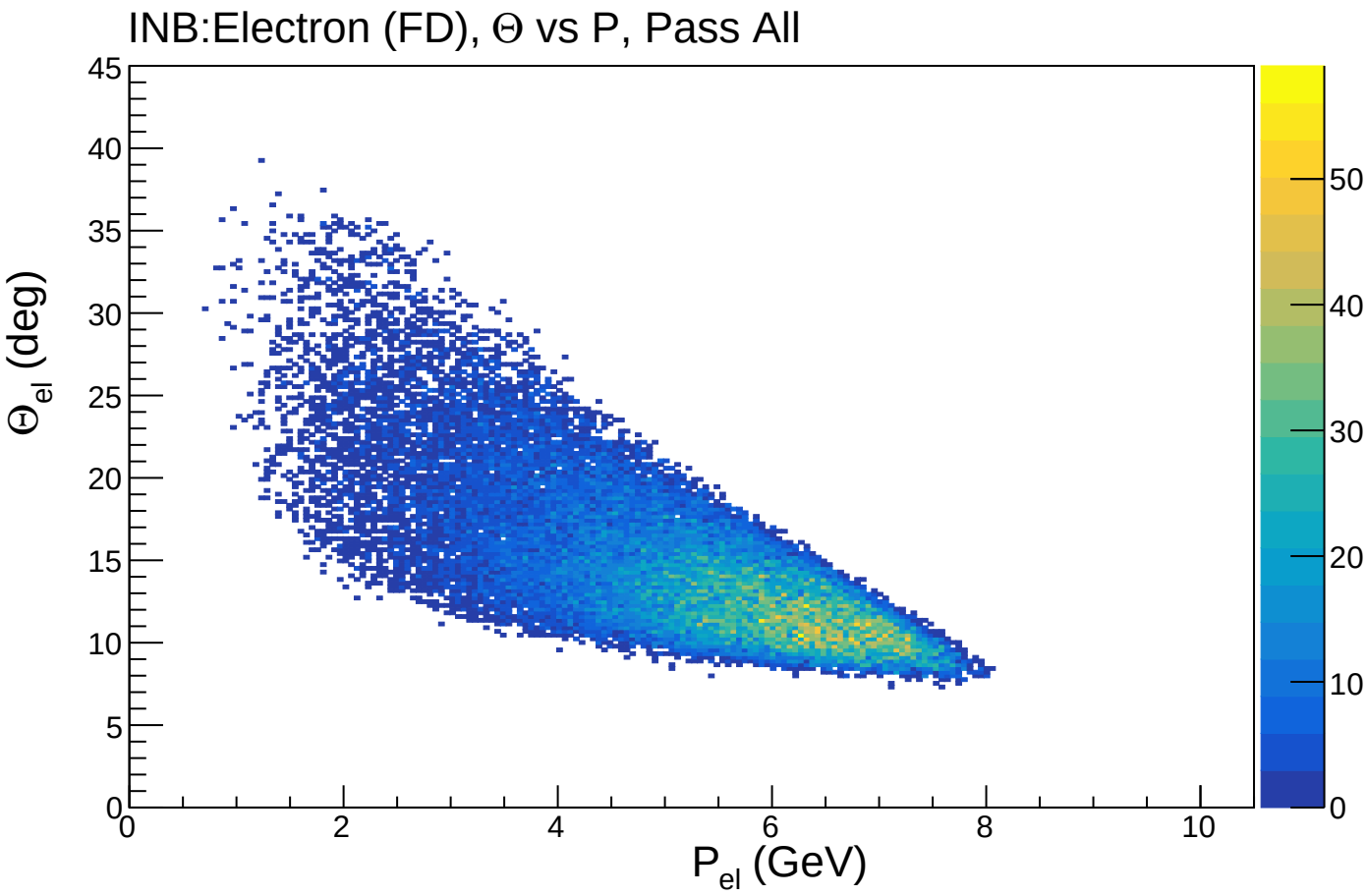
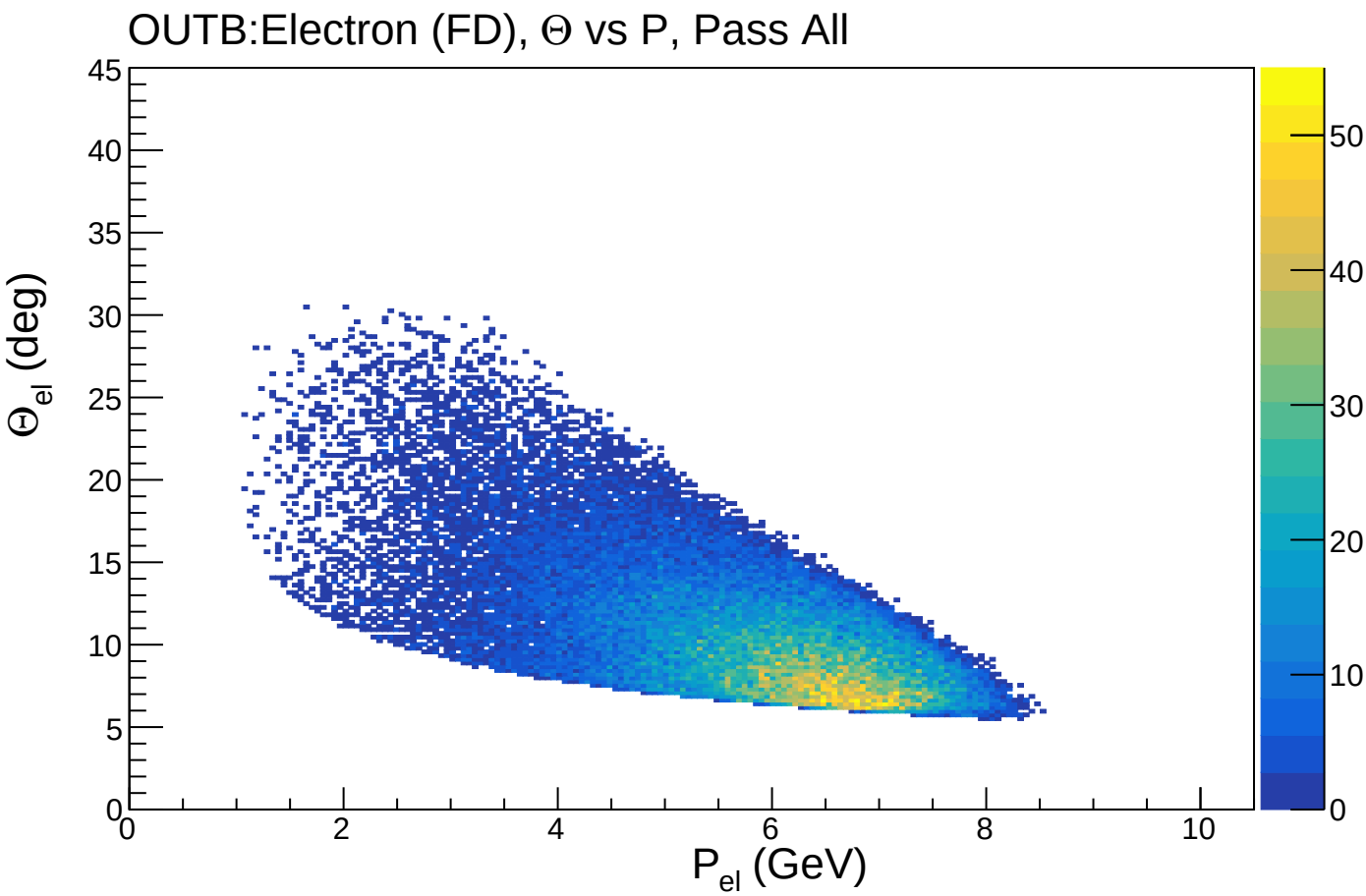
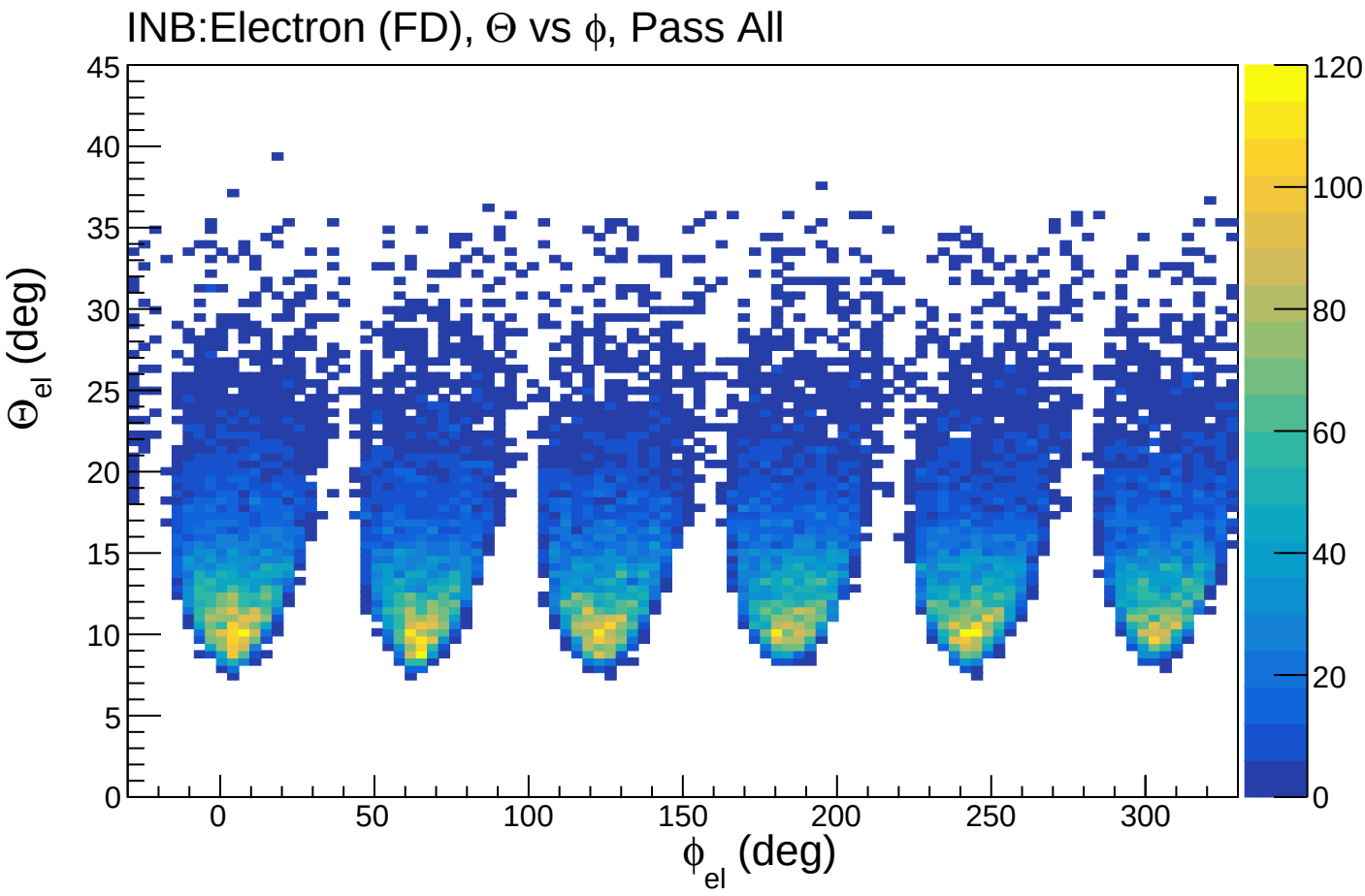
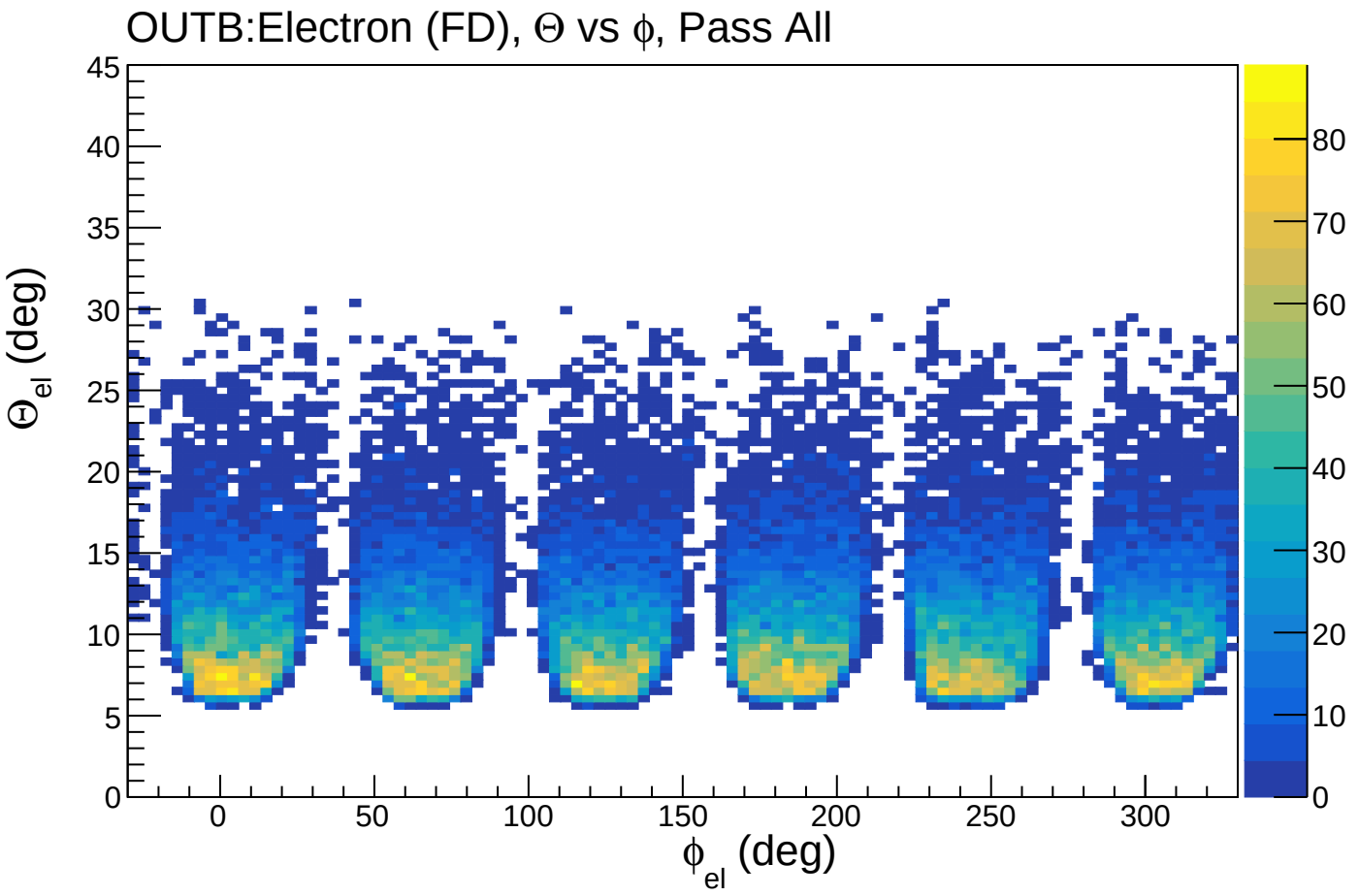
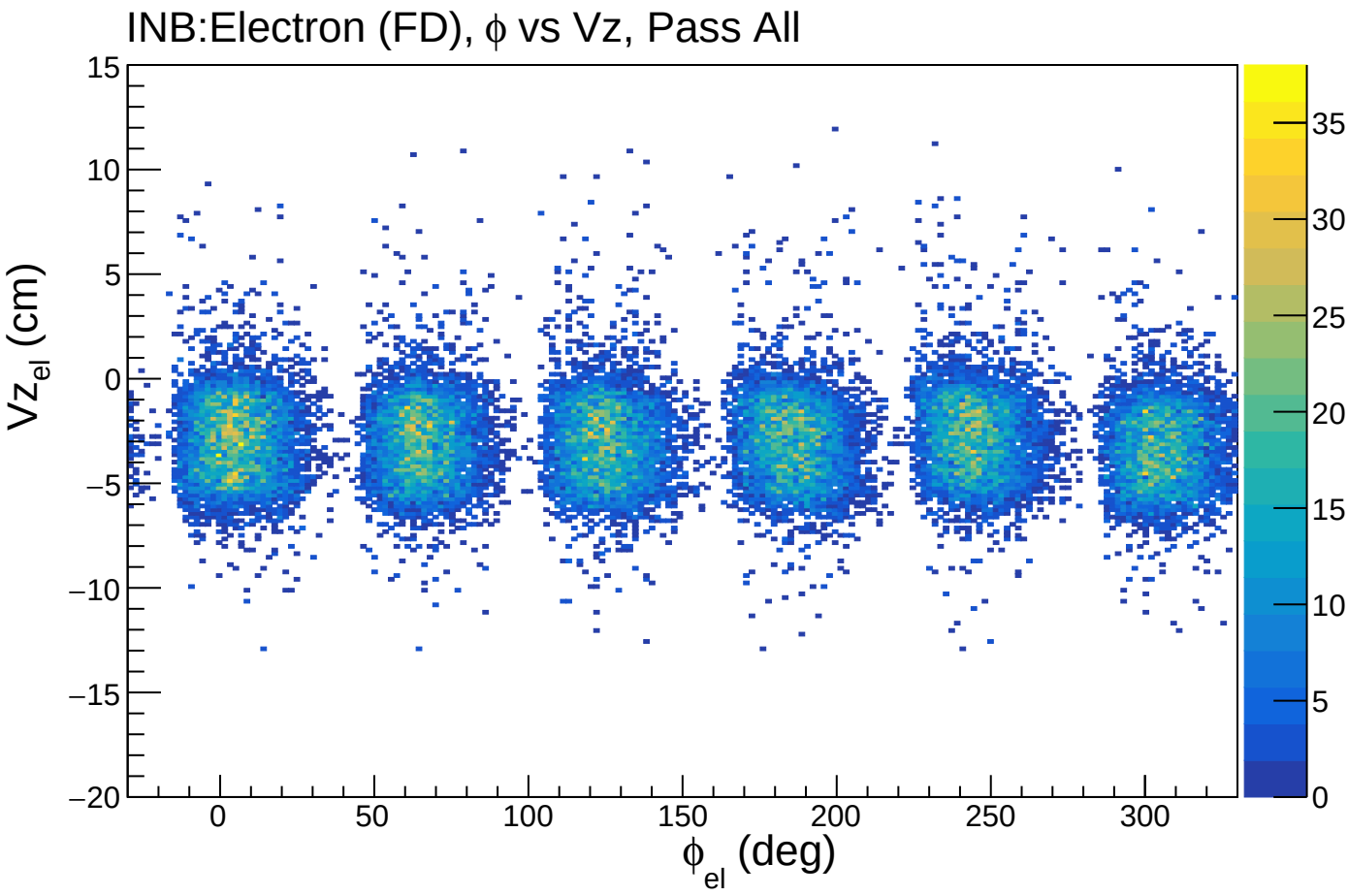
COMP-El Before Final Sel.

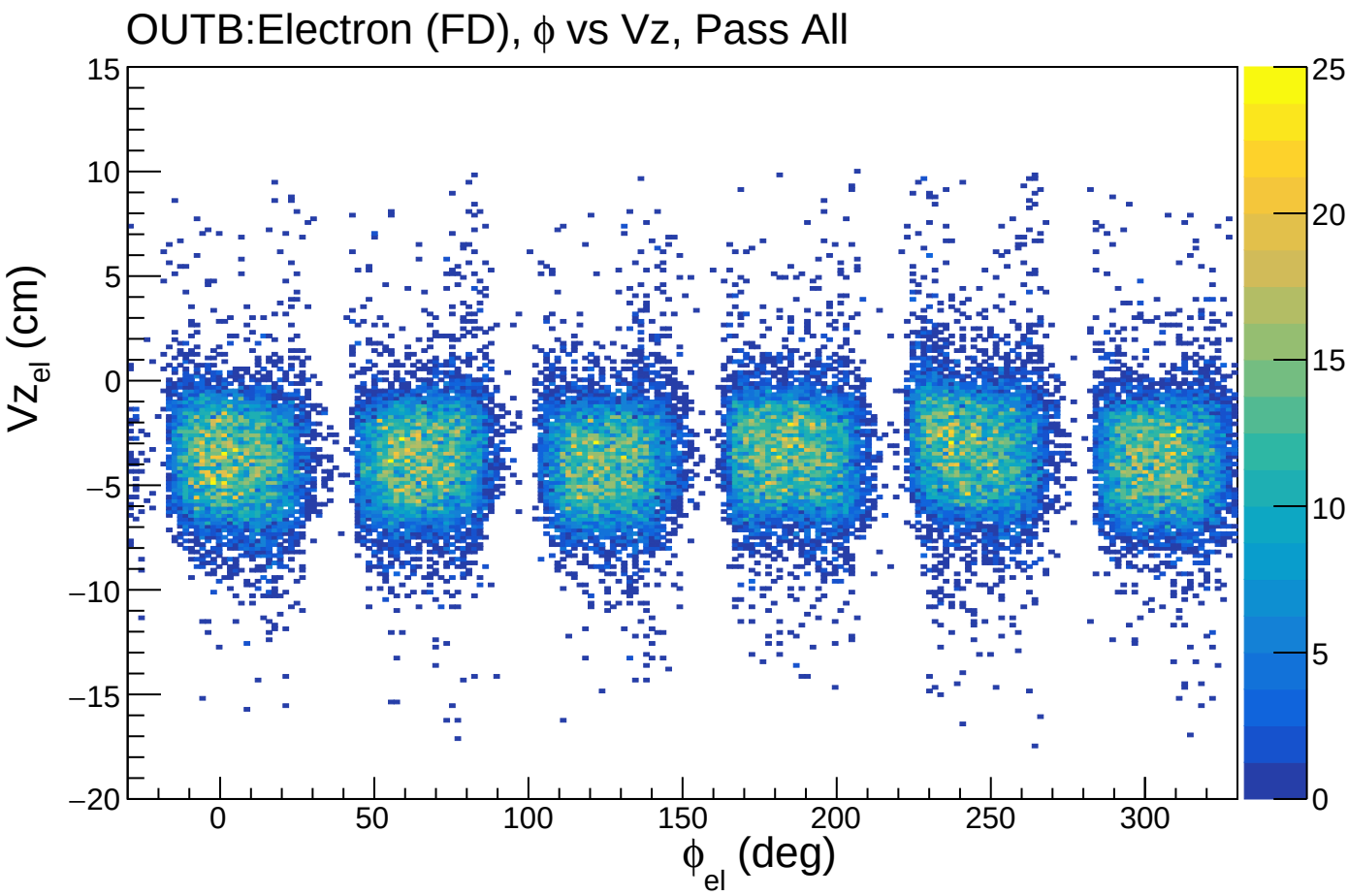

INB:Electron (FD), Θ vs P, Pass All
Θ_el (deg)
P_el (GeV)
0
5
10
15
20
25
30
35
40
45
0
2
4
6
8
10
0
10
20
30
40
50

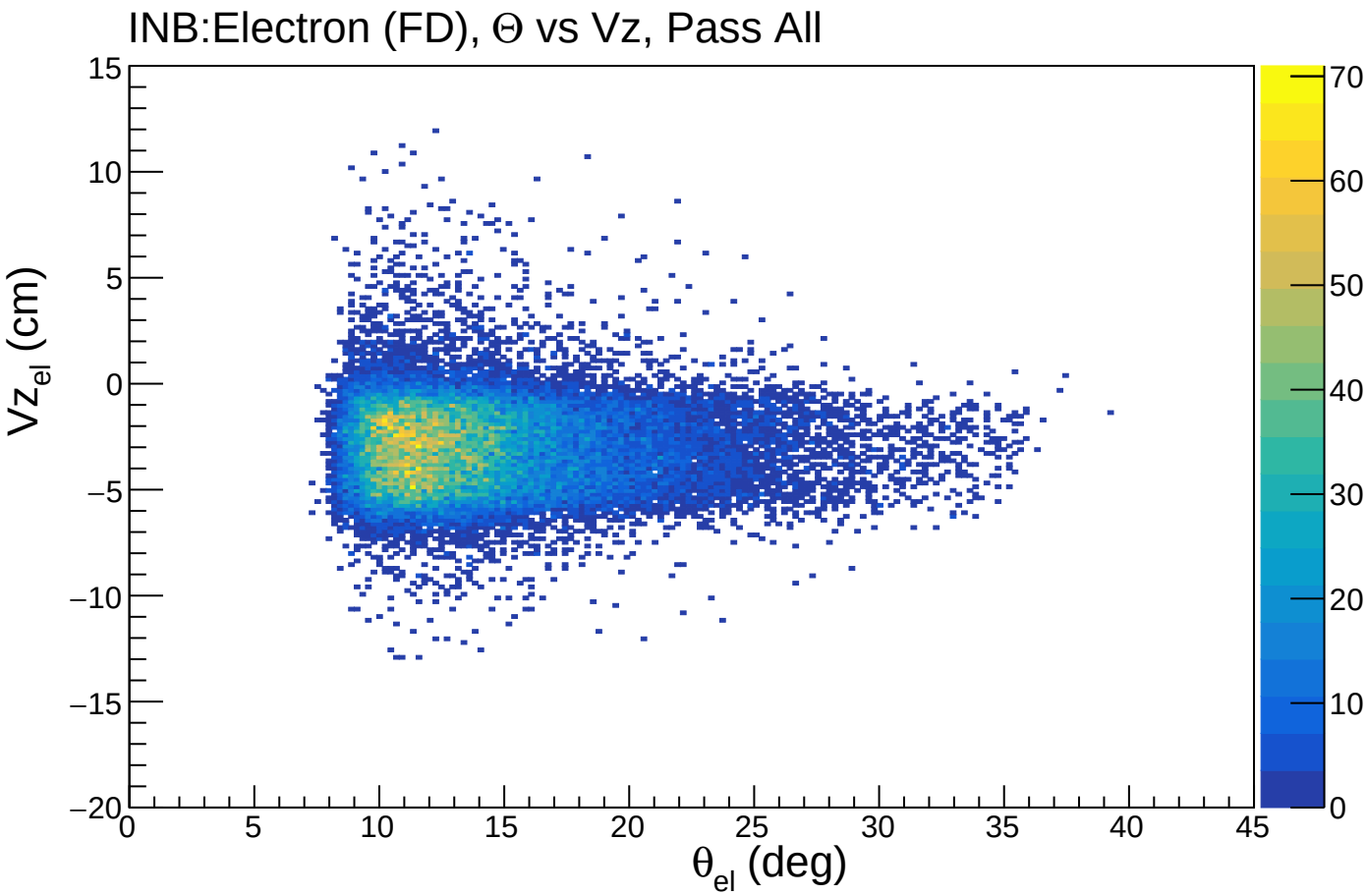

OUTB:Electron (FD), Θ vs P, Pass All
Θ_el (deg)
P_el (GeV)
0
5
10
15
20
25
30
35
40
45
0
2
4
6
8
10
0
10
20
30
40
50

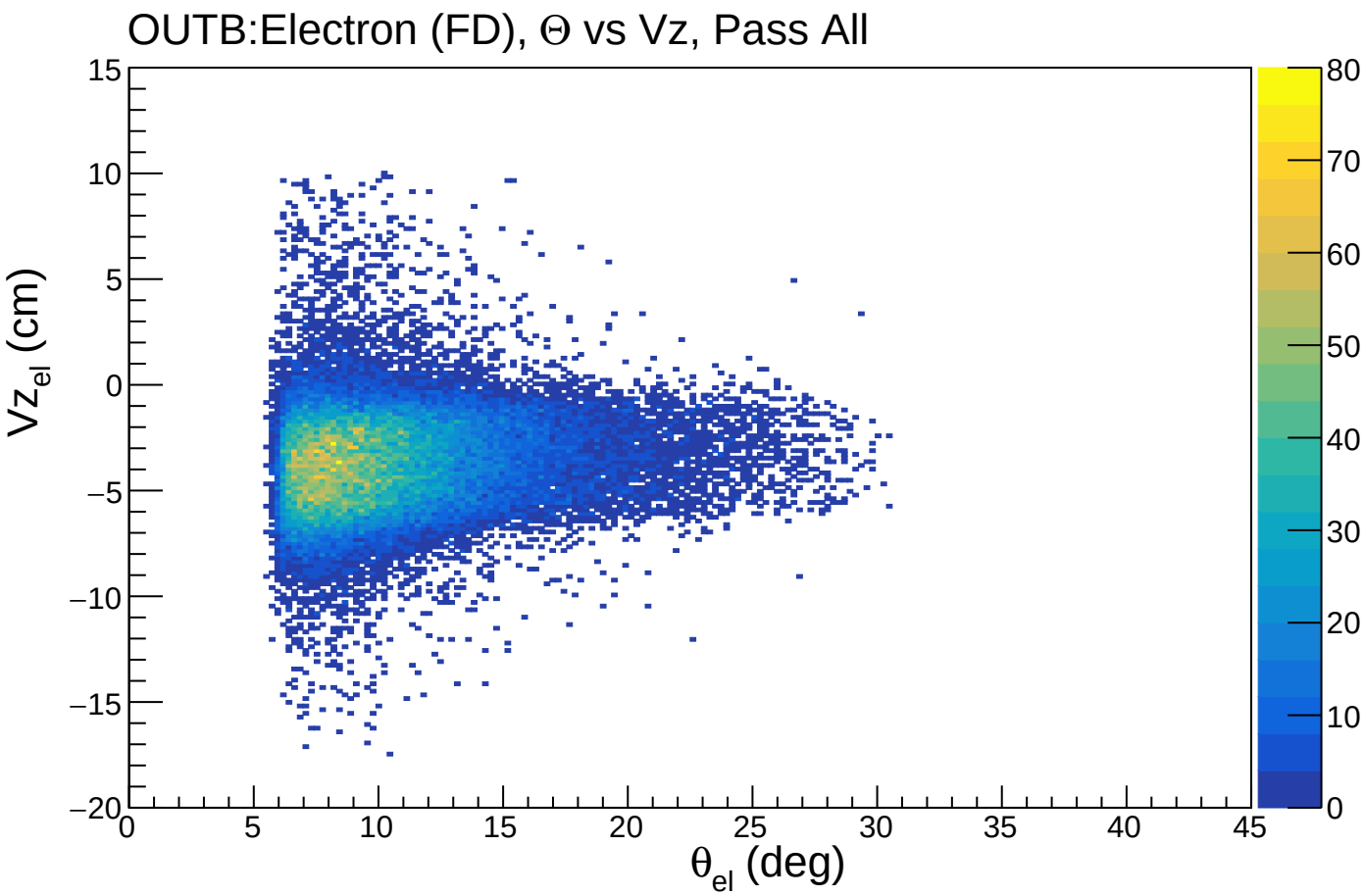

INB:Electron (FD), Θ vs ϕ, Pass All
Θ_el (deg)
ϕ_el (deg)
0
5
10
15
20
25
30
35
40
45
0
50
100
150
200
250
300
0
20
40
60
80
100
120

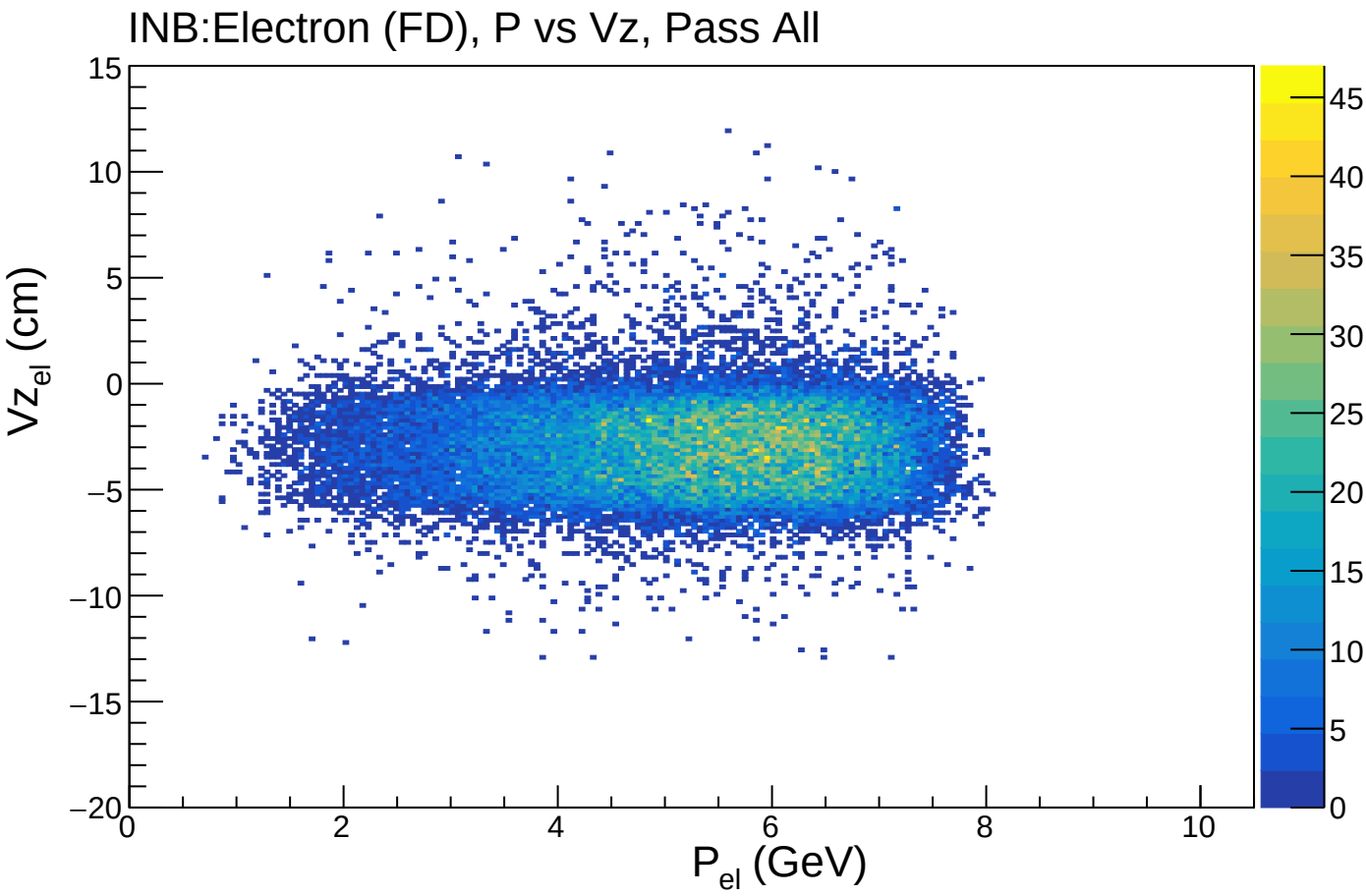

OUTB:Electron (FD), Θ vs ϕ, Pass All
Θ_el (deg)
ϕ_el (deg)
0
5
10
15
20
25
30
35
40
45
0
50
100
150
200
250
300
0
10
20
30
40
50
60
70
80

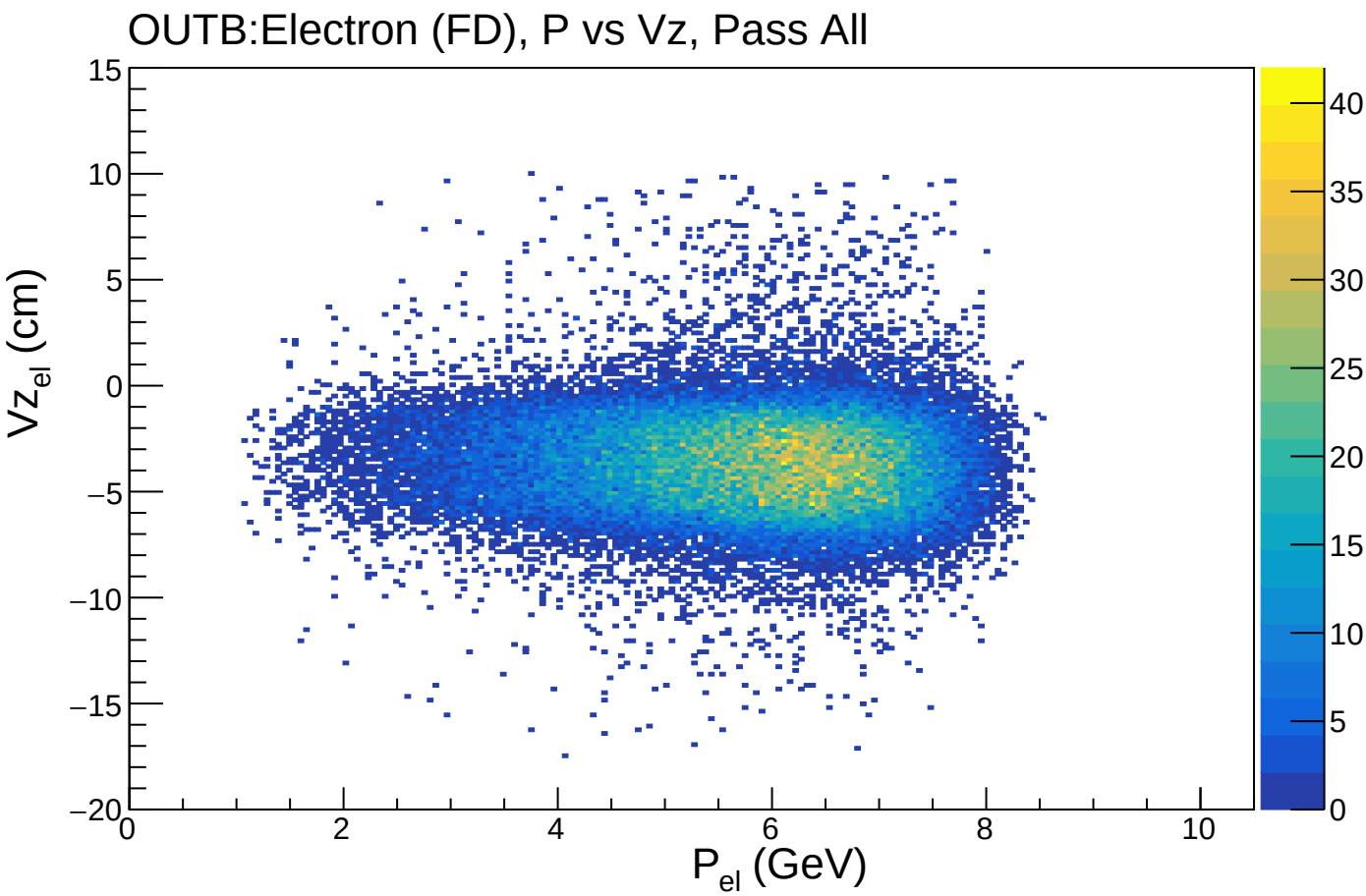

INB:Electron (FD), ϕ vs Vz, Pass All
Vz_el (cm)
ϕ_el (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
35
30
25
20
15
10
5
0

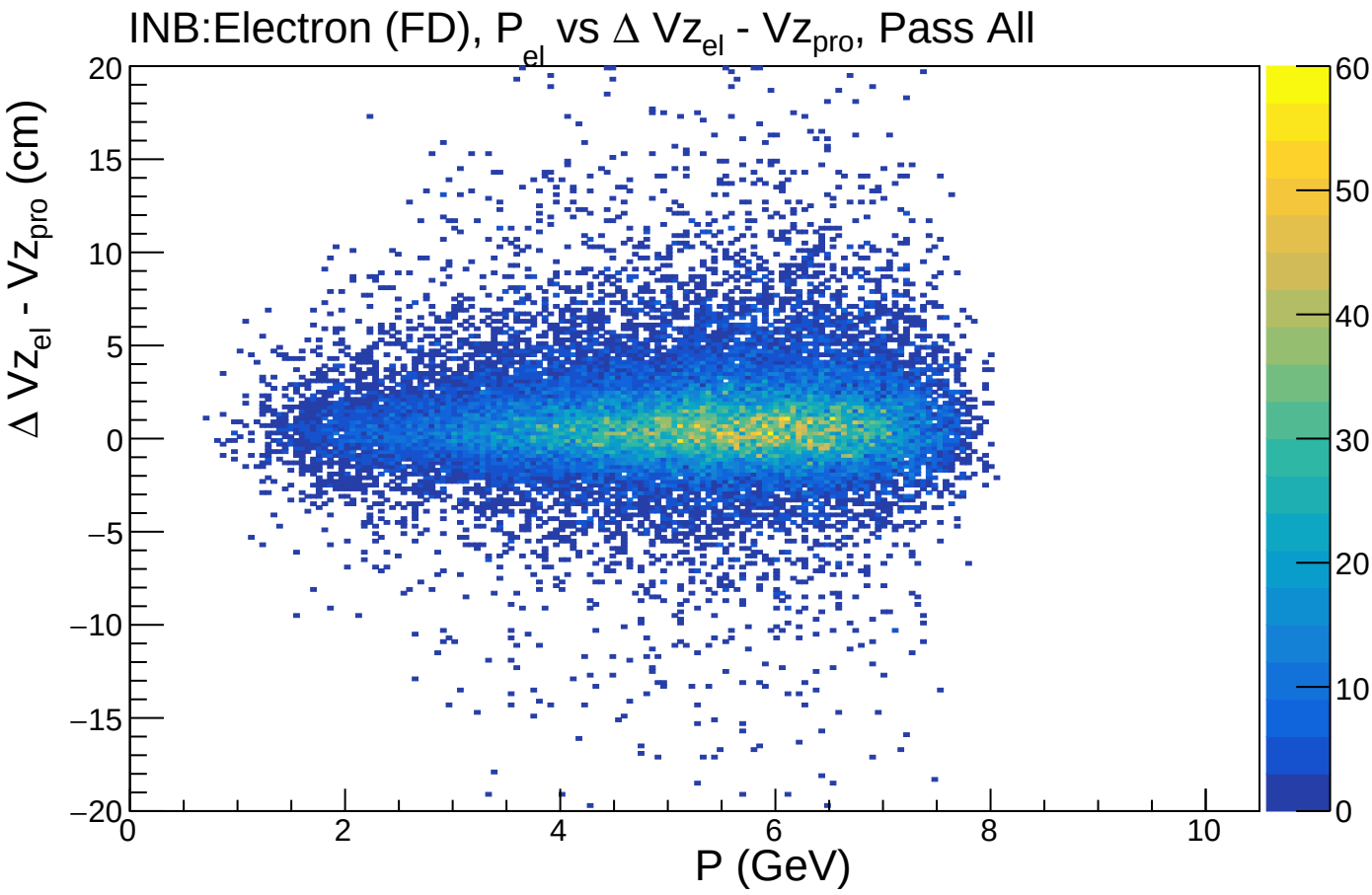

OUTB:Electron (FD), ϕ vs Vz, Pass All
Vz_el (cm)
ϕ_el (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
25
20
15
10
5
0

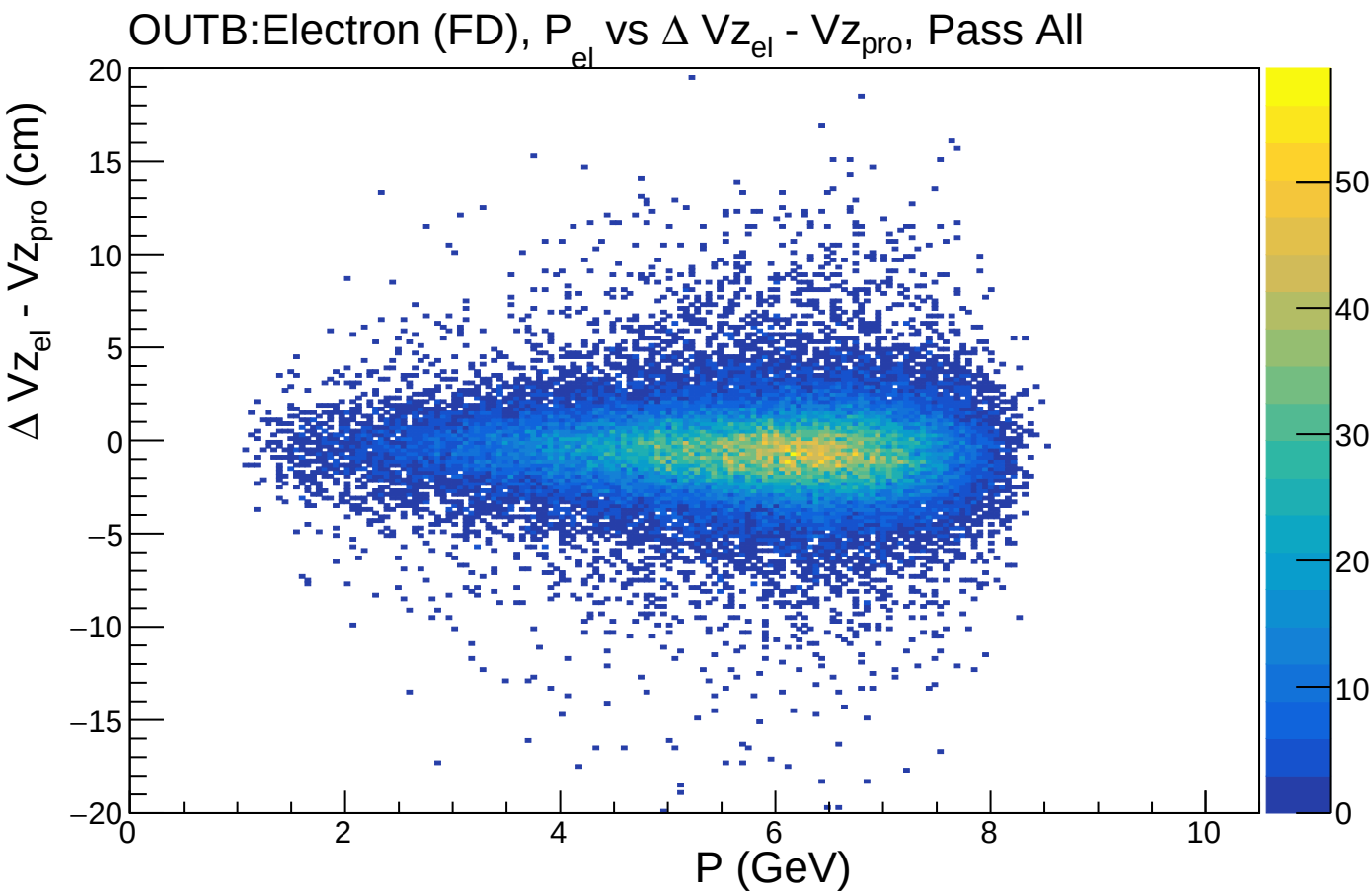

INB:Electron (FD), Θ vs Vz, Pass All
Vz_el (cm)
θ_el (deg)

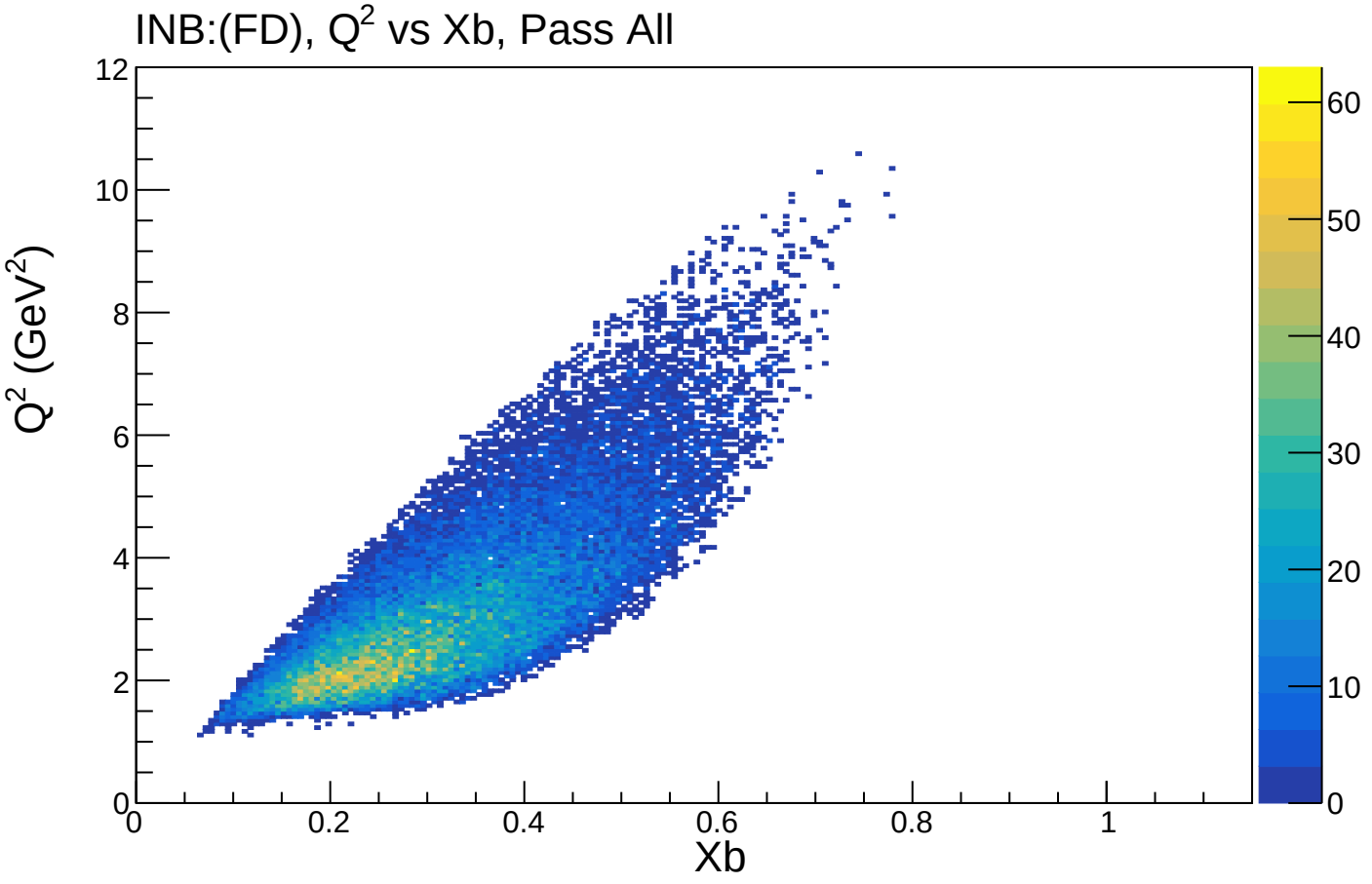

OUTB:Electron (FD), Θ vs Vz, Pass All
Vz_el (cm)
θ_el (deg)

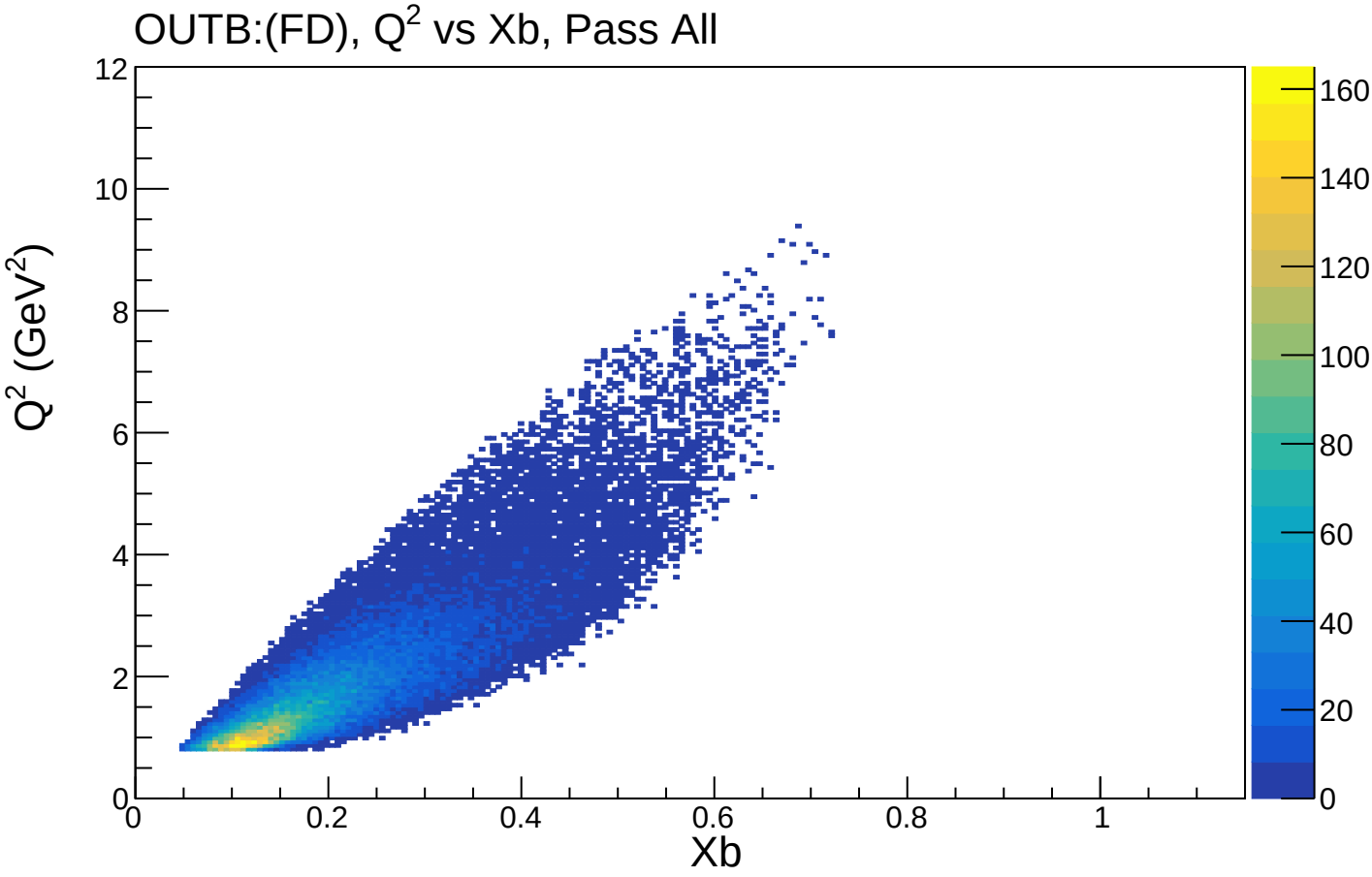

INB:Electron (FD), P vs Vz, Pass All
Vz_el (cm)
P_el (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
45
40
35
30
25
20
15
10
5
0

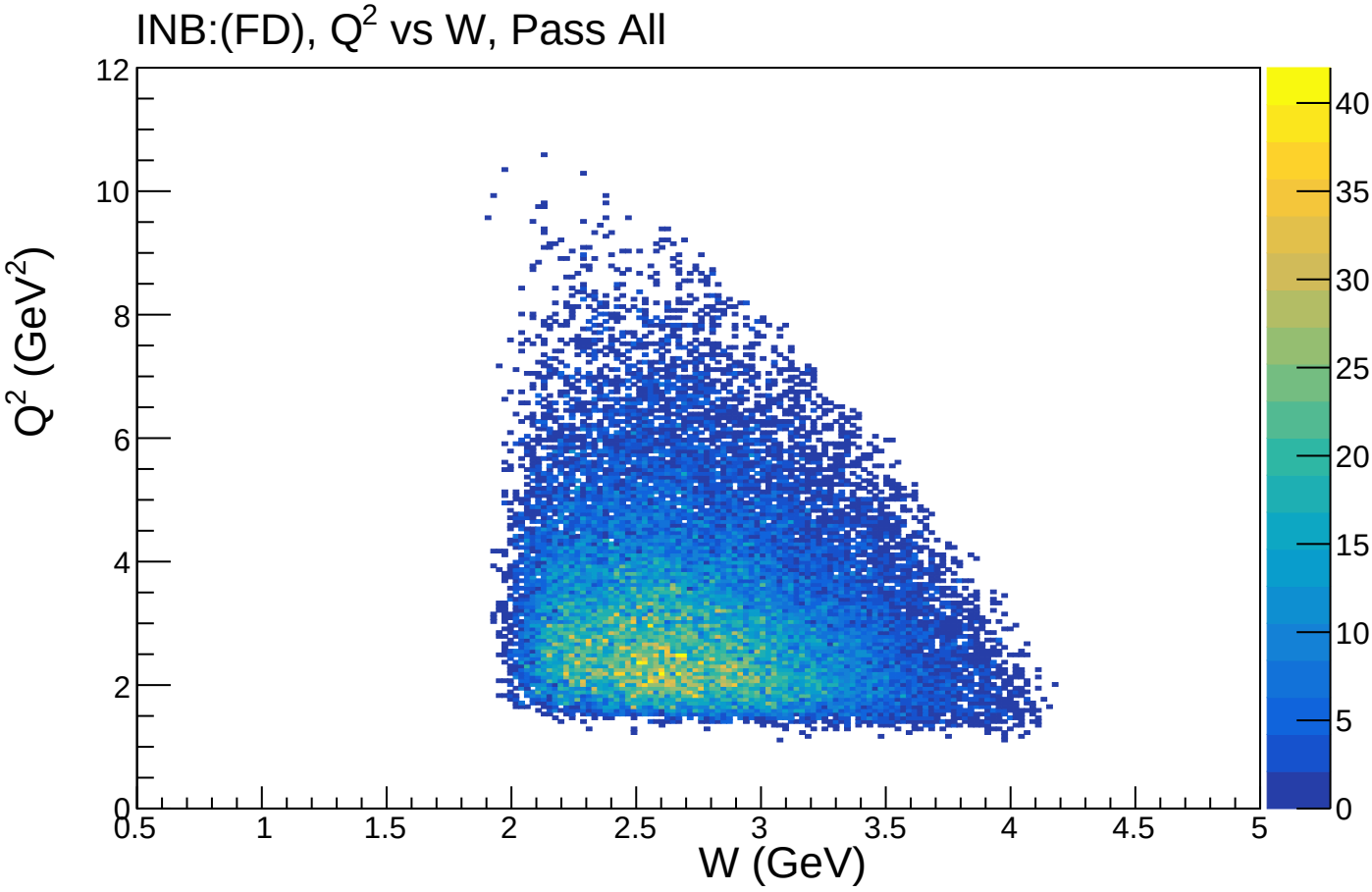

OUTB:Electron (FD), P vs Vz, Pass All
Vz_el (cm)
P_el (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
40
35
30
25
20
15
10
5
0

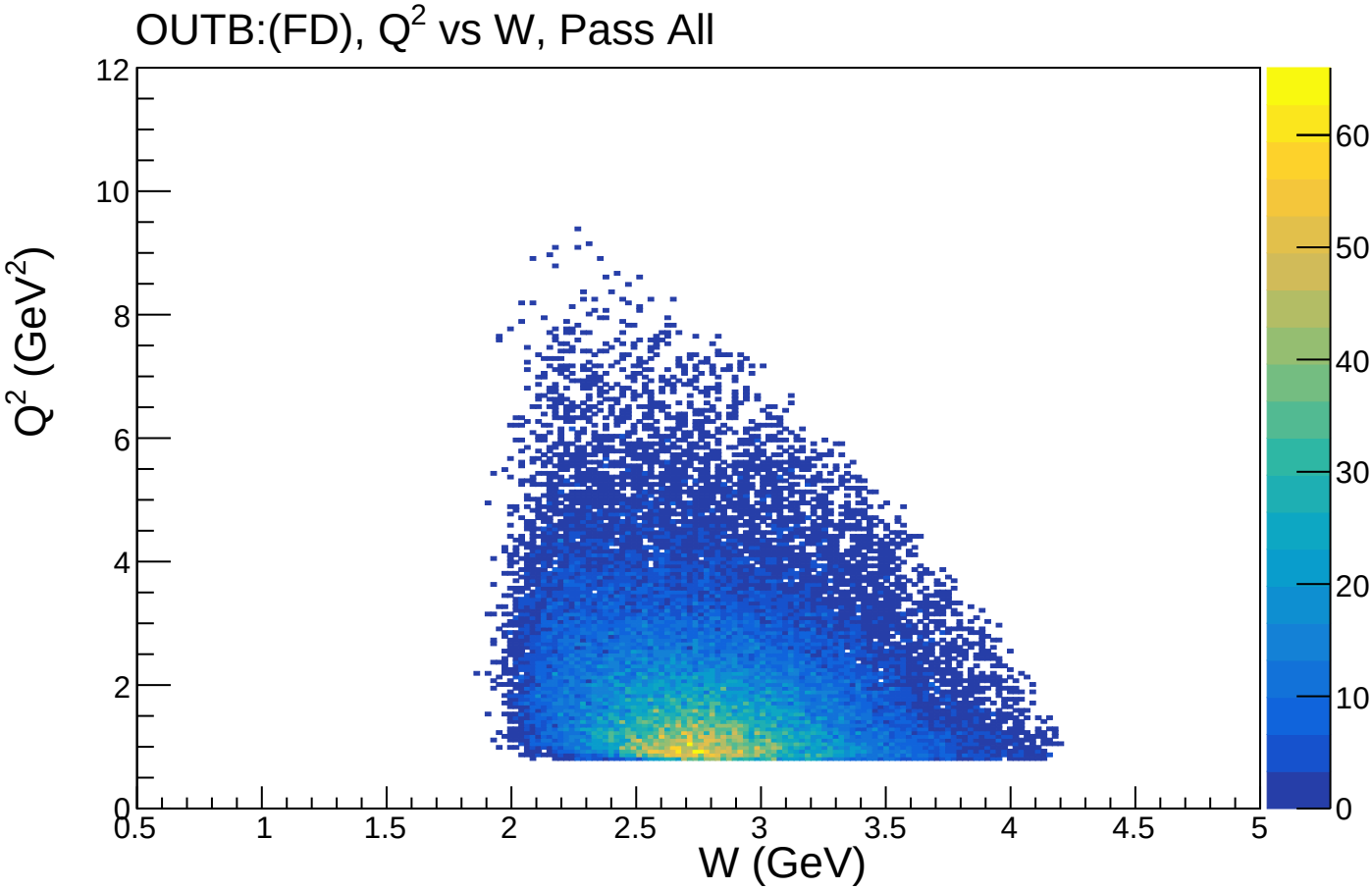

INB:Electron (FD), P_el vs Δ Vz_el - Vz_pro, Pass All
Δ Vz_el - Vz_pro (cm)
P (GeV)


OUTB:Electron (FD), P_el vs Δ Vz_el - Vz_pro, Pass All
Δ Vz_el - Vz_pro (cm)
P (GeV)

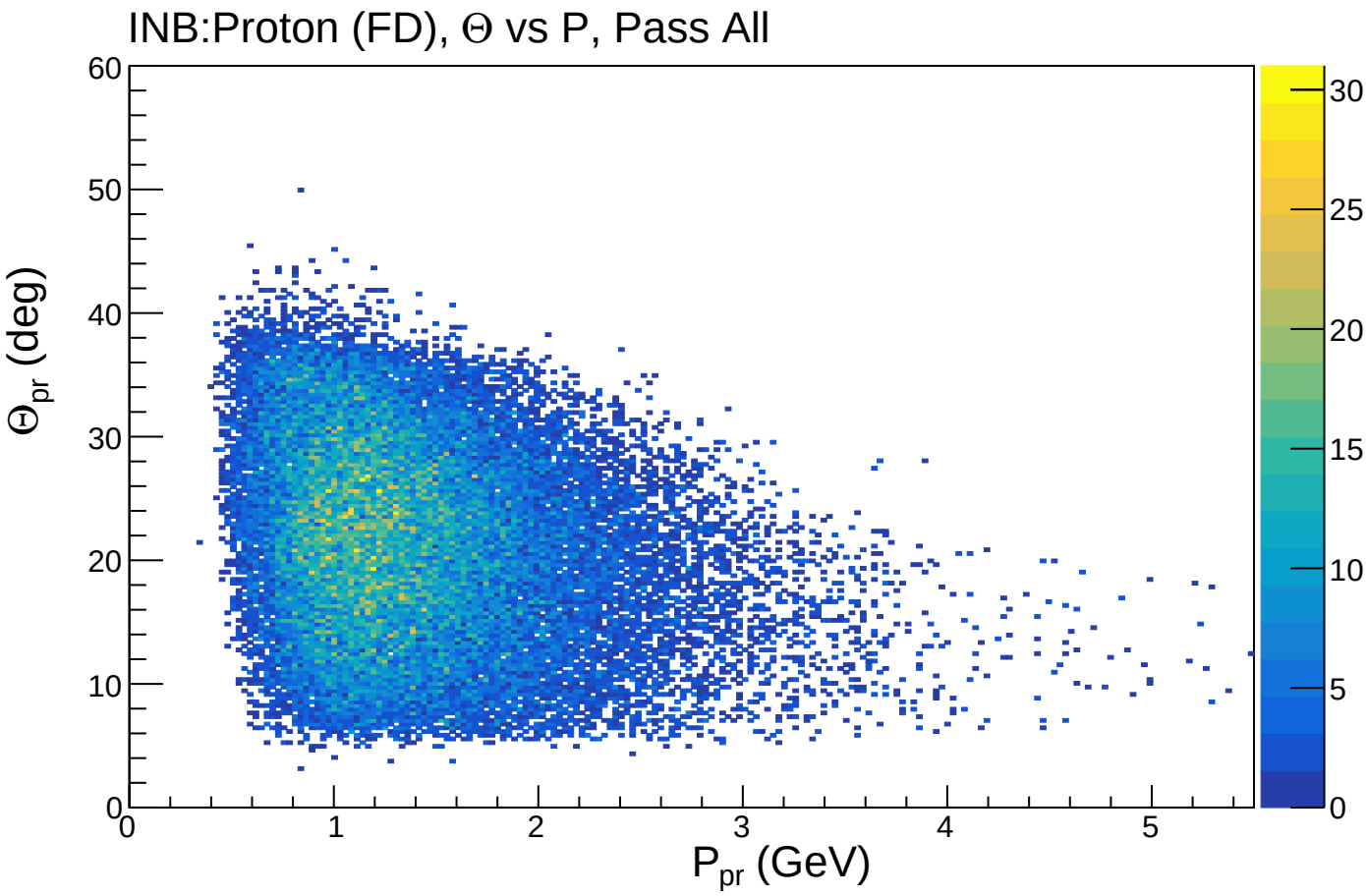

INB:(FD), Q2 vs Xb, Pass All
Q2 (GeV2)
Xb
0
2
4
6
8
10
12
0
0.2
0.4
0.6
0.8
1
0
10
20
30
40
50
60

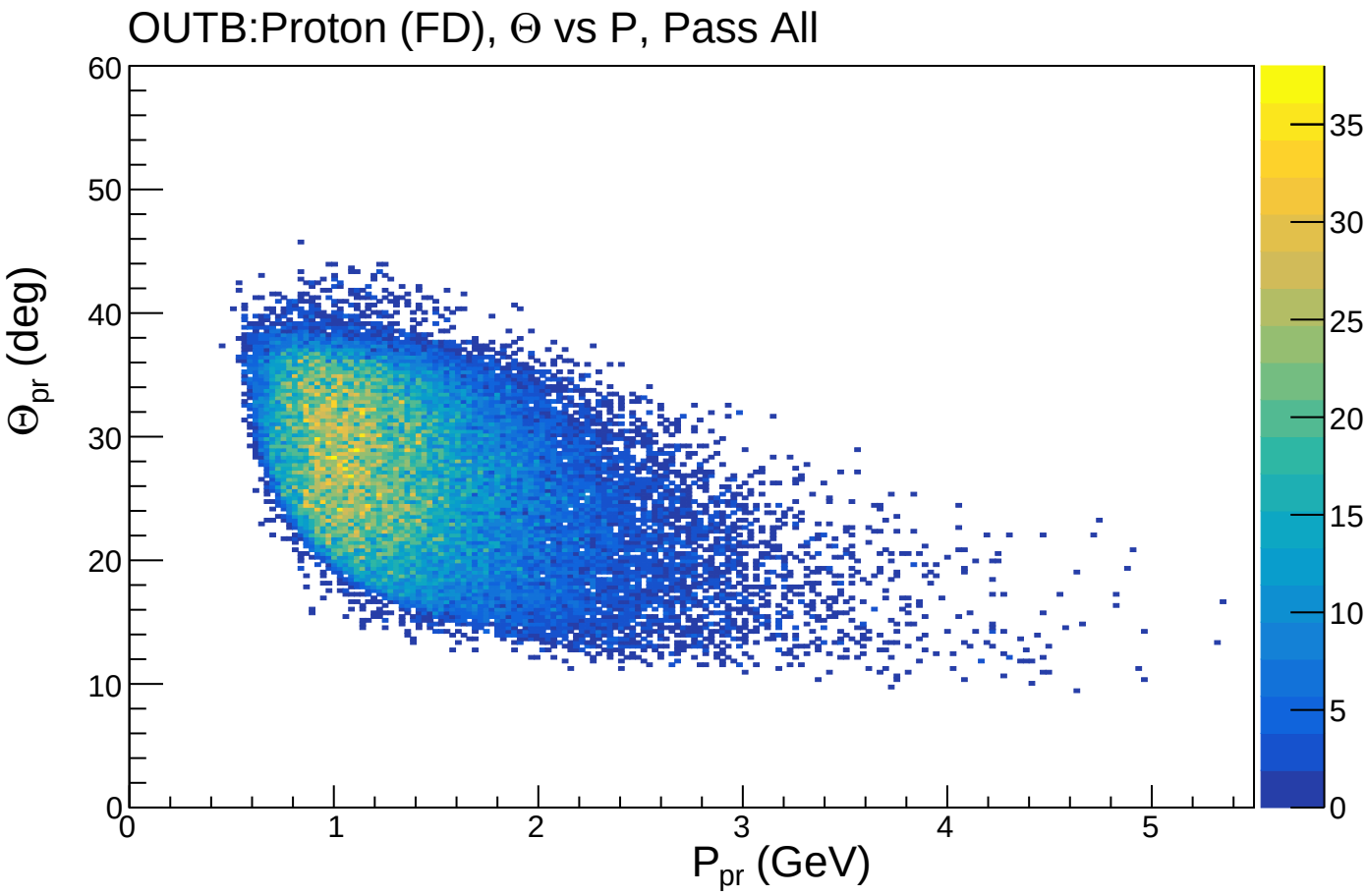

OUTB:(FD), Q2 vs Xb, Pass All
Q2 (GeV2)
Xb
0
2
4
6
8
10
12
0
0.2
0.4
0.6
0.8
1
0
20
40
60
80
100
120
140
160

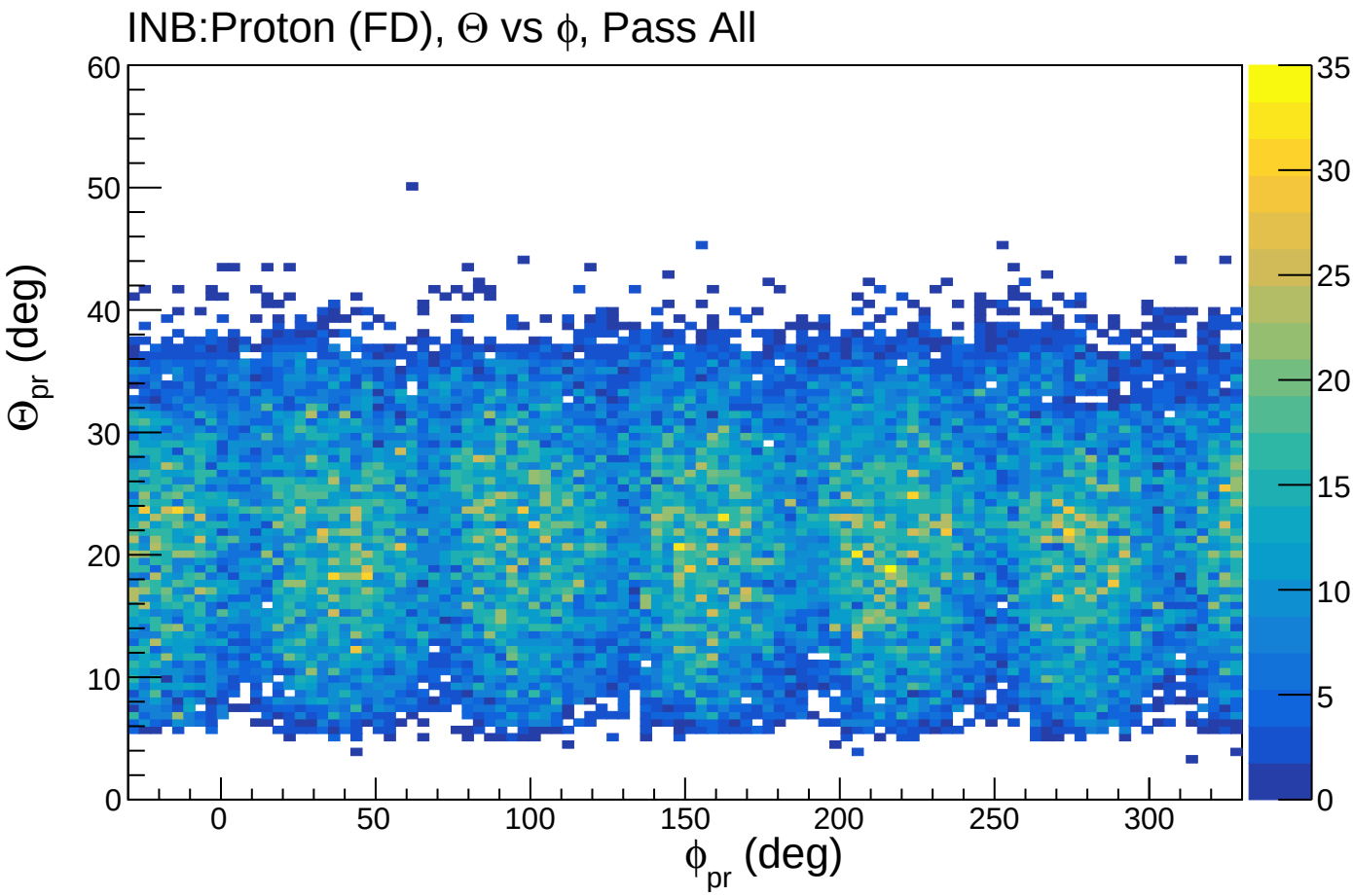

INB:(FD), Q2 vs W, Pass All
Q2 (GeV2)
W (GeV)
0
2
4
6
8
10
12
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
5
10
15
20
25
30
35
40

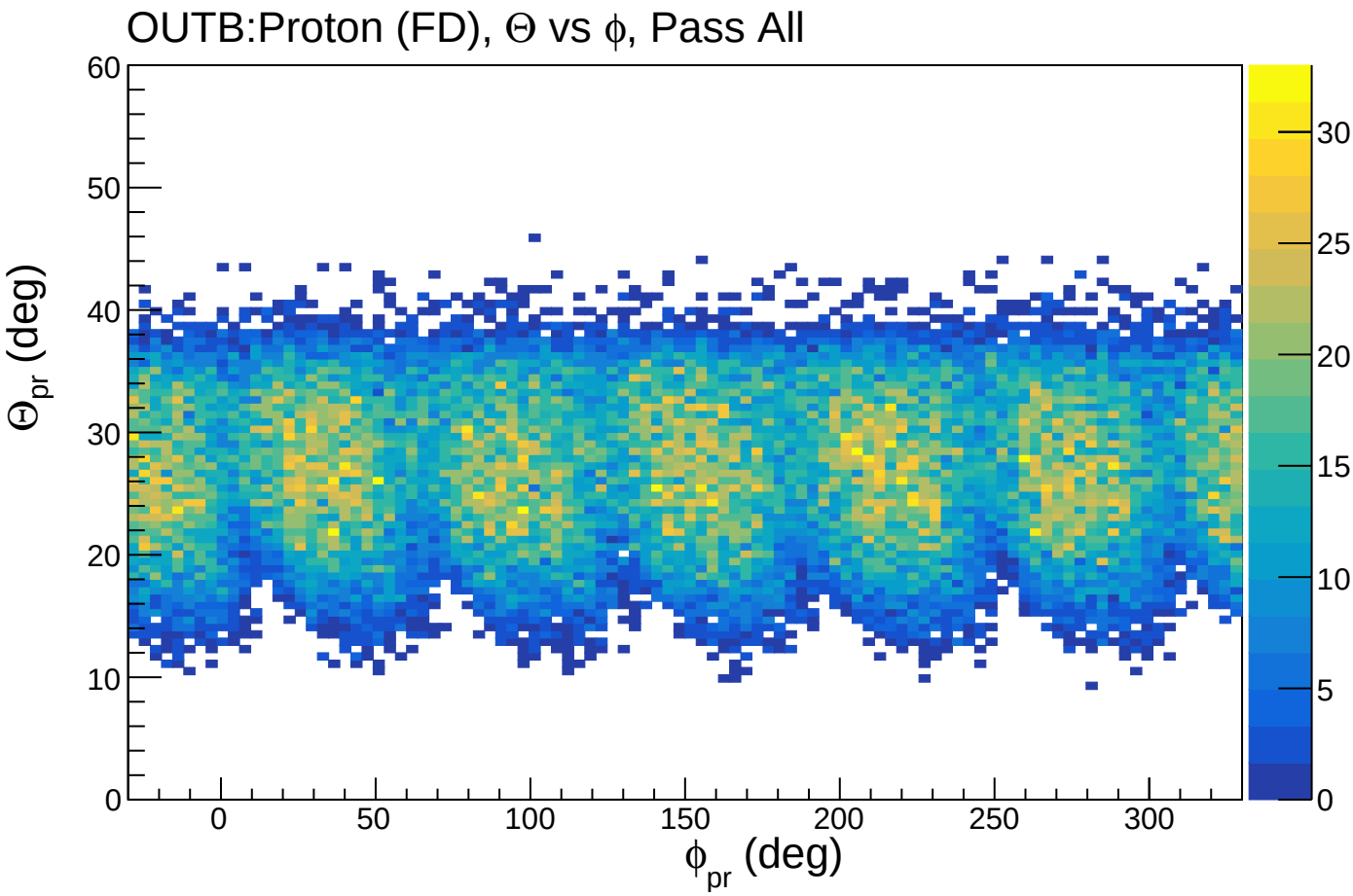

OUTB:(FD), Q2 vs W, Pass All
Q2 (GeV2)
W (GeV)
0
2
4
6
8
10
12
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
10
20
30
40
50
60

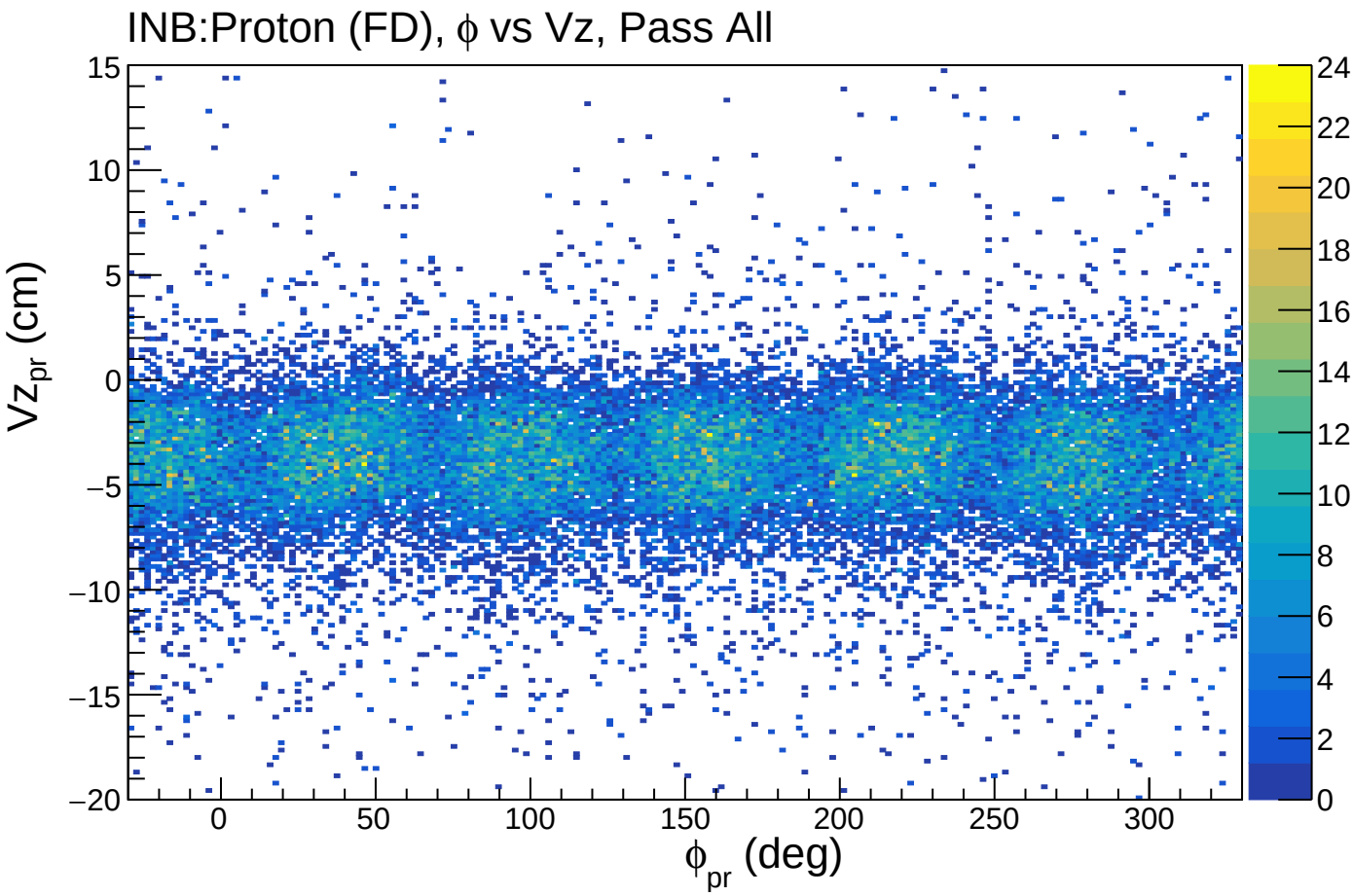
COMP- Pr Before Final Sel.

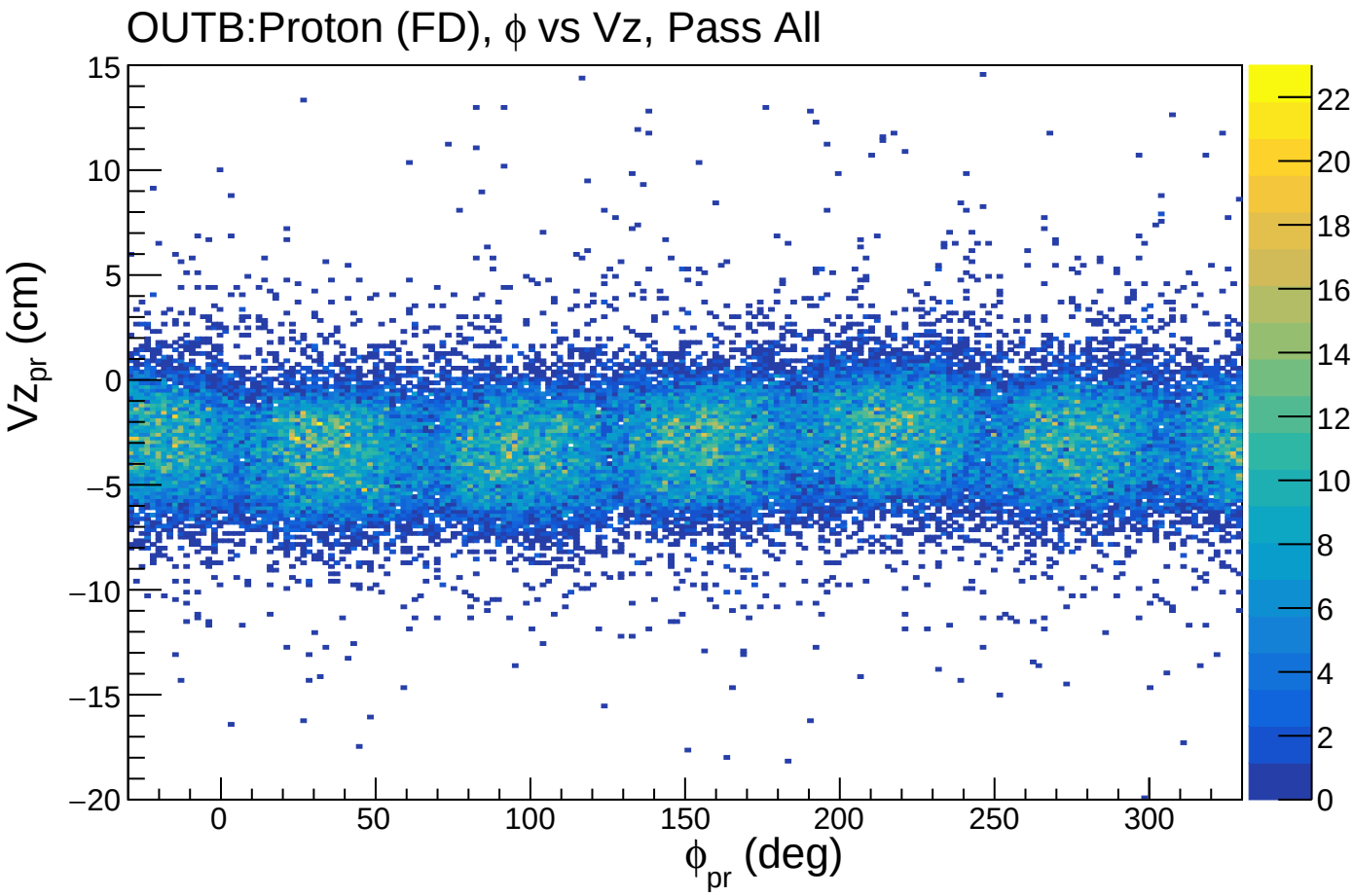

INB:Proton (FD), Θ vs P, Pass All
Θpr (deg)
Ppr (GeV)
0
10
20
30
40
50
60
1
2
3
4
5
0
5
10
15
20
25
30

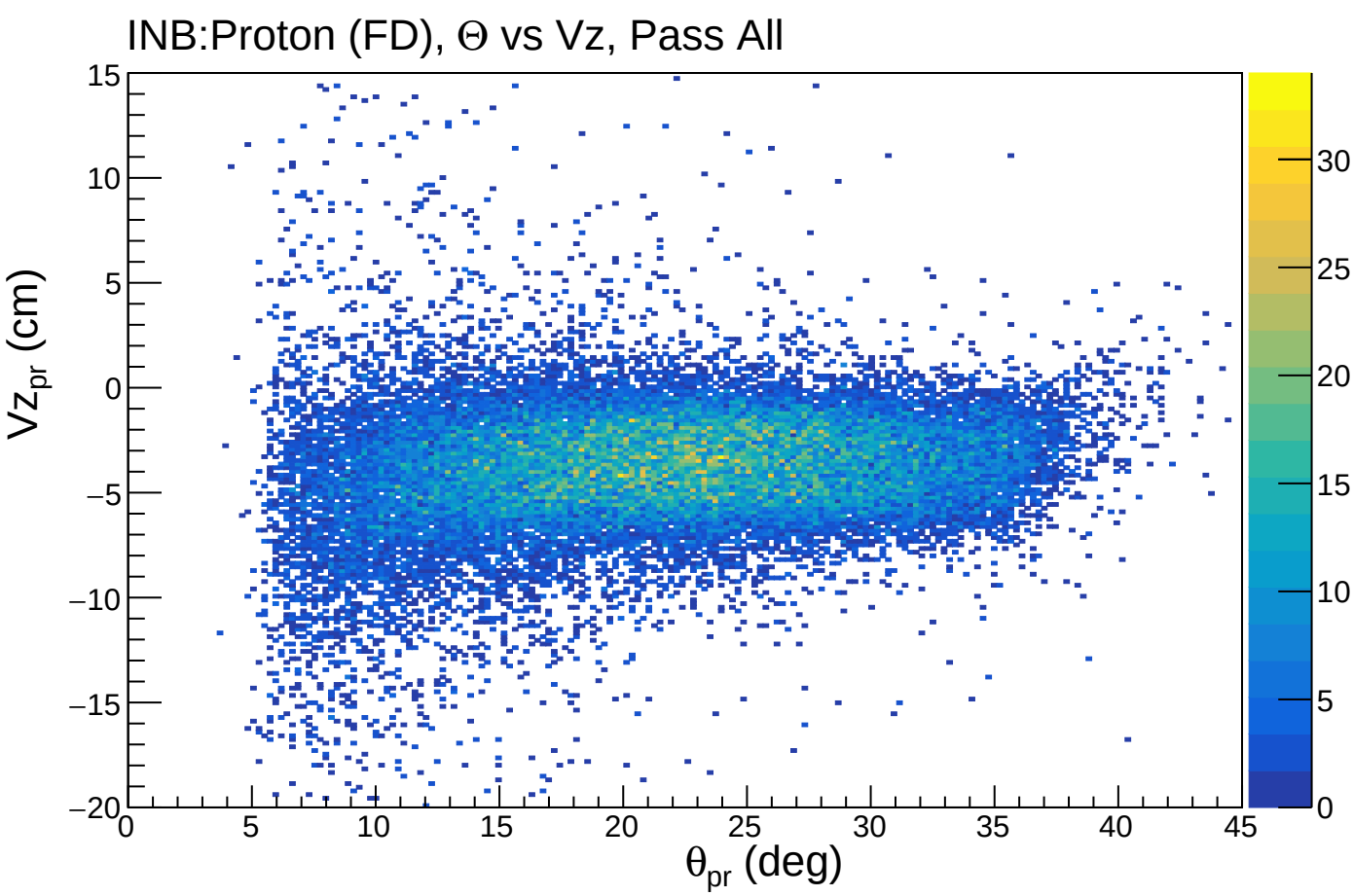

OUTB:Proton (FD), Θ vs P, Pass All
Θpr (deg)
Ppr (GeV)
0
10
20
30
40
50
60
1
2
3
4
5
0
5
10
15
20
25
30
35

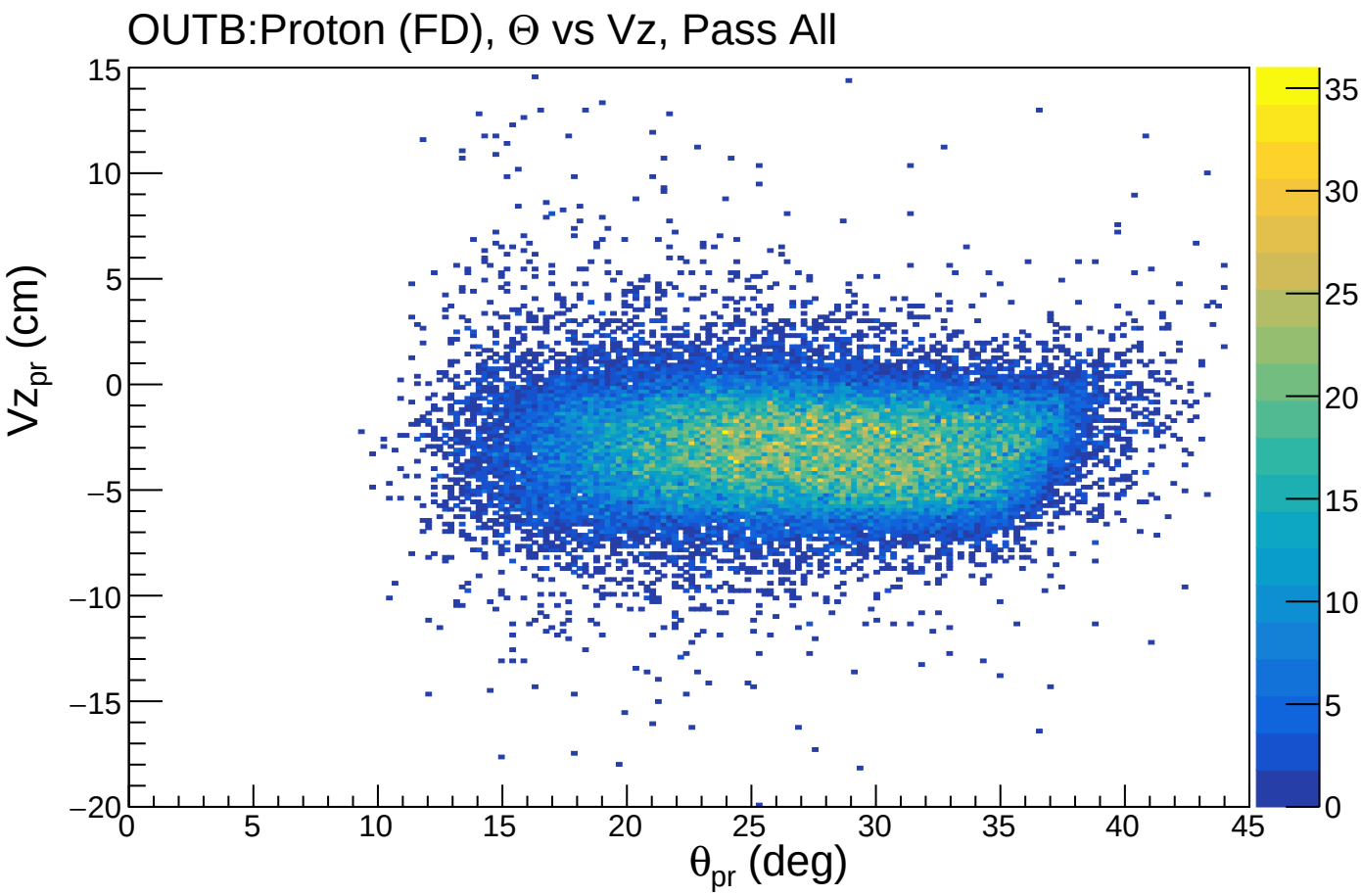

INB:Proton (FD), Θ vs ϕ, Pass All
Θpr (deg)
ϕpr (deg)
0
10
20
30
40
50
60
0
50
100
150
200
250
300
0
5
10
15
20
25
30
35

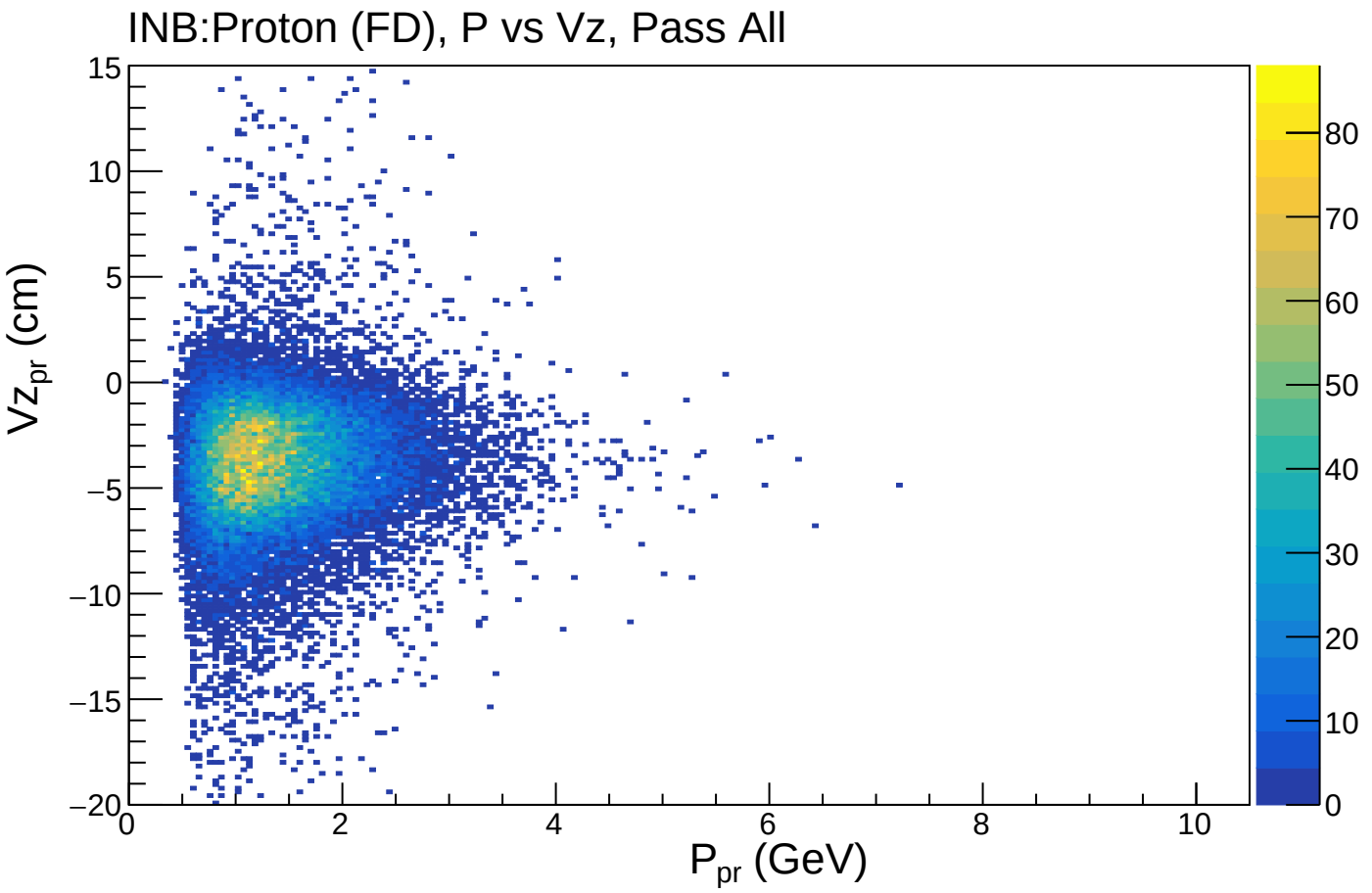

OUTB:Proton (FD), Θ vs ϕ, Pass All
Θpr (deg)
ϕpr (deg)
0
10
20
30
40
50
60
0
50
100
150
200
250
300
0
5
10
15
20
25
30

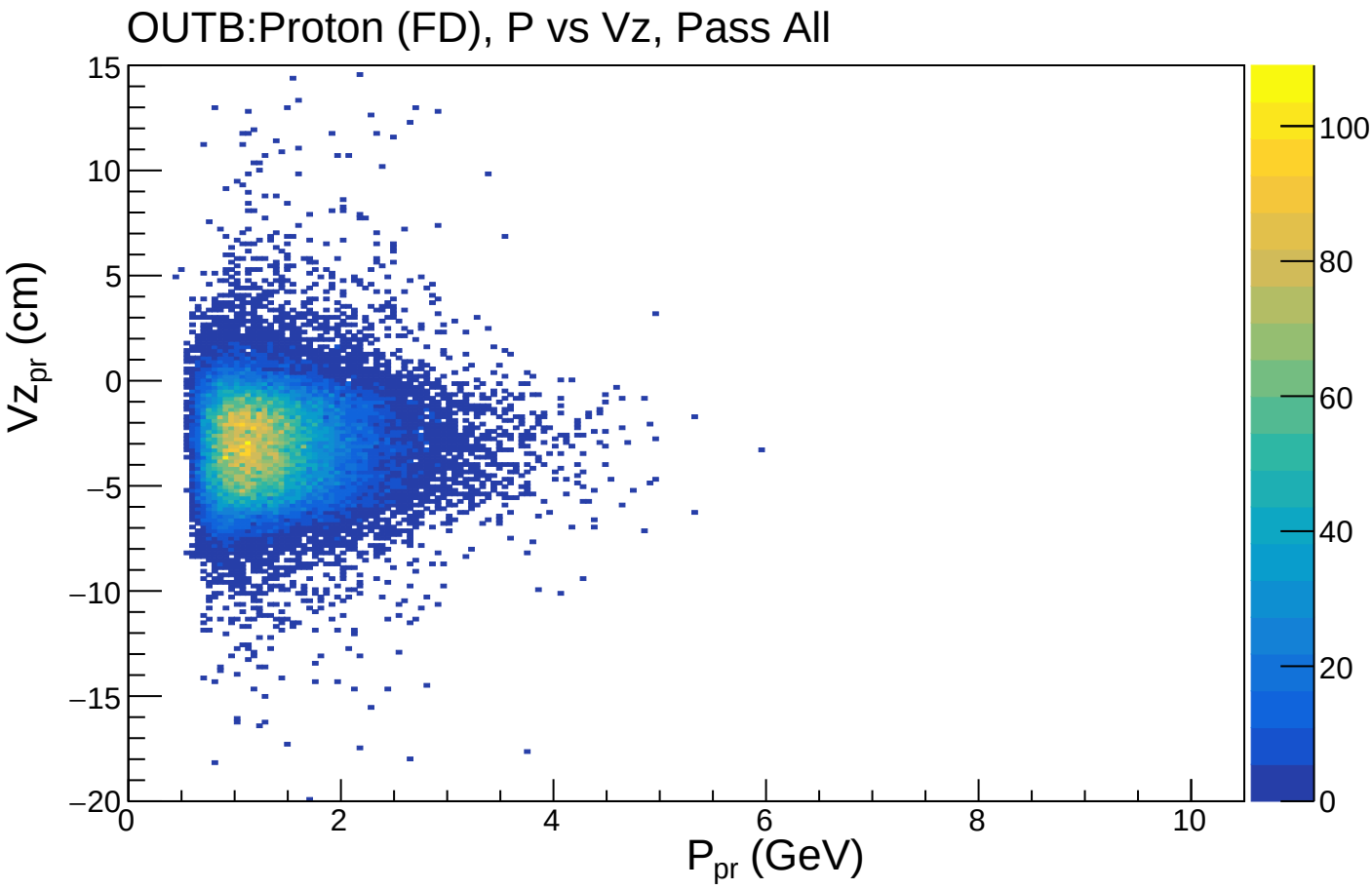

INB:Proton (FD), ϕ vs Vz, Pass All
Vz_pr (cm)
ϕ_pr (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
24
22
20
18
16
14
12
10
8
6
4
2
0

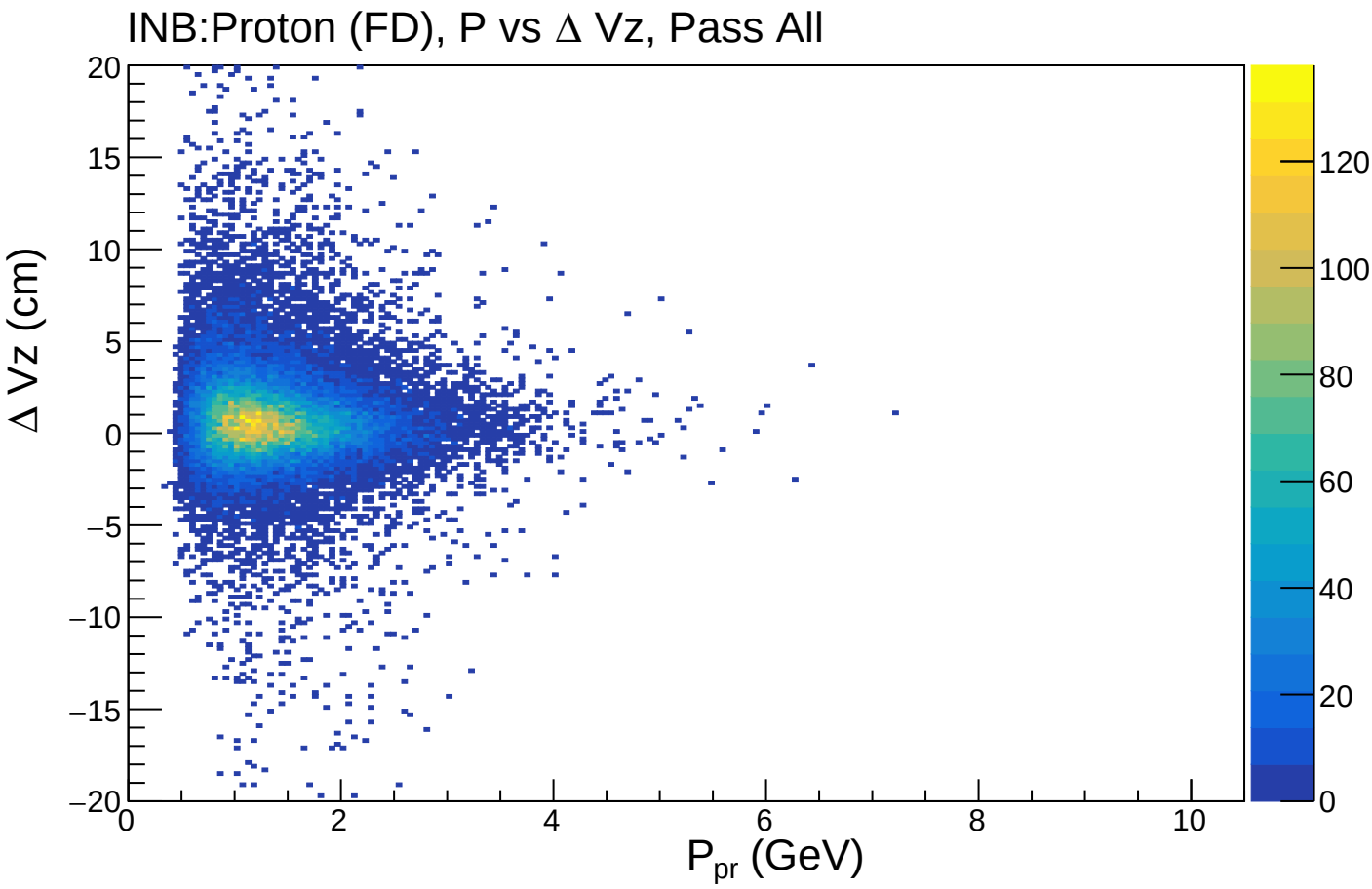

OUTB:Proton (FD), ϕ vs Vz, Pass All
Vz_pr (cm)
ϕ_pr (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
22
20
18
16
14
12
10
8
6
4
2
0

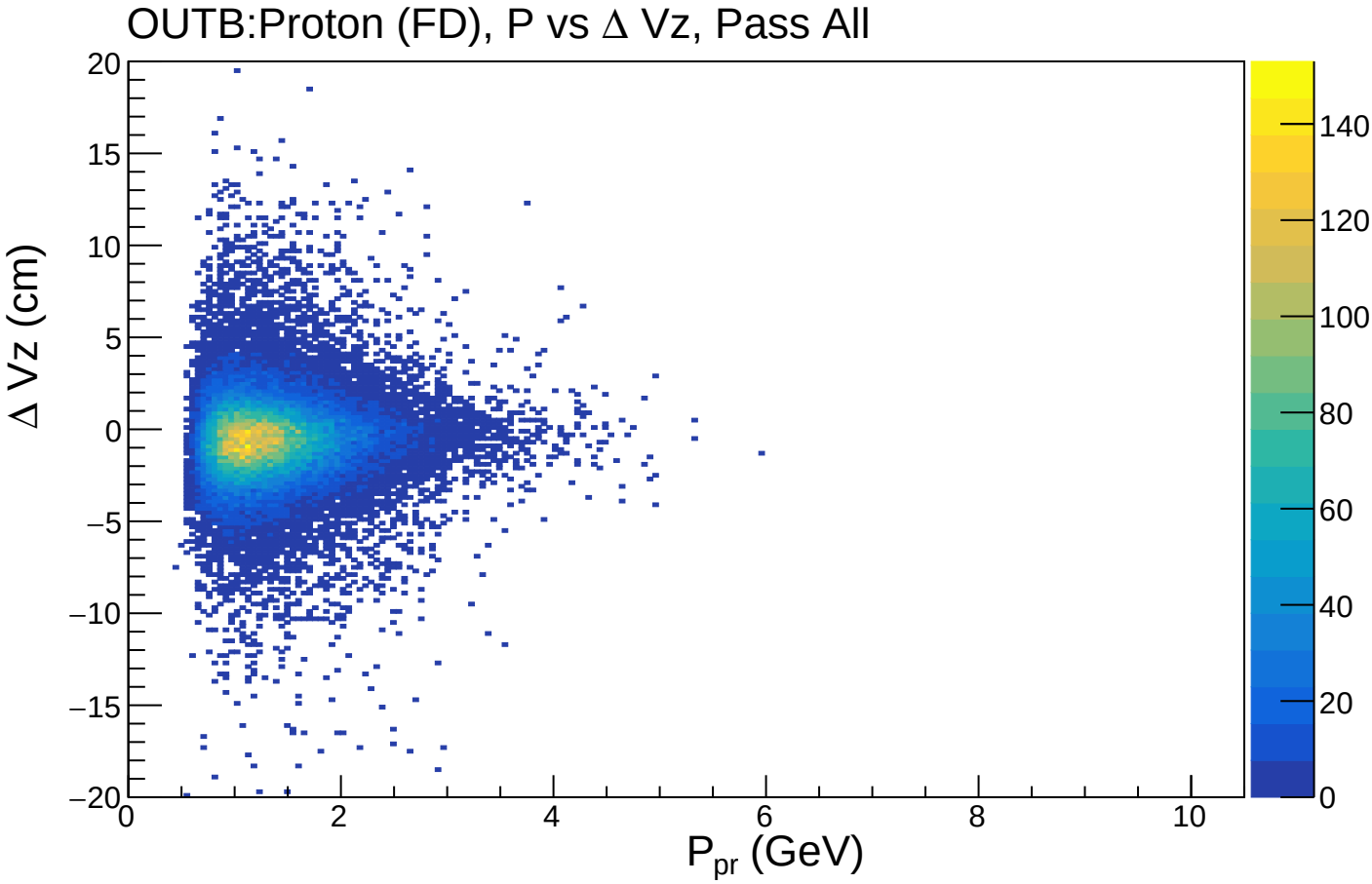

INB:Proton (FD), Θ vs Vz, Pass All
Vz_pr (cm)
θ_pr (deg)

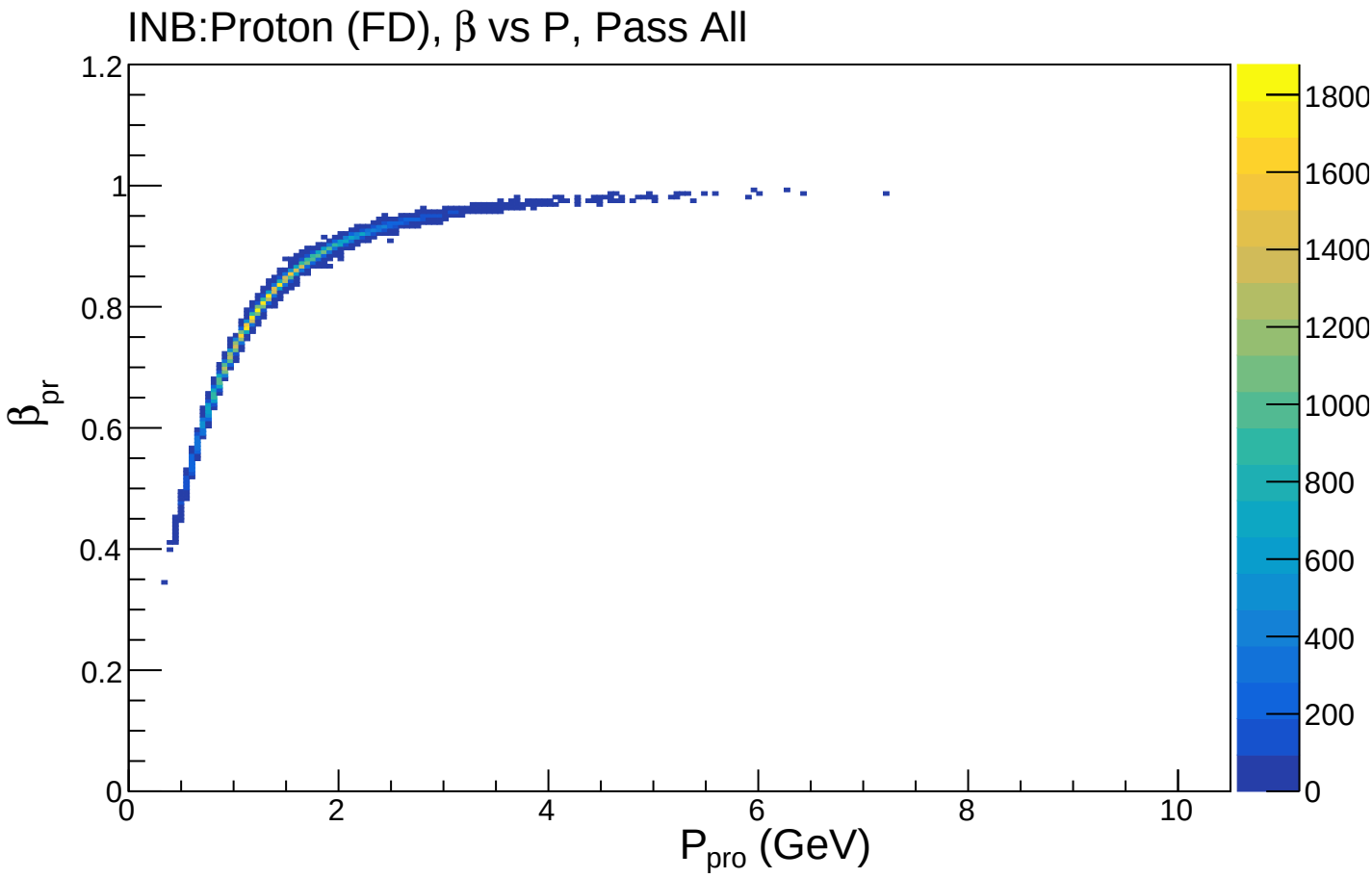

OUTB:Proton (FD), Θ vs Vz, Pass All
Vz_pr (cm)
θ_pr (deg)

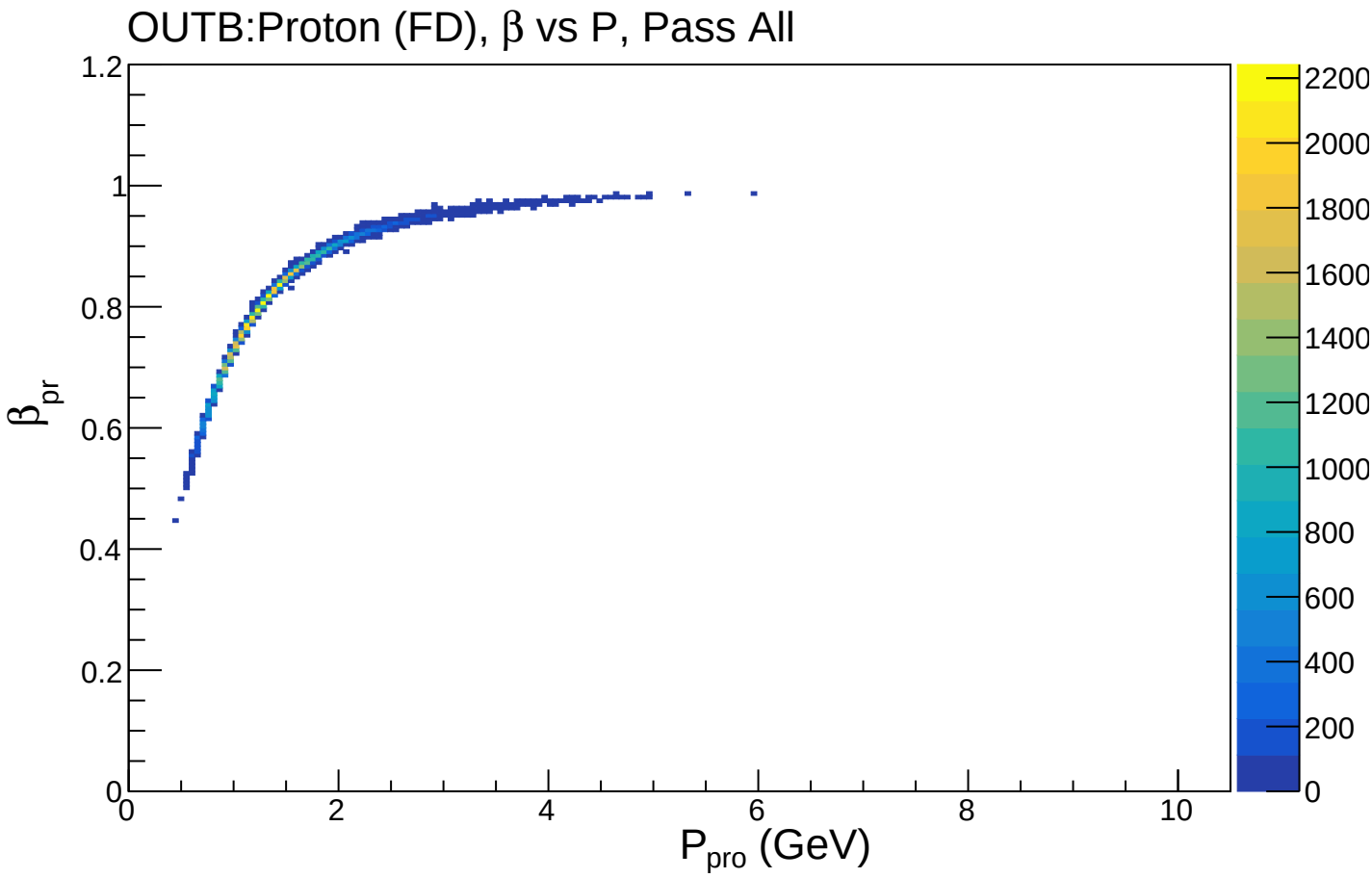

INB:Proton (FD), P vs Vz, Pass All
Vz_pr (cm)
P_pr (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
80
70
60
50
40
30
20
10
0

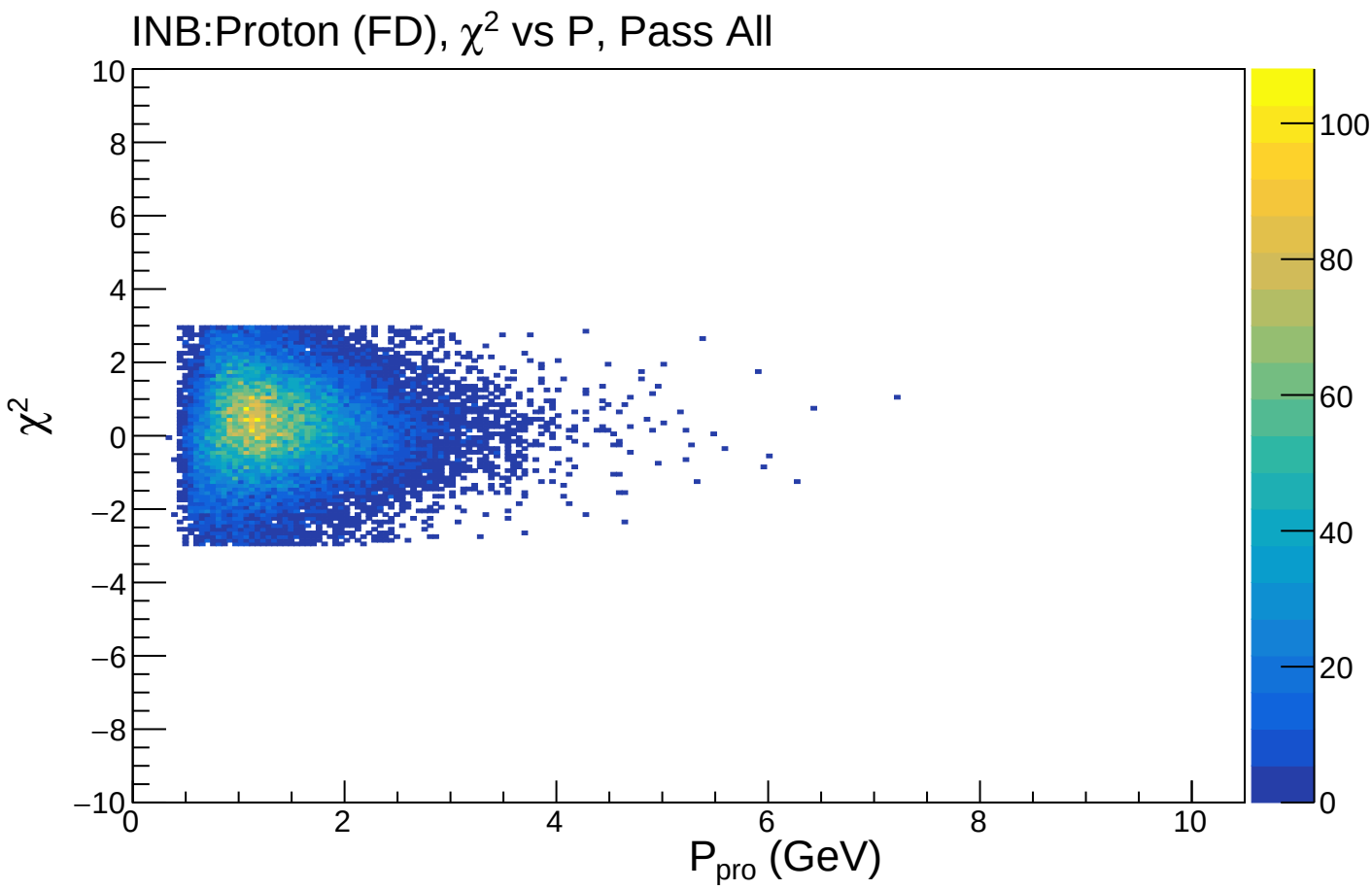

OUTB:Proton (FD), P vs Vz, Pass All
Vz_pr (cm)
P_pr (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
100
80
60
40
20
0

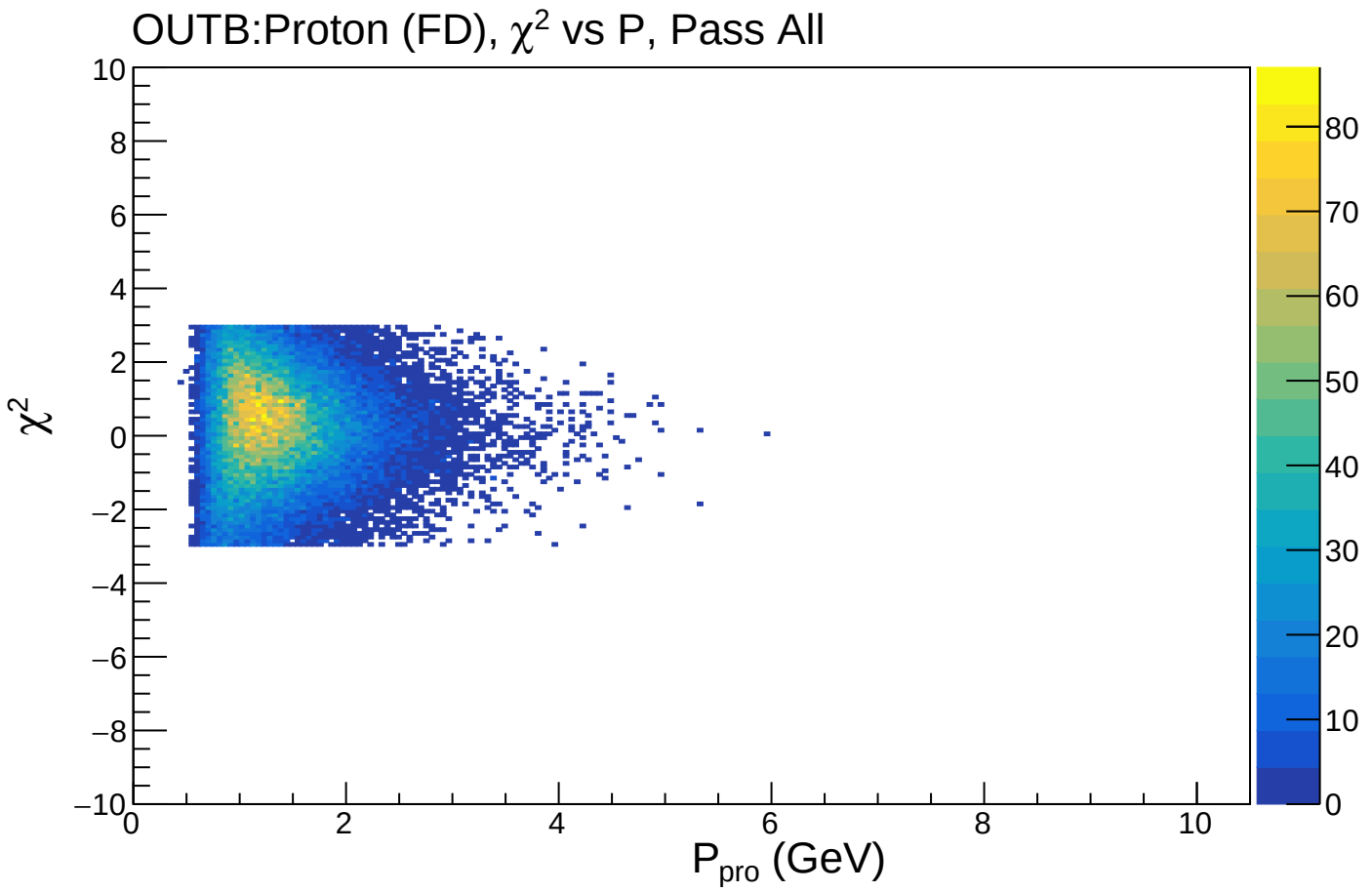

INB:Proton (FD), P vs Δ Vz, Pass All
Δ Vz (cm)
P_pr (GeV)

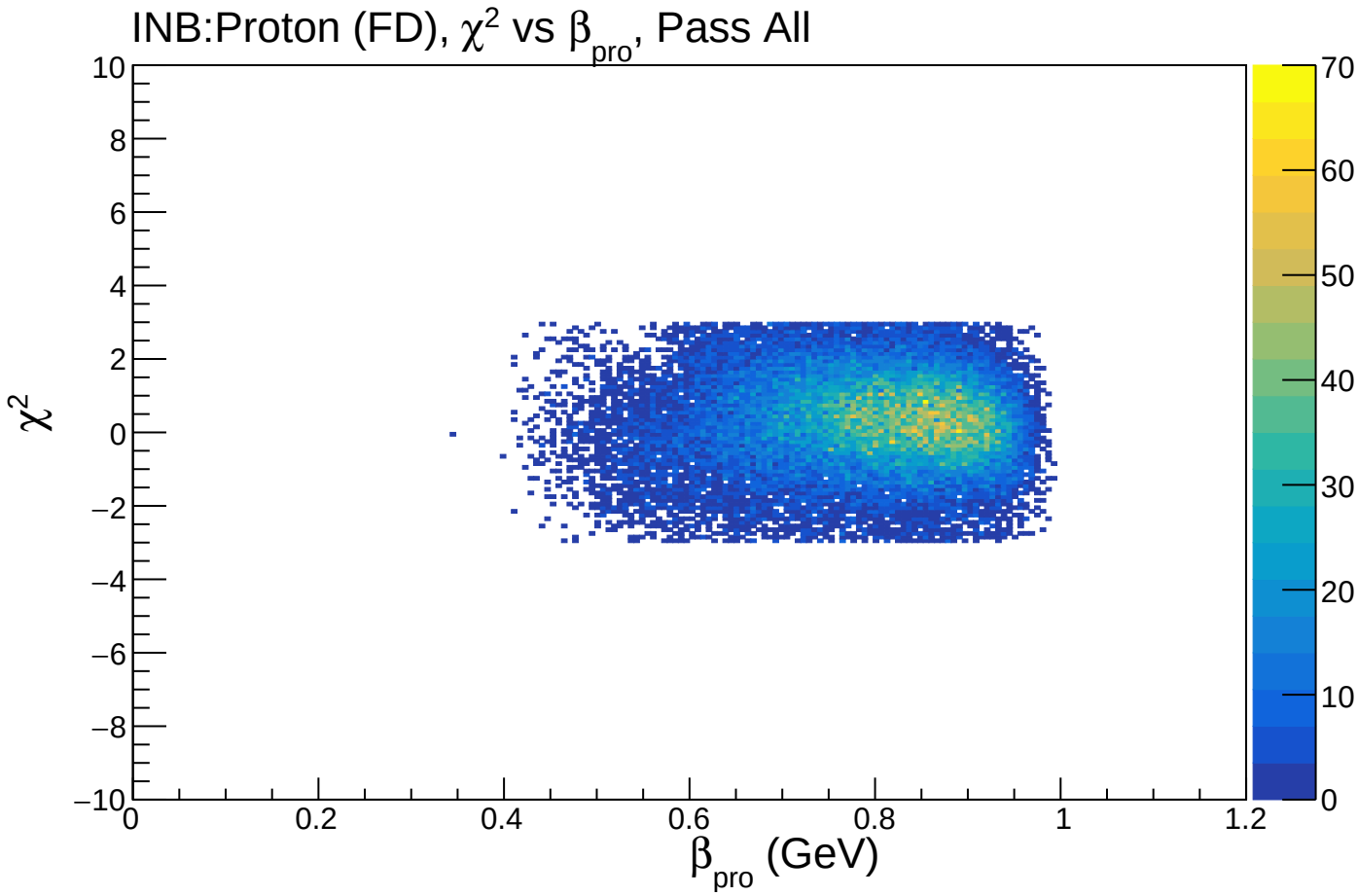

OUTB:Proton (FD), P vs Δ Vz, Pass All
Δ Vz (cm)
P_pr (GeV)

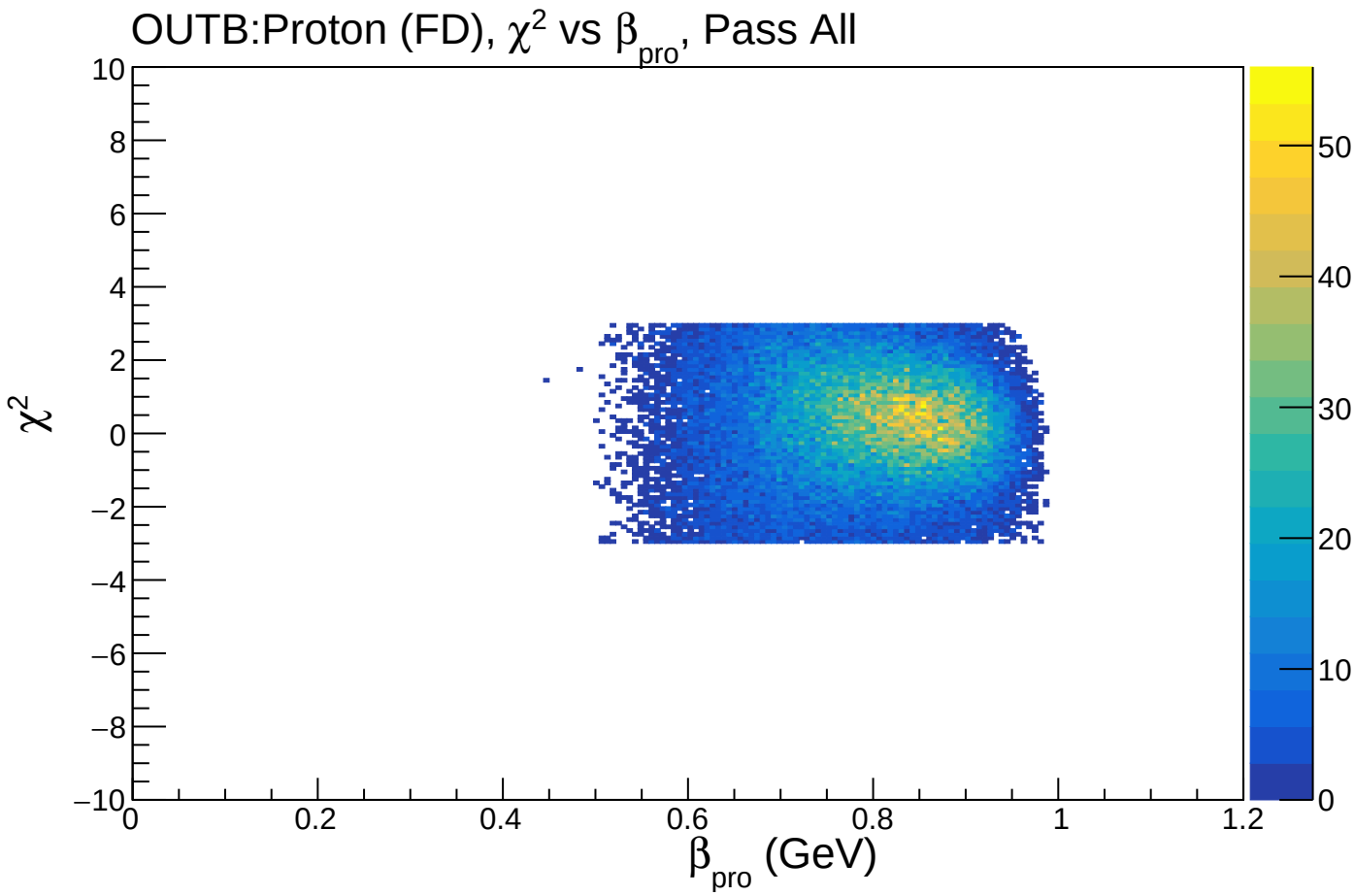

INB:Proton (FD), β vs P, Pass All
β_pr
P_pro (GeV)
0
0.2
0.4
0.6
0.8
1
1.2
2
4
6
8
10
200
400
600
800
1000
1200
1400
1600
1800


OUTB:Proton (FD), β vs P, Pass All
β_pr
P_pro (GeV)
0
0.2
0.4
0.6
0.8
1
1.2
2
4
6
8
10
200
400
600
800
1000
1200
1400
1600
1800
2000
2200

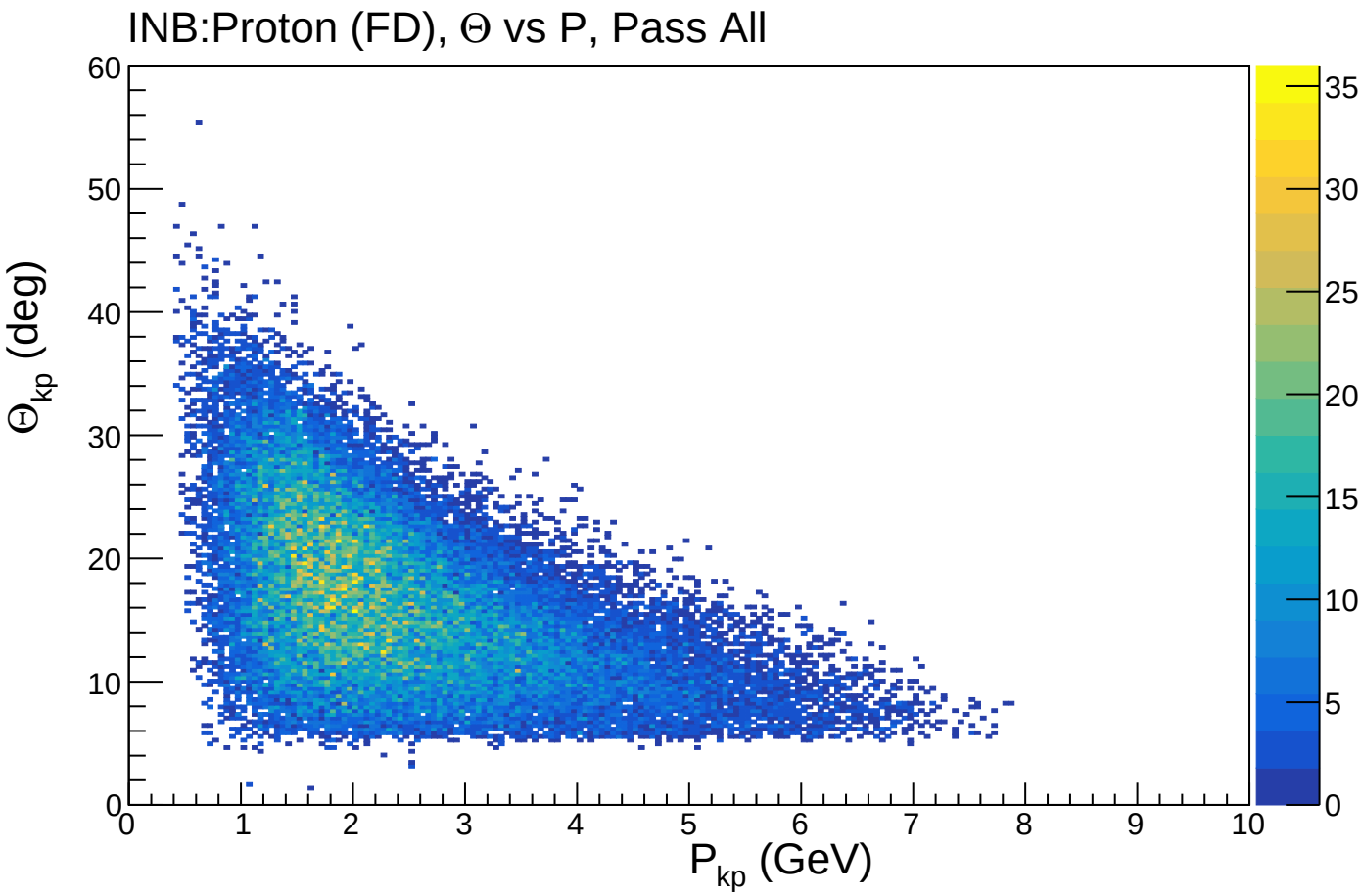

INB:Proton (FD), χ^2 vs P, Pass All
χ^2
P_{pro} (GeV)

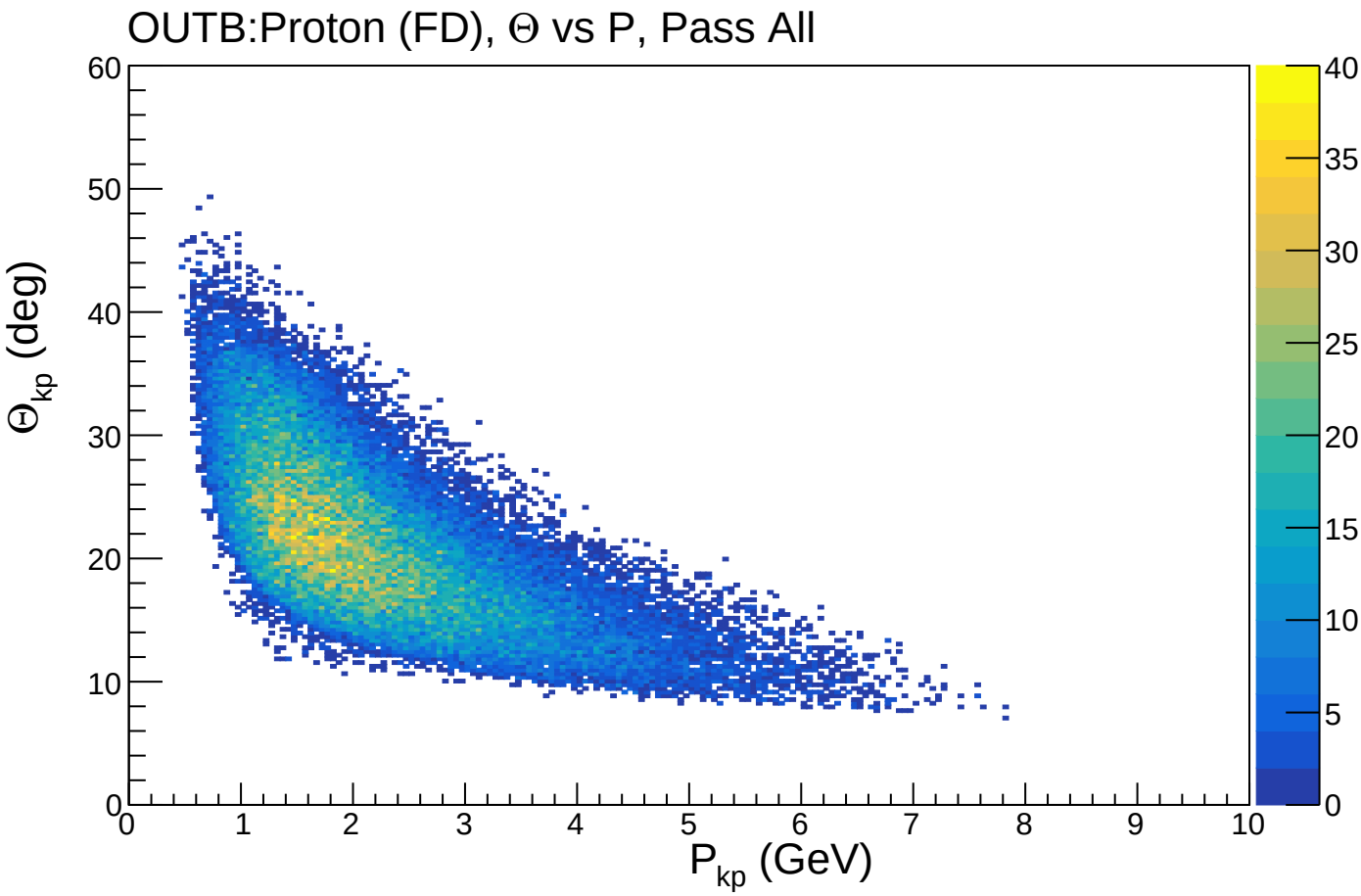

OUTB:Proton (FD), χ^2 vs P, Pass All
χ^2
P_{pro} (GeV)

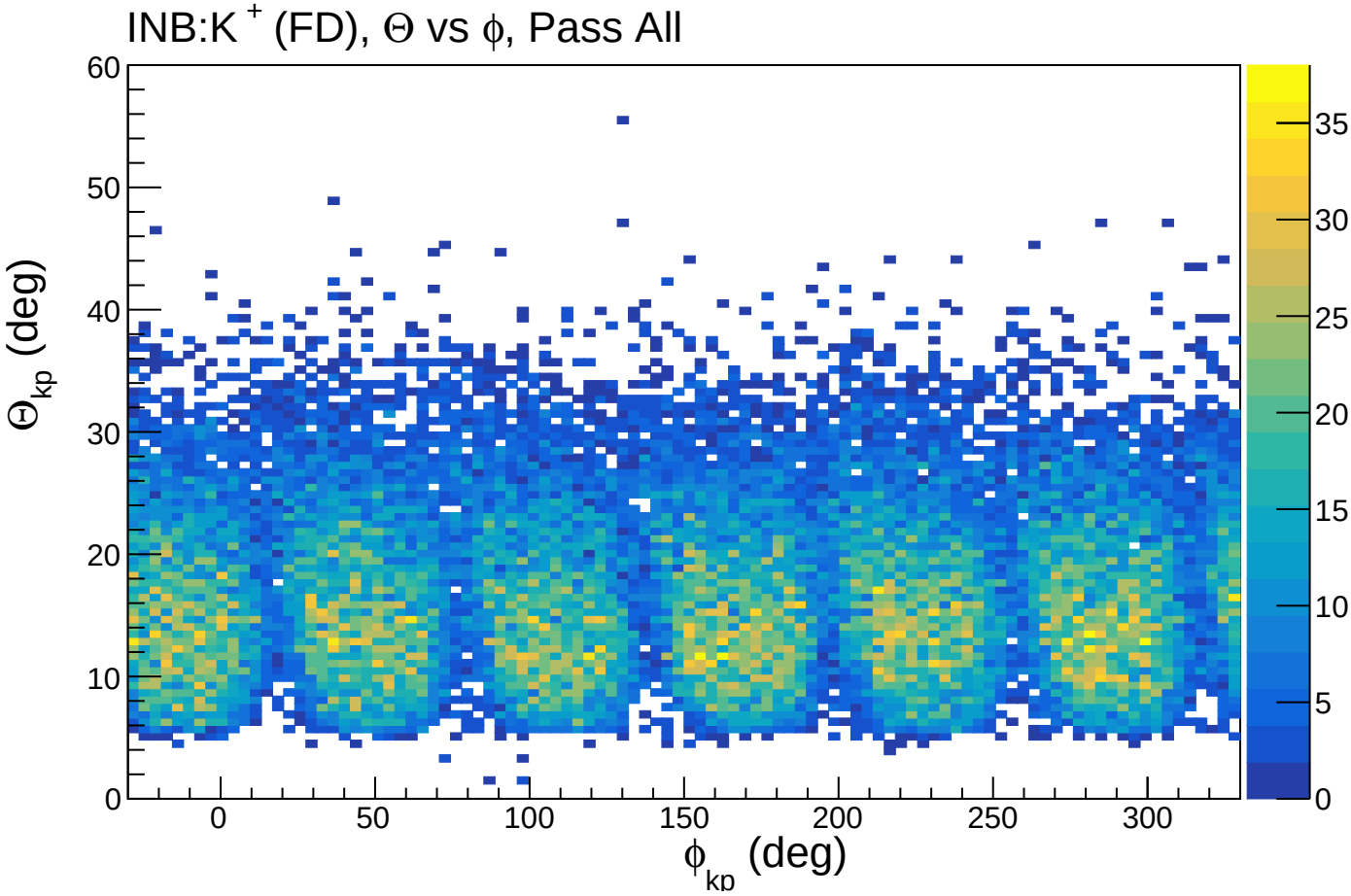

INB:Proton (FD), χ^2 vs β_{pro}, Pass All
χ^2
β_{pro} (GeV)

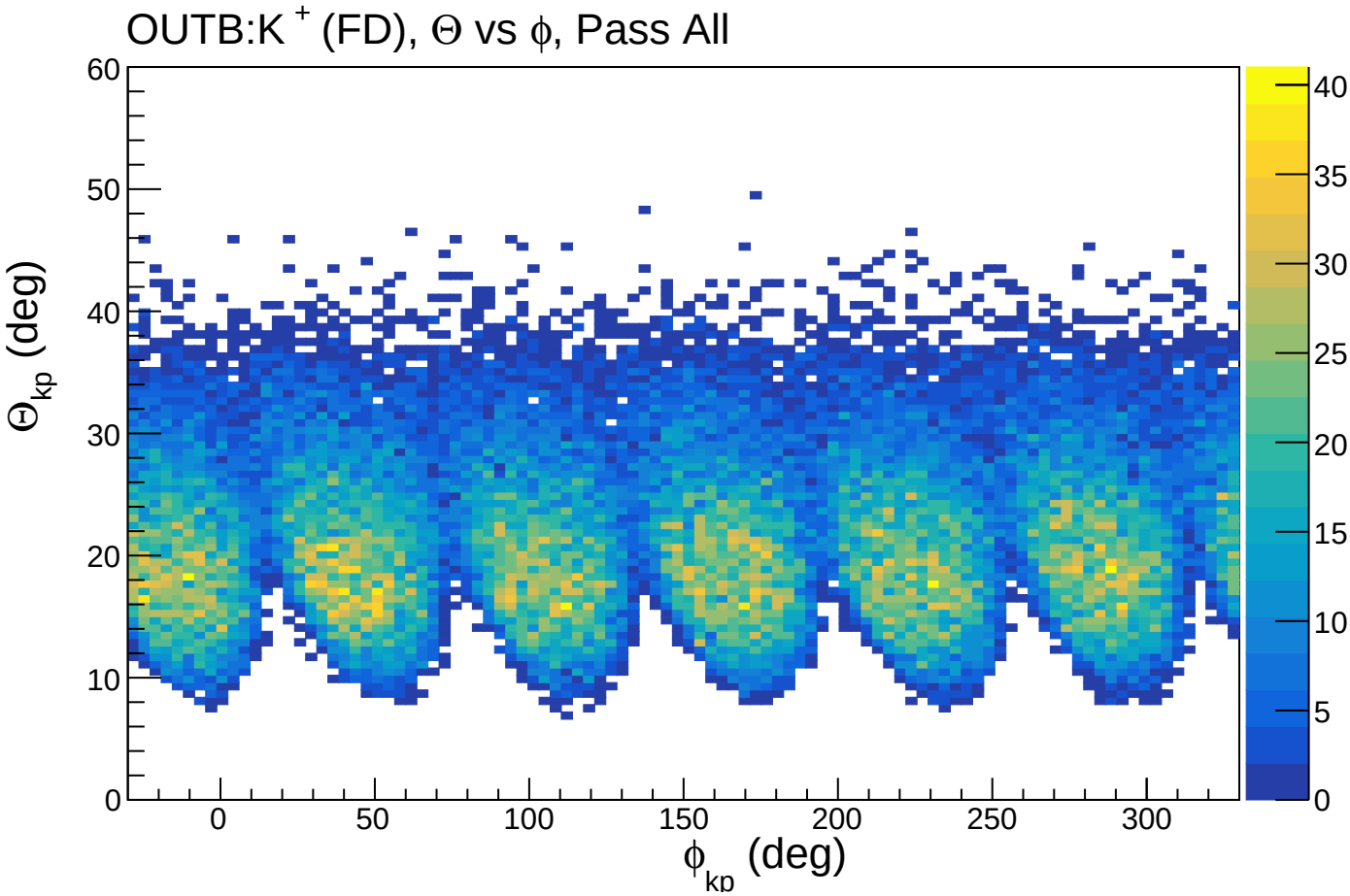

OUTB:Proton (FD), χ^2 vs β_{pro}, Pass All
χ^2
β_{pro} (GeV)

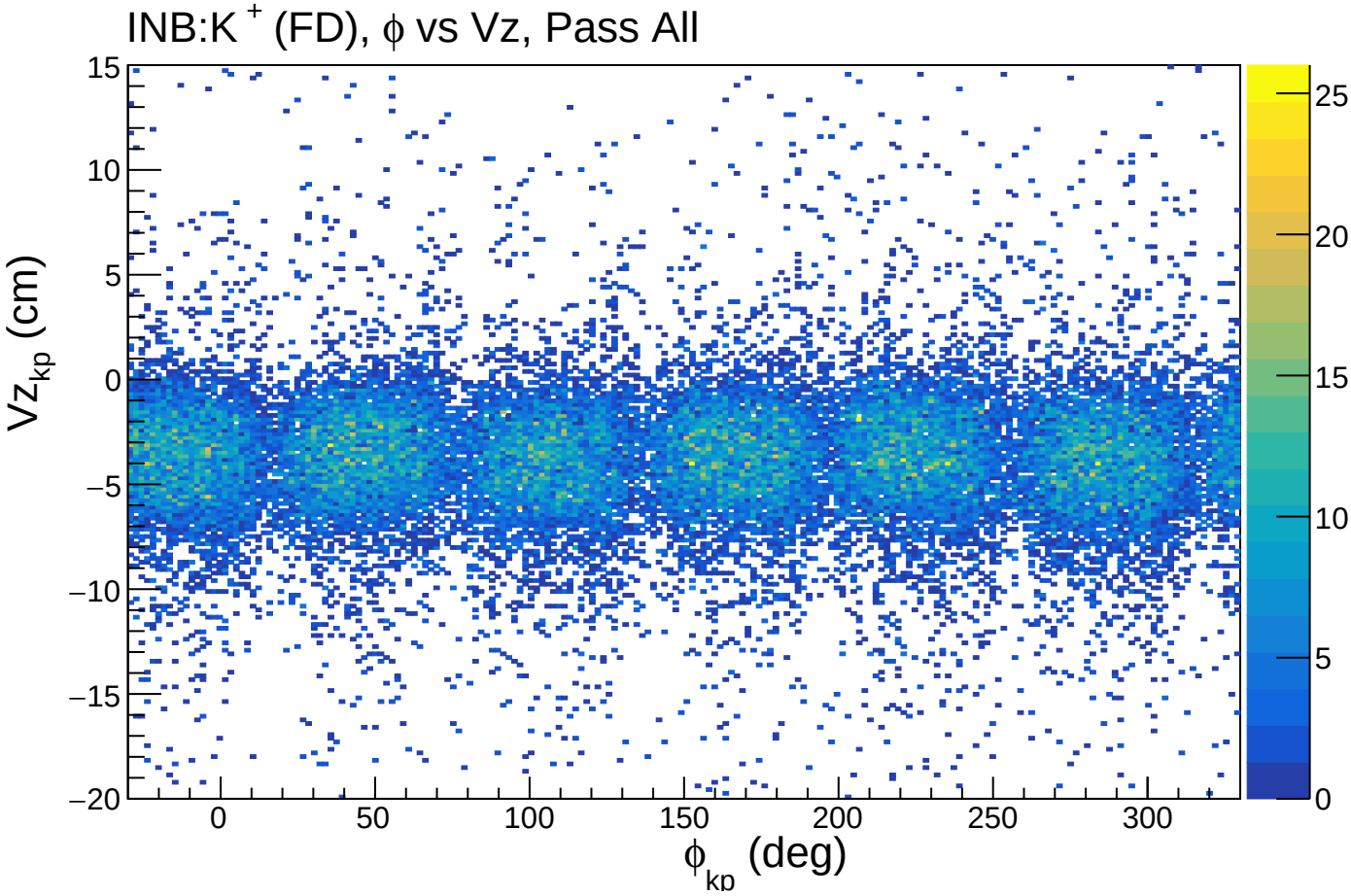
COMP -KaonP Before Final Sel.

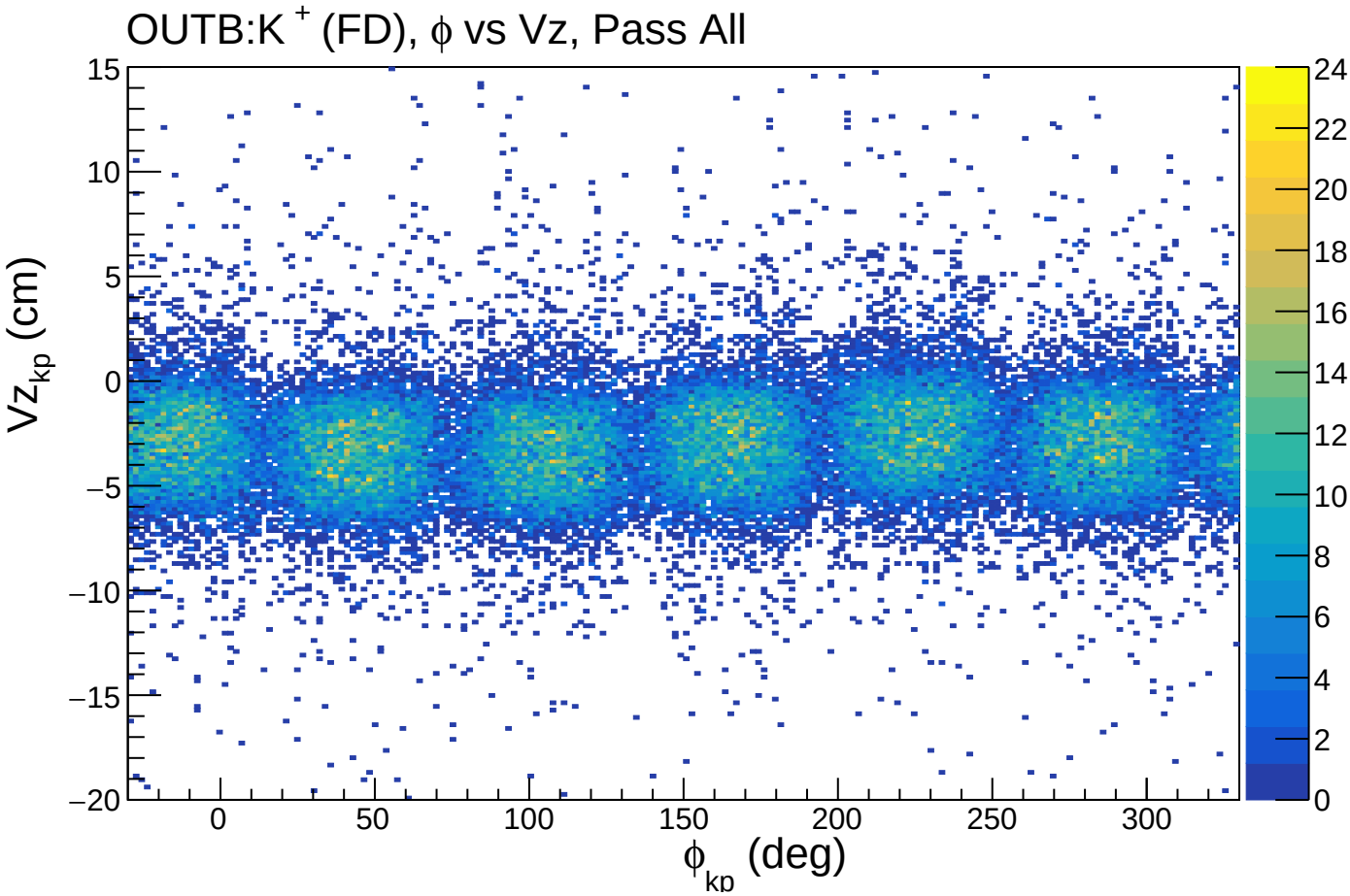

INB:Proton (FD), Θ vs P, Pass All
Θkp (deg)
Pkp (GeV)
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
0
5
10
15
20
25
30
35

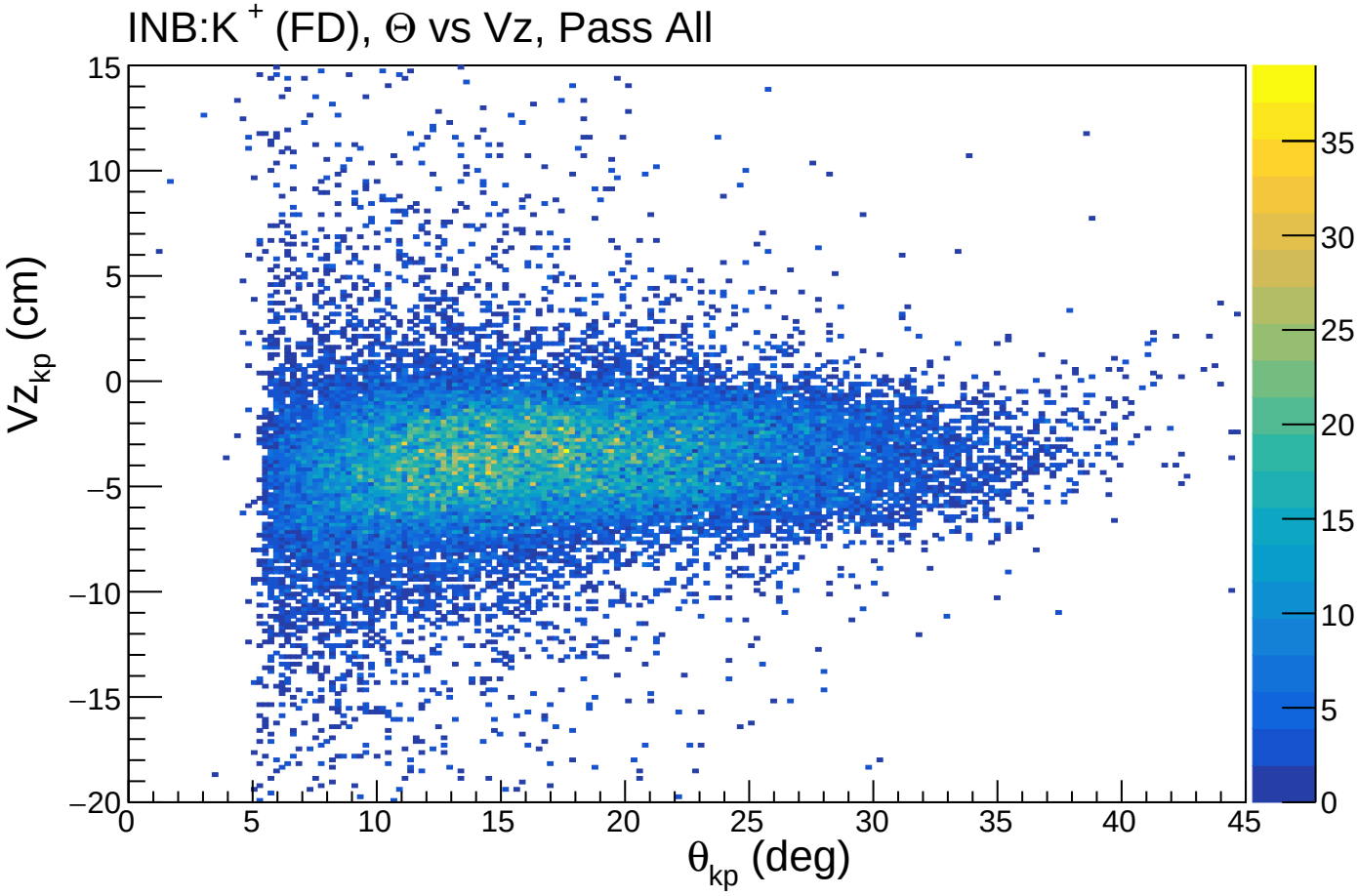

OUTB:Proton (FD), Θ vs P, Pass All
Θkp (deg)
Pkp (GeV)
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
0
5
10
15
20
25
30
35
40

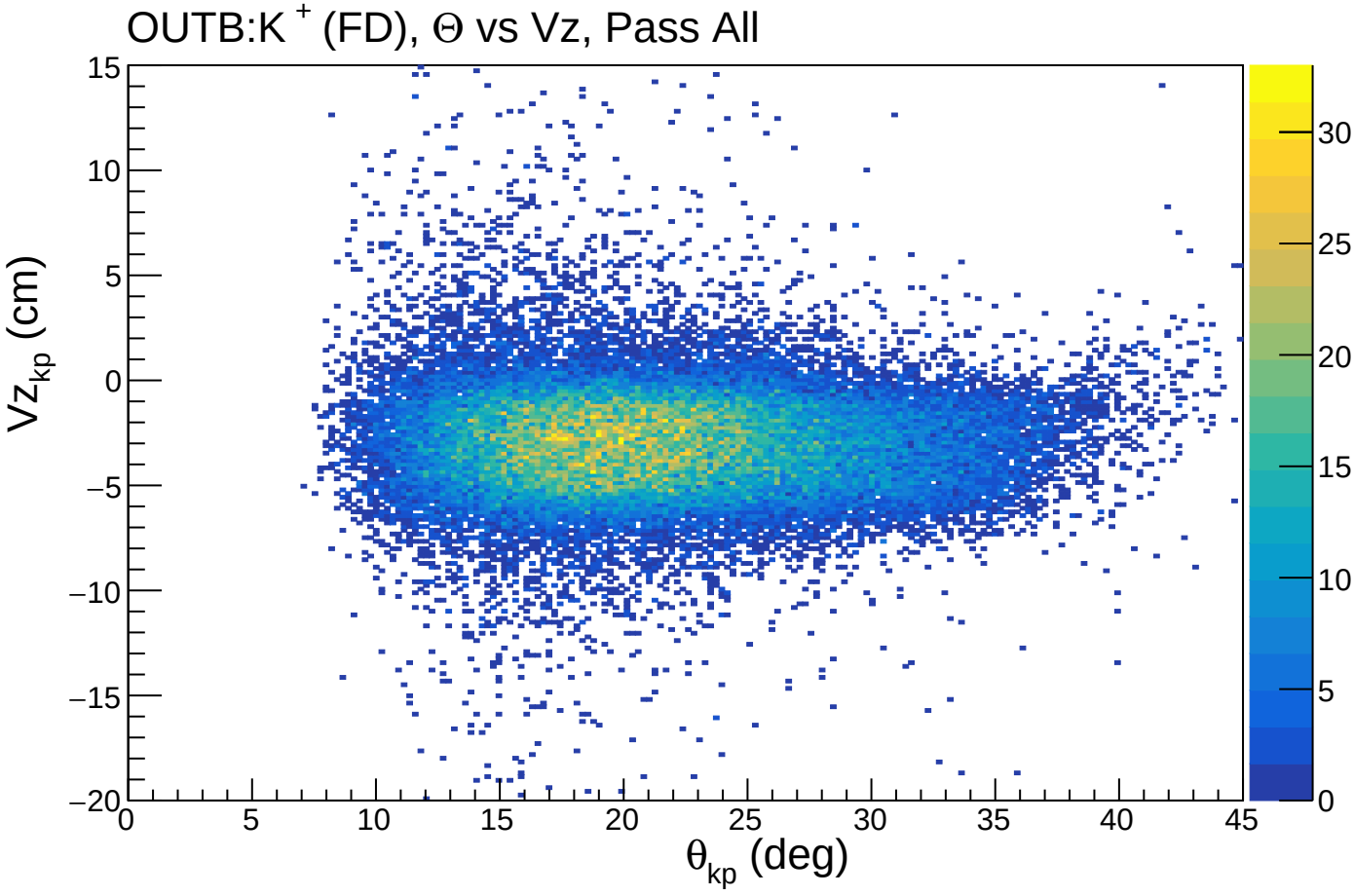

INB:K + (FD), Θ vs ϕ, Pass All
Θkp (deg)
ϕkp (deg)
0
10
20
30
40
50
60
0
50
100
150
200
250
300
0
5
10
15
20
25
30
35

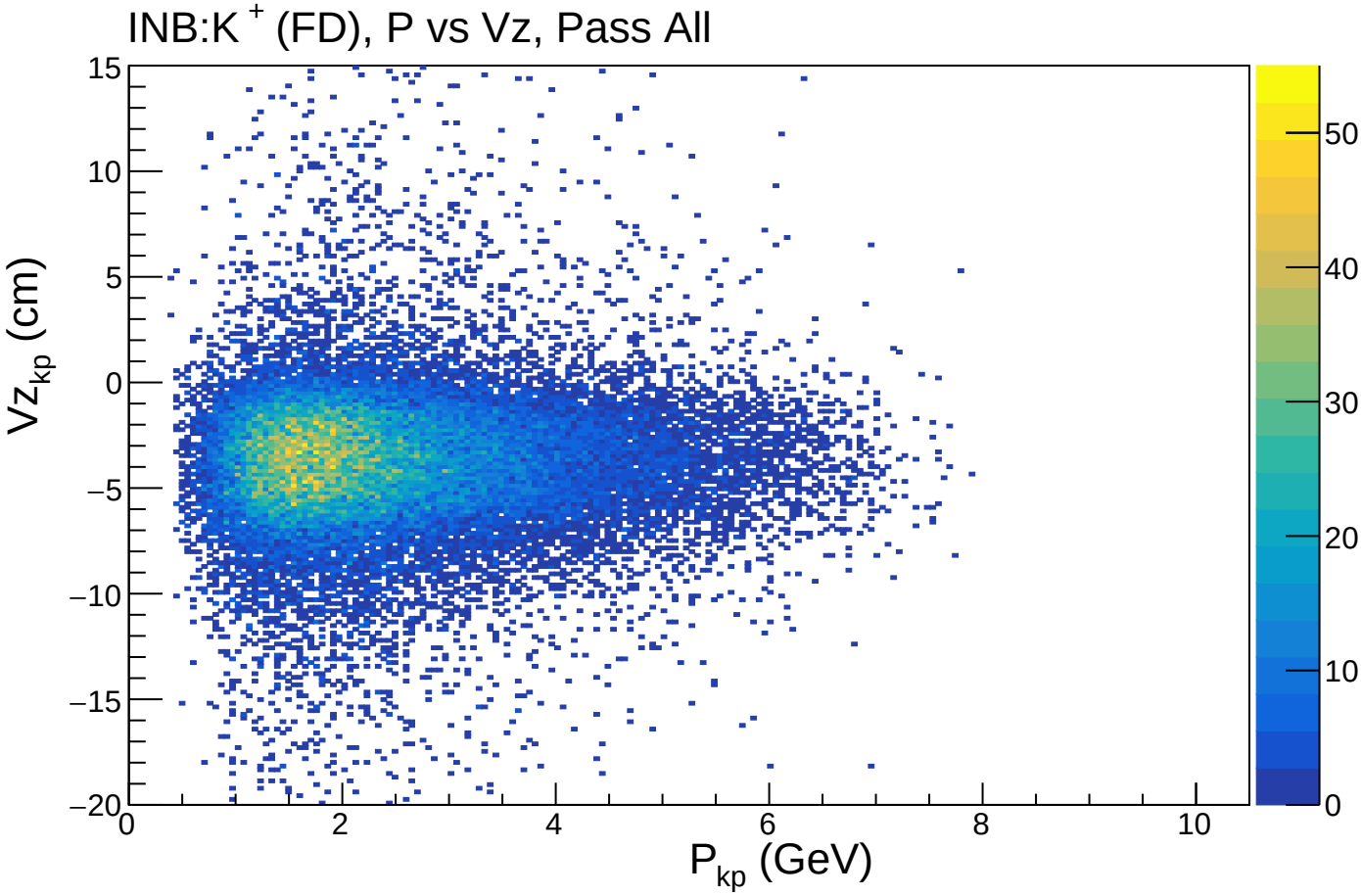

OUTB:K + (FD), Θ vs ϕ, Pass All
Θkp (deg)
ϕkp (deg)
0
10
20
30
40
50
60
0
50
100
150
200
250
300
0
5
10
15
20
25
30
35
40

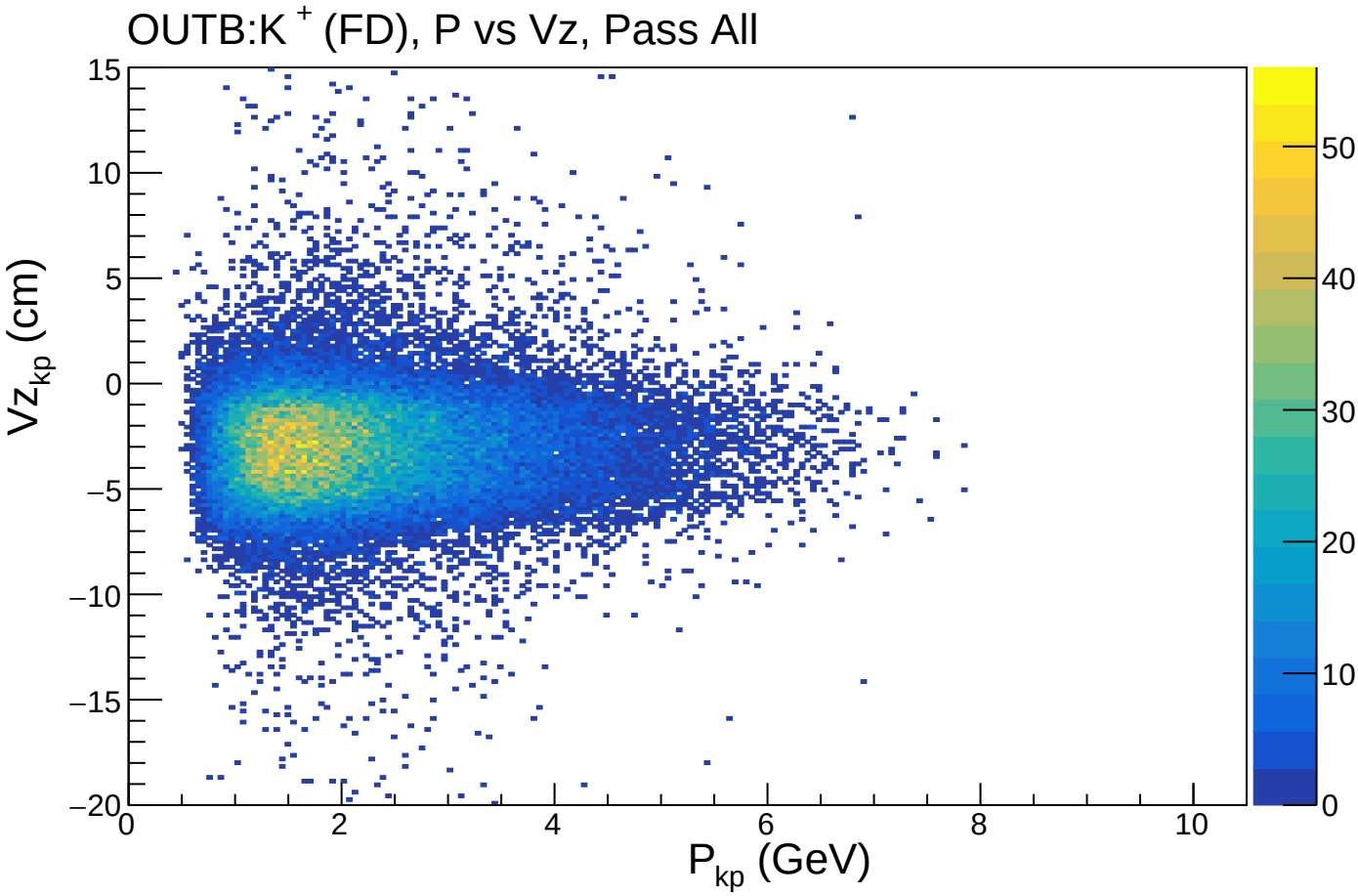

INB:K+ (FD), ϕ vs Vz, Pass All
Vzkp (cm)
ϕkp (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
25
20
15
10
5
0

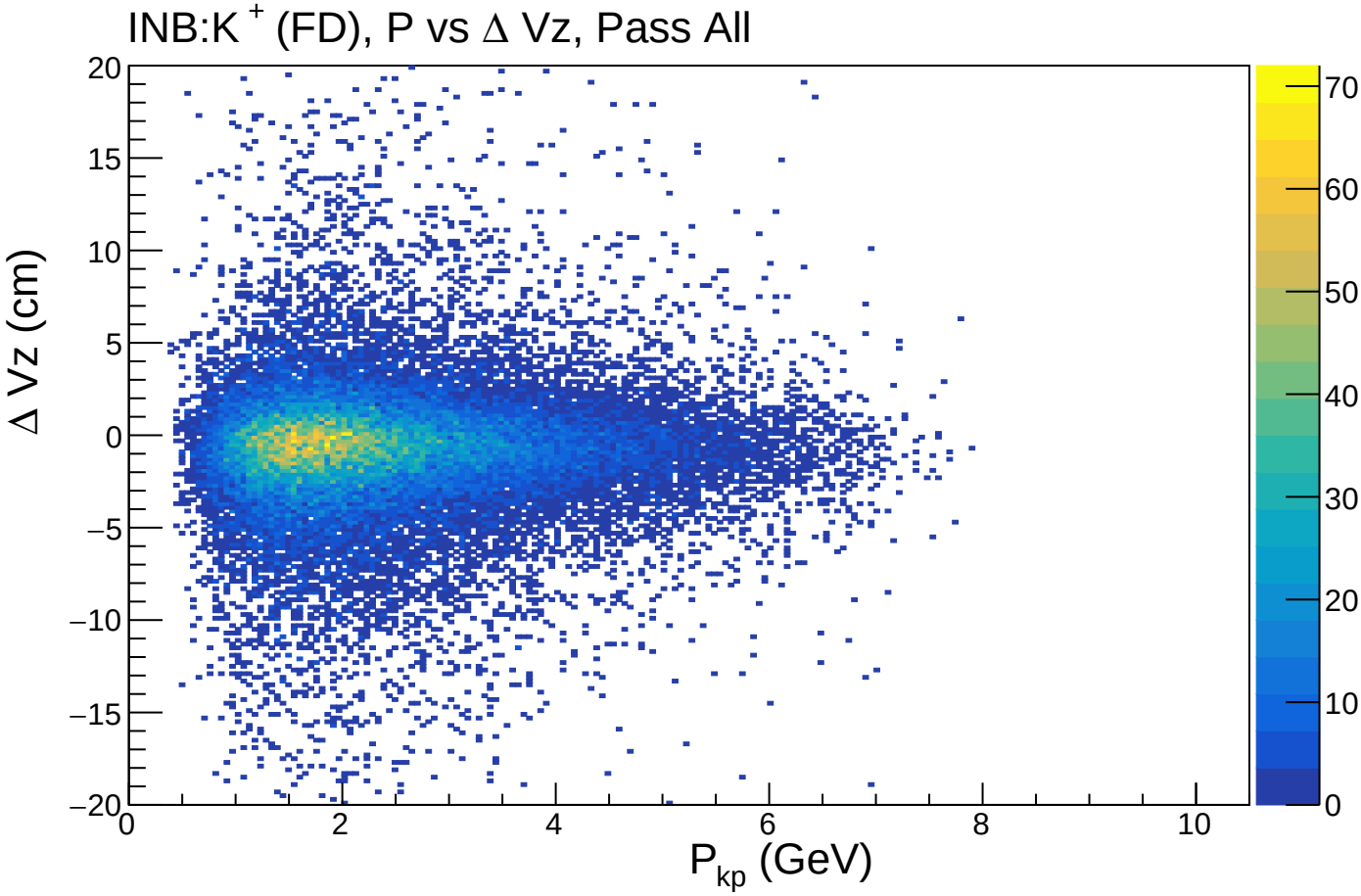

OUTB:K+ (FD), ϕ vs Vz, Pass All
Vzkp (cm)
ϕkp (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
24
22
20
18
16
14
12
10
8
6
4
2
0

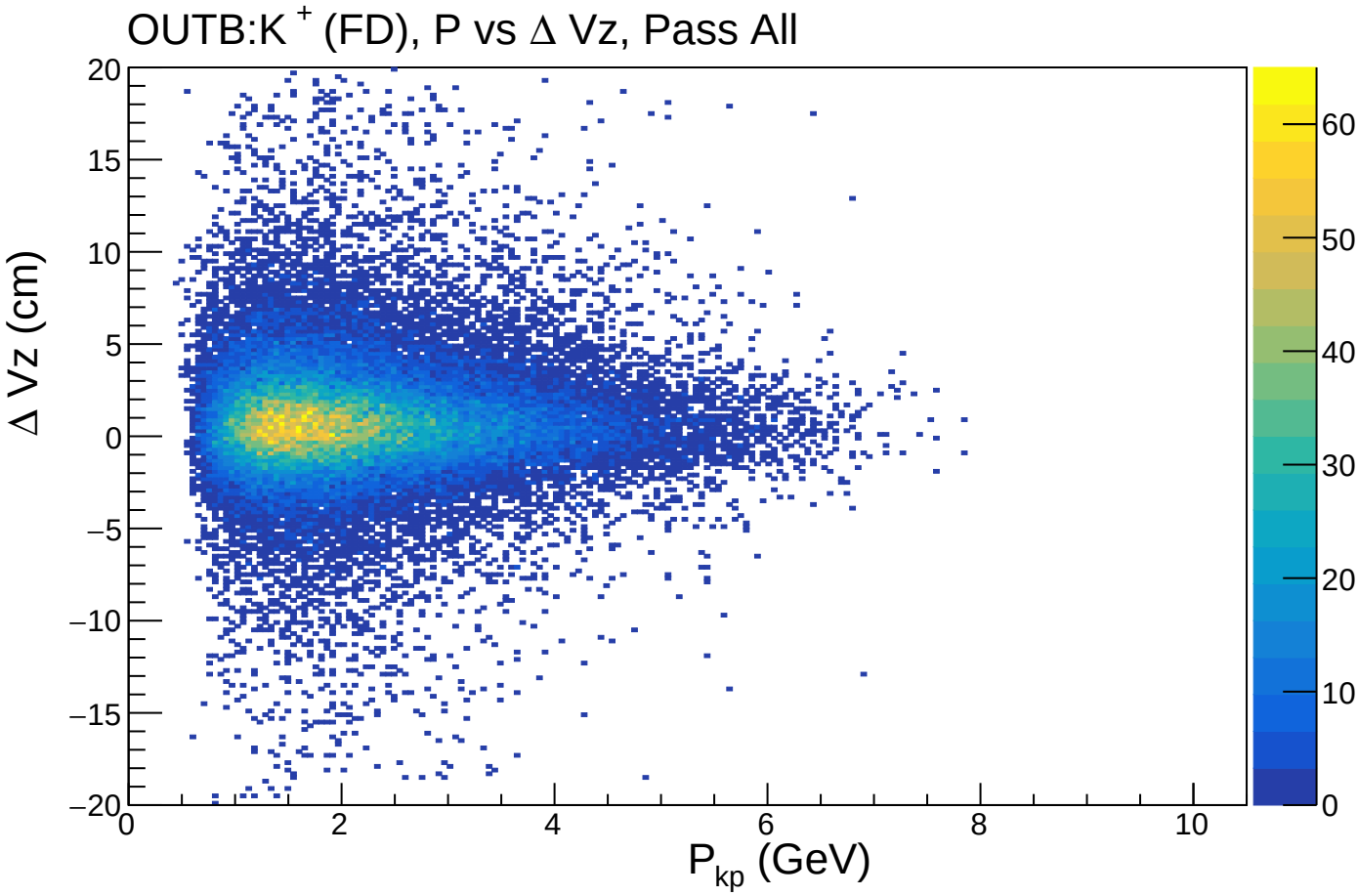

INB:K + (FD), Θ vs Vz, Pass All
Vz_kp (cm)
θ_kp (deg)

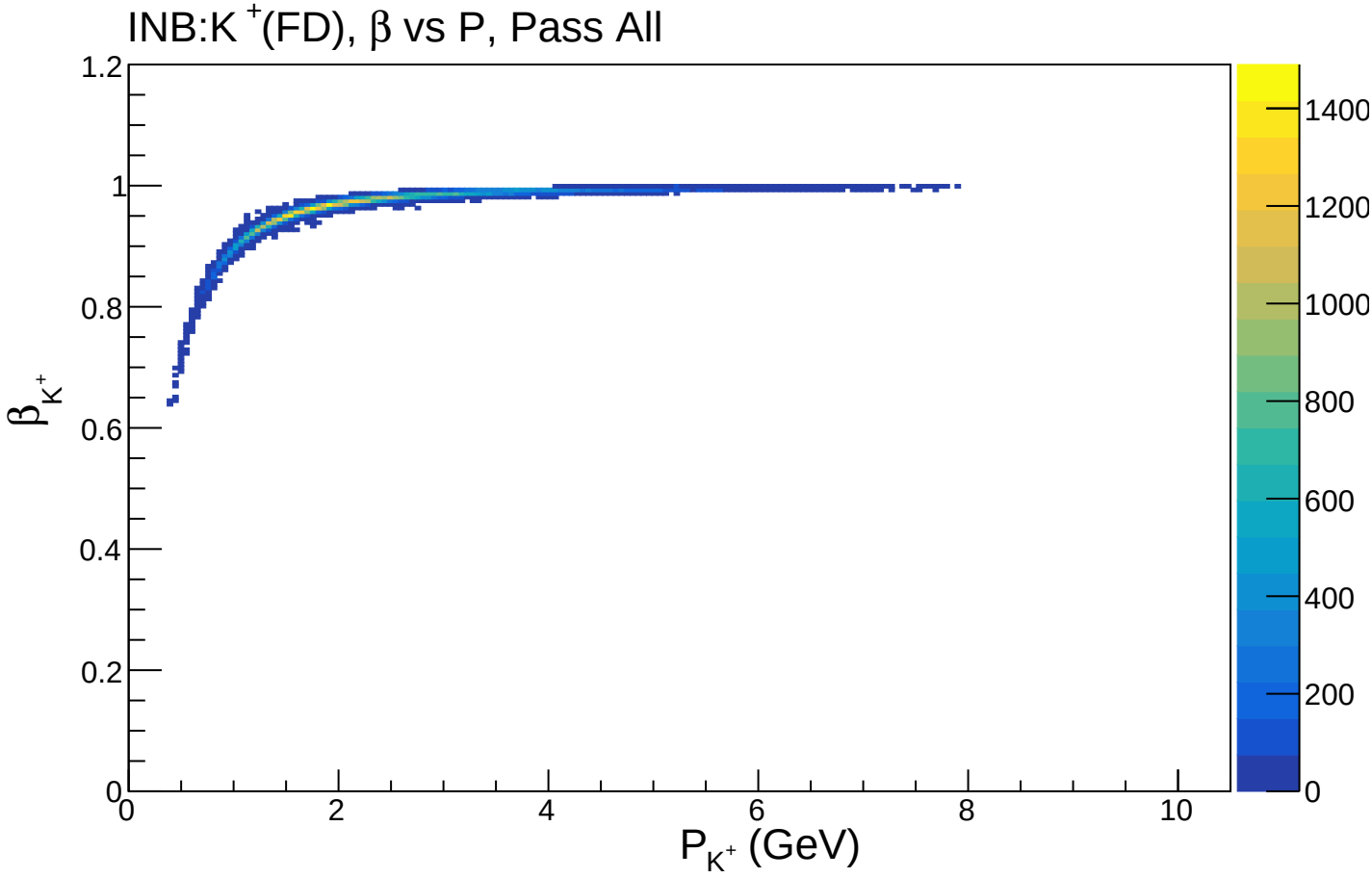

OUTB:K + (FD), Θ vs Vz, Pass All
Vz_kp (cm)
θ_kp (deg)

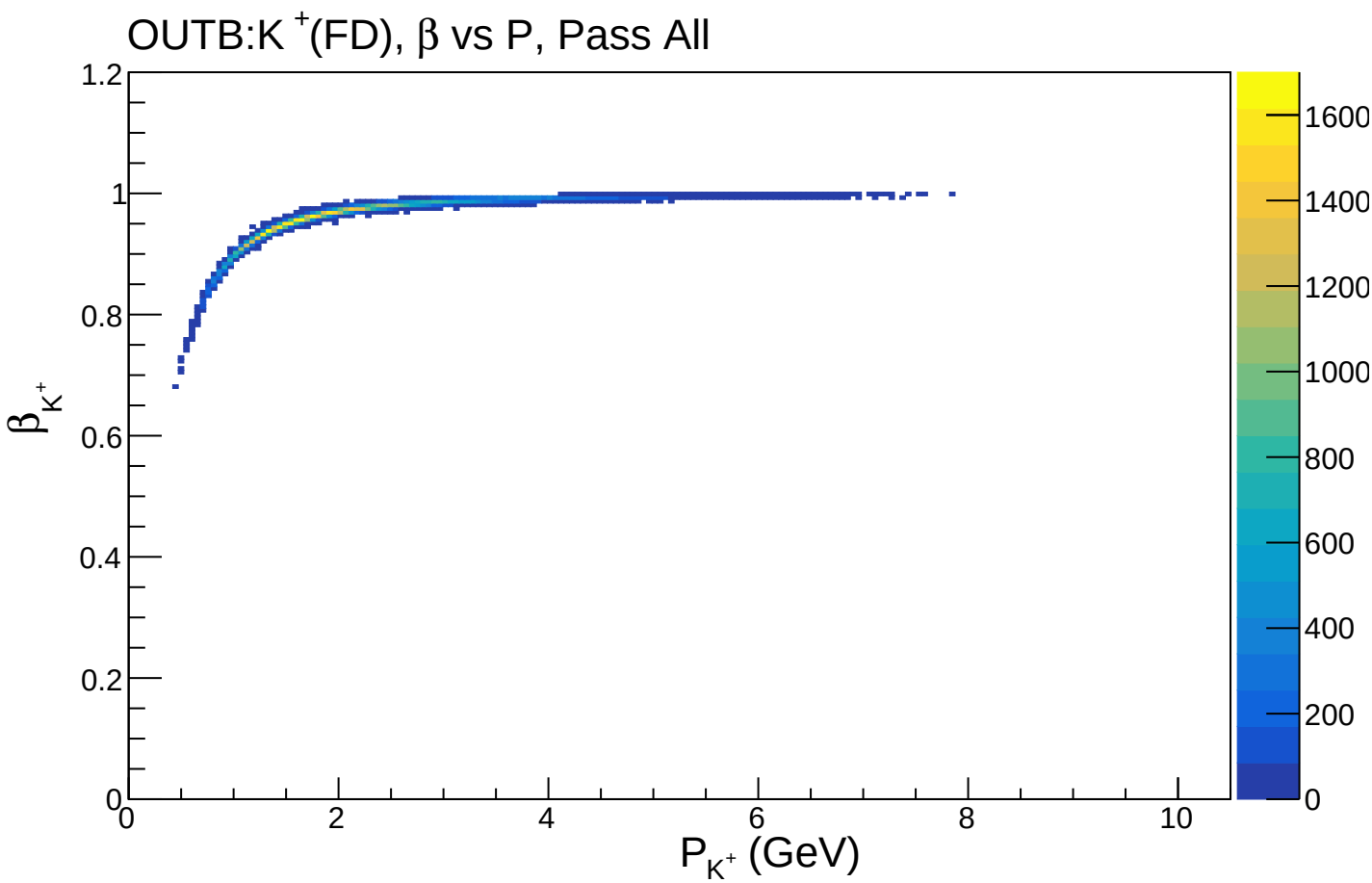

INB:K+ (FD), P vs Vz, Pass All
Vzkp (cm)
Pkp (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
50
40
30
20
10
0

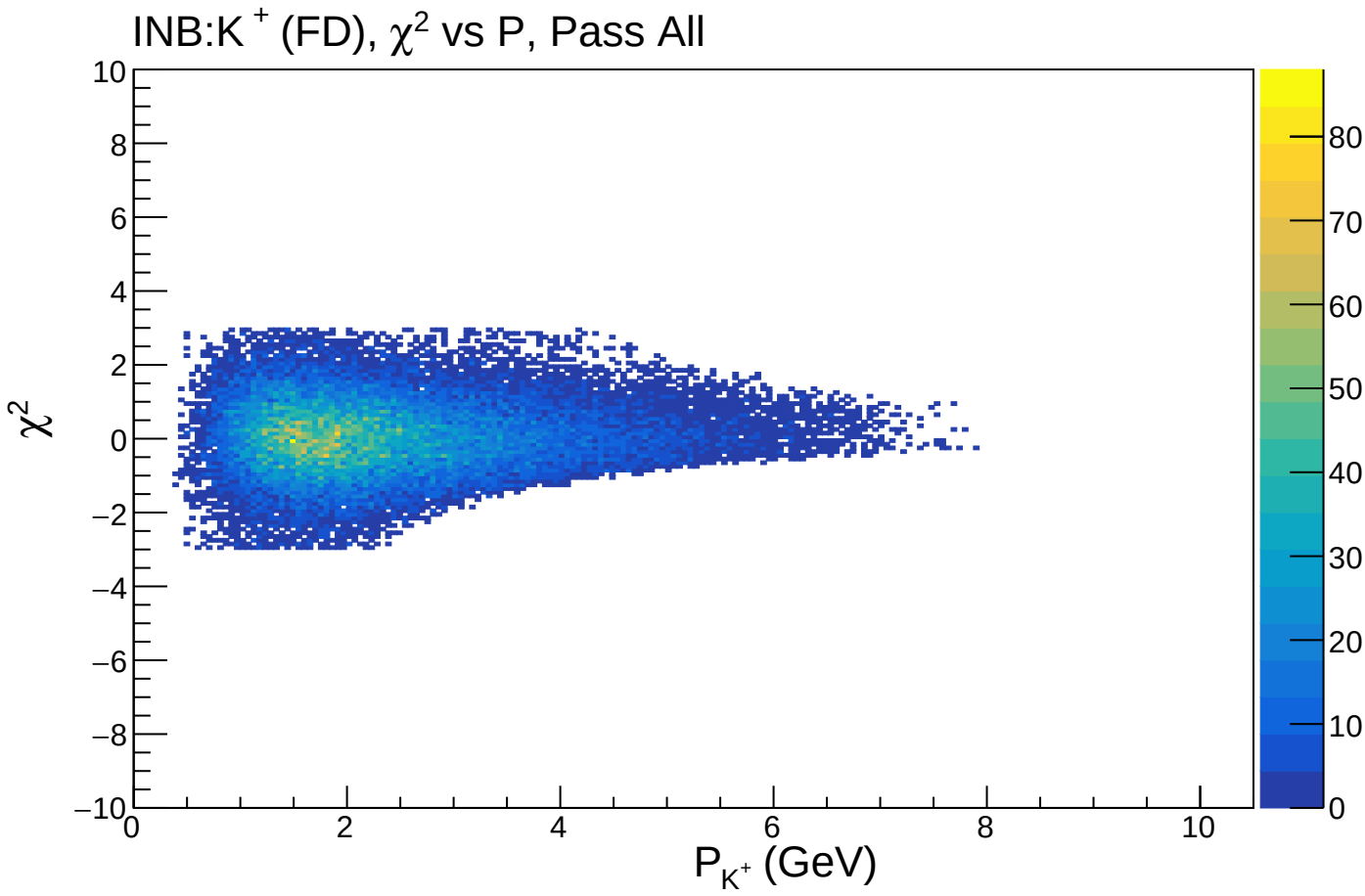

OUTB:K+ (FD), P vs Vz, Pass All
Vzkp (cm)
Pkp (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
50
40
30
20
10
0

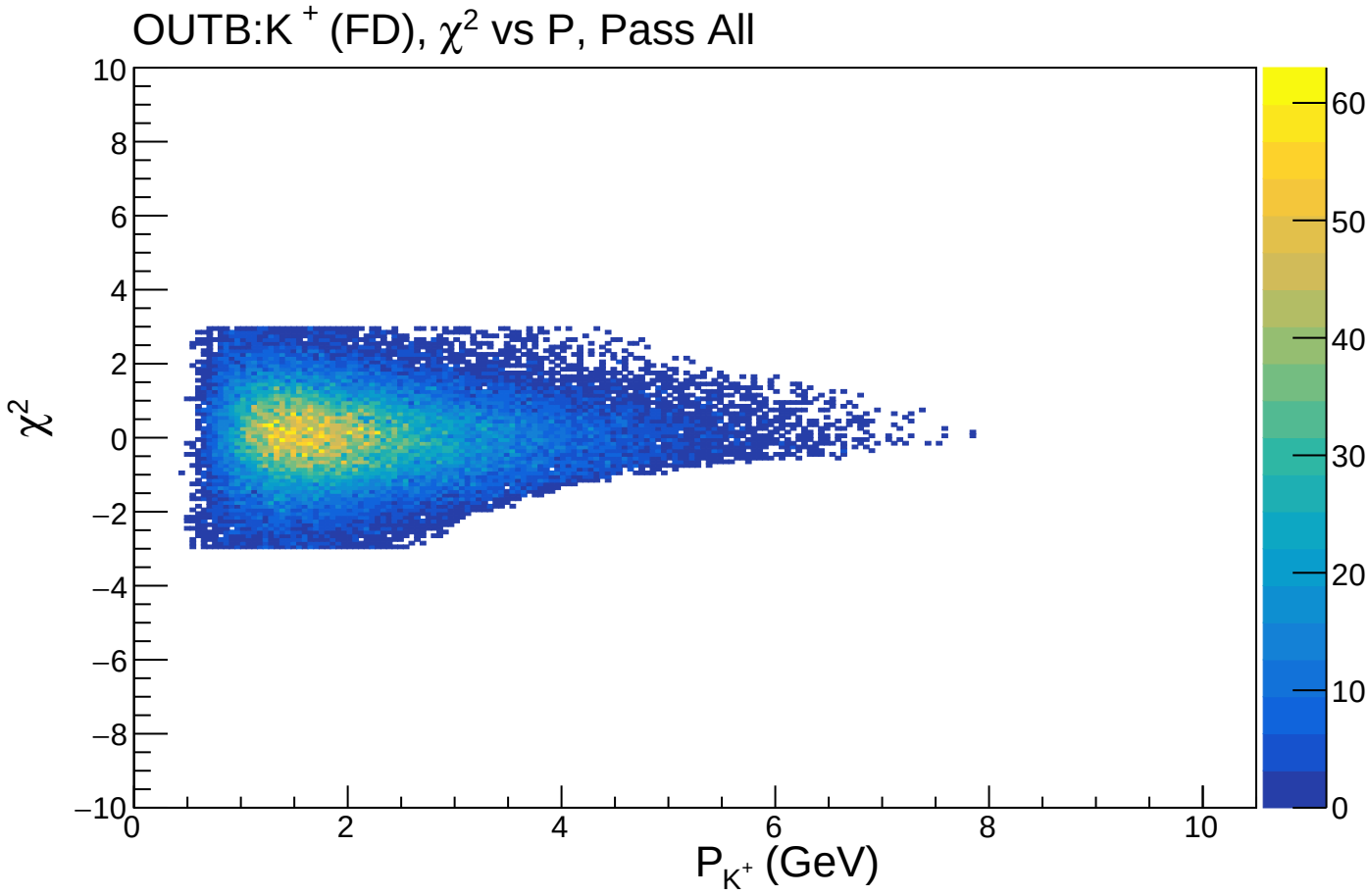

INB:K + (FD), P vs Δ Vz, Pass All
Δ Vz (cm)
P kp (GeV)

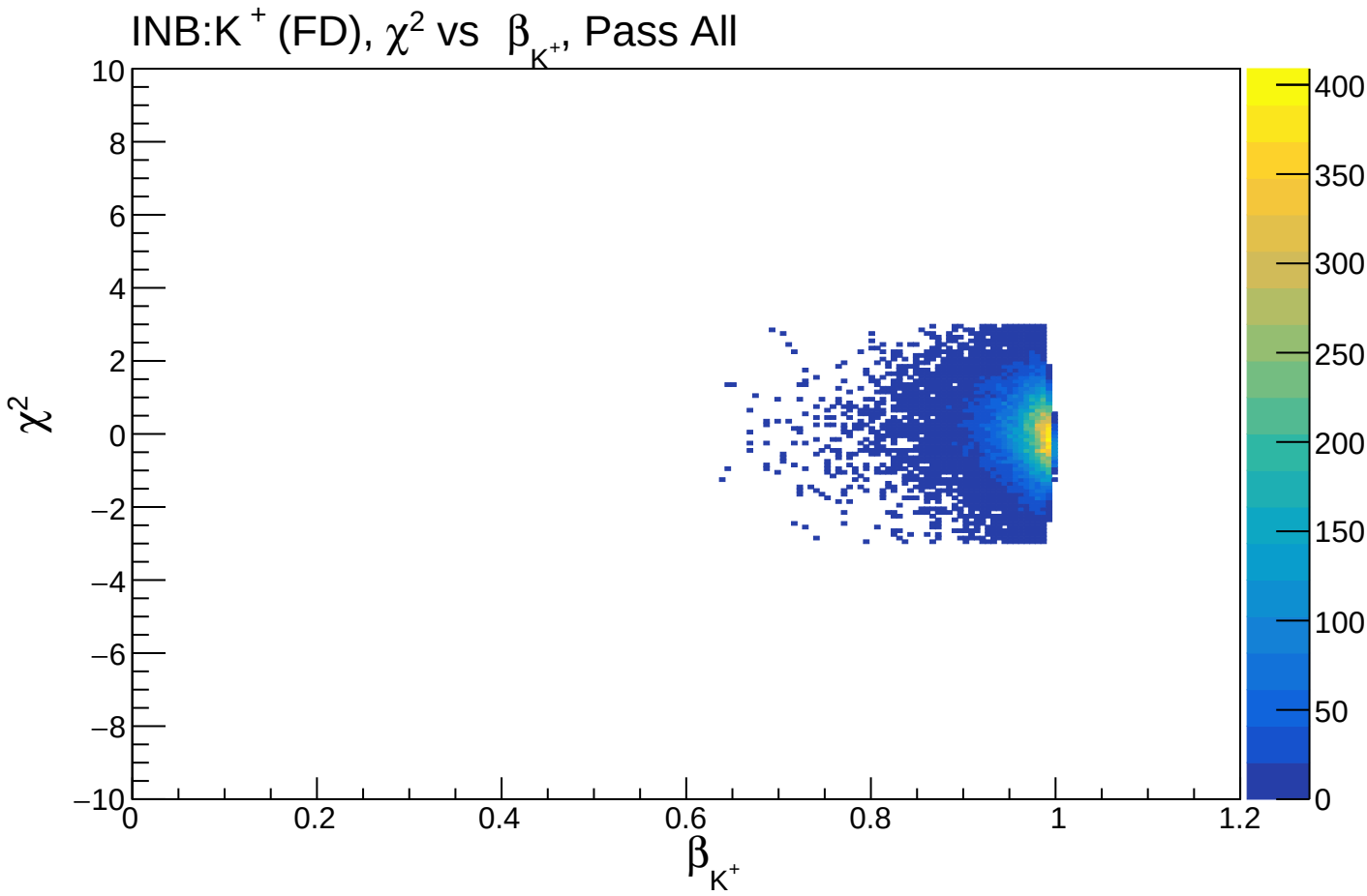

OUTB:K + (FD), P vs Δ Vz, Pass All
Δ Vz (cm)
P kp (GeV)

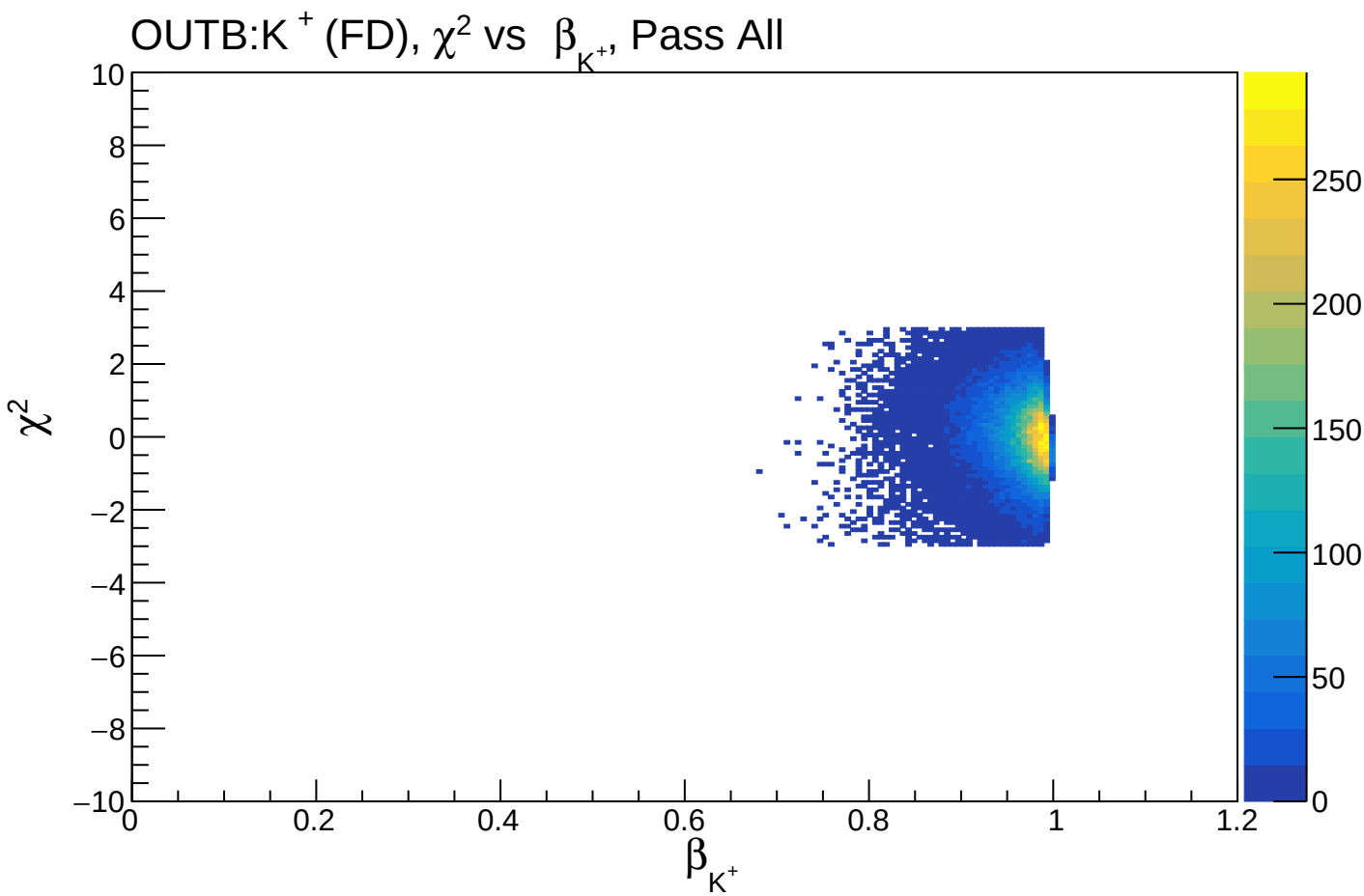

INB:K +(FD), β vs P, Pass All
1.2
1
0.8
0.6
0.4
0.2
0
β K+
0
2
4
6
8
10
P K+ (GeV)
1400
1200
1000
800
600
400
200
0


OUTB:K +(FD), β vs P, Pass All
1.2
1
0.8
0.6
0.4
0.2
0
β K+
0
2
4
6
8
10
P K+ (GeV)
1600
1400
1200
1000
800
600
400
200
0

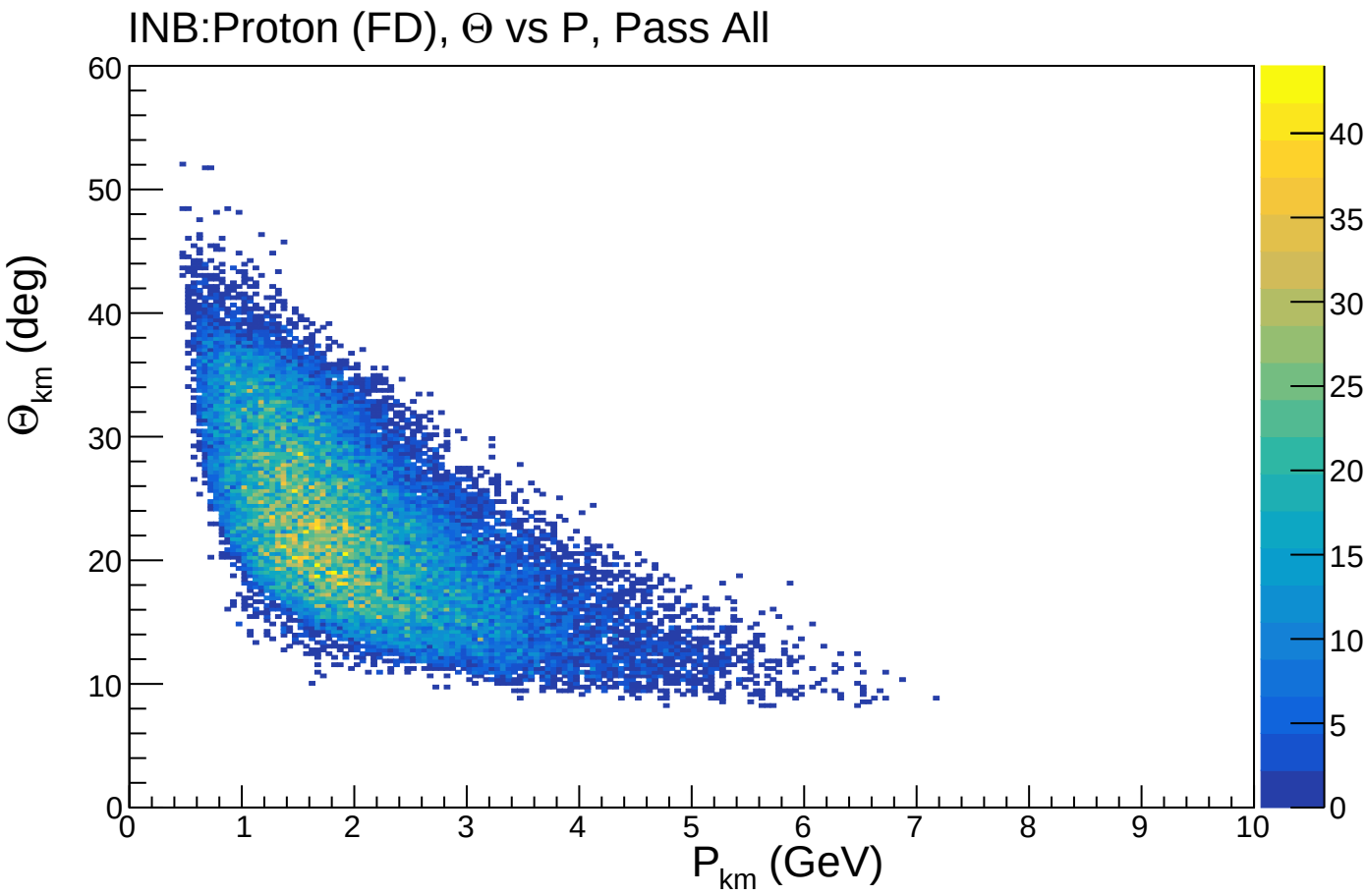

INB:K + (FD), χ2 vs P, Pass All
χ2
PK+ (GeV)

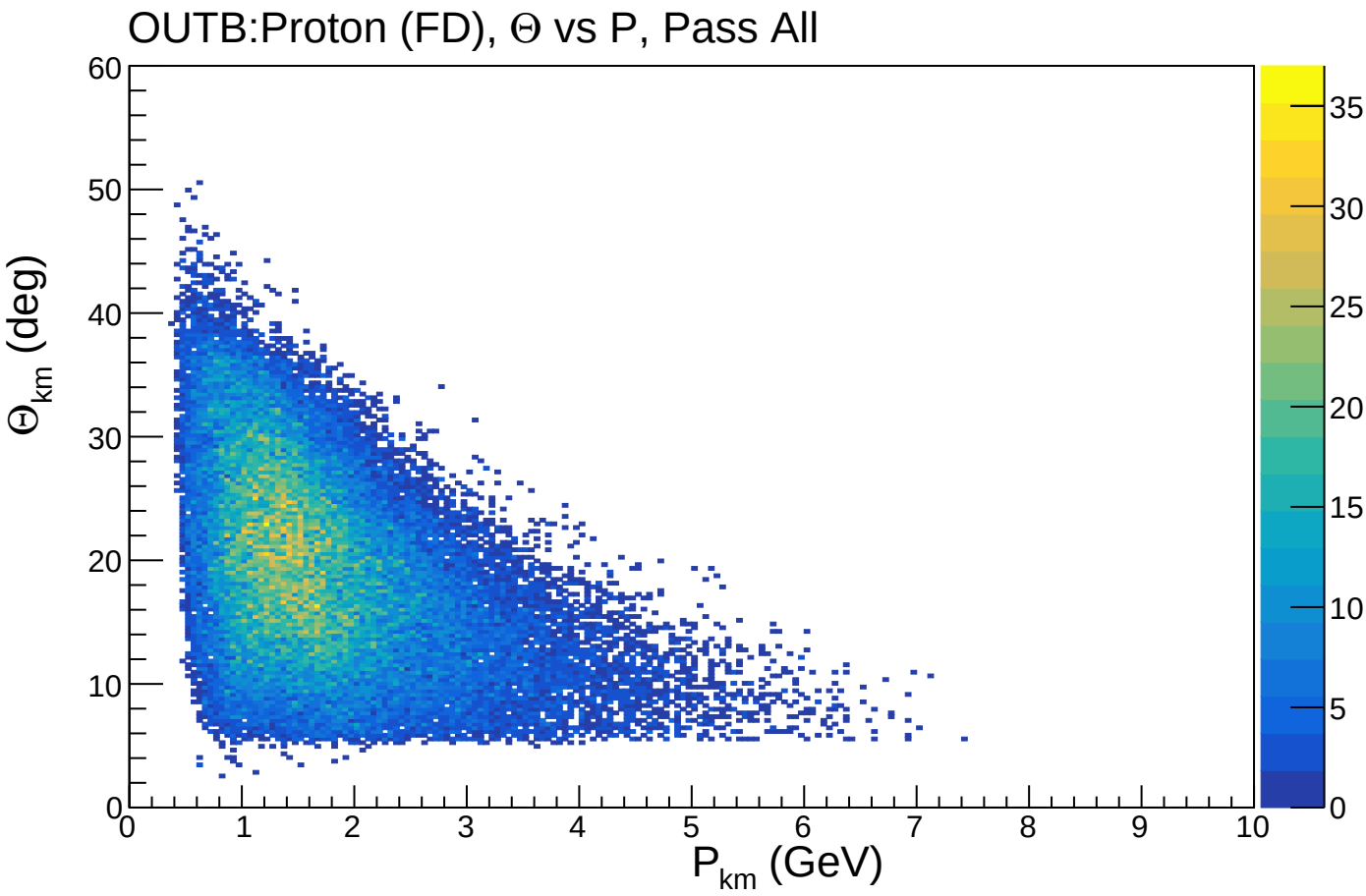

OUTB:K + (FD), χ2 vs P, Pass All
χ2
PK+ (GeV)

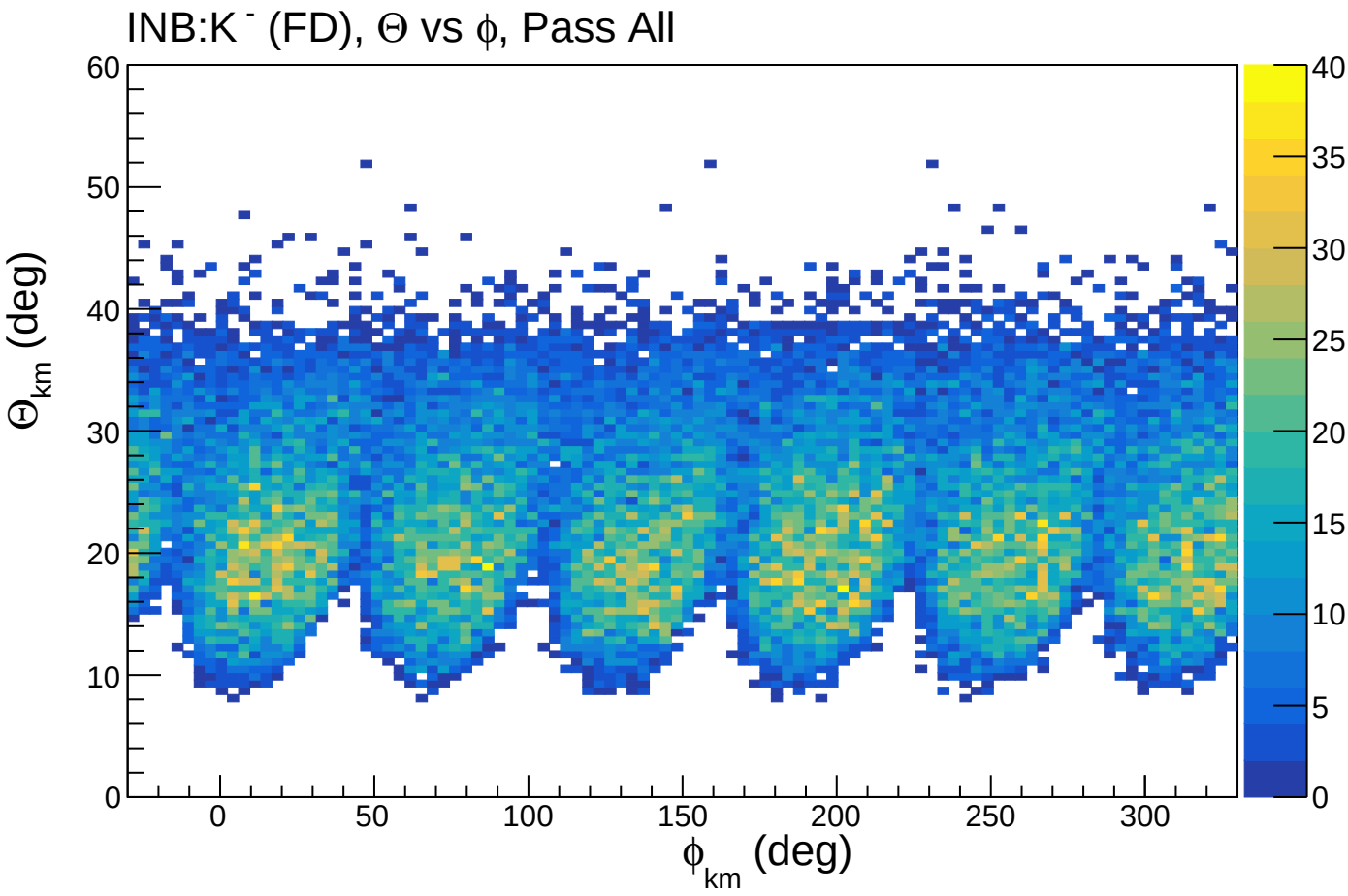

INB:K+ (FD), χ2 vs βK+, Pass All
χ2
βK+
10
8
6
4
2
0
−2
−4
−6
−8
−10
0
0.2
0.4
0.6
0.8
1
1.2
400
350
300
250
200
150
100
50
0

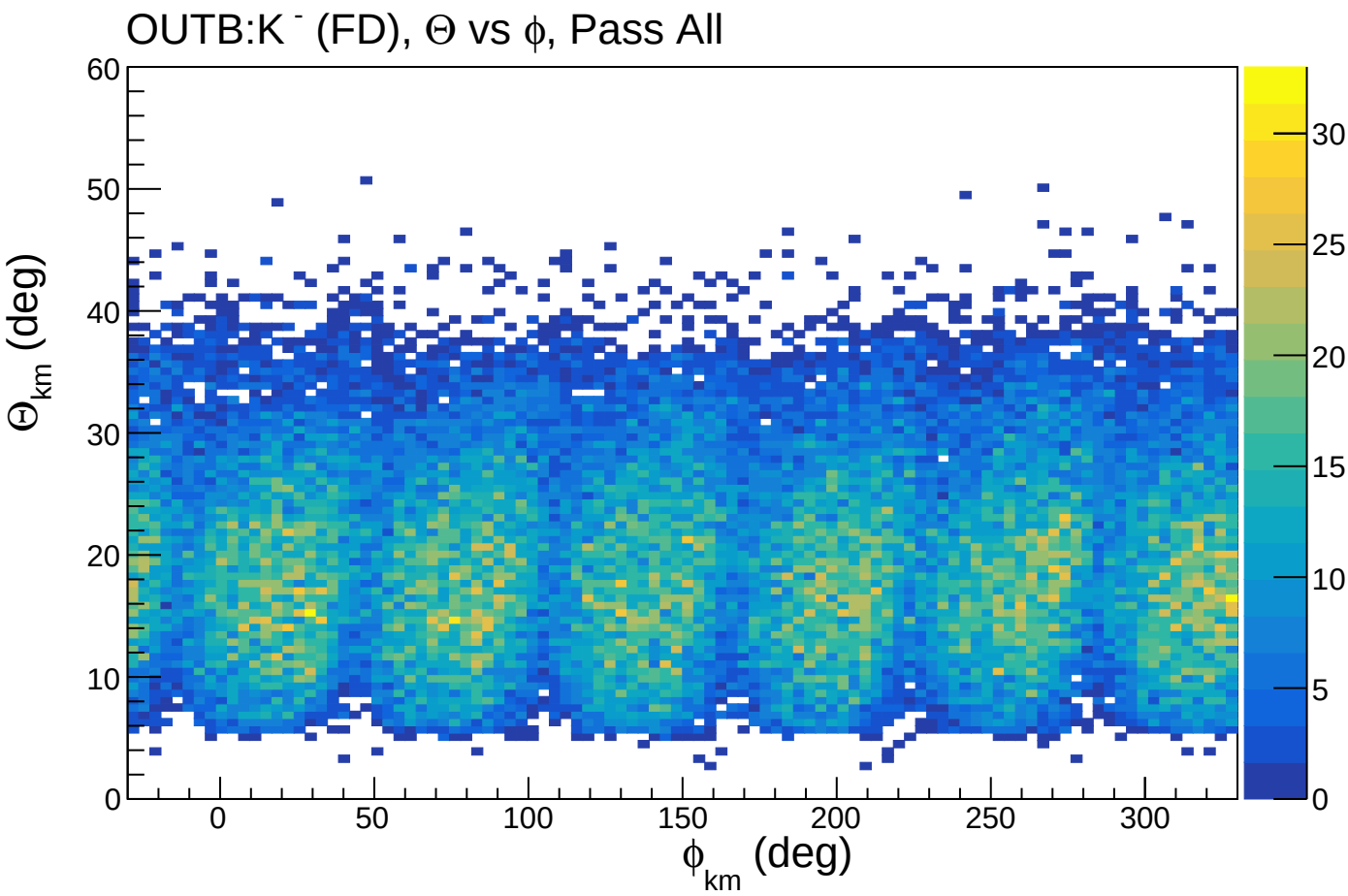

OUTB:K+ (FD), χ2 vs βK+, Pass All
χ2
βK+
10
8
6
4
2
0
−2
−4
−6
−8
−10
0
0.2
0.4
0.6
0.8
1
1.2
250
200
150
100
50
0

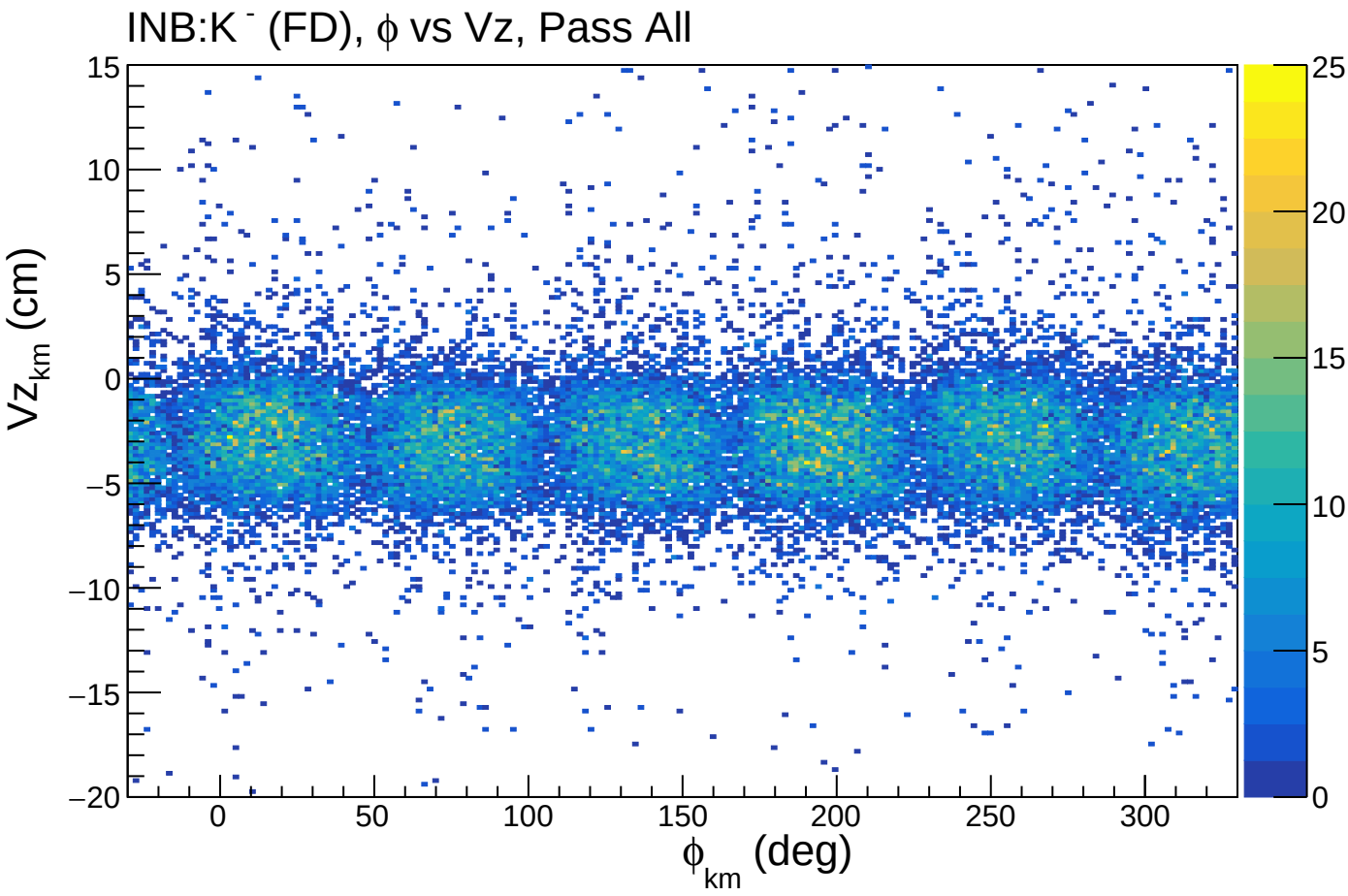
COMP -KaonM Before Final Sel.

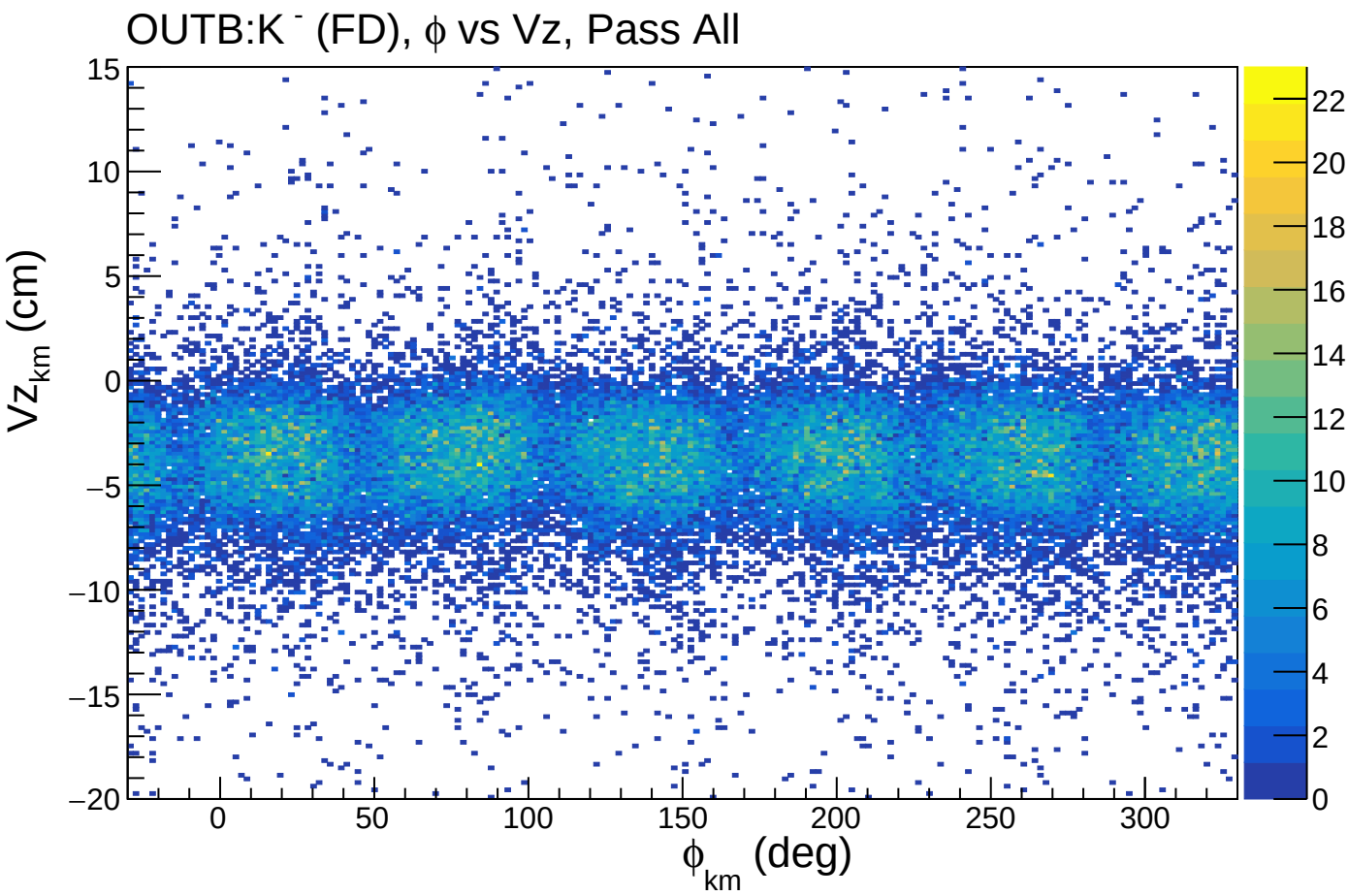

INB:Proton (FD), Θ vs P, Pass All
Θ_km (deg)
P_km (GeV)
0
10
20
30
40
50
60
1
2
3
4
5
6
7
8
9
35
25
15
5

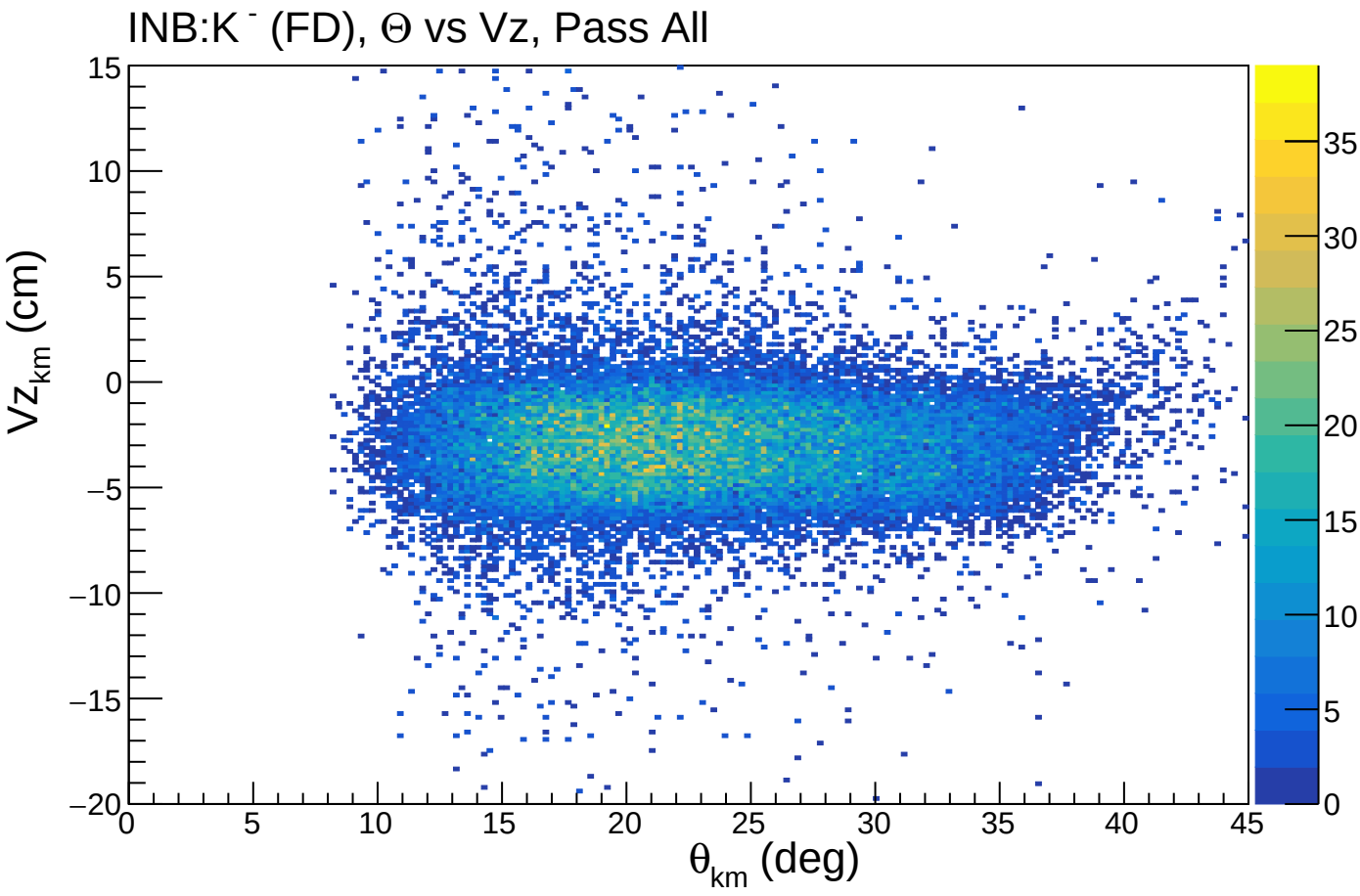

OUTB:Proton (FD), Θ vs P, Pass All
Θ_km (deg)
P_km (GeV)
0
10
20
30
40
50
60
1
2
3
4
5
6
7
8
9
35
25
15
5

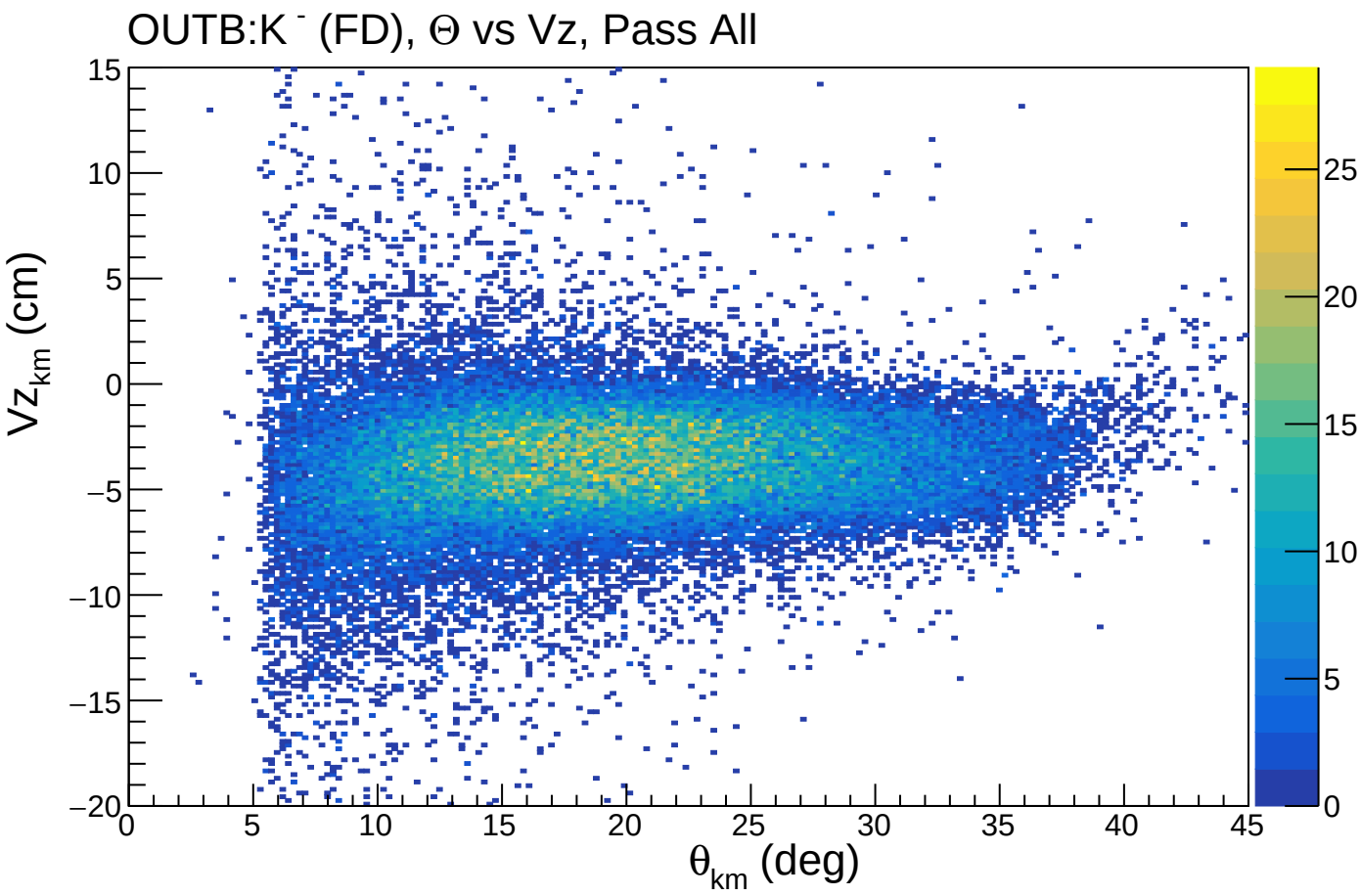

INB:K⁻ (FD), Θ vs ϕ, Pass All
Θ_km (deg)
ϕ_km (deg)
0
10
20
30
40
50
60
0
50
100
150
200
250
300
0
5
10
15
20
25
30
35
40

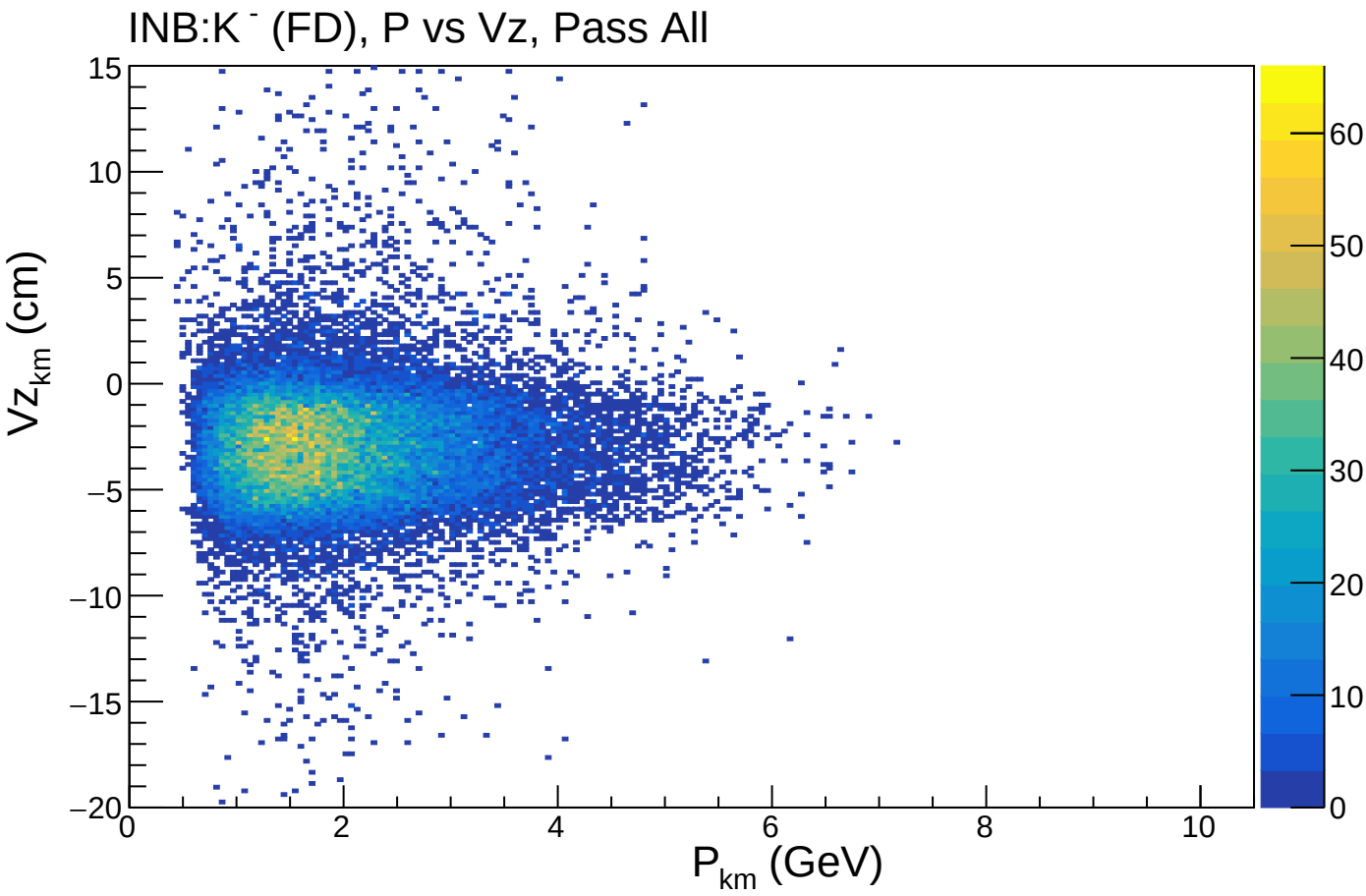

OUTB:K⁻ (FD), Θ vs ϕ, Pass All
Θ_km (deg)
ϕ_km (deg)
0
10
20
30
40
50
60
0
50
100
150
200
250
300
0
5
10
15
20
25
30

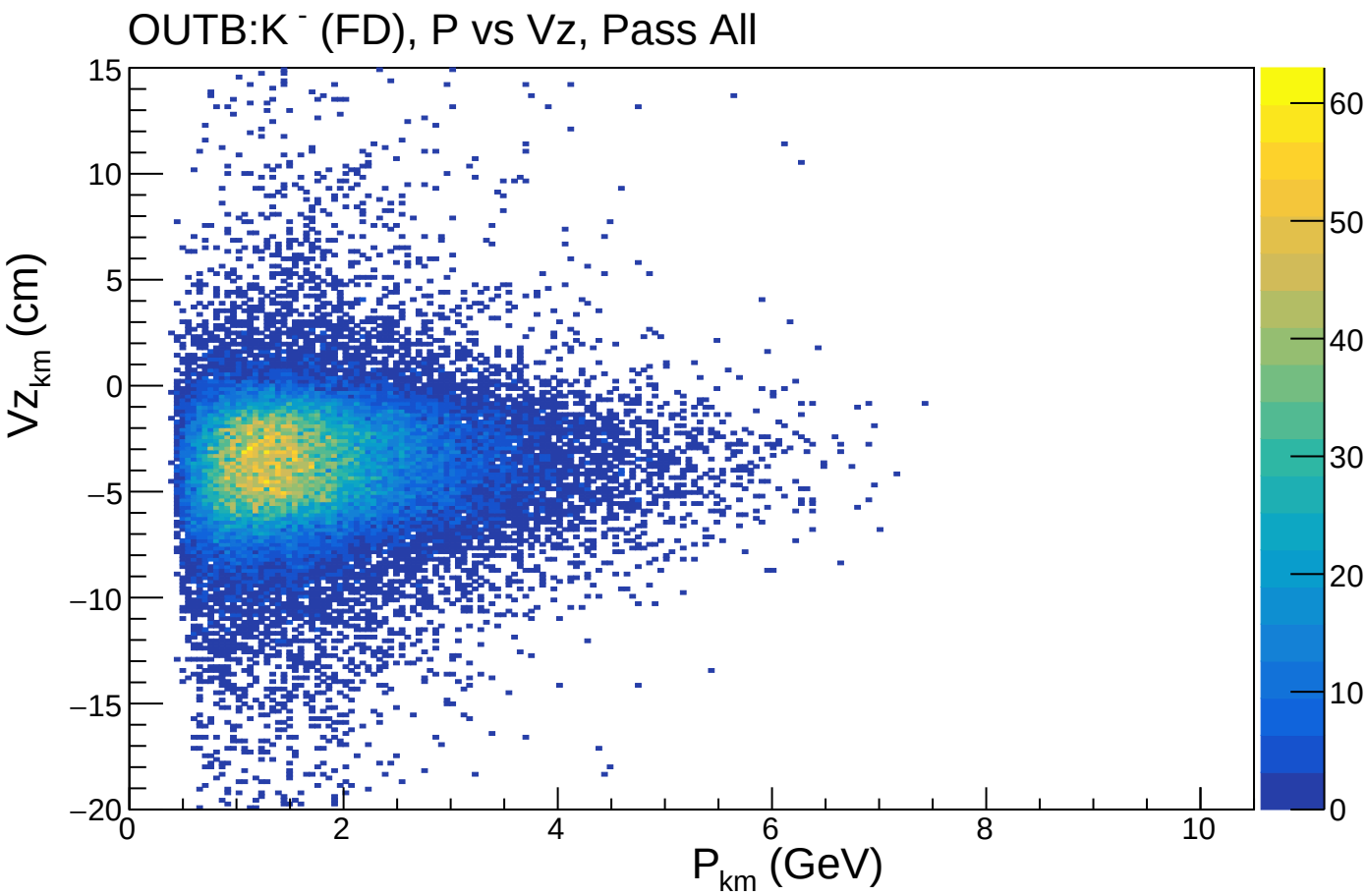

INB:K⁻ (FD), ϕ vs Vz, Pass All
Vz_km (cm)
ϕ_km (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
25
20
15
10
5
0

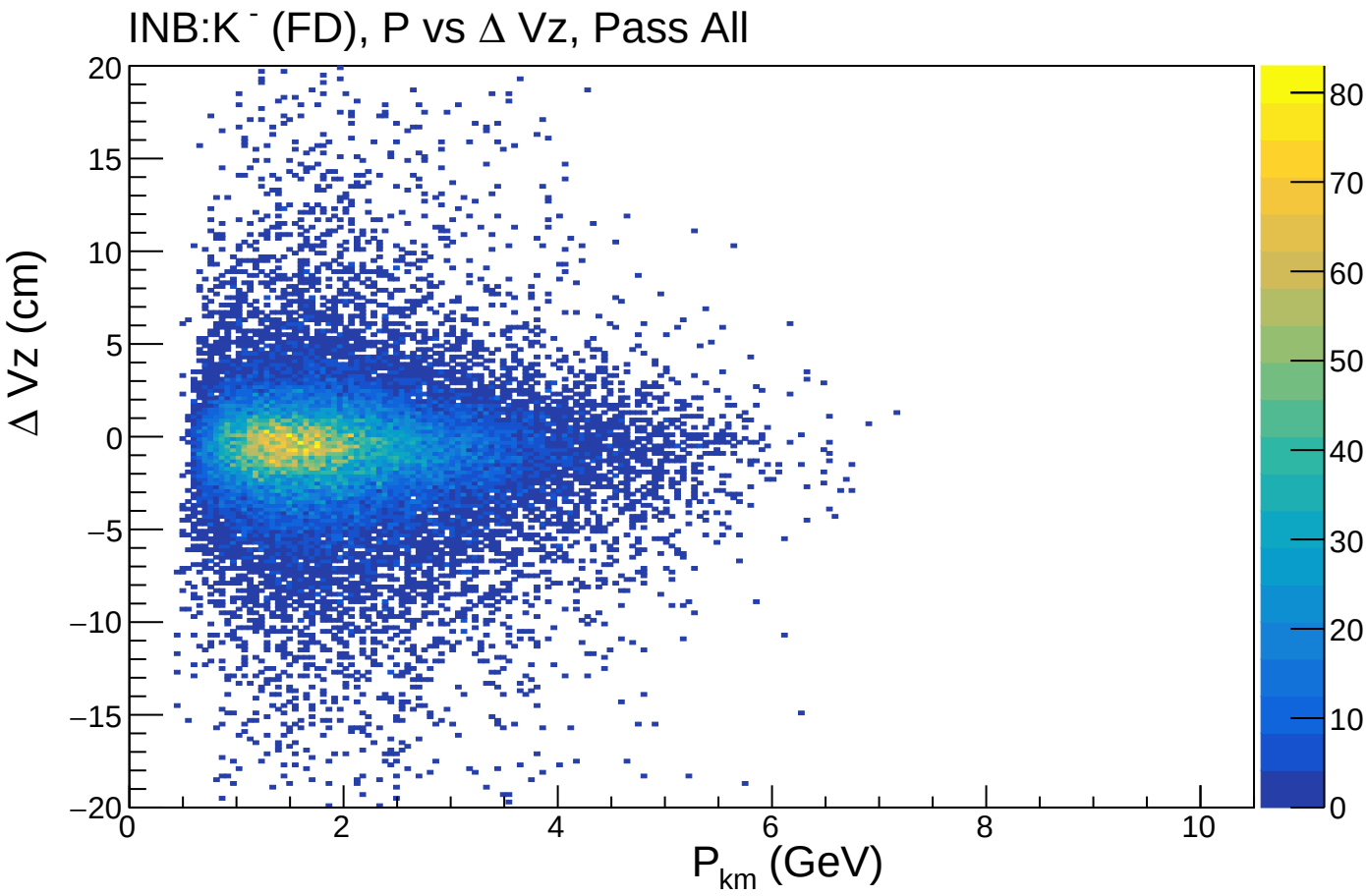

OUTB:K⁻ (FD), ϕ vs Vz, Pass All
Vz_km (cm)
ϕ_km (deg)
15
10
5
0
−5
−10
−15
−20
0
50
100
150
200
250
300
22
20
18
16
14
12
10
8
6
4
2
0

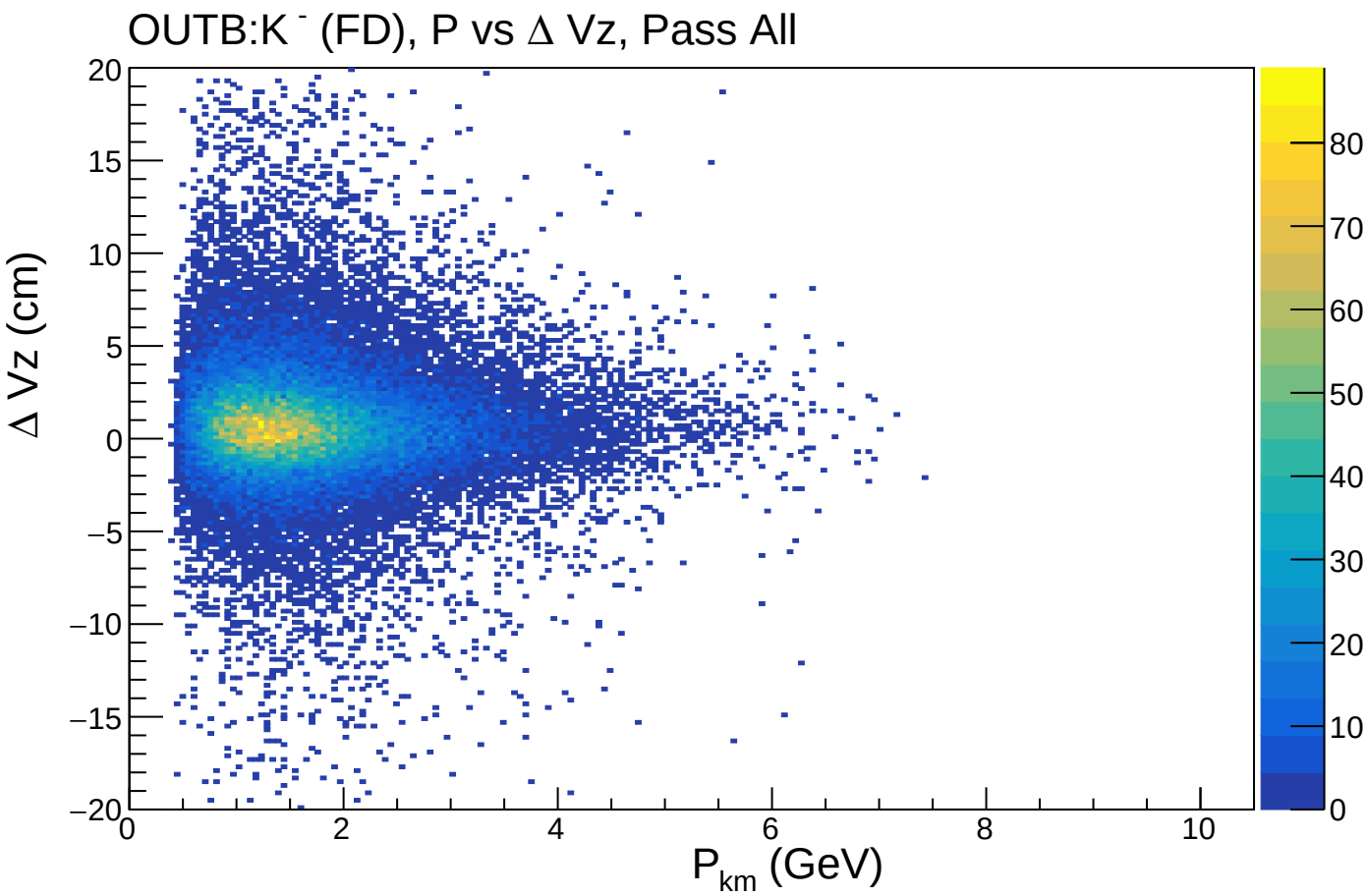

INB:K⁻ (FD), Θ vs Vz, Pass All
Vz_km (cm)
θ_km (deg)

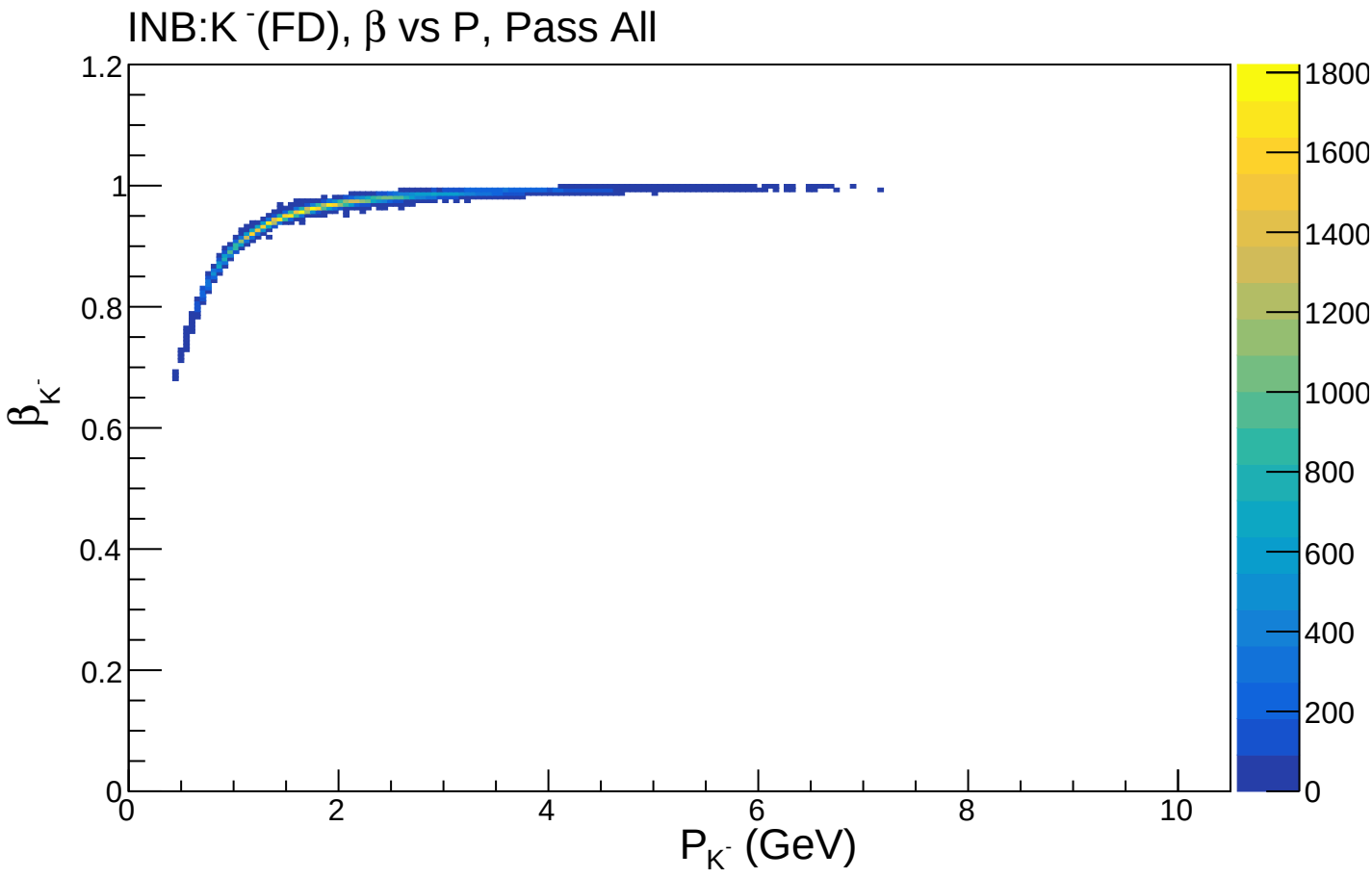

OUTB:K⁻ (FD), Θ vs Vz, Pass All
Vz_km (cm)
θ_km (deg)

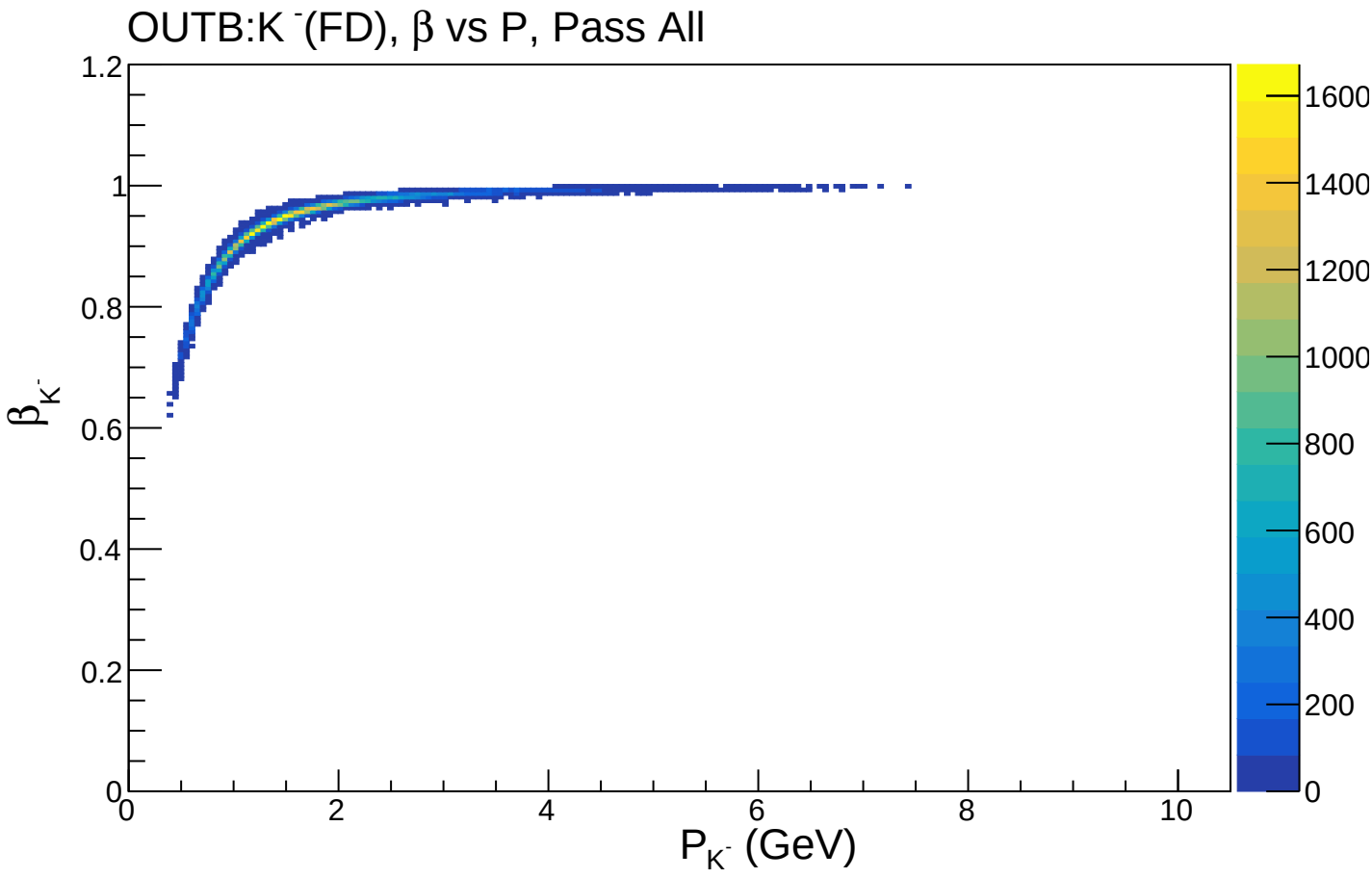

INB:K⁻ (FD), P vs Vz, Pass All
Vz_km (cm)
P_km (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
60
50
40
30
20
10
0

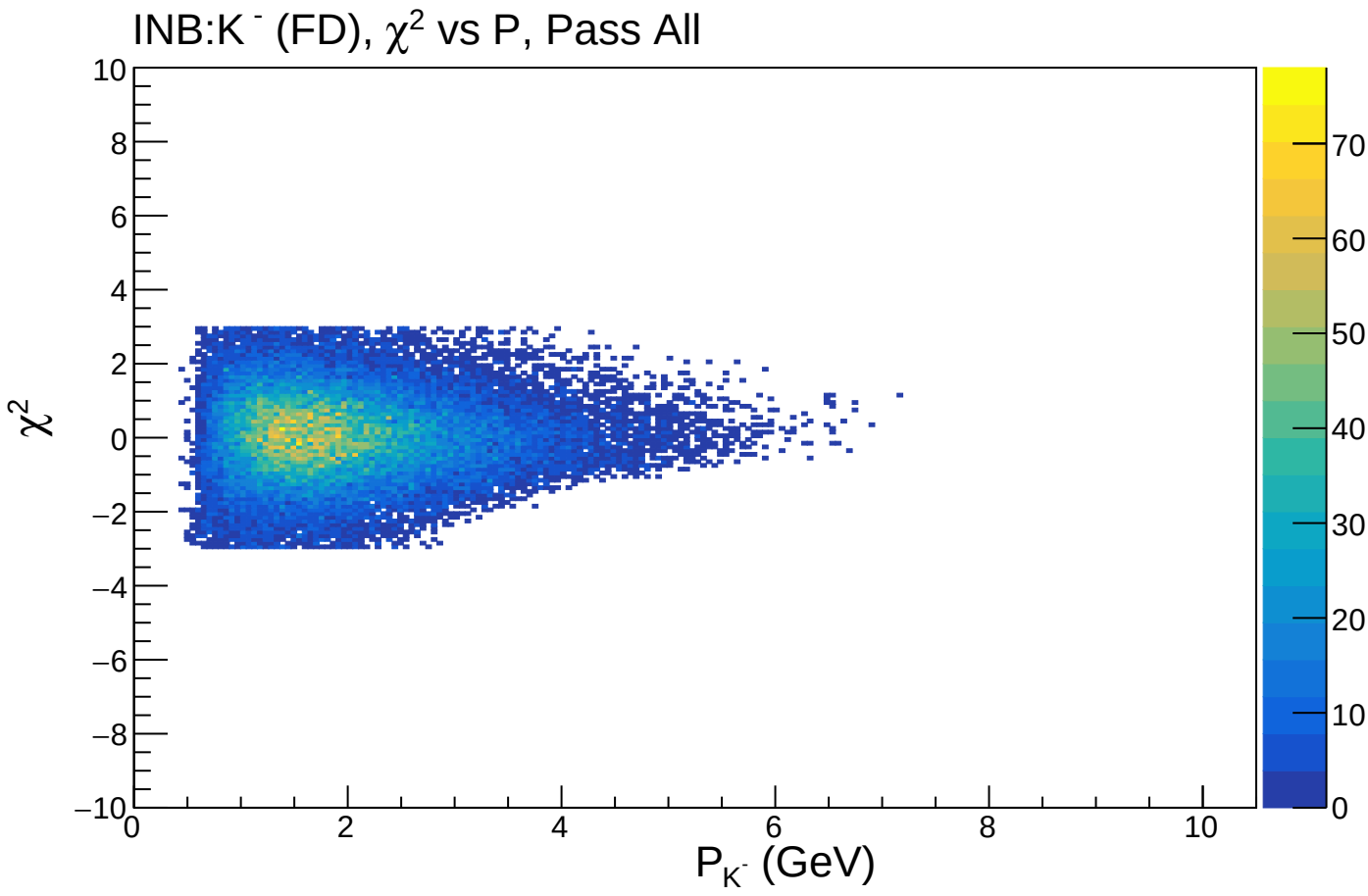

OUTB:K⁻ (FD), P vs Vz, Pass All
Vz_km (cm)
P_km (GeV)
15
10
5
0
−5
−10
−15
−20
0
2
4
6
8
10
60
50
40
30
20
10
0

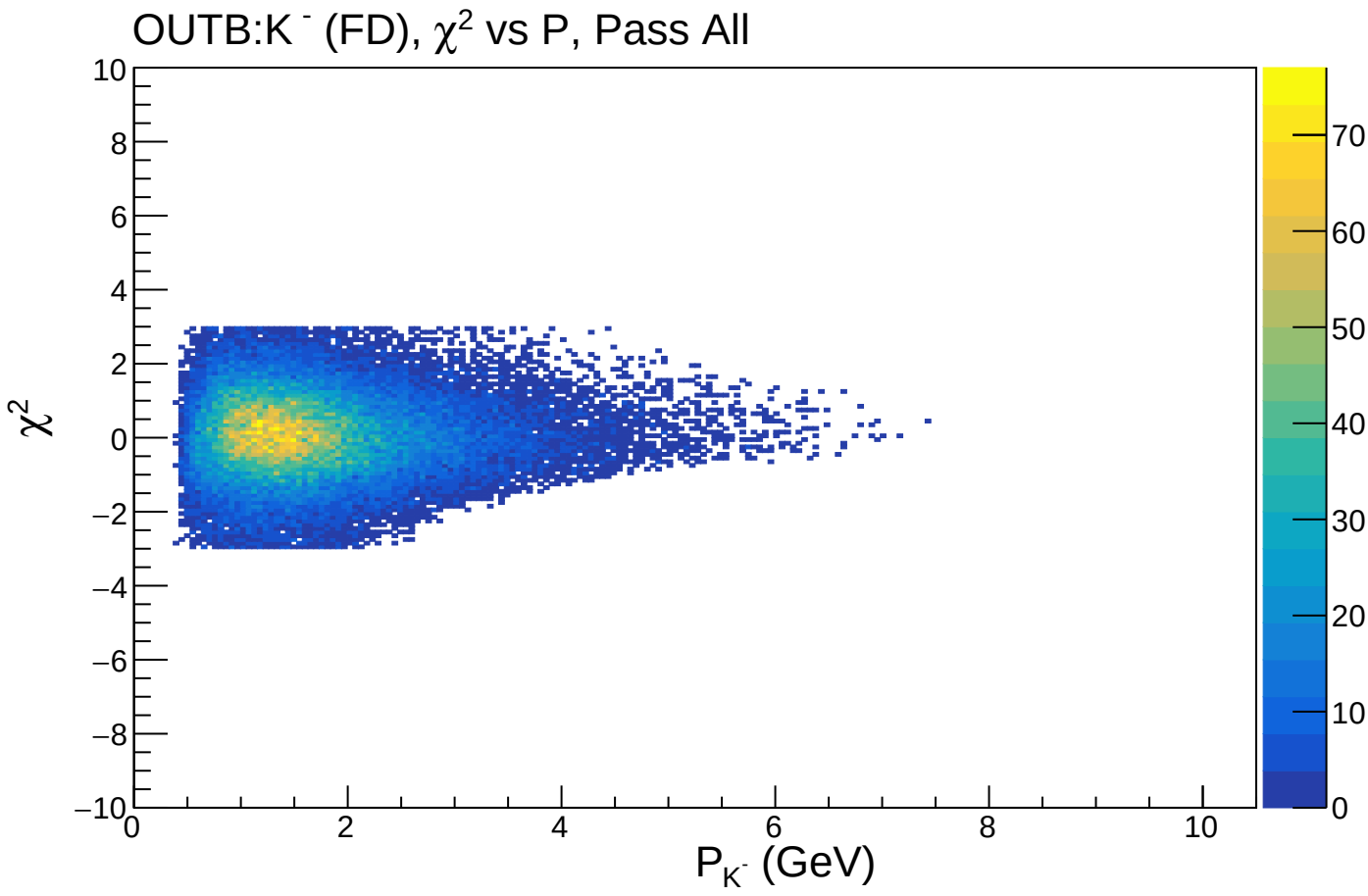

INB:K⁻ (FD), P vs Δ Vz, Pass All
Δ Vz (cm)
P_km (GeV)

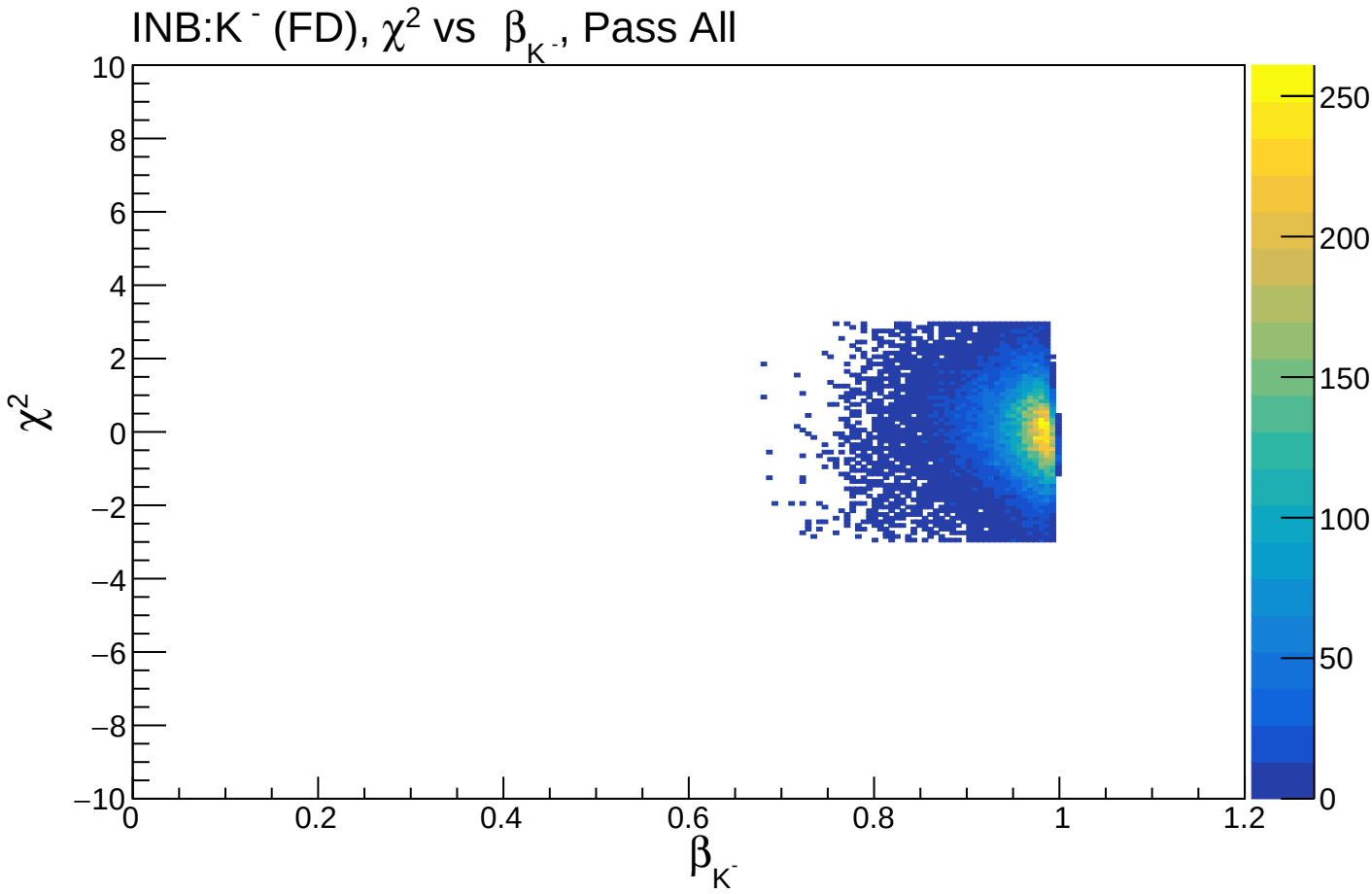

OUTB:K⁻ (FD), P vs Δ Vz, Pass All
Δ Vz (cm)
P_km (GeV)

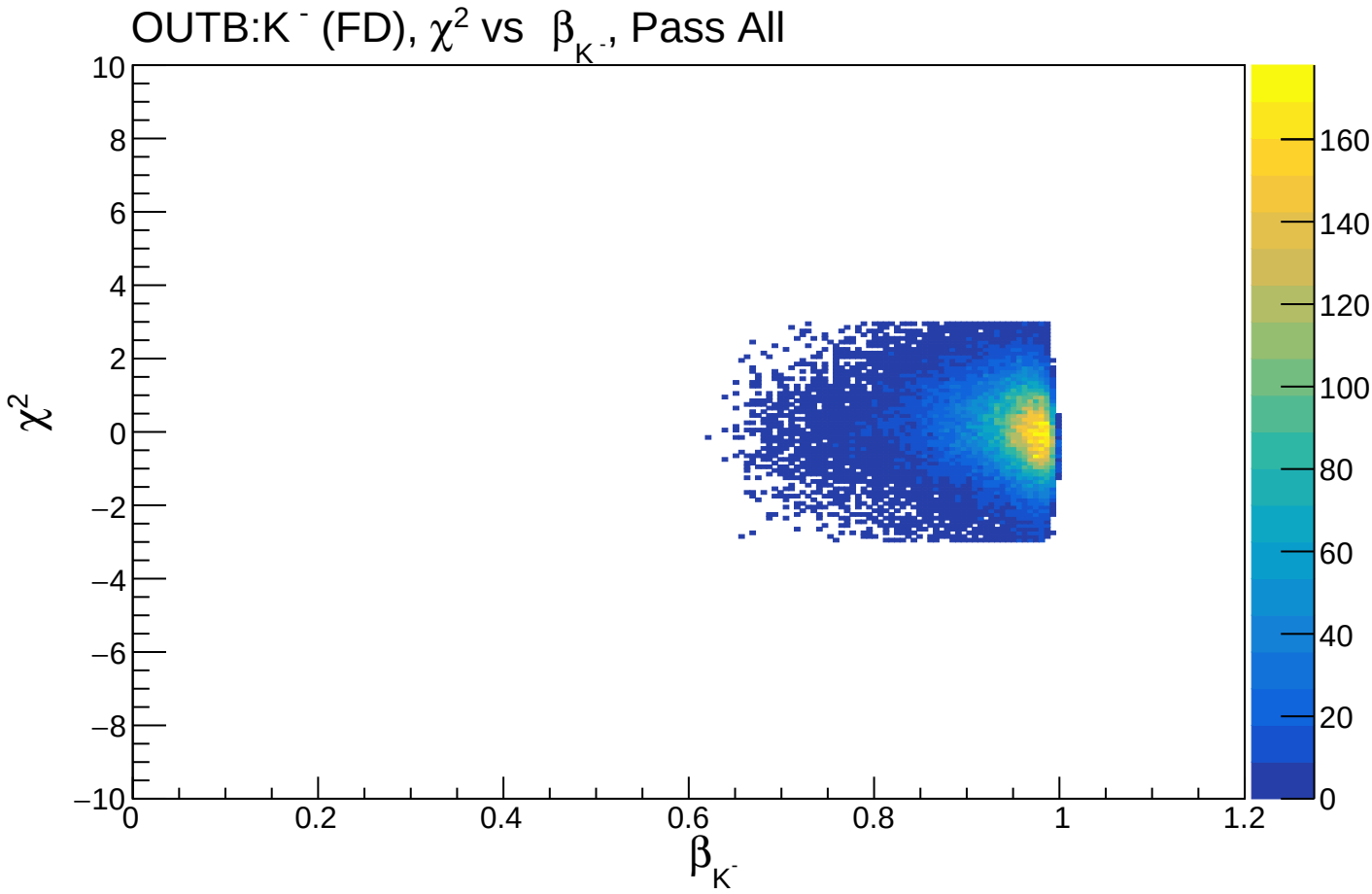

INB:K⁻(FD), β vs P, Pass All
1.2
1
0.8
0.6
0.4
0.2
0
β_K⁻
0
2
4
6
8
10
P_K⁻ (GeV)
1800
1600
1400
1200
1000
800
600
400
200
0


OUTB:K⁻(FD), β vs P, Pass All
1.2
1
0.8
0.6
0.4
0.2
0
β_K⁻
0
2
4
6
8
10
P_K⁻ (GeV)
1600
1400
1200
1000
800
600
400
200
0

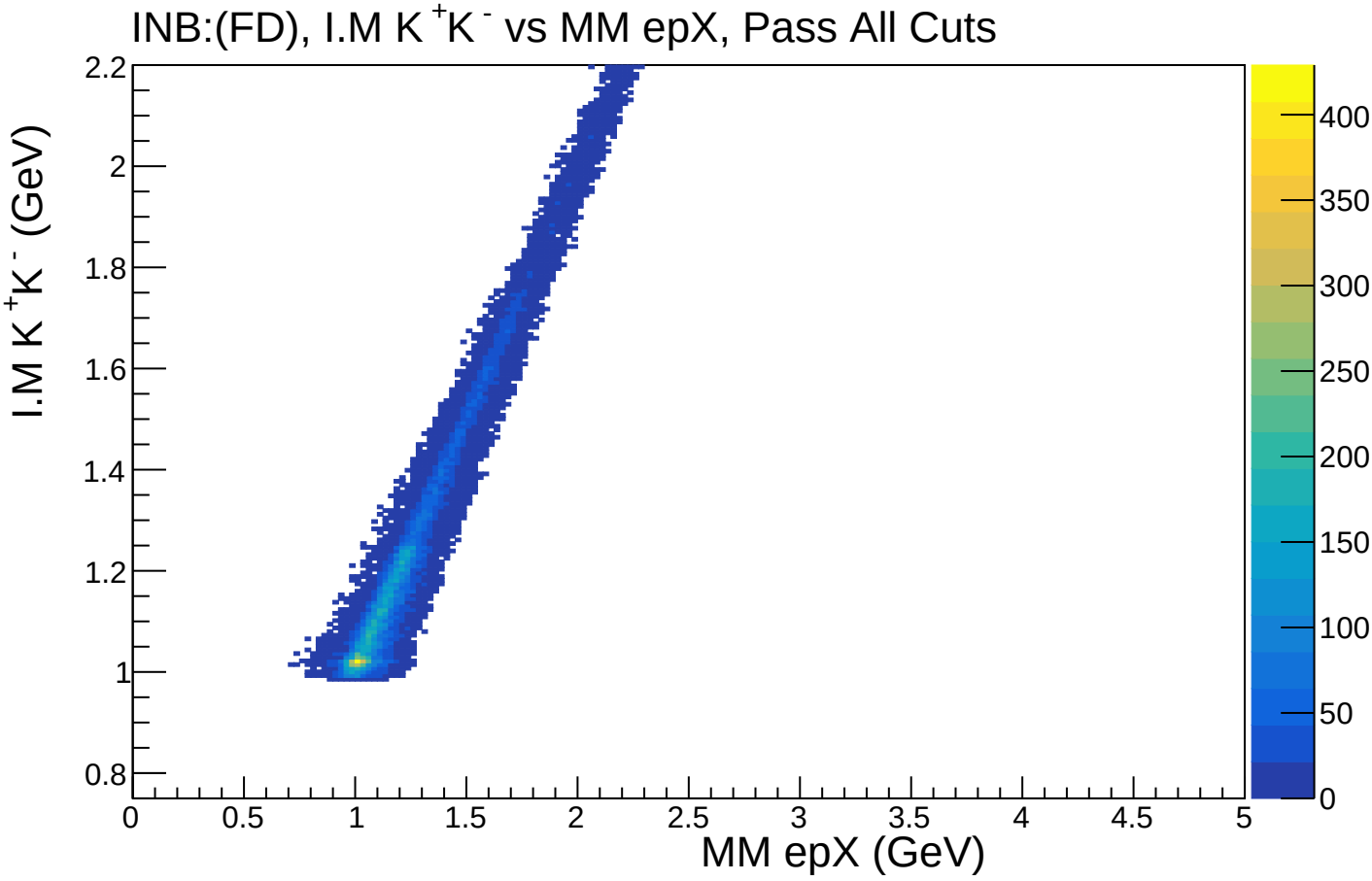

INB:K⁻ (FD), χ² vs P, Pass All
χ²
P_K⁻ (GeV)

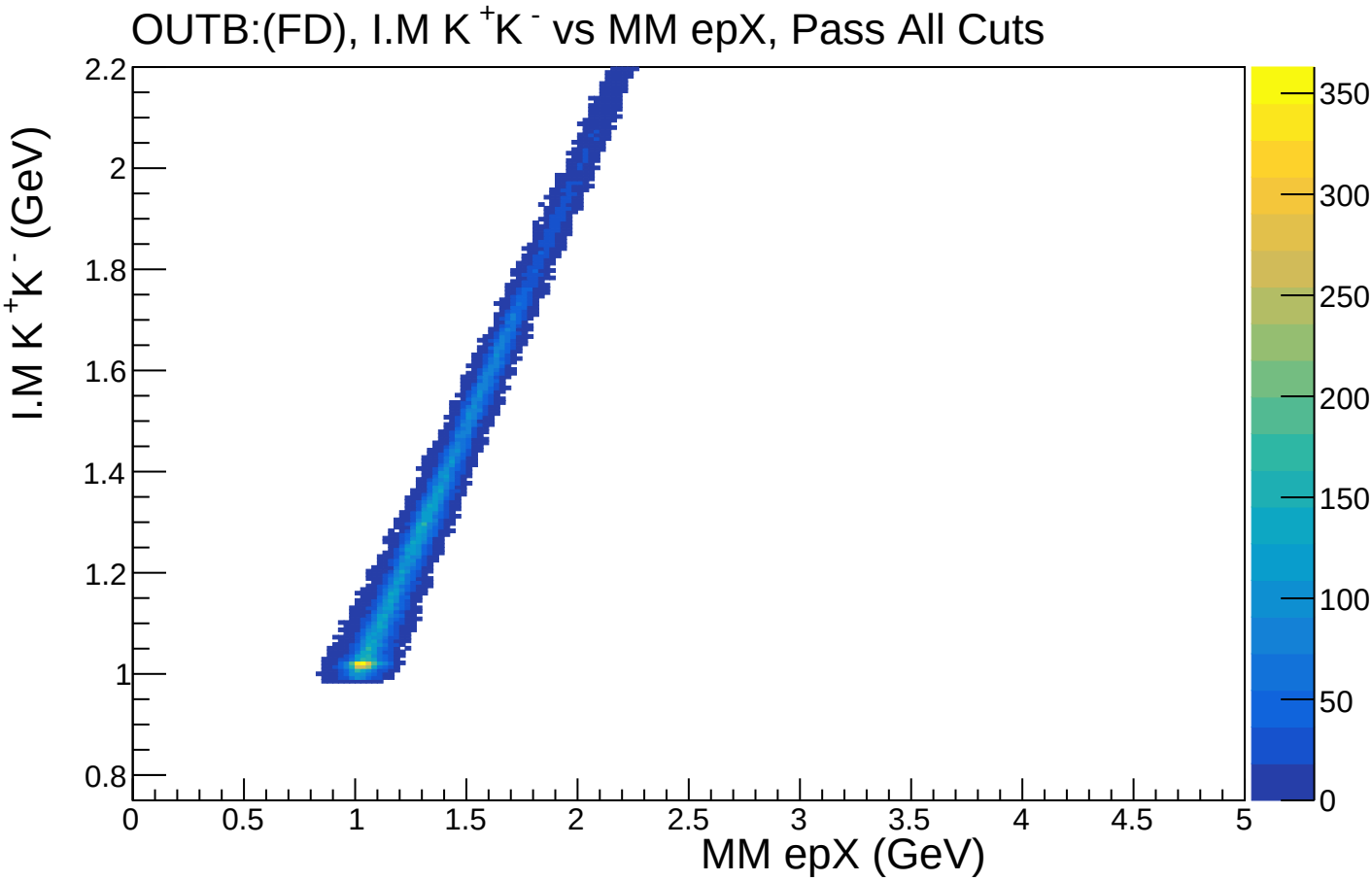

OUTB:K⁻ (FD), χ² vs P, Pass All
χ²
P_K⁻ (GeV)

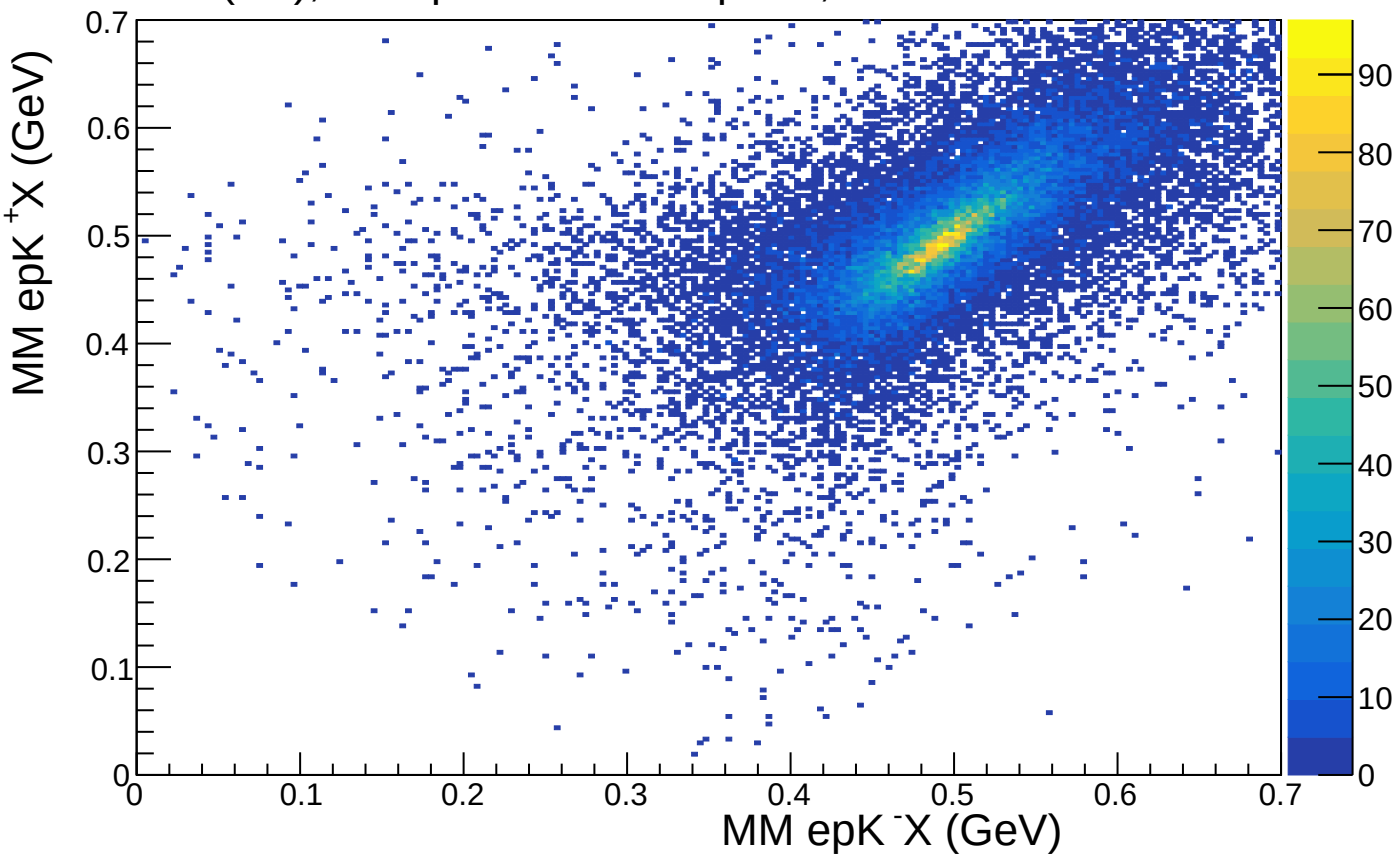

INB:K⁻ (FD), χ² vs β_K⁻, Pass All
χ²
β_K⁻
10
8
6
4
2
0
−2
−4
−6
−8
−10
0
0.2
0.4
0.6
0.8
1
1.2
250
200
150
100
50
0

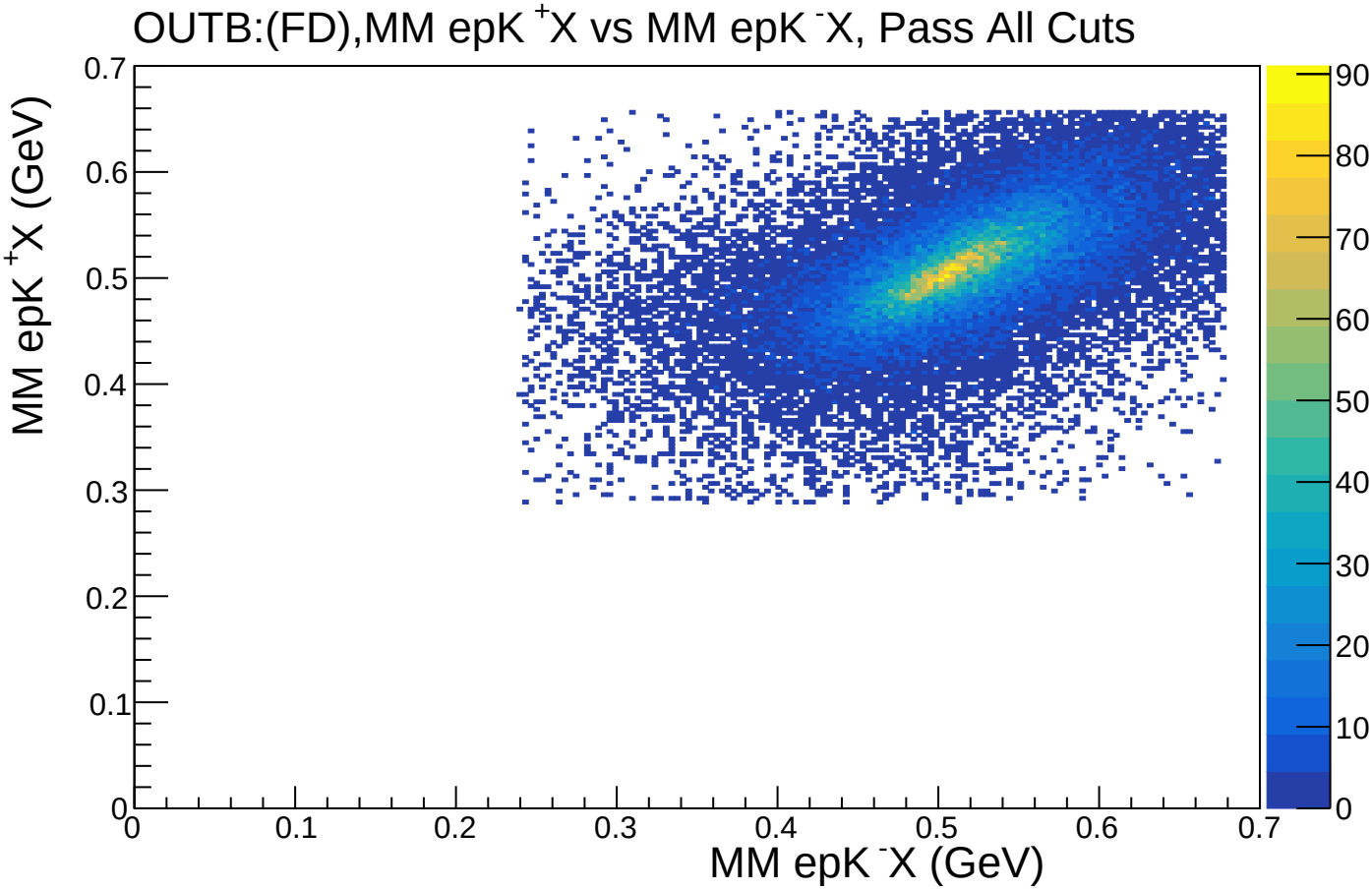

OUTB:K⁻ (FD), χ² vs β_K⁻, Pass All
χ²
β_K⁻
10
8
6
4
2
0
−2
−4
−6
−8
−10
0
0.2
0.4
0.6
0.8
1
1.2
160
140
120
100
80
60
40
20
0

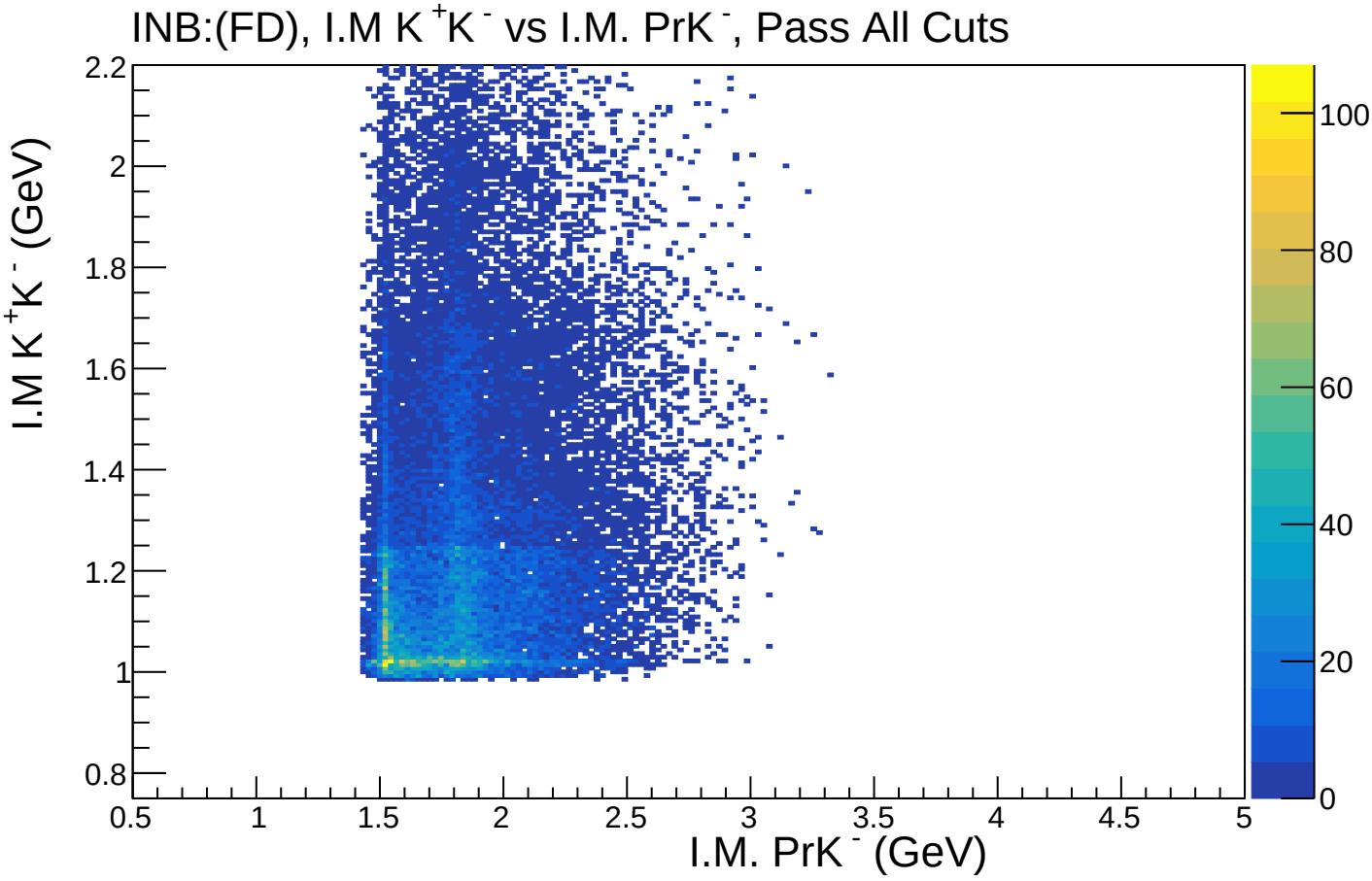
COMP - Masses Pass All+Add.

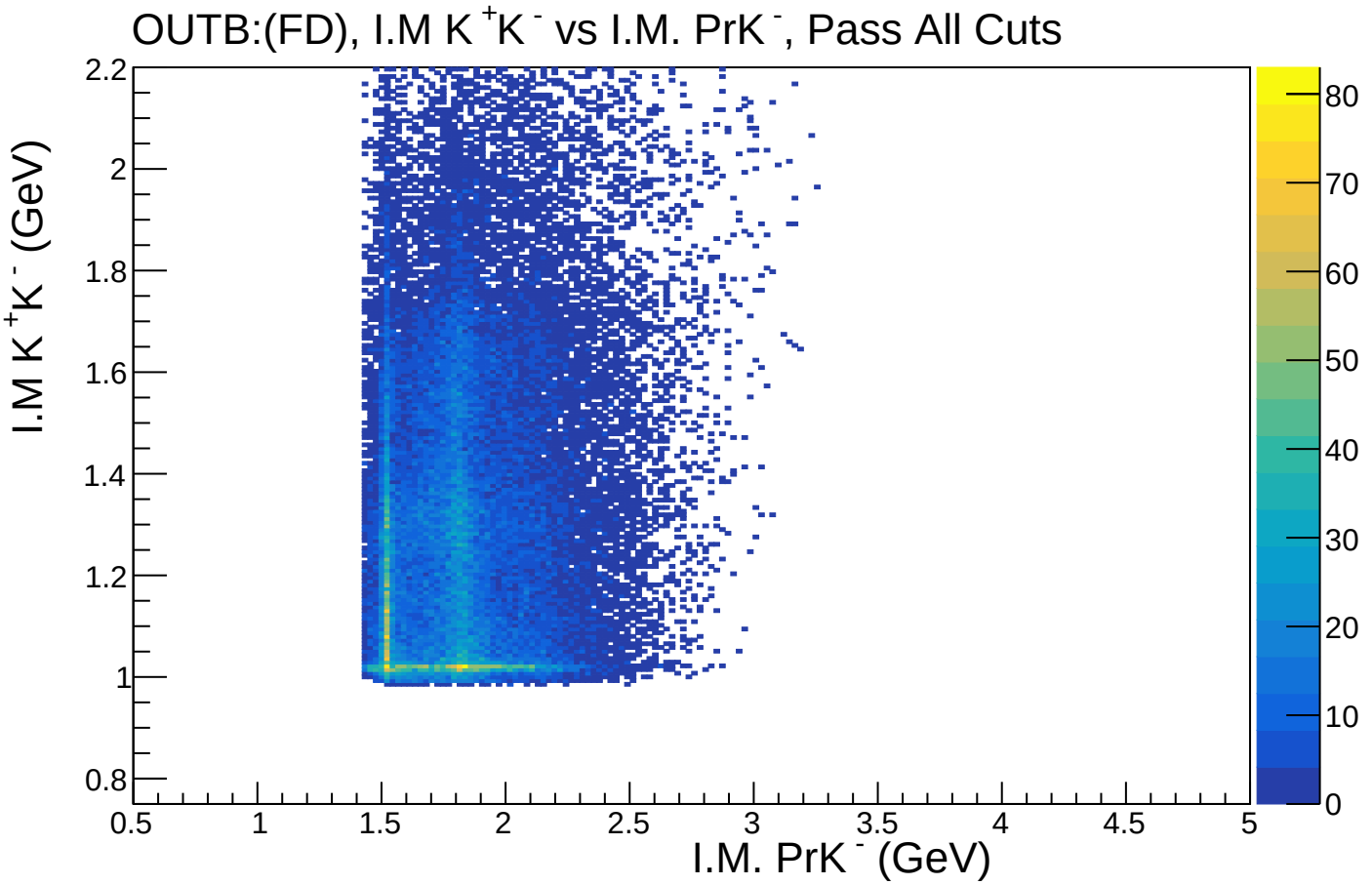

INB:(FD), I.M K+K- vs MM epX, Pass All Cuts
I.M K+K- (GeV)
MM epX (GeV)
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
400
350
300
250
200
150
100
50
0

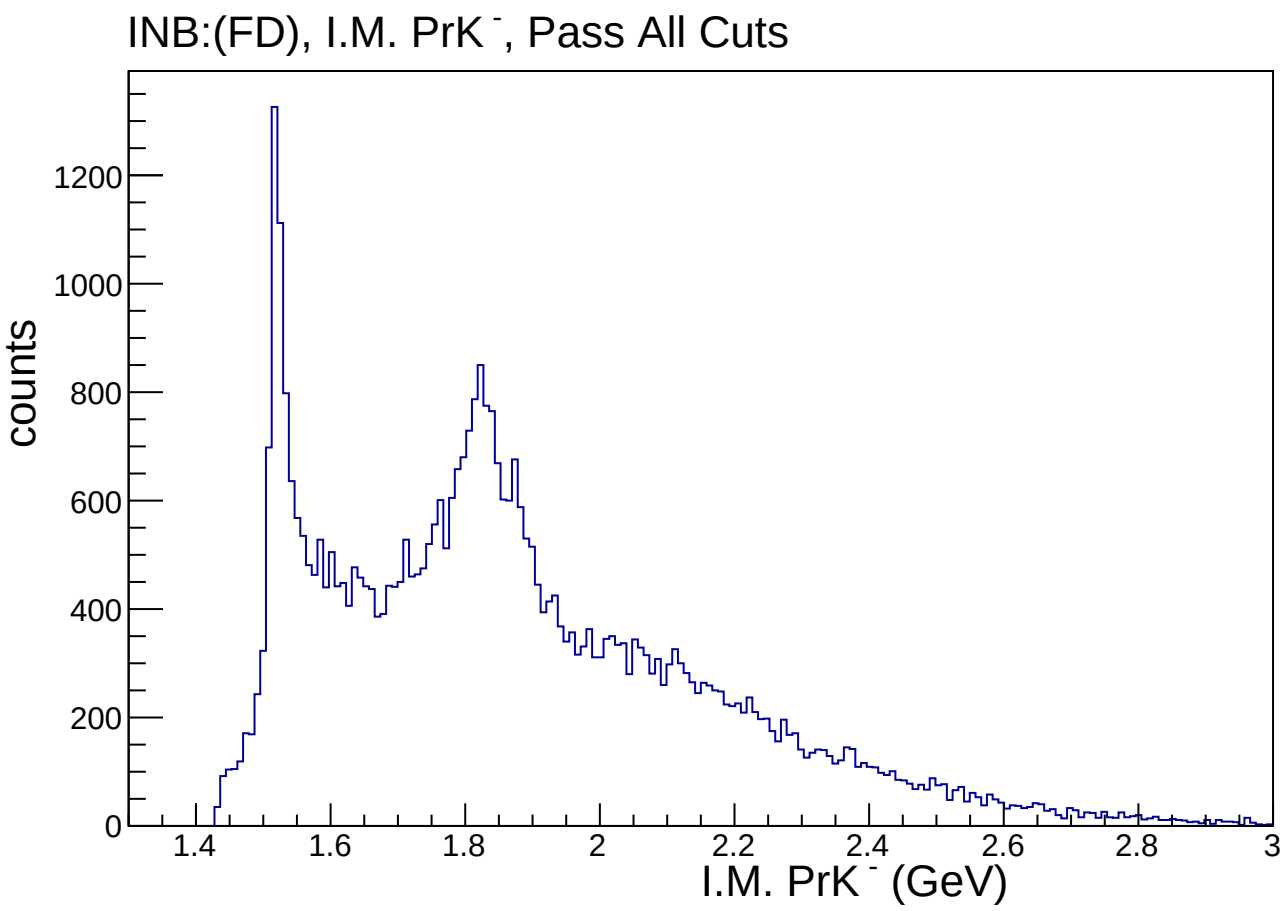

OUTB:(FD), I.M K+K- vs MM epX, Pass All Cuts
I.M K+K- (GeV)
MM epX (GeV)
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
350
300
250
200
150
100
50
0

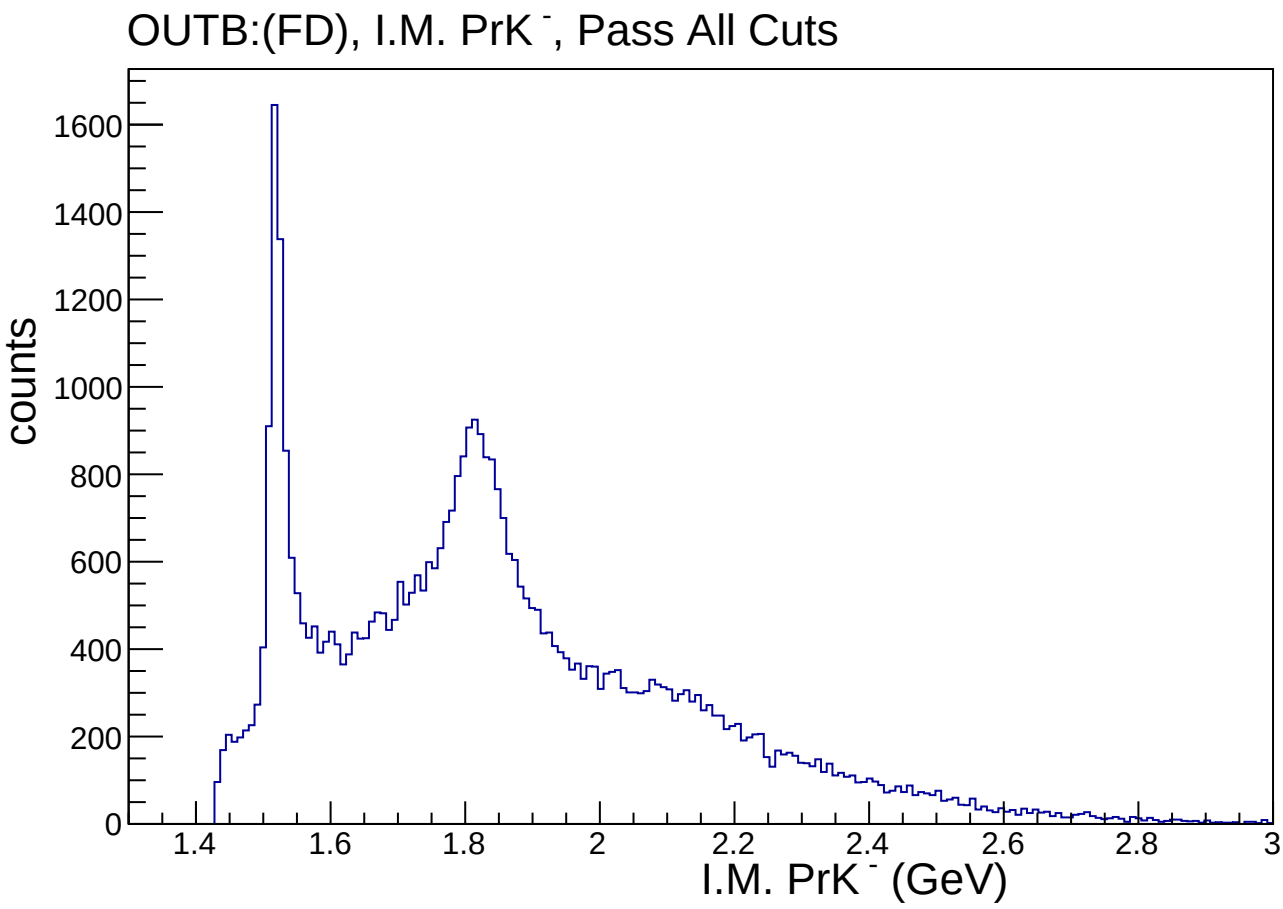

INB:(FD),MM epK +X vs MM epK -X, Pass All Cuts
MM epK +X (GeV)
MM epK -X (GeV)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0
10
20
30
40
50
60
70
80
90

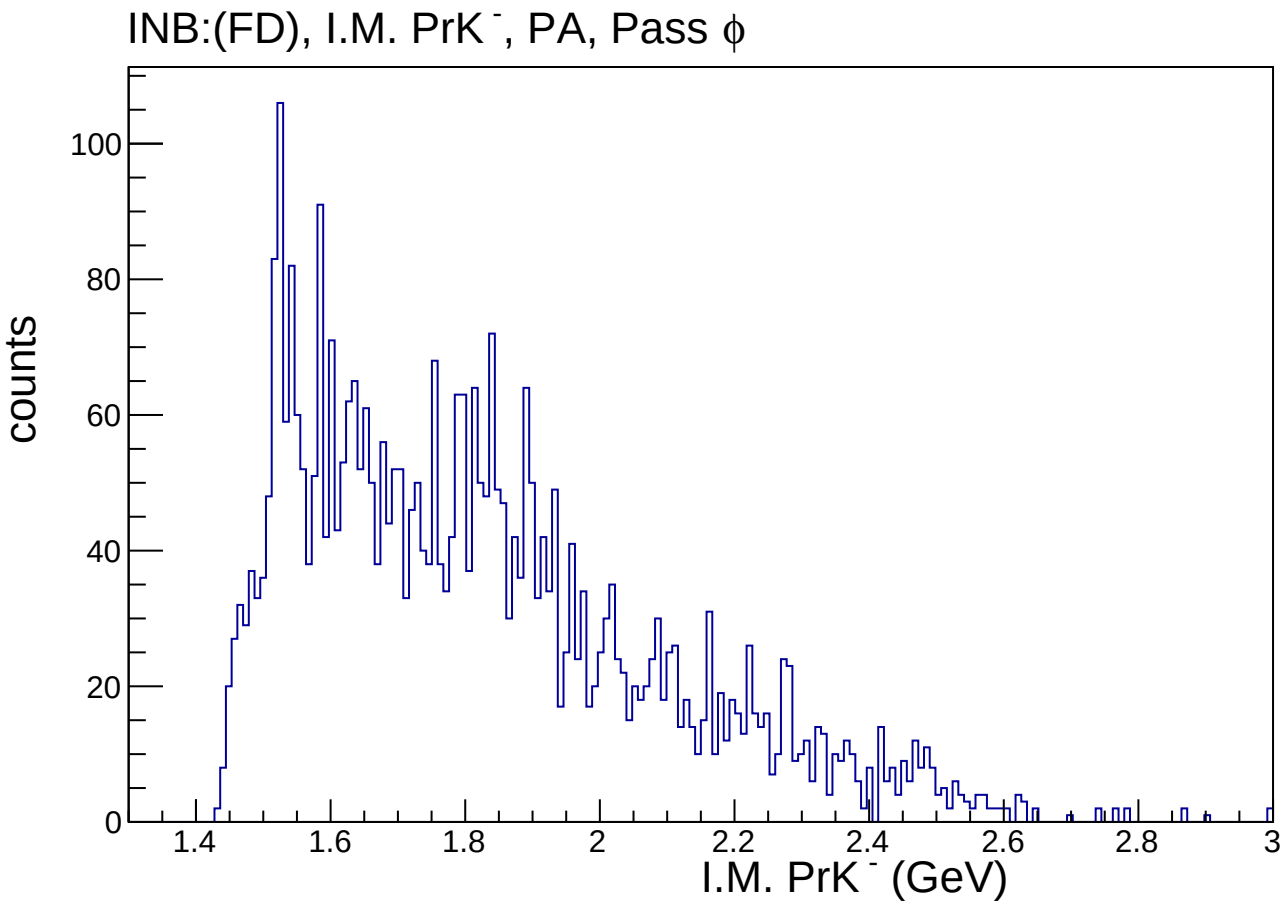

OUTB:(FD),MM epK +X vs MM epK -X, Pass All Cuts
MM epK +X (GeV)
MM epK -X (GeV)
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0
10
20
30
40
50
60
70
80
90

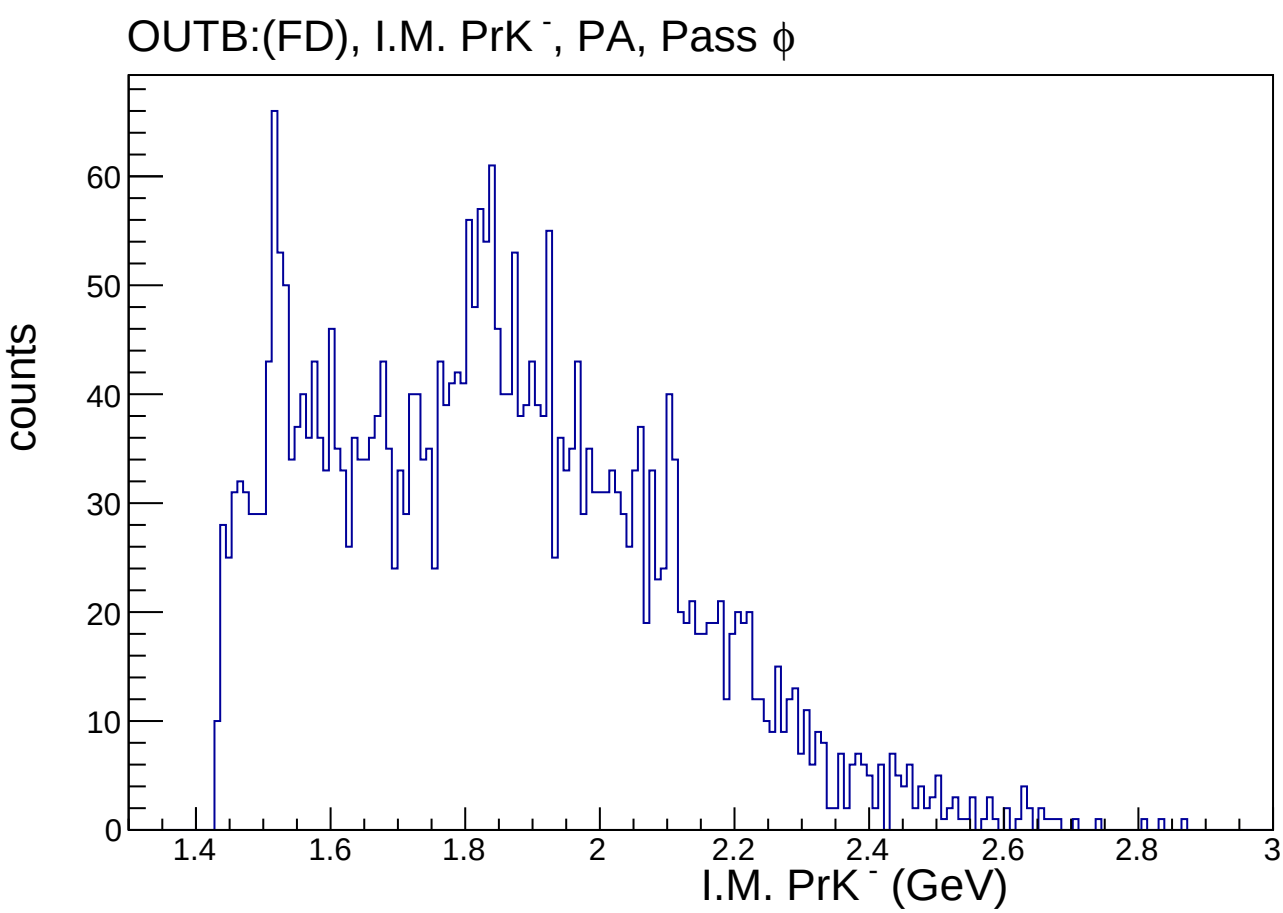

INB:(FD), I.M K+K- vs I.M. PrK-, Pass All Cuts
I.M K+K- (GeV)
I.M. PrK- (GeV)
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
100
80
60
40
20
0

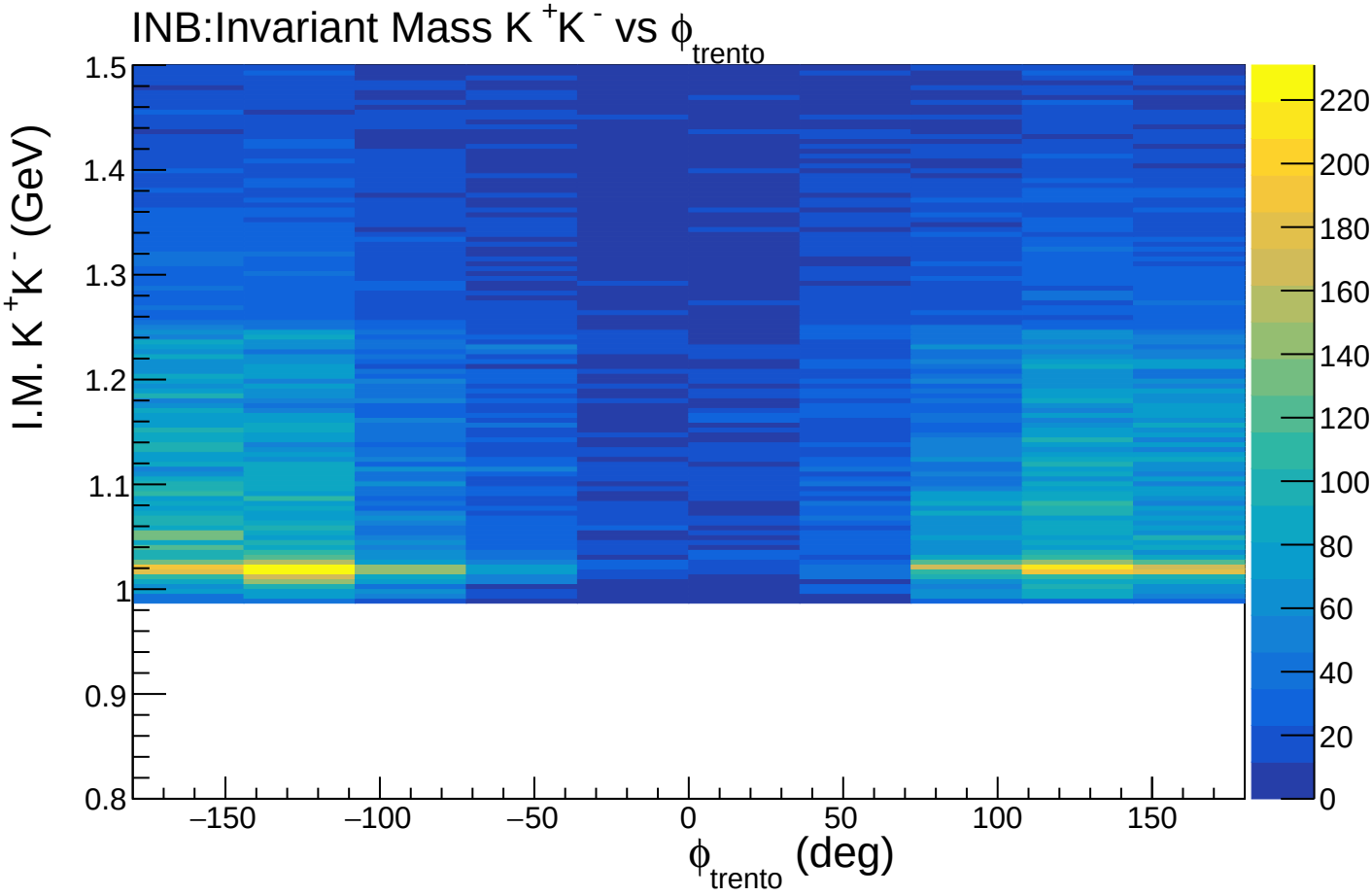

OUTB:(FD), I.M K+K- vs I.M. PrK-, Pass All Cuts
I.M K+K- (GeV)
I.M. PrK- (GeV)
2.2
2
1.8
1.6
1.4
1.2
1
0.8
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
80
70
60
50
40
30
20
10
0

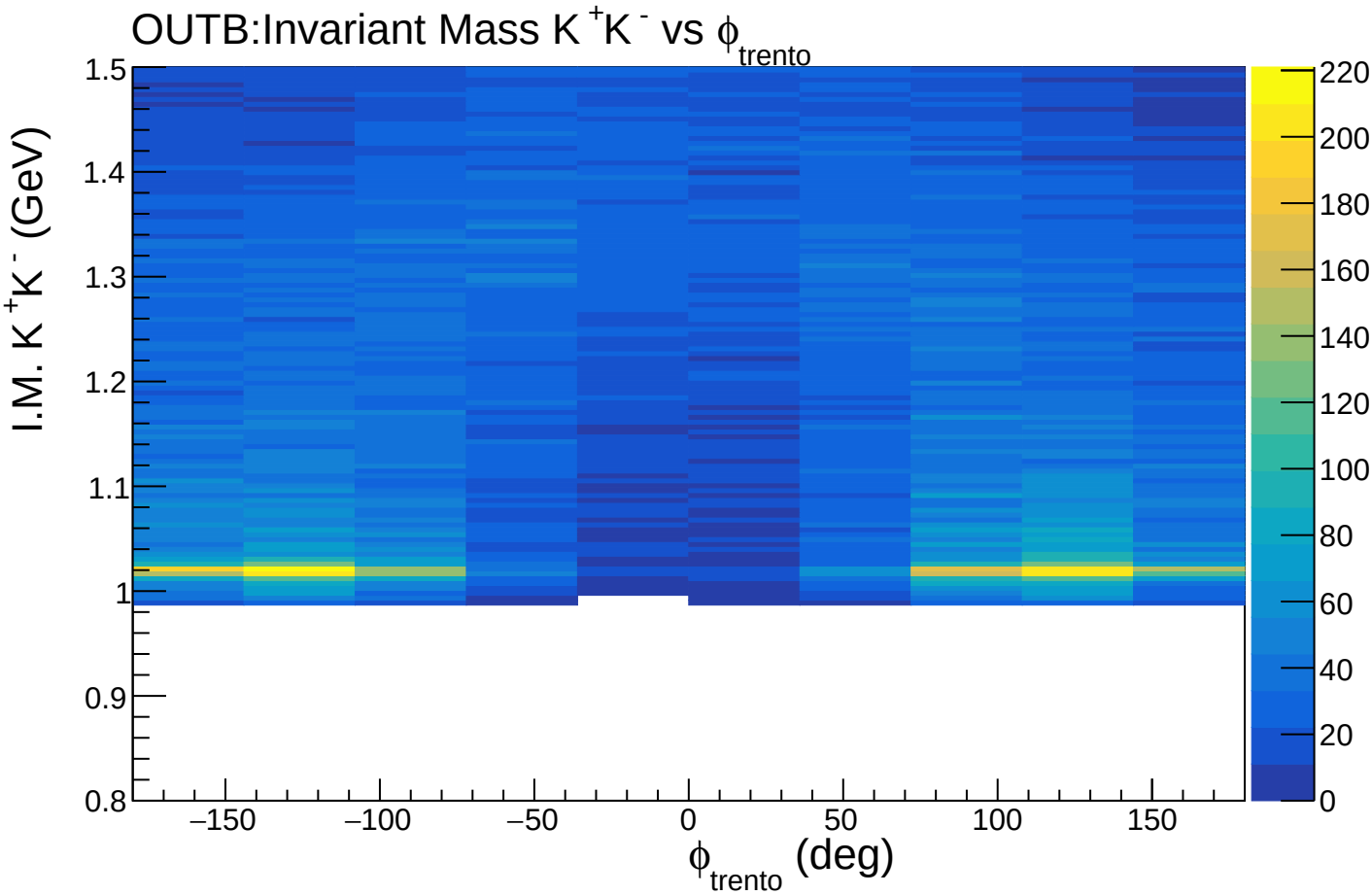

INB:(FD), I.M. PrK⁻, Pass All Cuts
counts
0
200
400
600
800
1000
1200
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
I.M. PrK⁻ (GeV)


OUTB:(FD), I.M. PrK⁻, Pass All Cuts
counts
0
200
400
600
800
1000
1200
1400
1600
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
I.M. PrK⁻ (GeV)

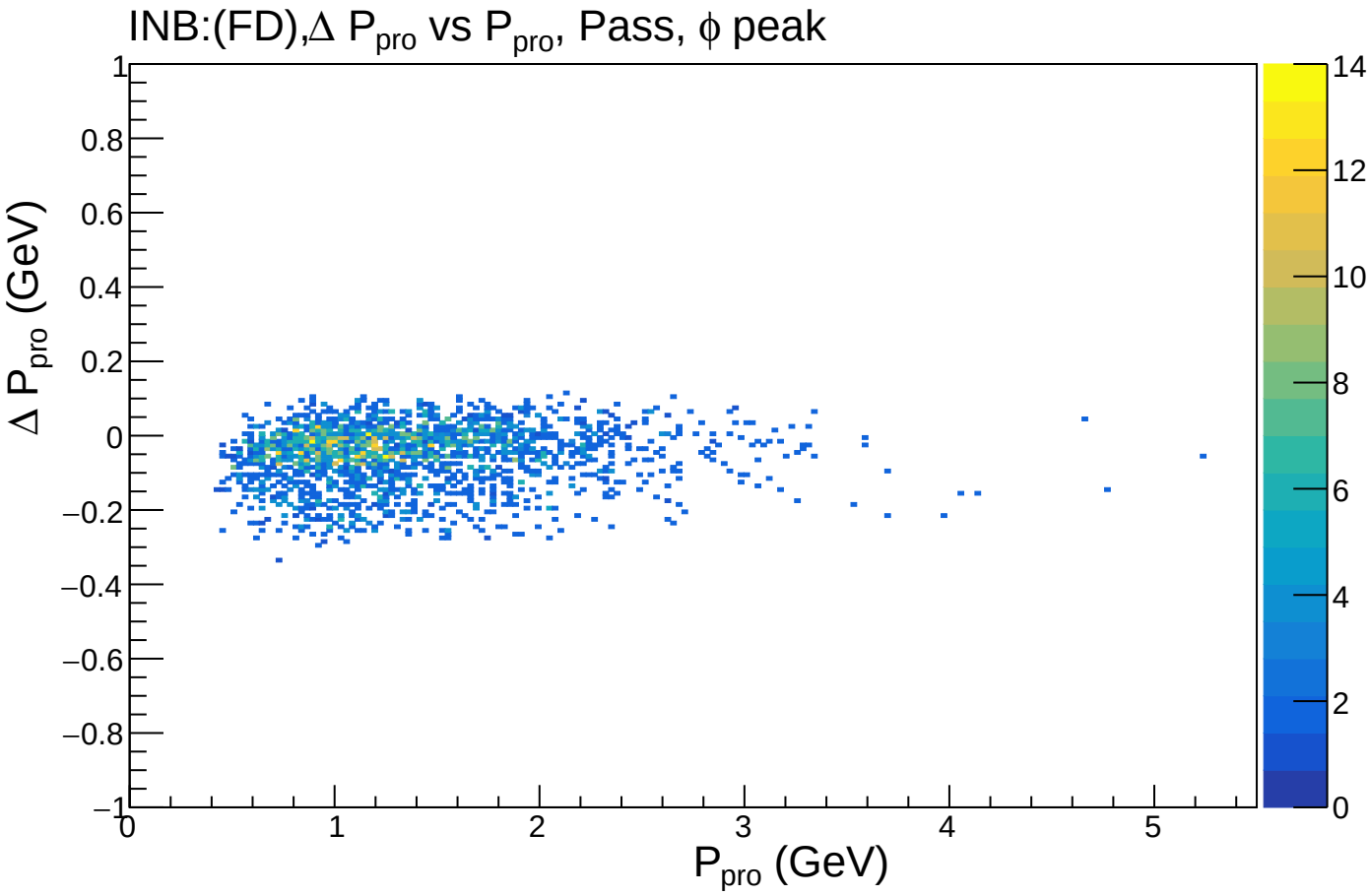

INB:(FD), I.M. PrK⁻, PA, Pass ϕ
counts
0
20
40
60
80
100
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
I.M. PrK⁻ (GeV)

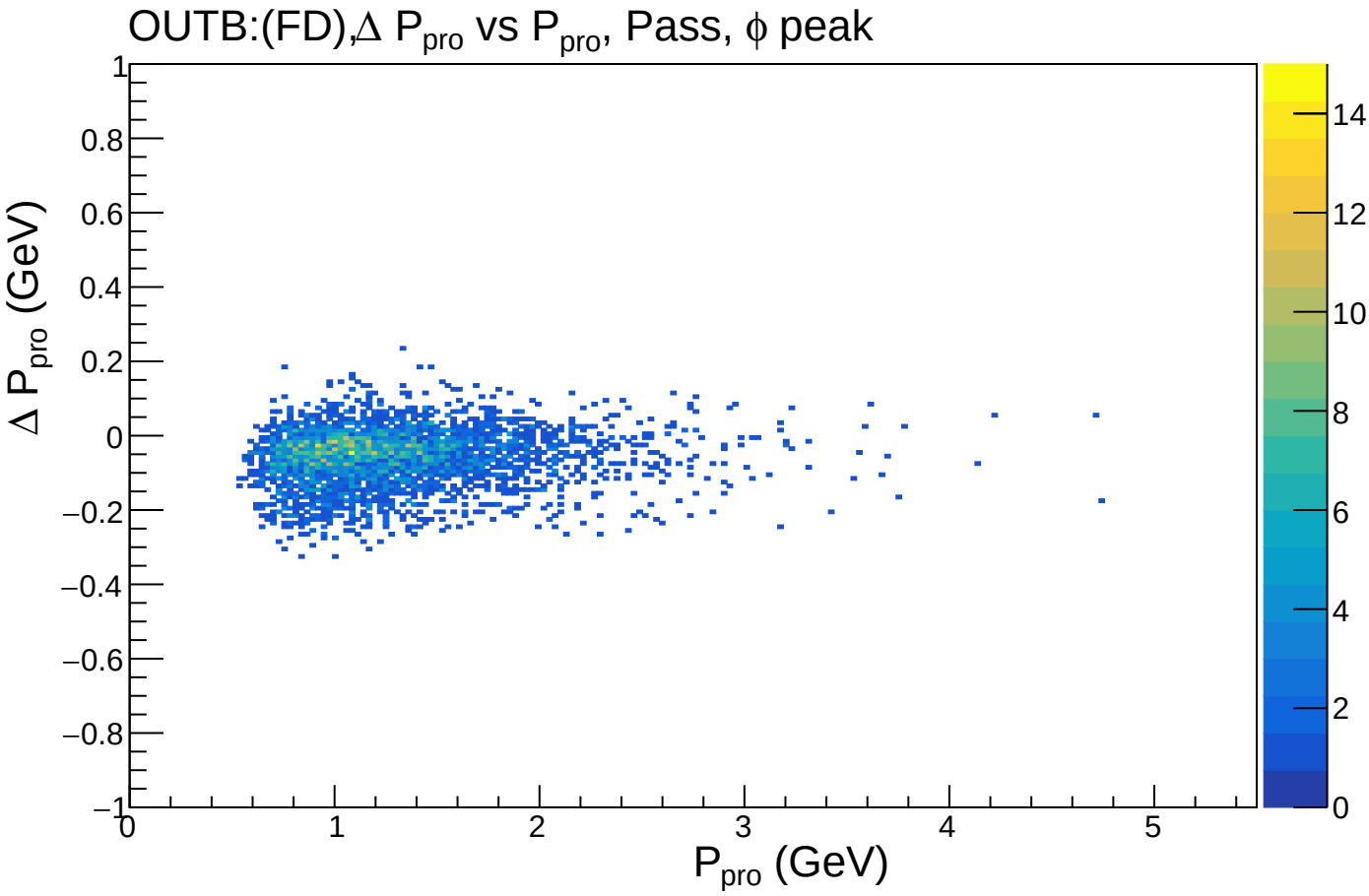

OUTB:(FD), I.M. PrK⁻, PA, Pass ϕ
counts
0
10
20
30
40
50
60
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
I.M. PrK⁻ (GeV)

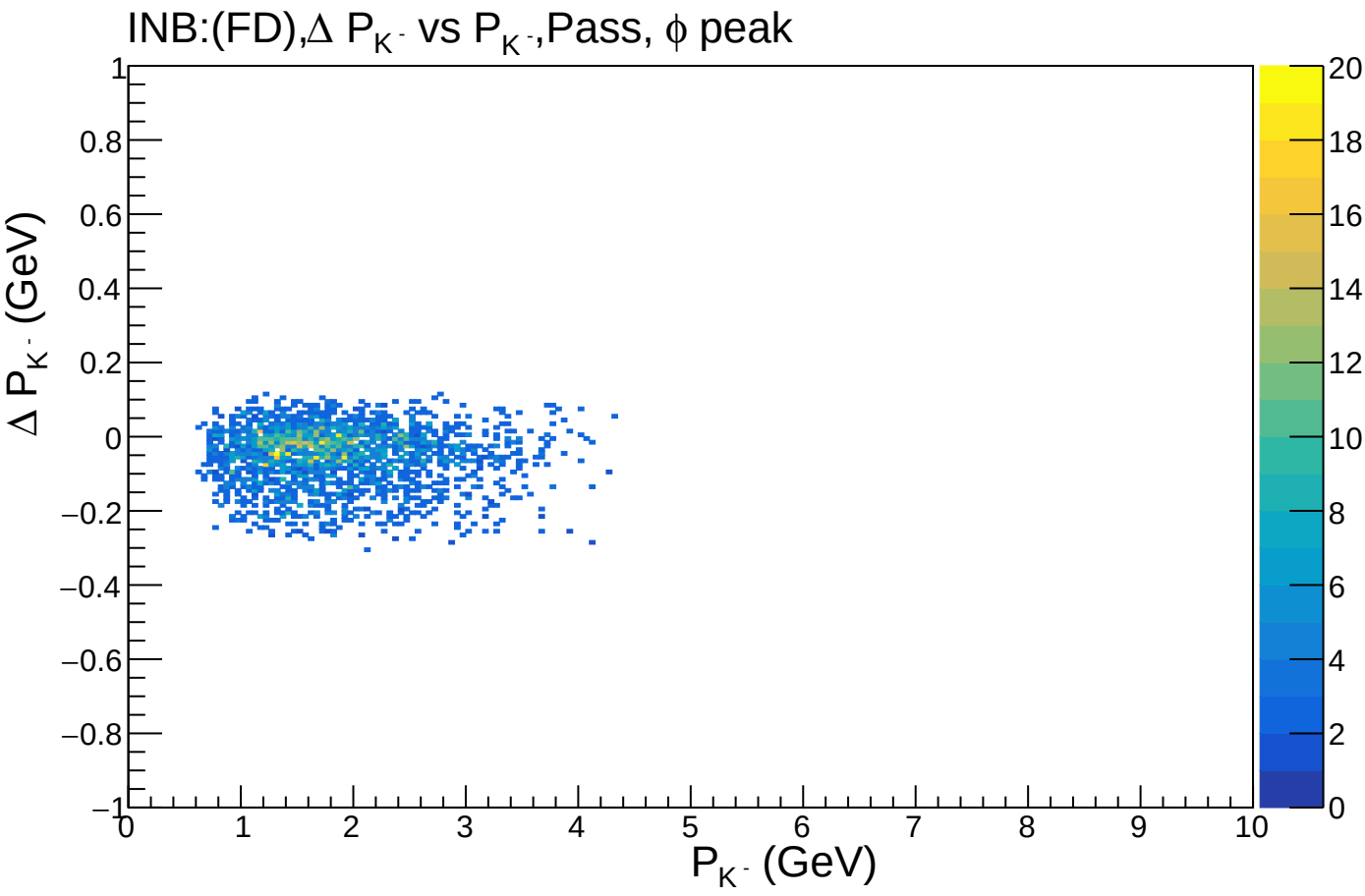

INB:Invariant Mass K+K- vs ϕtrento
I.M. K+K- (GeV)
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
−150
−100
−50
0
50
100
150
ϕtrento (deg)
220
200
180
160
140
120
100
80
60
40
20
0

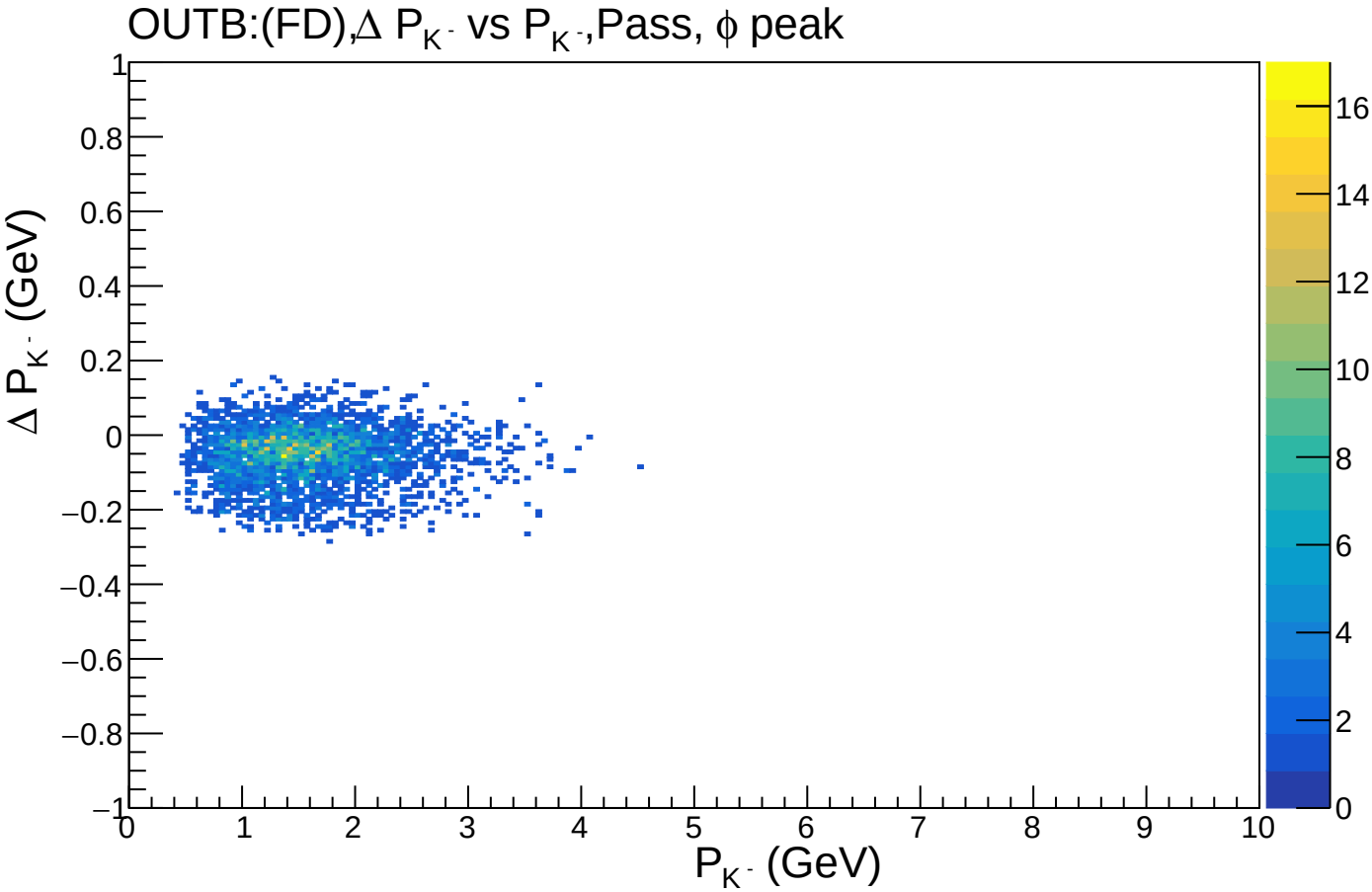

OUTB:Invariant Mass K+K- vs ϕtrento
I.M. K+K- (GeV)
1.5
1.4
1.3
1.2
1.1
1
0.9
0.8
−150
−100
−50
0
50
100
150
ϕtrento (deg)
220
200
180
160
140
120
100
80
60
40
20
0

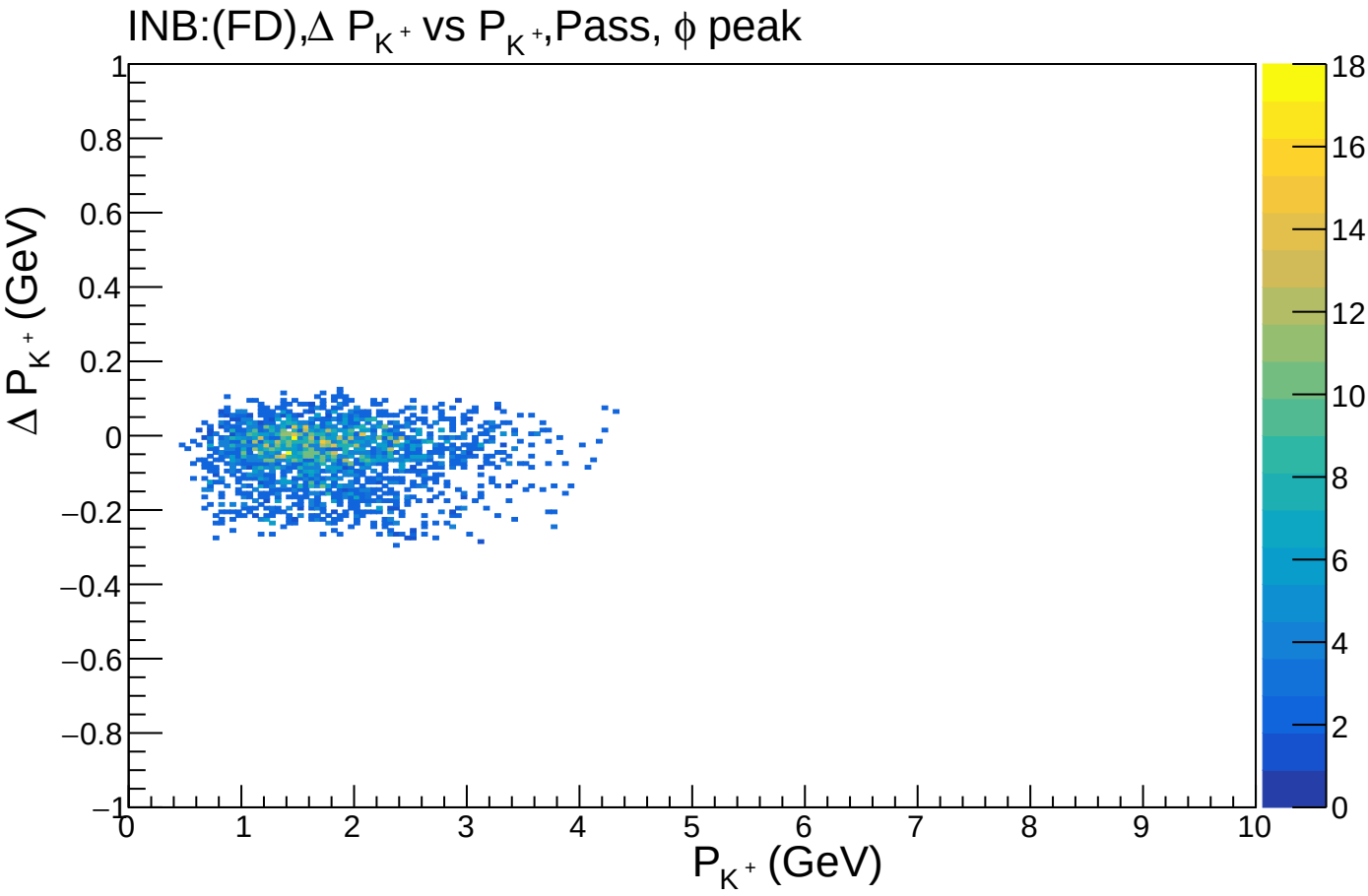
COMP-Calc. Δ P PassAll ϕ Peak

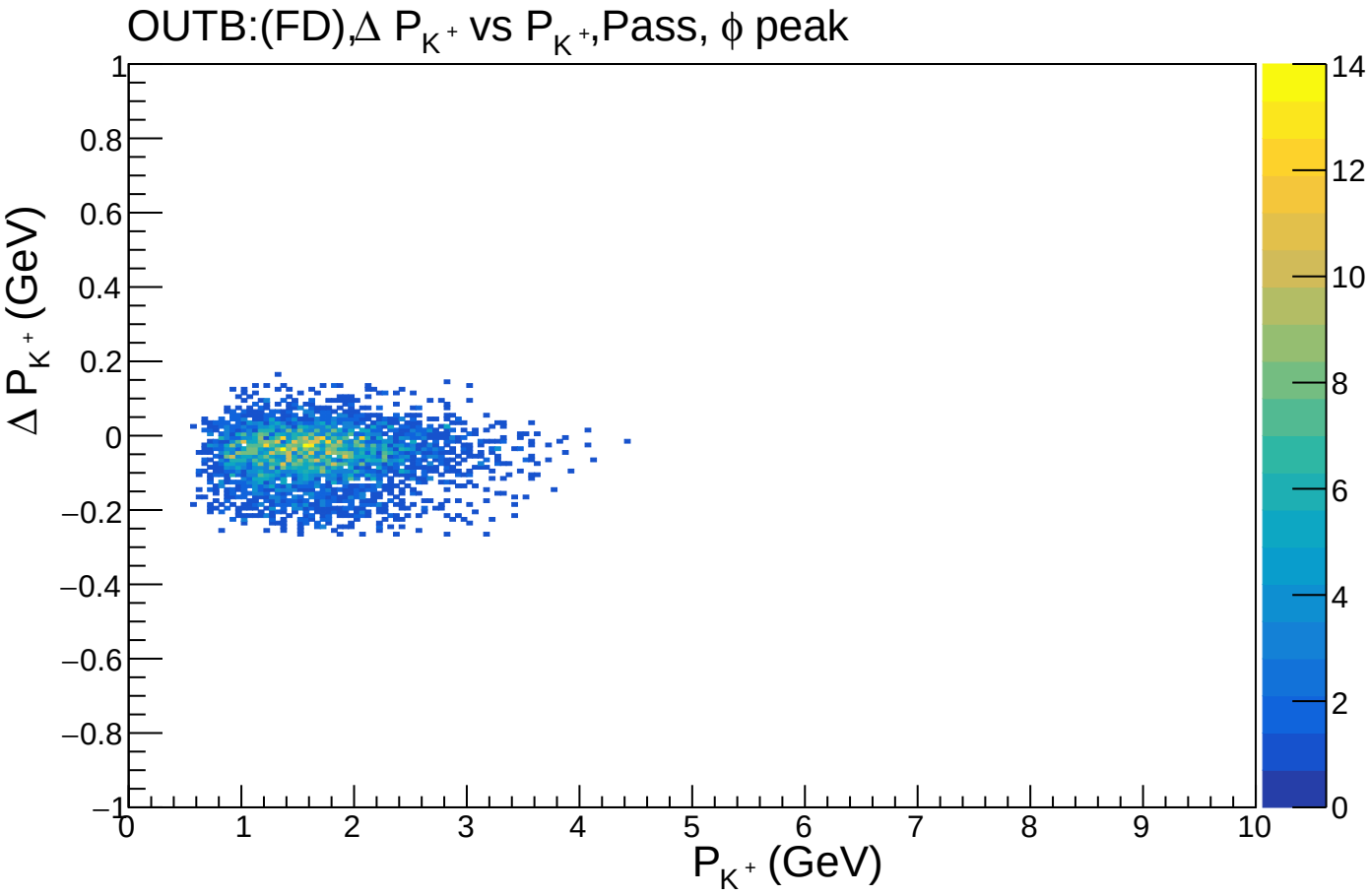

INB:(FD),Δ P_pro vs P_pro, Pass, ϕ peak
Δ P_pro (GeV)
P_pro (GeV)
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
0
1
2
3
4
5
14
12
10
8
6
4
2
0


OUTB:(FD),Δ P_pro vs P_pro, Pass, ϕ peak
Δ P_pro (GeV)
P_pro (GeV)
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
0
1
2
3
4
5
14
12
10
8
6
4
2
0


INB:(FD),Δ P_K- vs P_K-,Pass, ϕ peak
Δ P_K- (GeV)
P_K- (GeV)


OUTB:(FD),Δ P_K- vs P_K-,Pass, ϕ peak
Δ P_K- (GeV)
P_K- (GeV)


INB:(FD),Δ P_K+ vs P_K+,Pass, ϕ peak
Δ P_K+ (GeV)
P_K+ (GeV)


OUTB:(FD),Δ P_K+ vs P_K+,Pass, ϕ peak
Δ P_K+ (GeV)
P_K+ (GeV)