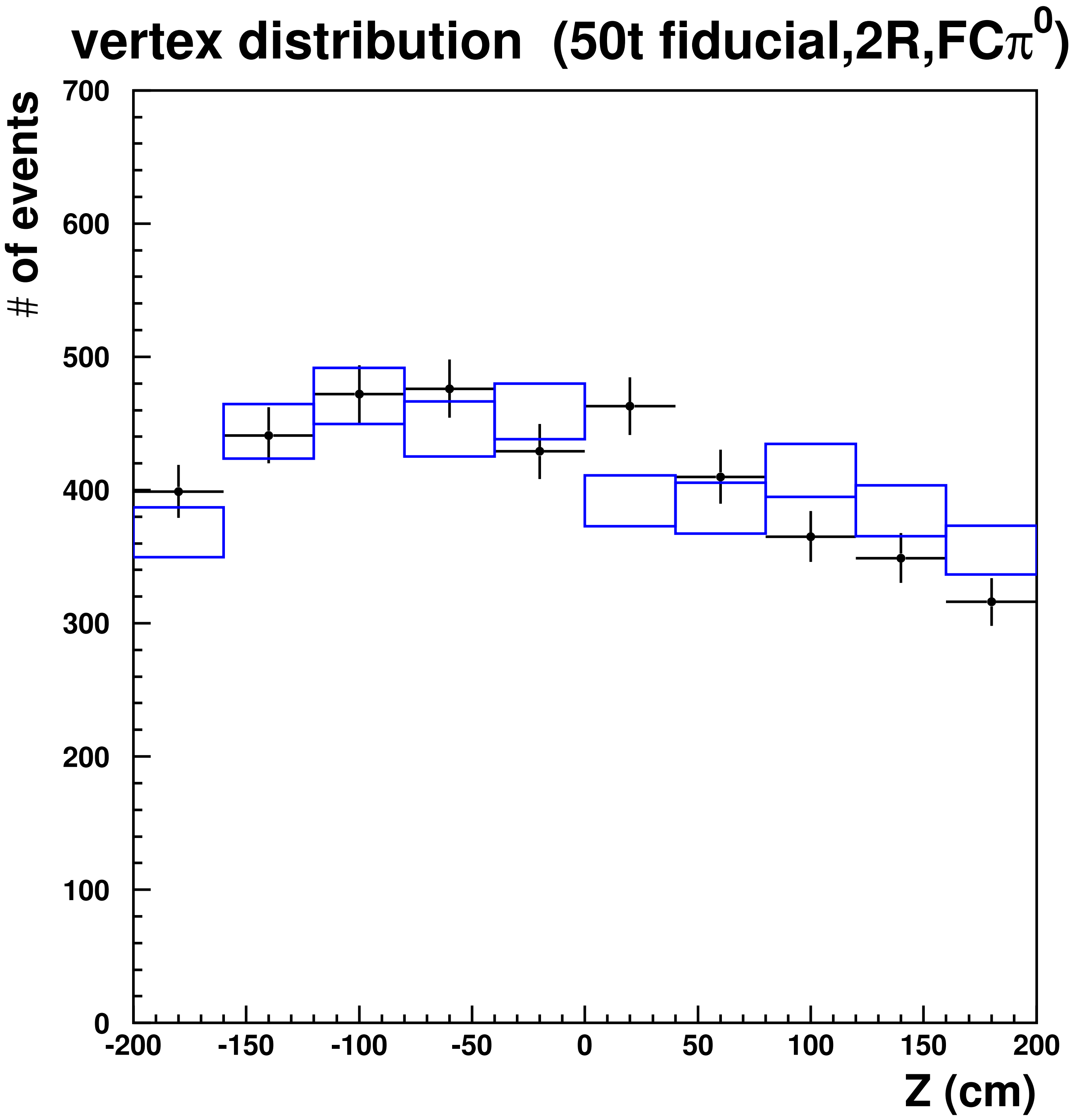
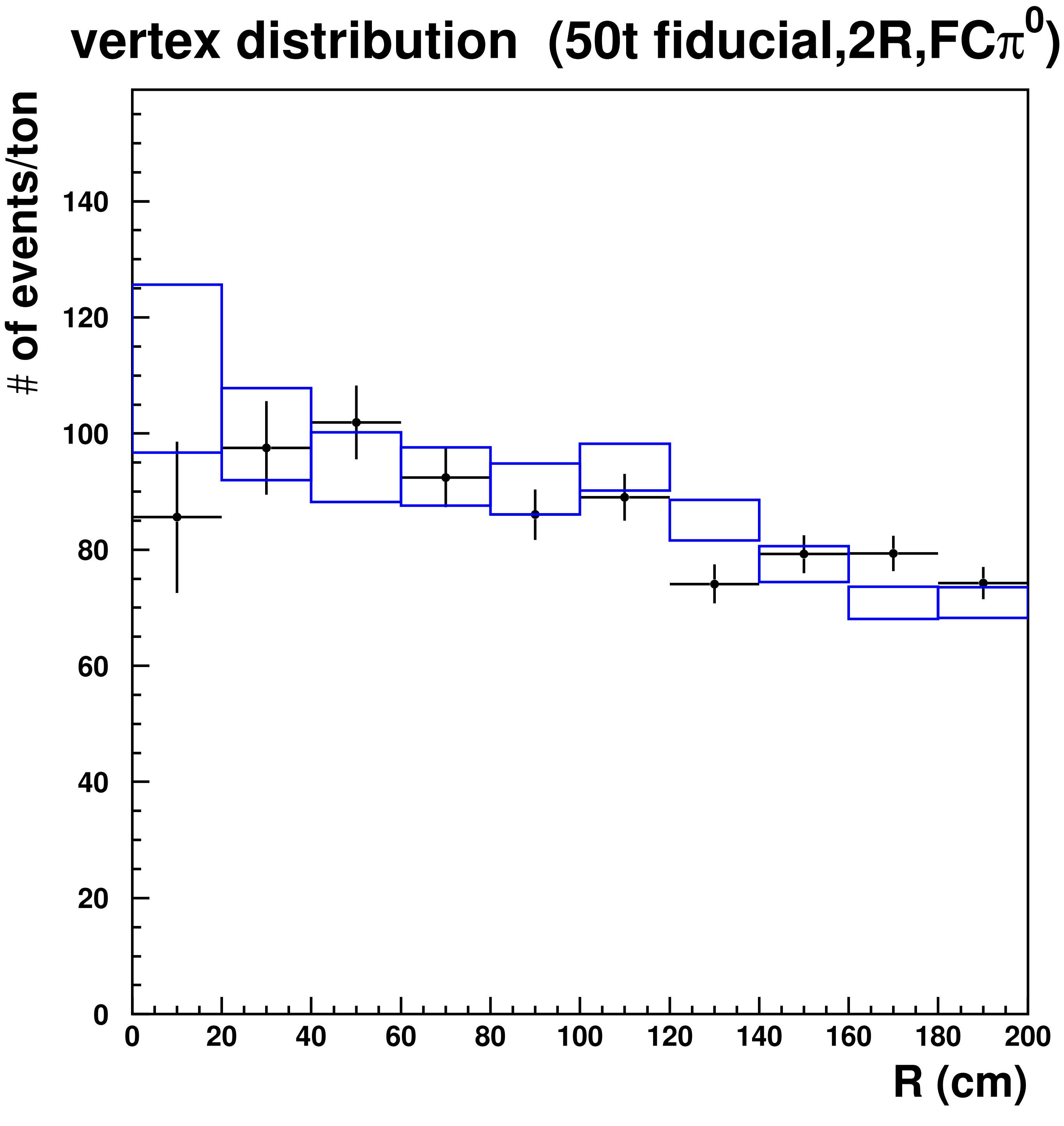
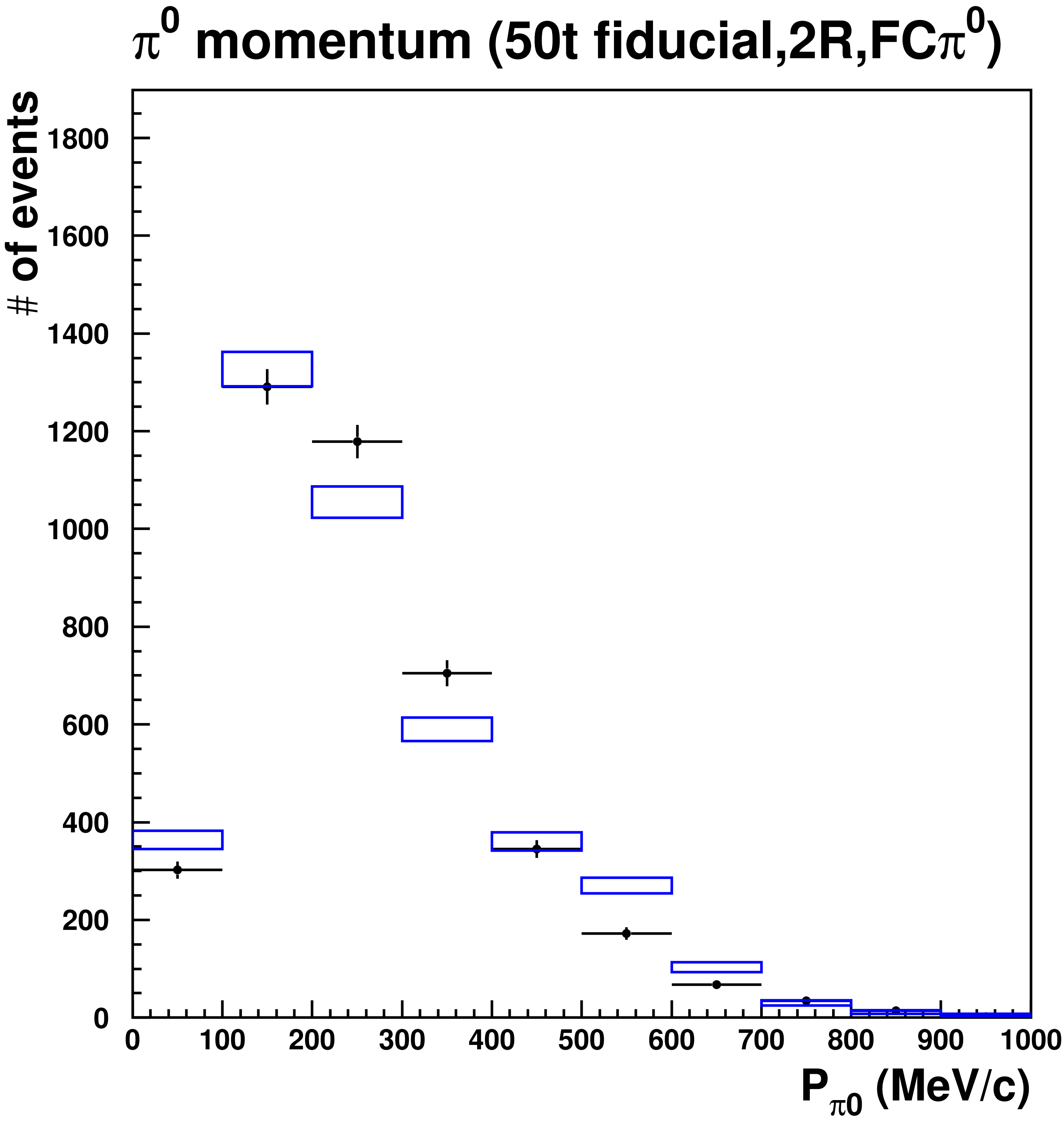
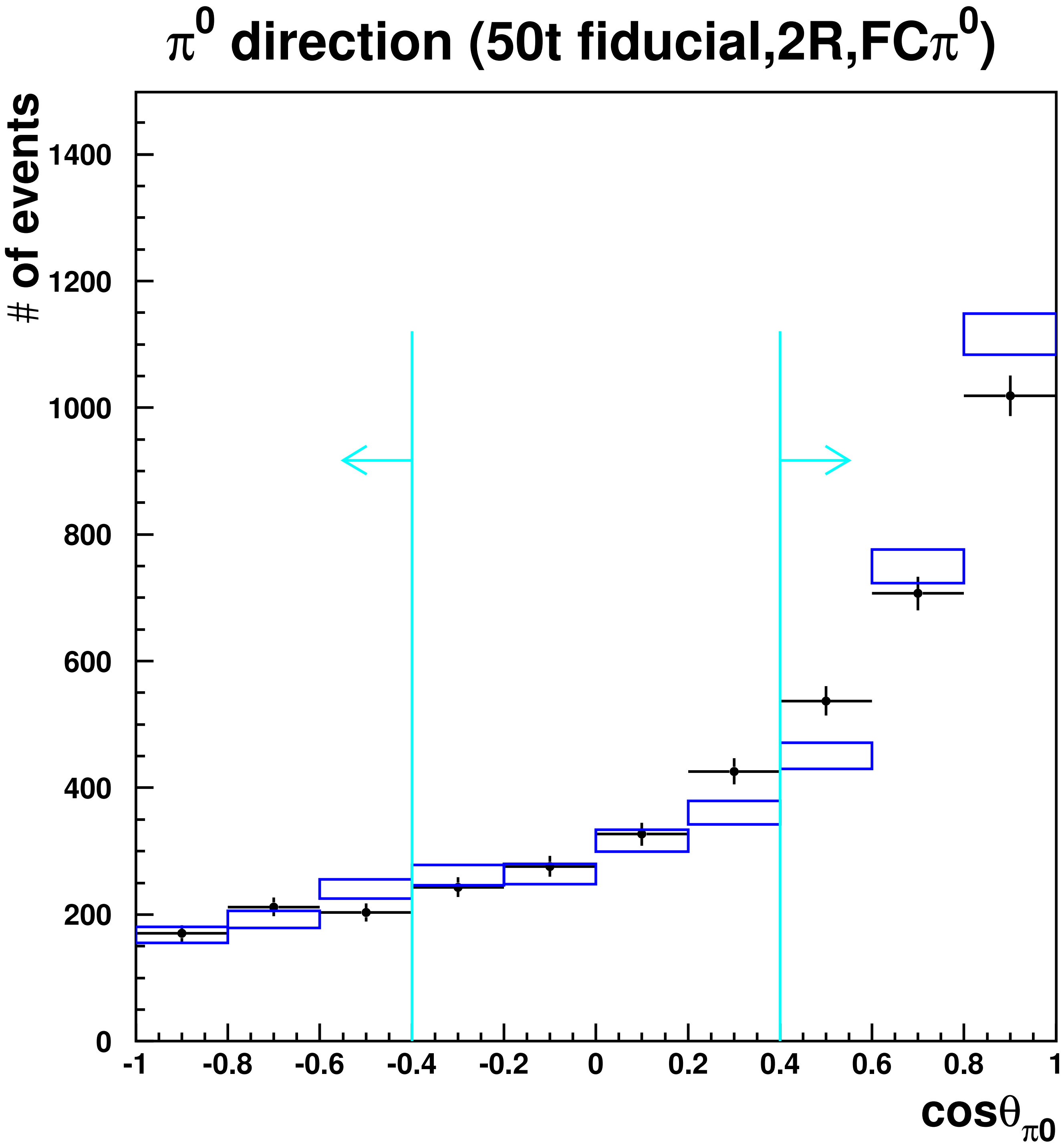

vertex distribution (50t fiducial,2R,FCπ0)
# of events
Z (cm)
0
100
200
300
400
500
600
700
-200
-150
-100
-50
0
50
100
150
200



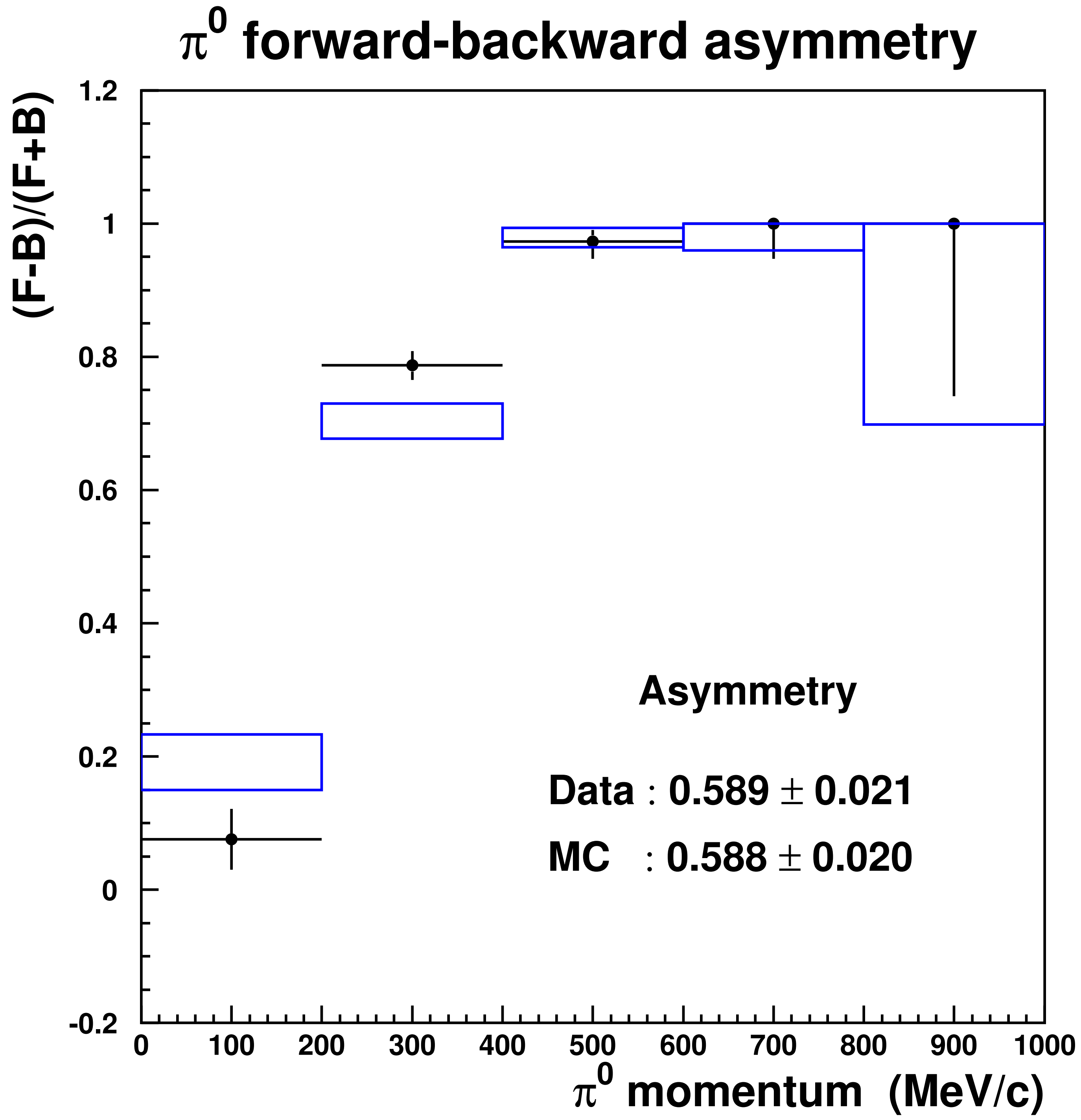
vertex distribution (50t fiducial,2R,FCπ0)
# of events/ton
R (cm)
0
20
40
60
80
100
120
140
160
180
200



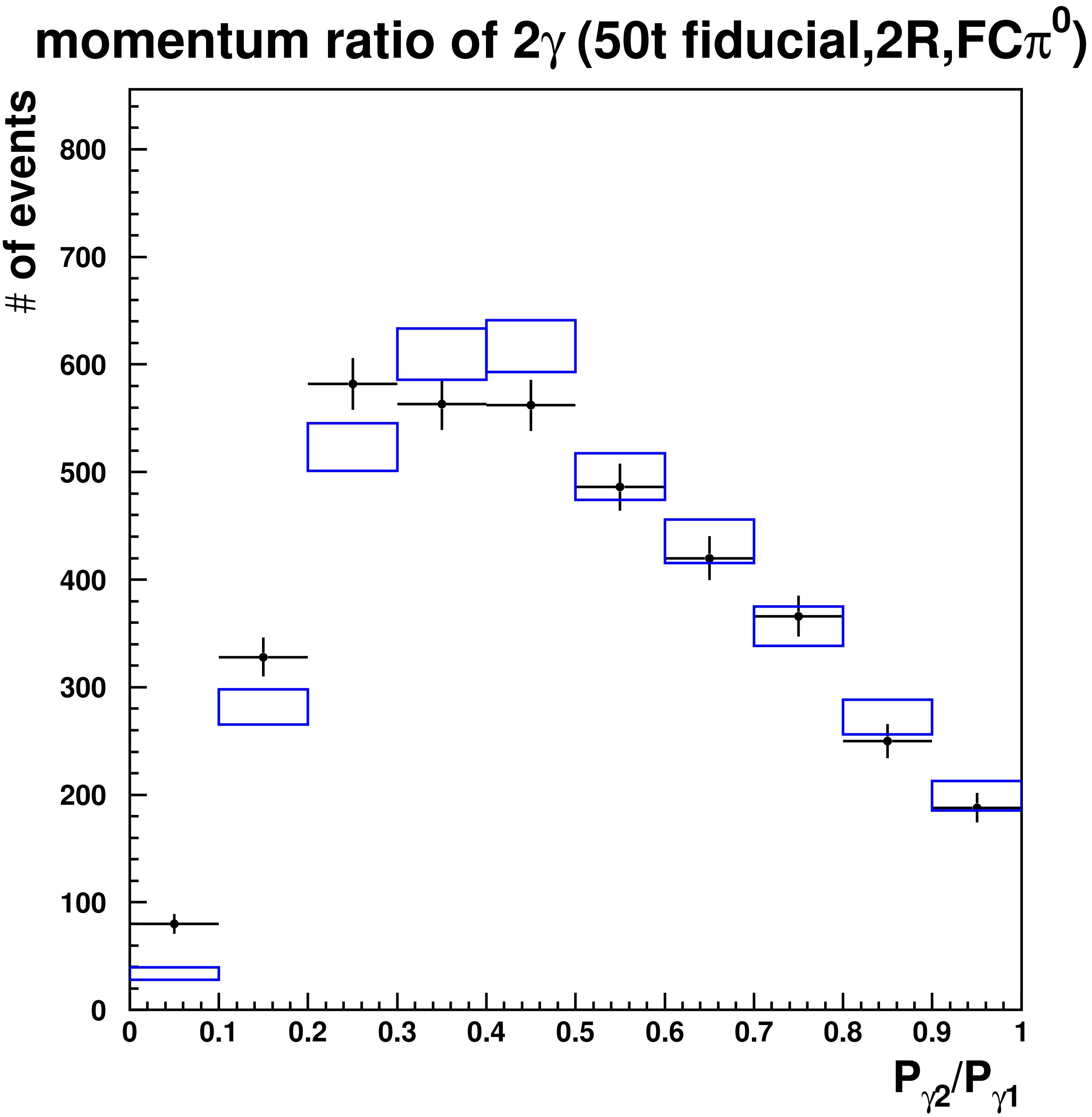
π^0 momentum (50t fiducial,2R,FCπ^0)
# of events
0
200
400
600
800
1000
1200
1400
1600
1800
0
100
200
300
400
500
600
700
800
900
1000
$P_{\pi 0}$ (MeV/c)

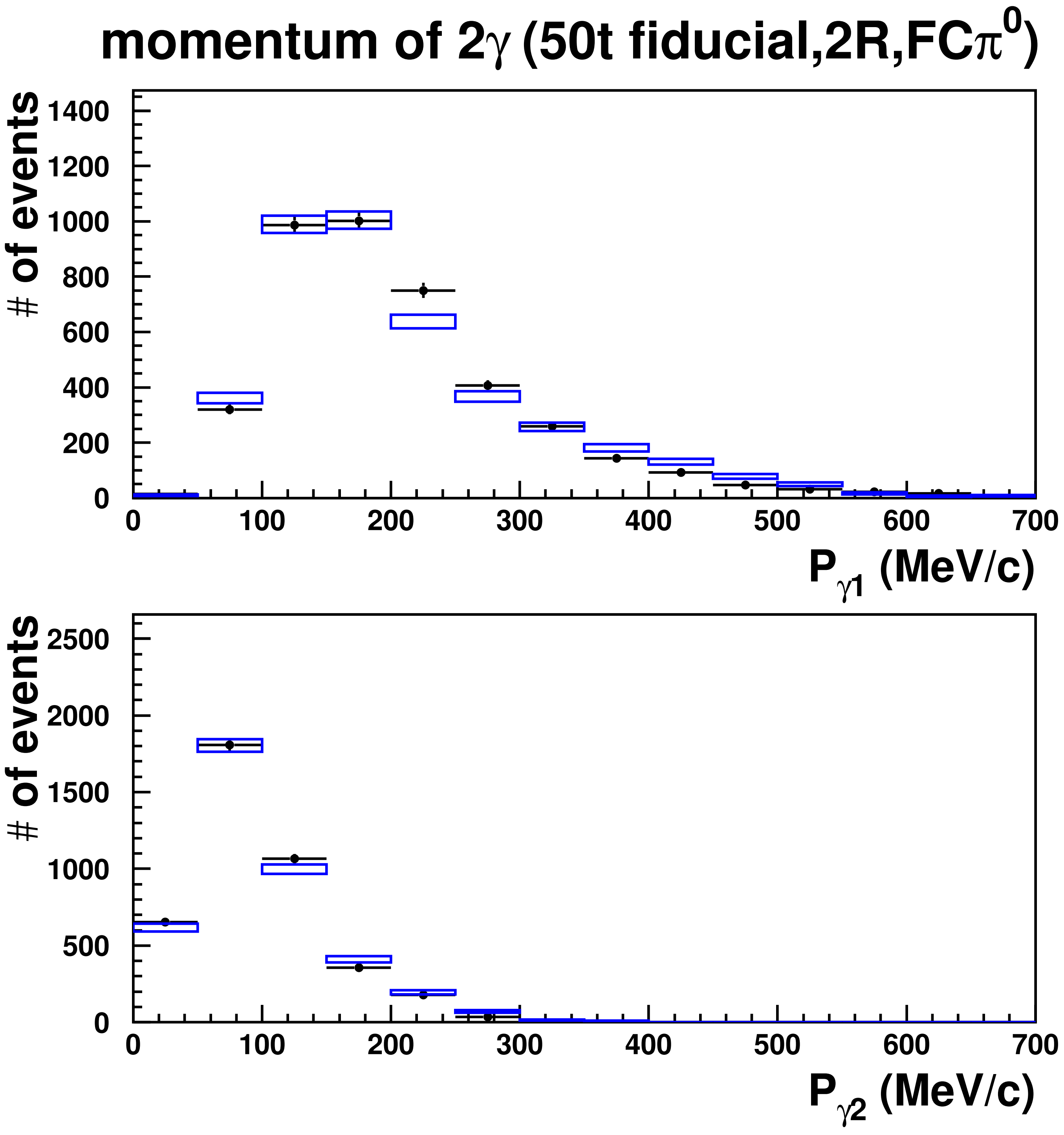


π^0 direction (50t fiducial,2R,FCπ^0)
# of events
0
200
400
600
800
1000
1200
1400
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1
$\cos\theta_{\pi 0}$

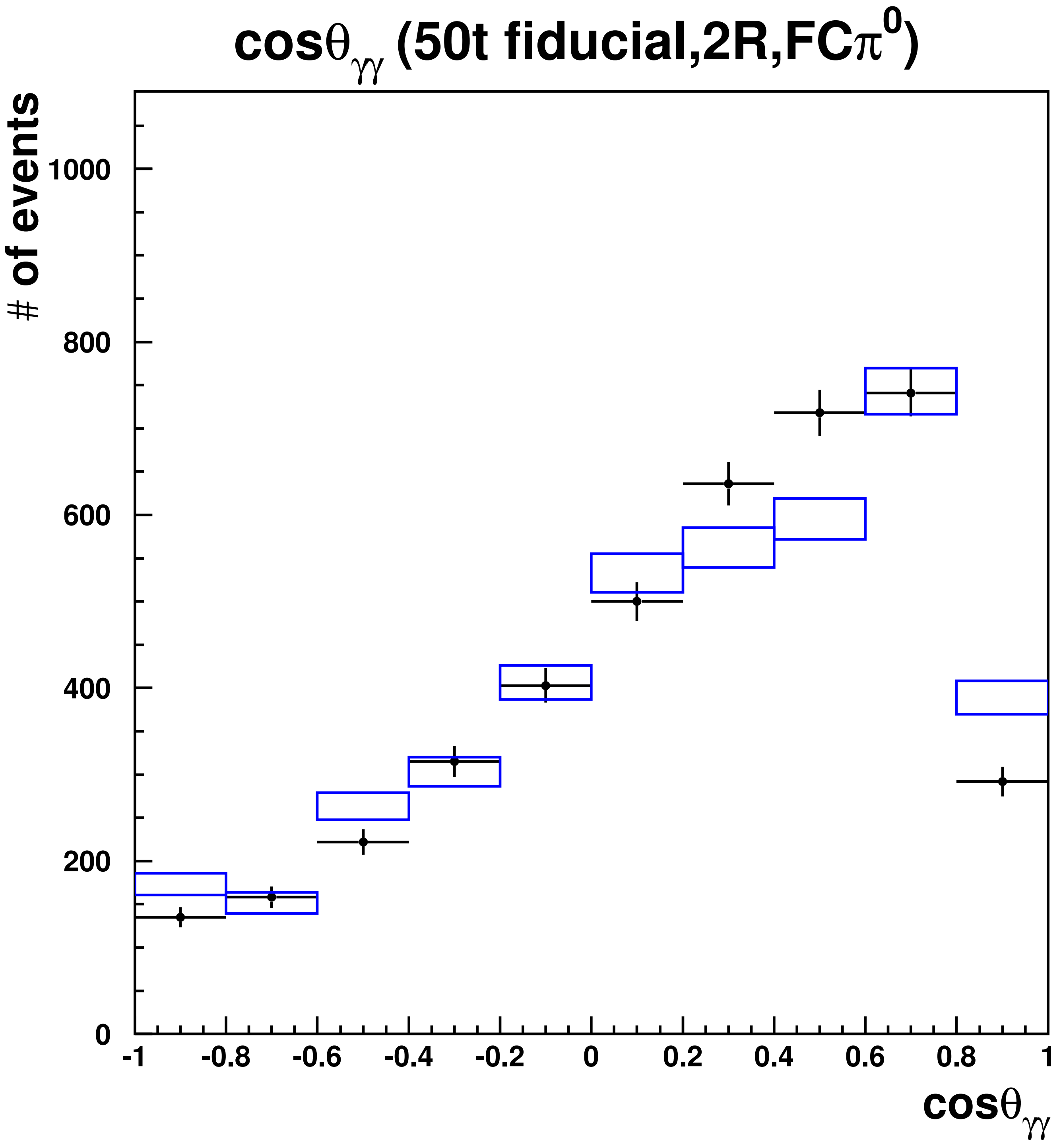


π^0 forward-backward asymmetry
(F-B)/(F+B)
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
0
100
200
300
400
500
600
700
800
900
1000
π^0 momentum (MeV/c)
Asymmetry
Data : 0.589 ± 0.021
MC : 0.588 ± 0.020

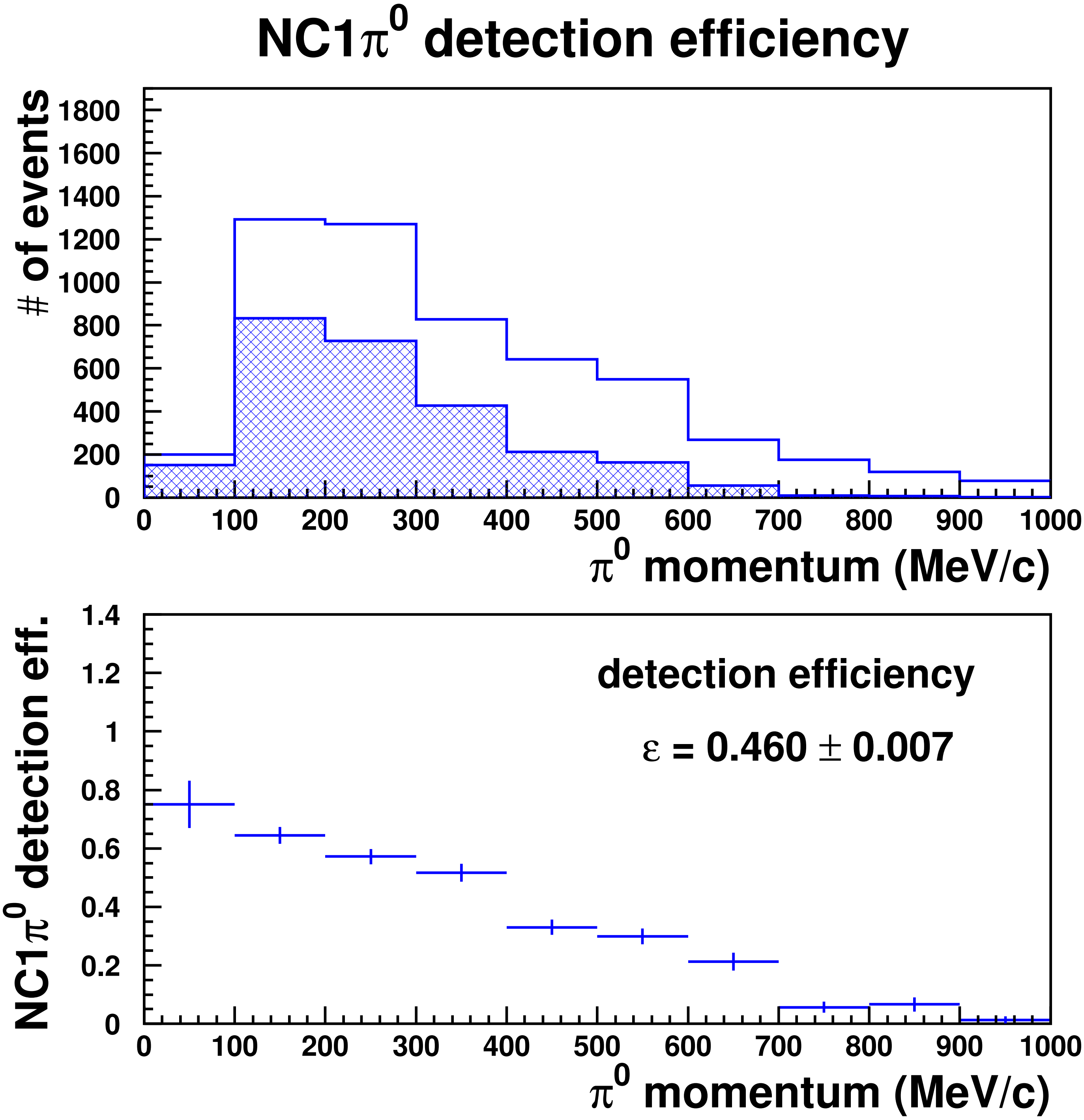

momentum ratio of 2γ (50t fiducial,2R,FCπ0)
# of events
0
100
200
300
400
500
600
700
800
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Pγ2/Pγ1

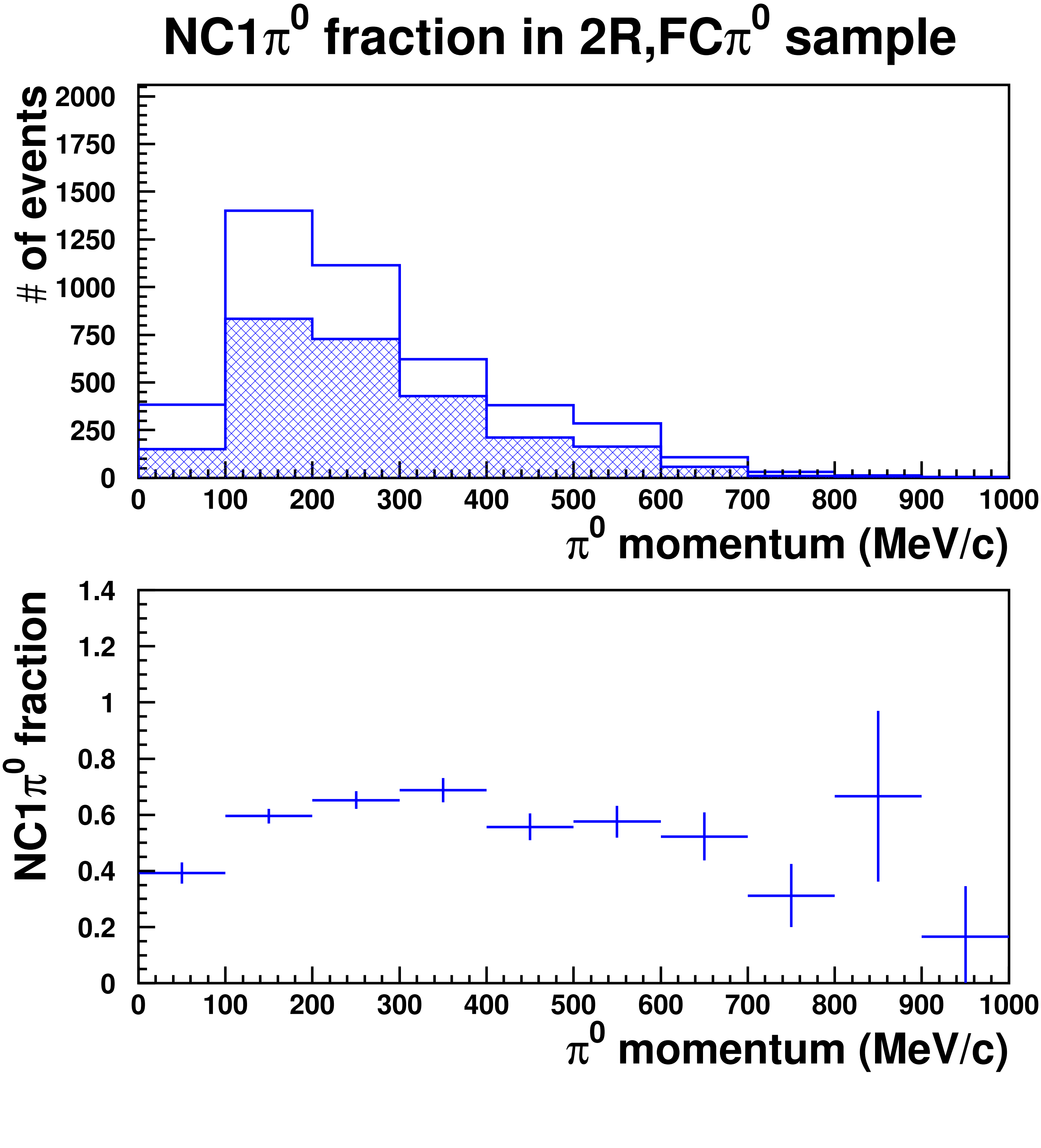


momentum of 2γ (50t fiducial,2R,FCπ0)
# of events
P γ1 (MeV/c)
P γ2 (MeV/c)
0
100
200
300
400
500
600
700
1400
1200
1000
800
600
400
200
2500
2000
1500
1000
500



$\cos\theta_{\gamma\gamma}$ (50t fiducial,2R,FCπ^0)
# of events
0
200
400
600
800
1000
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1
$\cos\theta_{\gamma\gamma}$


NC1π^0 detection efficiency
# of events
1800
1600
1400
1200
1000
800
600
400
200
0
0
100
200
300
400
500
600
700
800
900
1000
π^0 momentum (MeV/c)
NC1π^0 detection eff.
1.4
1.2
1
0.8
0.6
0.4
0.2
0
detection efficiency
ε = 0.460 $\pm$ 0.007
0
100
200
300
400
500
600
700
800
900
1000
π^0 momentum (MeV/c)



NC1π^0 fraction in 2R,FCπ^0 sample
# of events
2000
1750
1500
1250
1000
750
500
250
0
0
100
200
300
400
500
600
700
800
900
1000
π^0 momentum (MeV/c)
NC1π^0 fraction
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
100
200
300
400
500
600
700
800
900
1000
π^0 momentum (MeV/c)