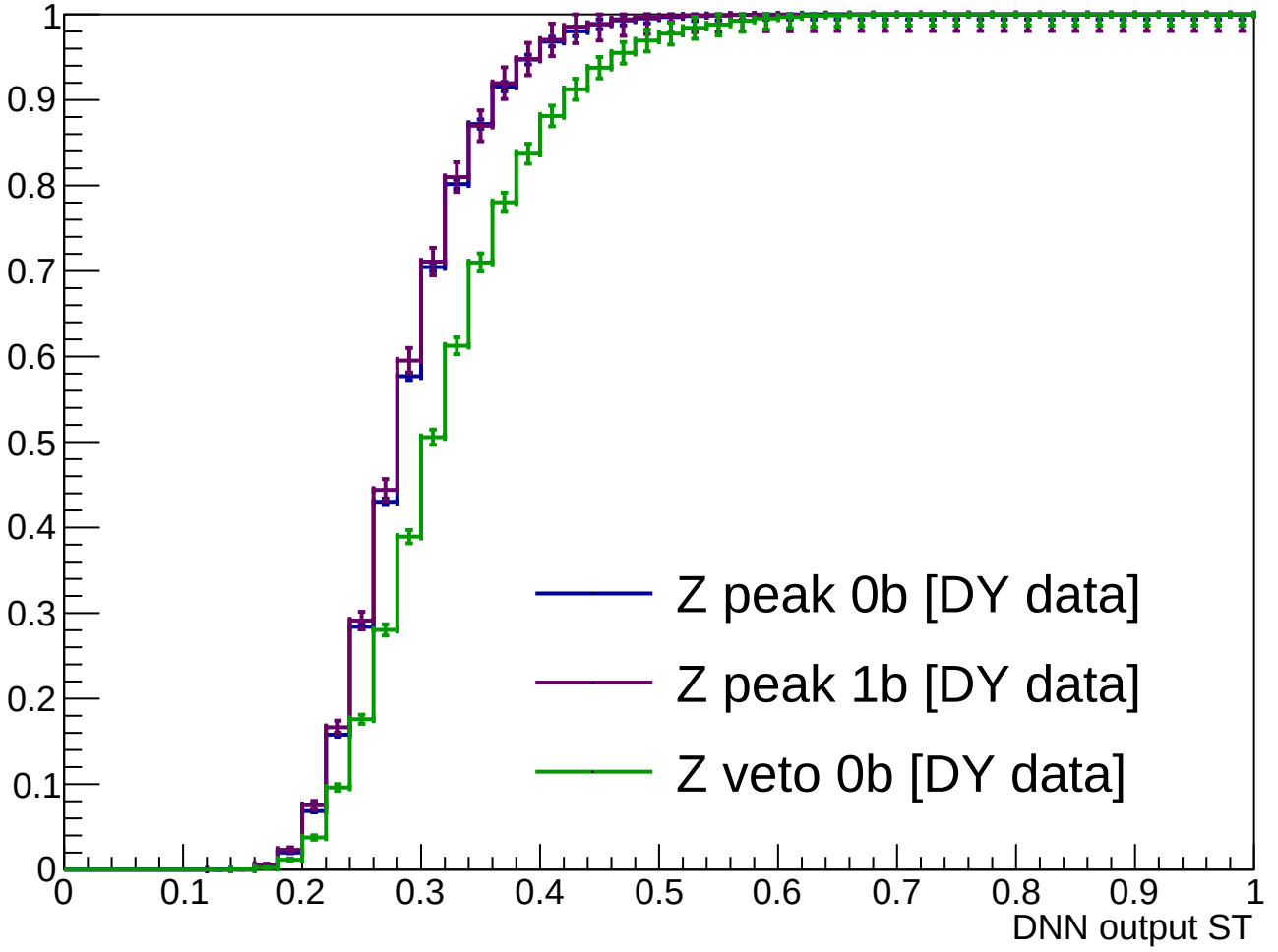
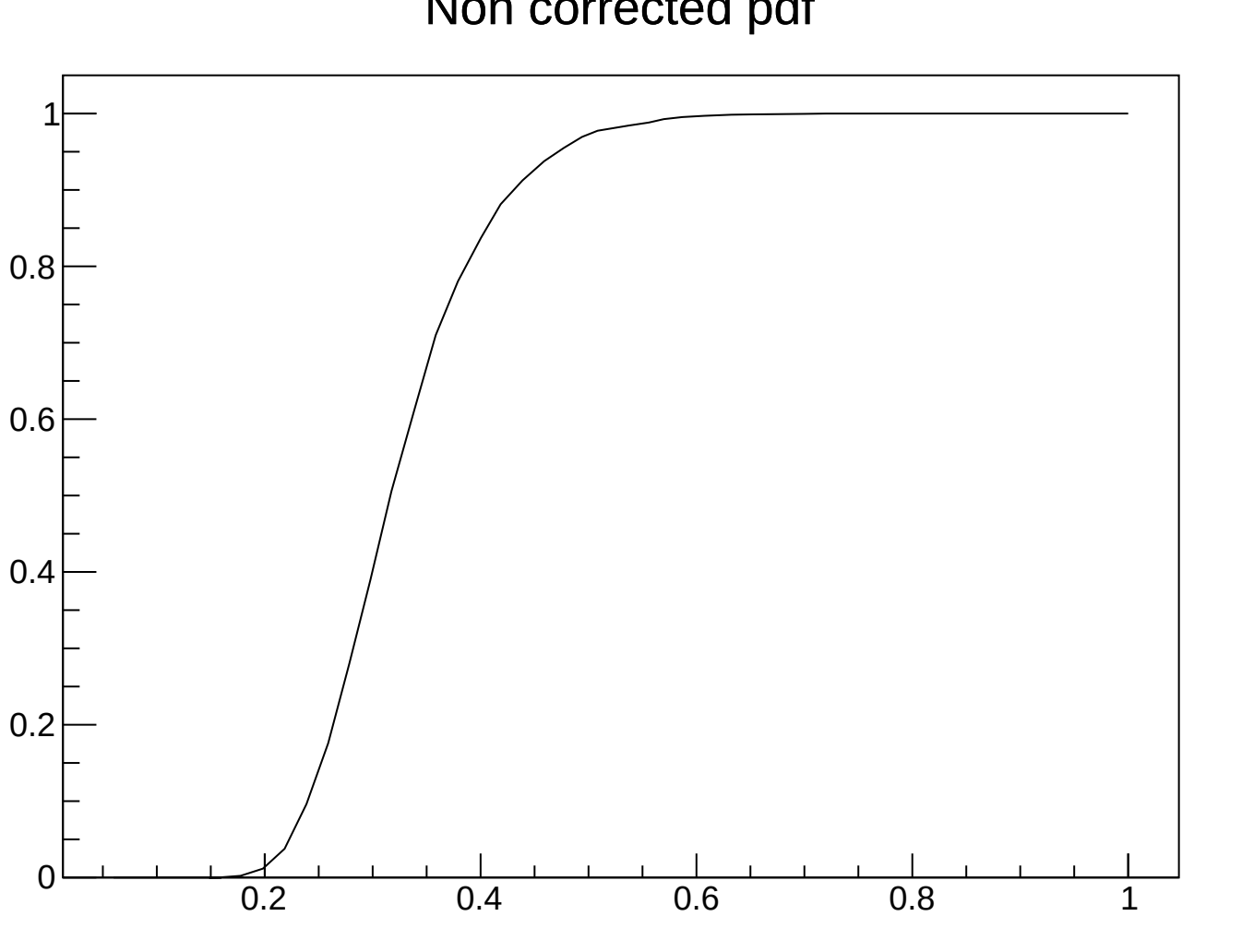

0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST
Z peak 0b [DY data]
Z peak 1b [DY data]
Z veto 0b [DY data]
Z veto 1b [DY MC]
Z veto 1b [DY data extrapolated]

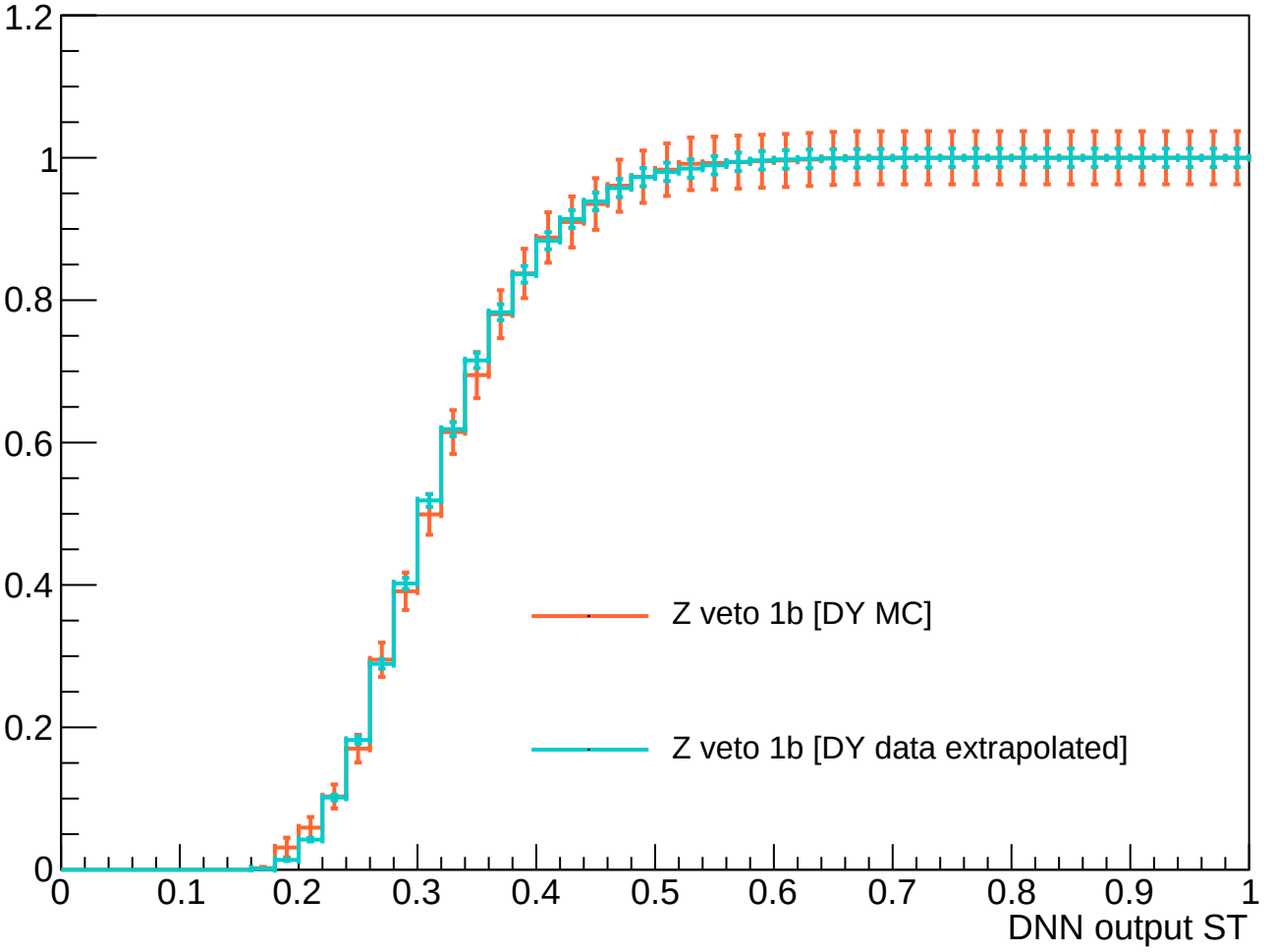

1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST
Z peak 0b [DY data]
Z peak 1b [DY data]
Z veto 0b [DY data]
Z veto 1b [DY MC]
Z veto 1b [DY data extrapolated]

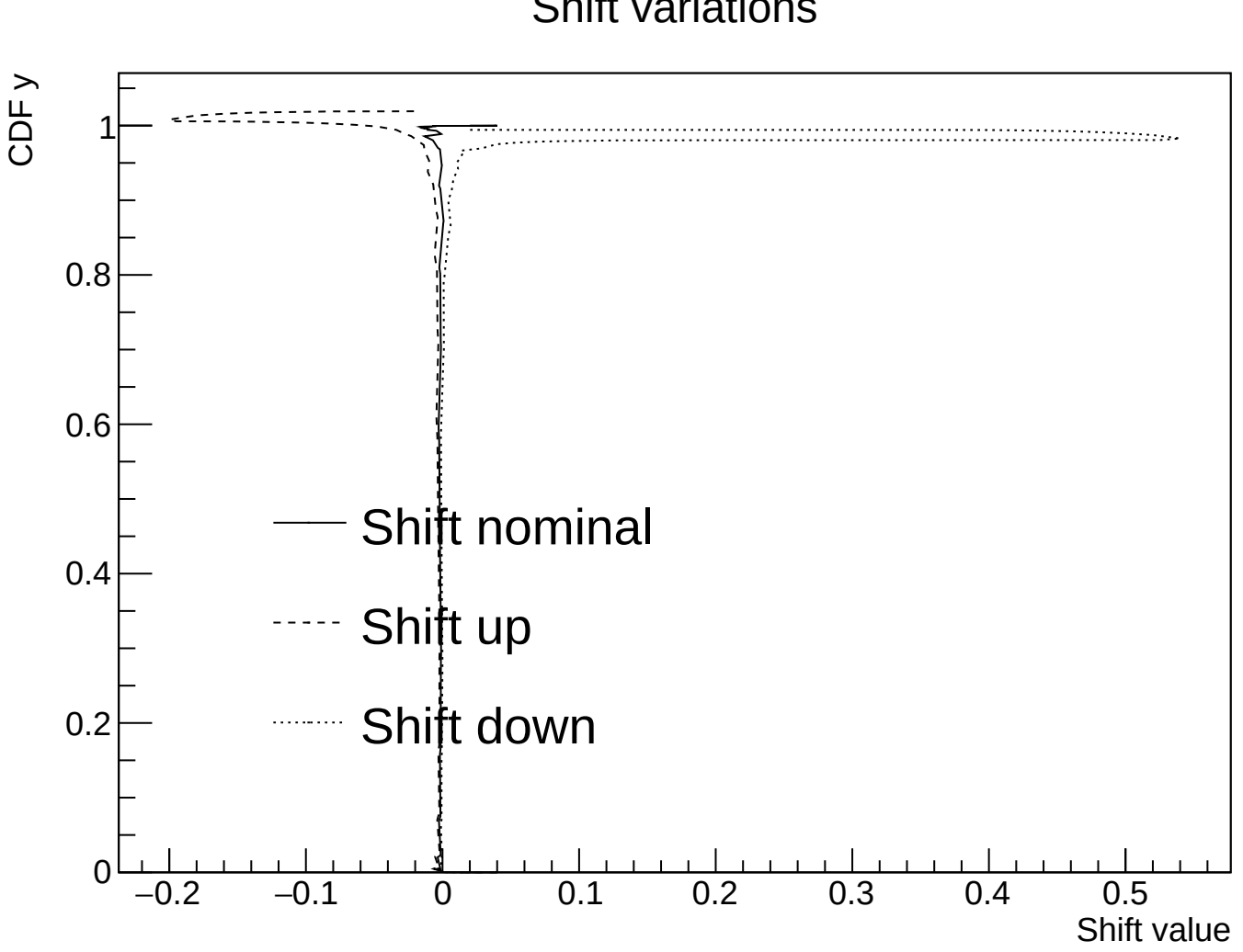

Z peak 0b [DY data]
Integral = 35072.685
Z peak 1b [DY data]
Integral = 4226.325
Z veto 0b [DY data]
Integral = 11301.670
6000
5000
4000
3000
2000
1000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
DNN output ST

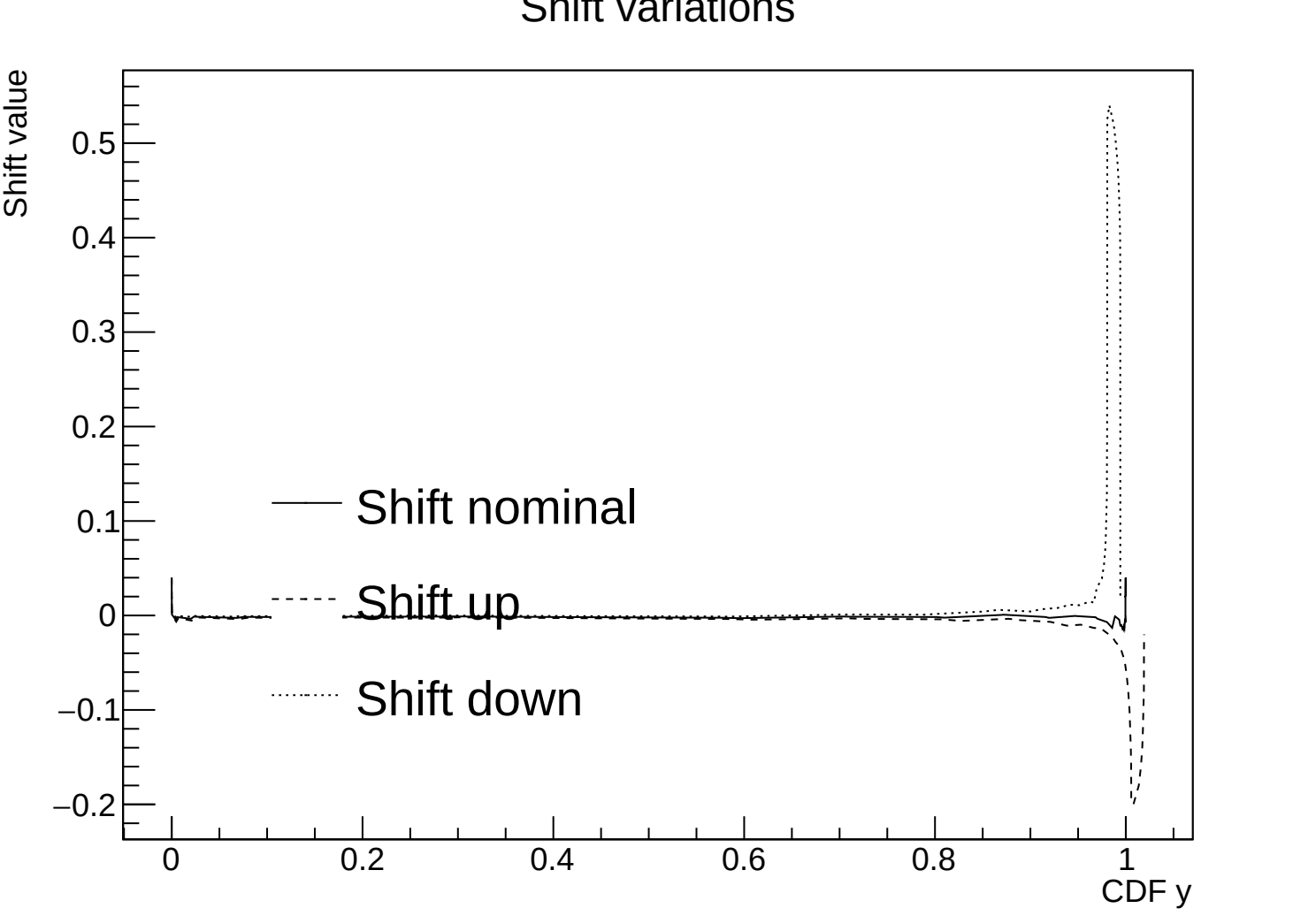

Z veto 1b [DY MC]
Integral = 1480.789
Z veto 1b [DY data extrapolated]
Integral = 984.061
KS test (no option) : 9.533e-01
KS test (option 'M') : 2.035e-02
KS test (option 'X') : 6.770e-01
Z Veto 0b correction factor : 0.75254
Factor Z Peak 1b / Z Peak 0b : 0.11570
DNN output ST
0
20
40
60
80
100
120
140
160
180
200
220
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

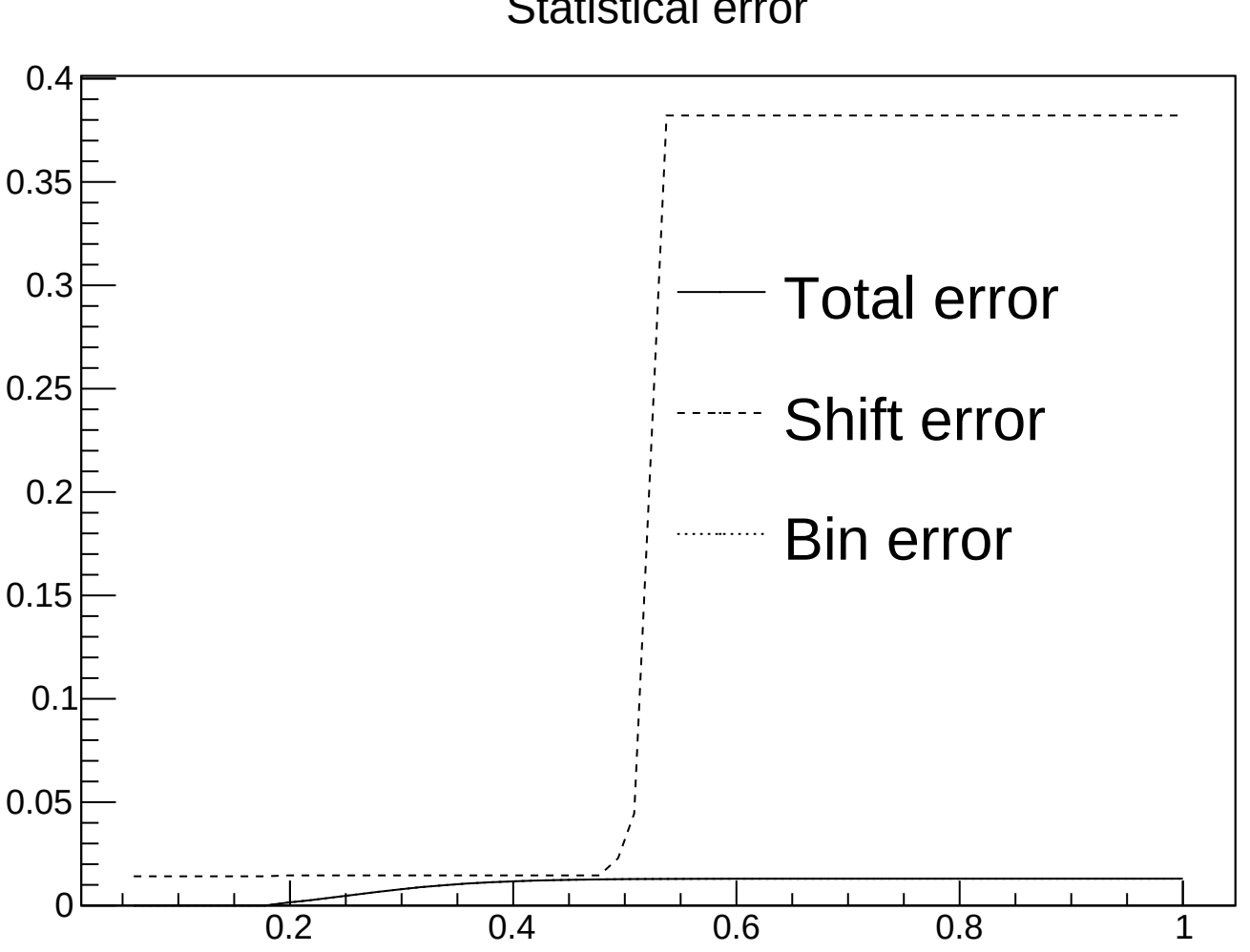

Z peak 0b [DY data]
Z peak 1b [DY data]
Z veto 0b [DY data]
DNN output ST
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1


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
–0.1
0
0.1
0.2
0.3
0.4
0.5
Shift value
Shift nominal
Shift up
Shift down


Shift variations
Shift value
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
0
0.2
0.4
0.6
0.8
1
CDF y
Shift nominal
Shift up
Shift down


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