

各モジュールでの各分布

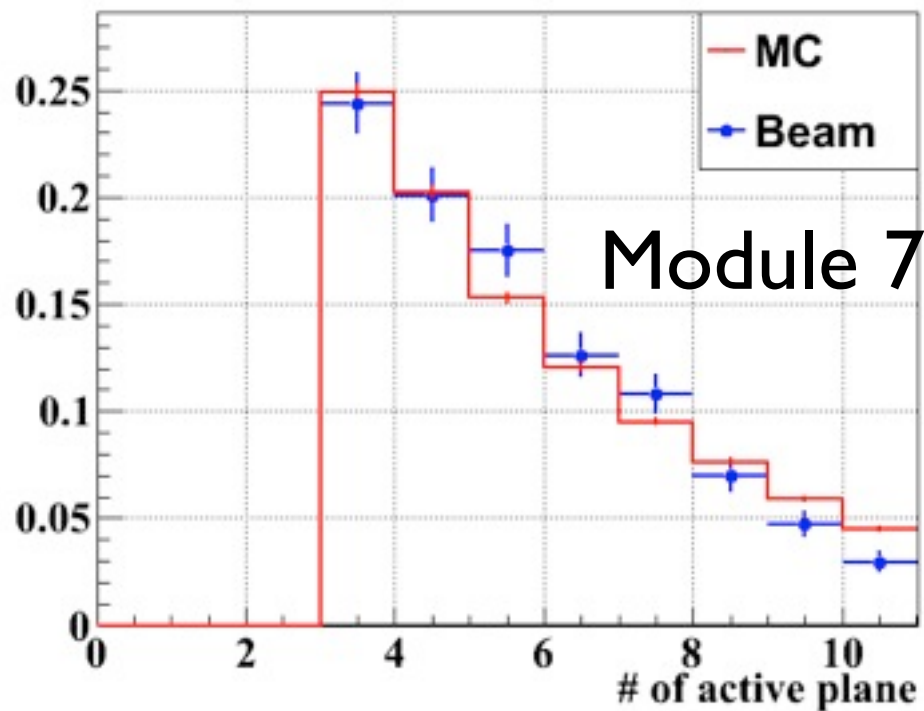
@ND4

- ND4の各モジュールでの”neutrino event selection”後の各分布をプロット
 - # of active plane
 - p.e. / layer
 - reconstructed vertex
 - reconstructed angle
 - p.e. of hit of reconstructed track

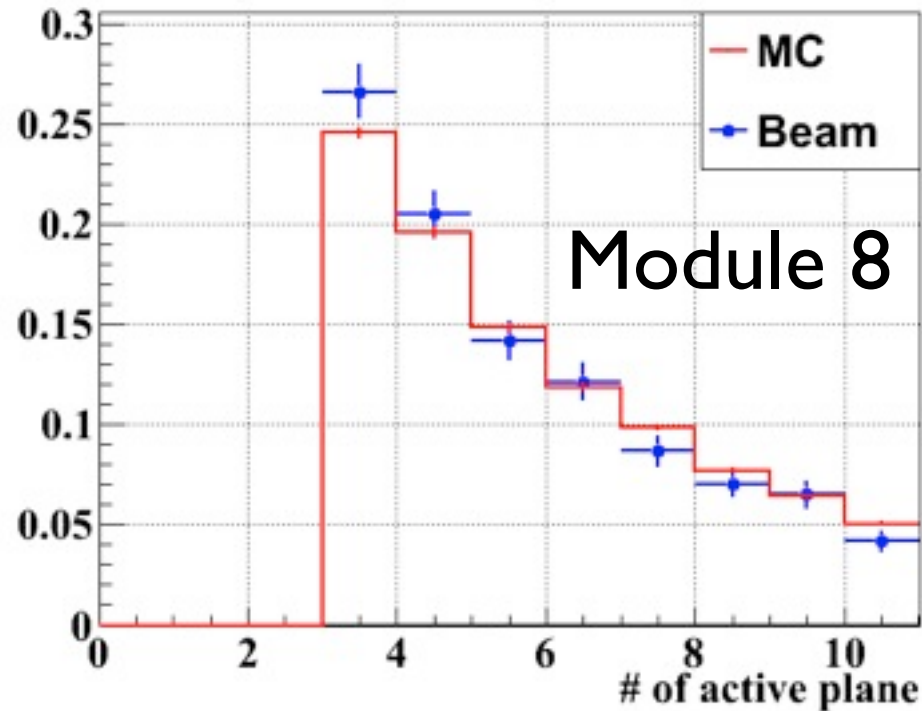
- ビームデータとMCデータを比較するために、各分布はその面積で規格化した。

of active plane

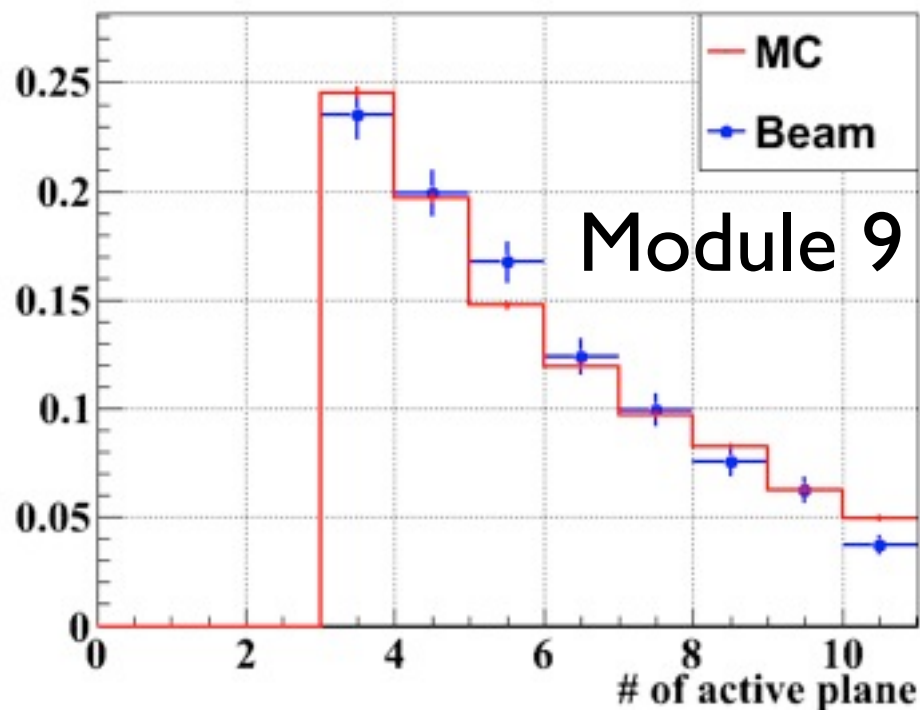
of active plane at module 7 (neutrino event)



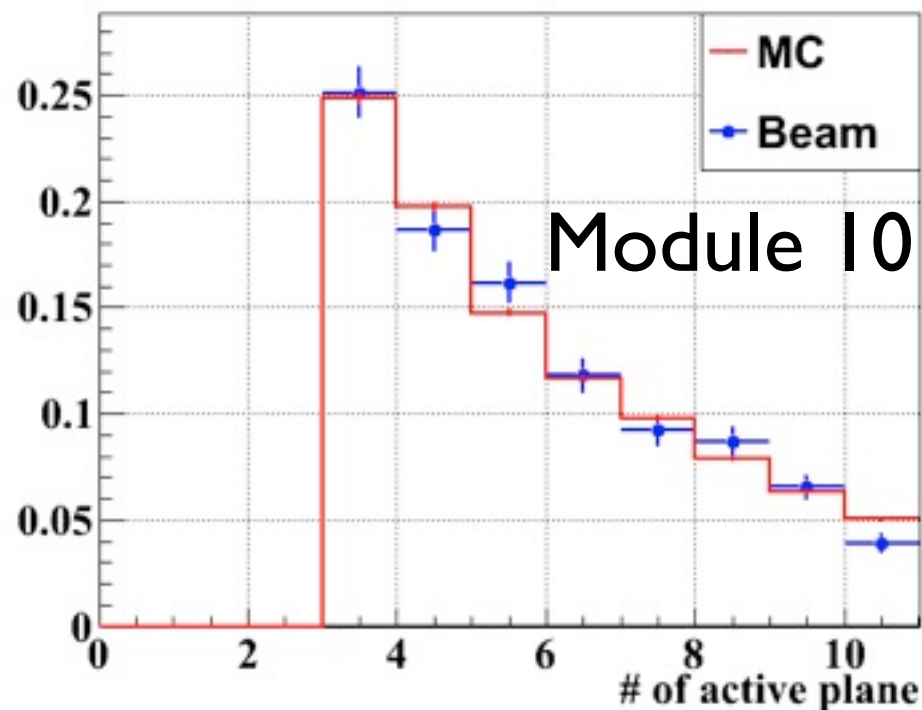
of active plane at module 8 (neutrino event)



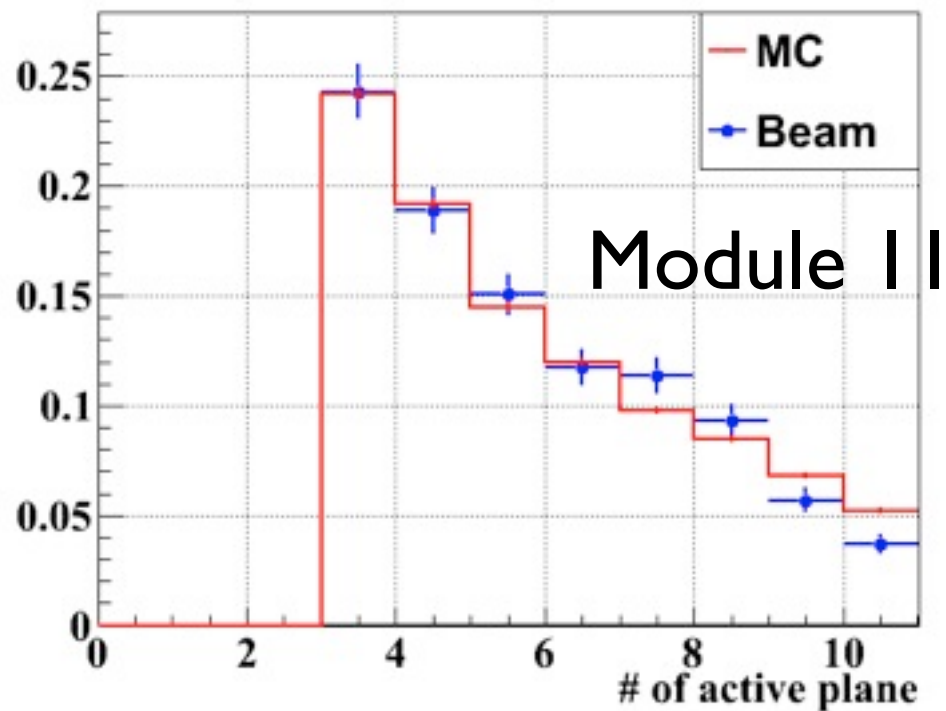
of active plane at module 9 (neutrino event)



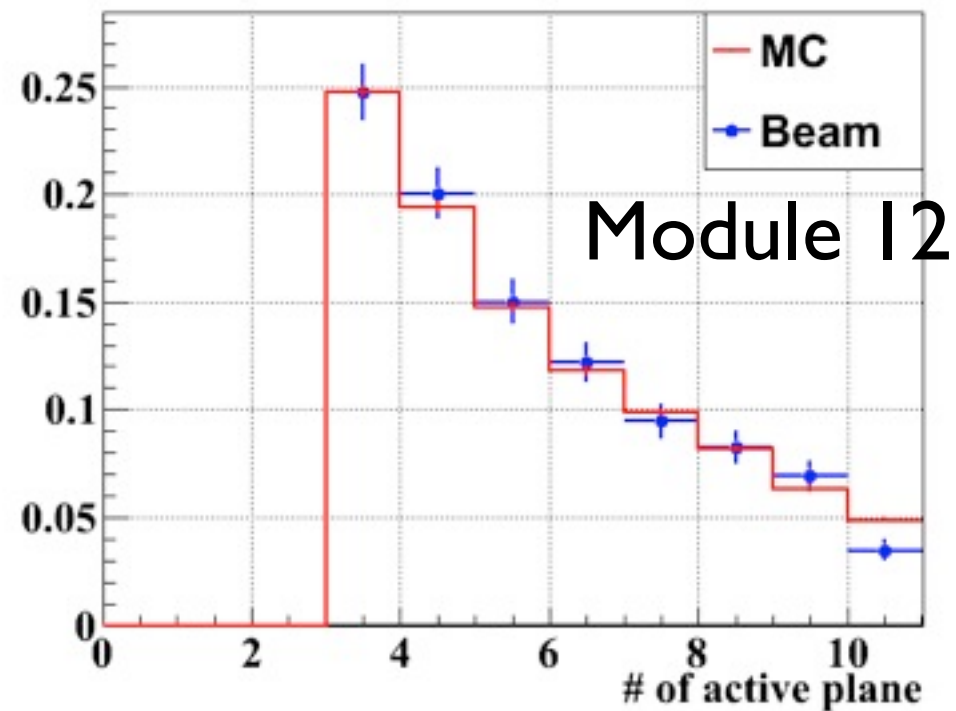
of active plane at module 10 (neutrino event)



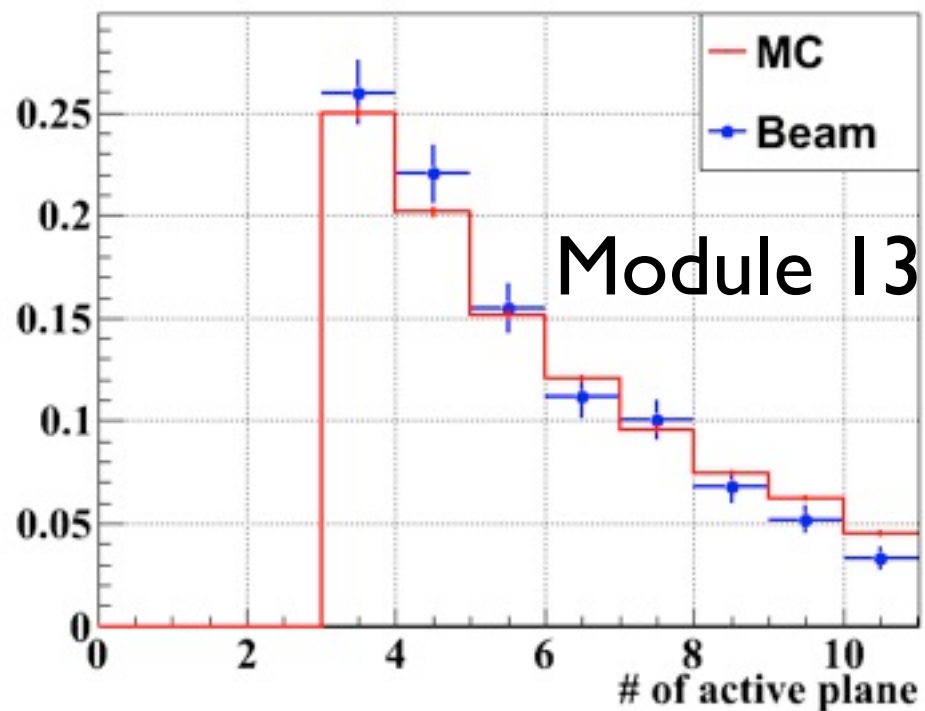
of active plane at module 11 (neutrino event)



of active plane at module 12 (neutrino event)

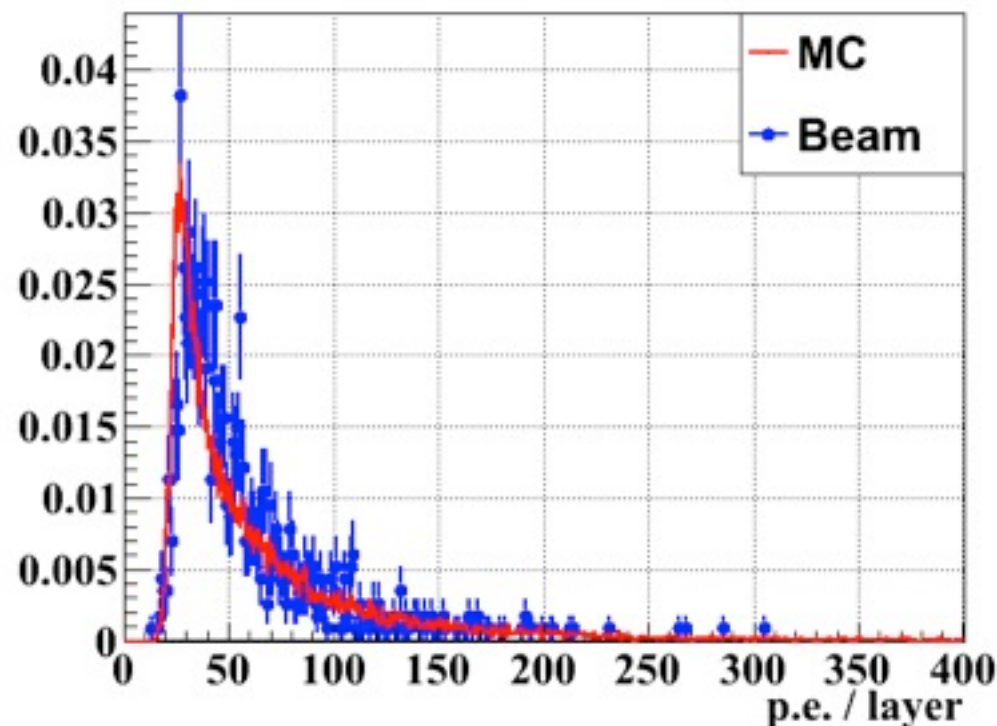


of active plane at module 13 (neutrino event)

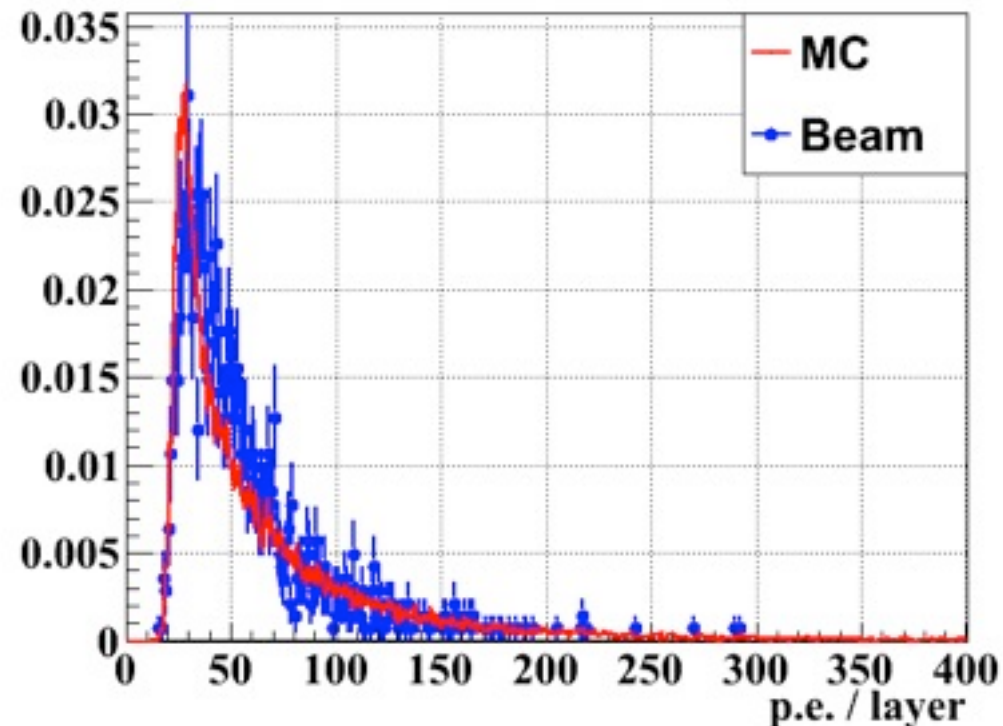


p.e. / layer

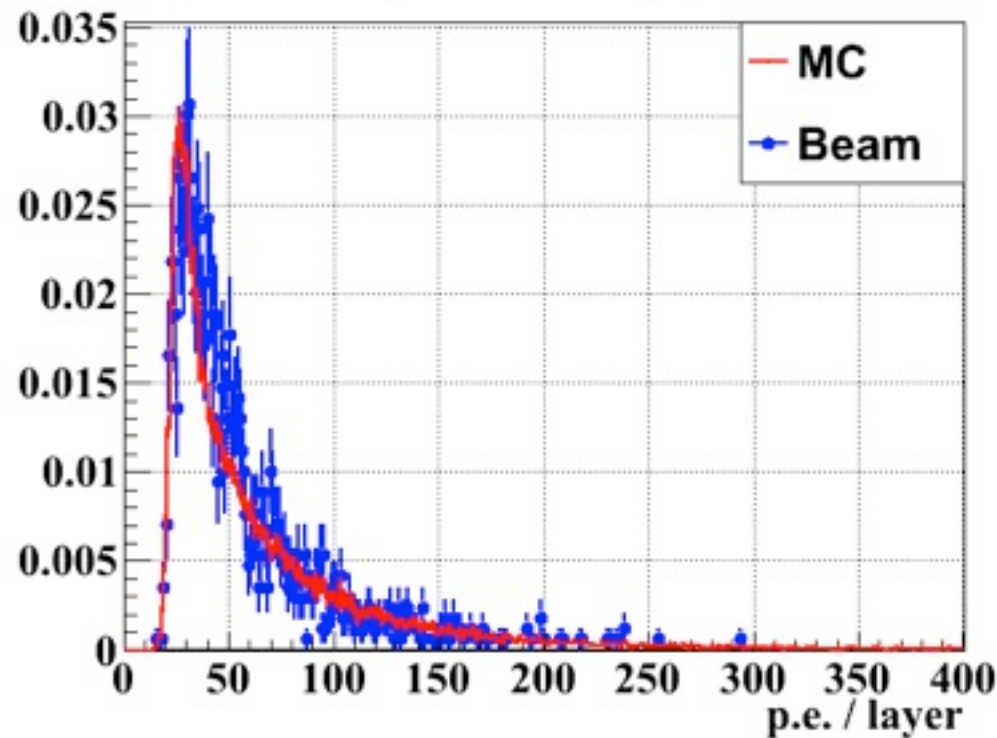
p.e. / layer at module 7 (neutrino event)



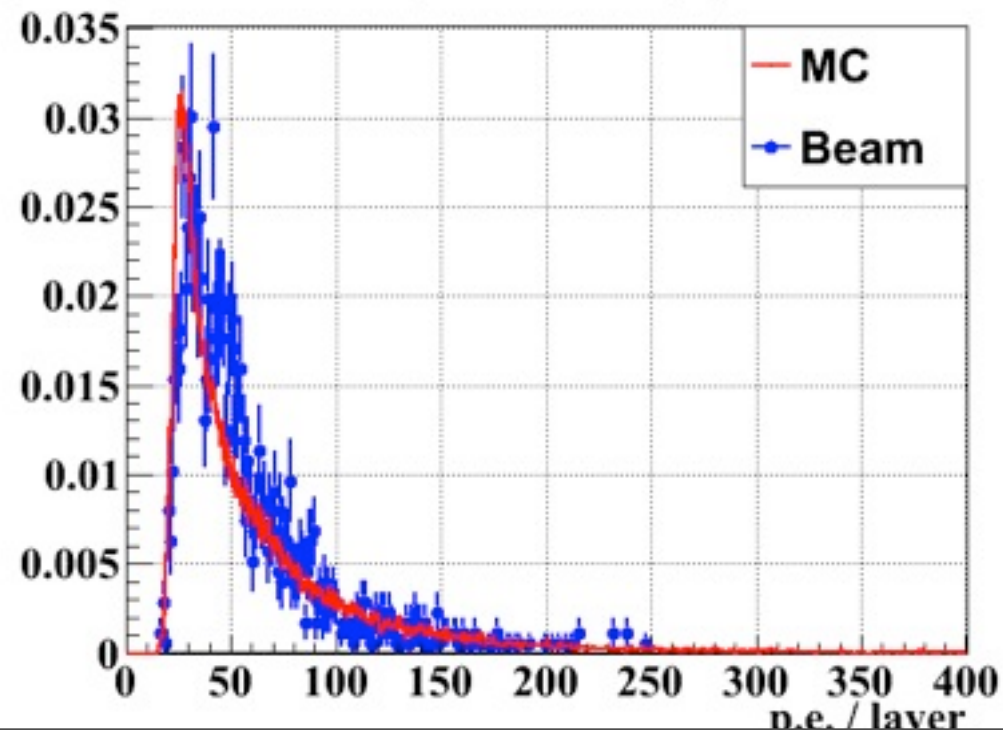
p.e. / layer at module 8 (neutrino event)



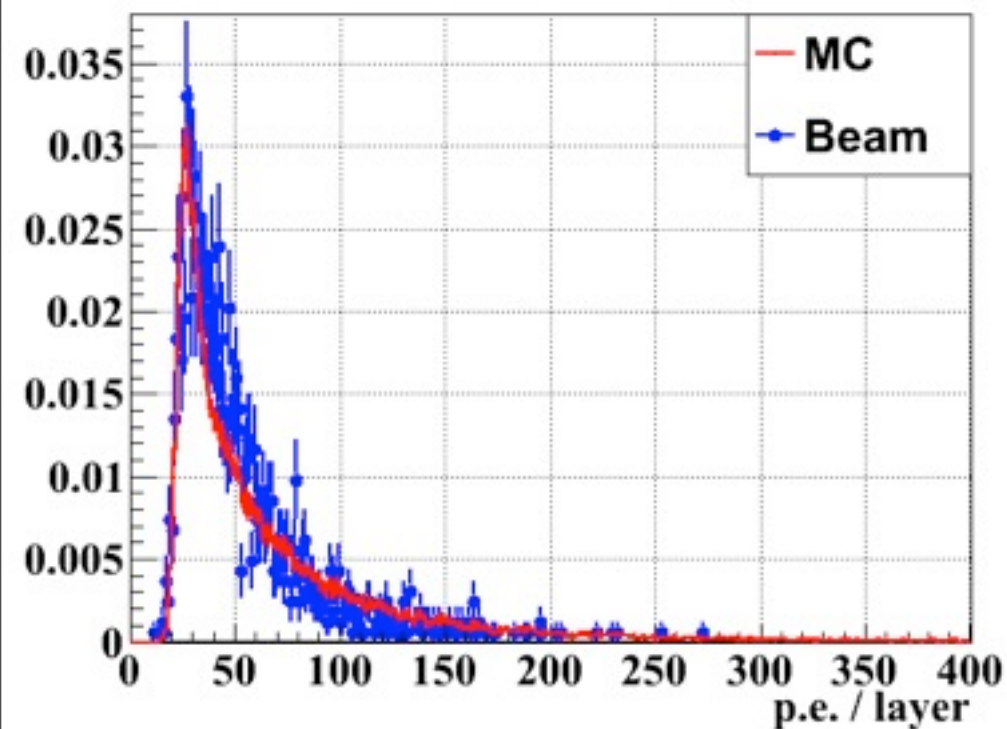
p.e. / layer at module 9 (neutrino event)



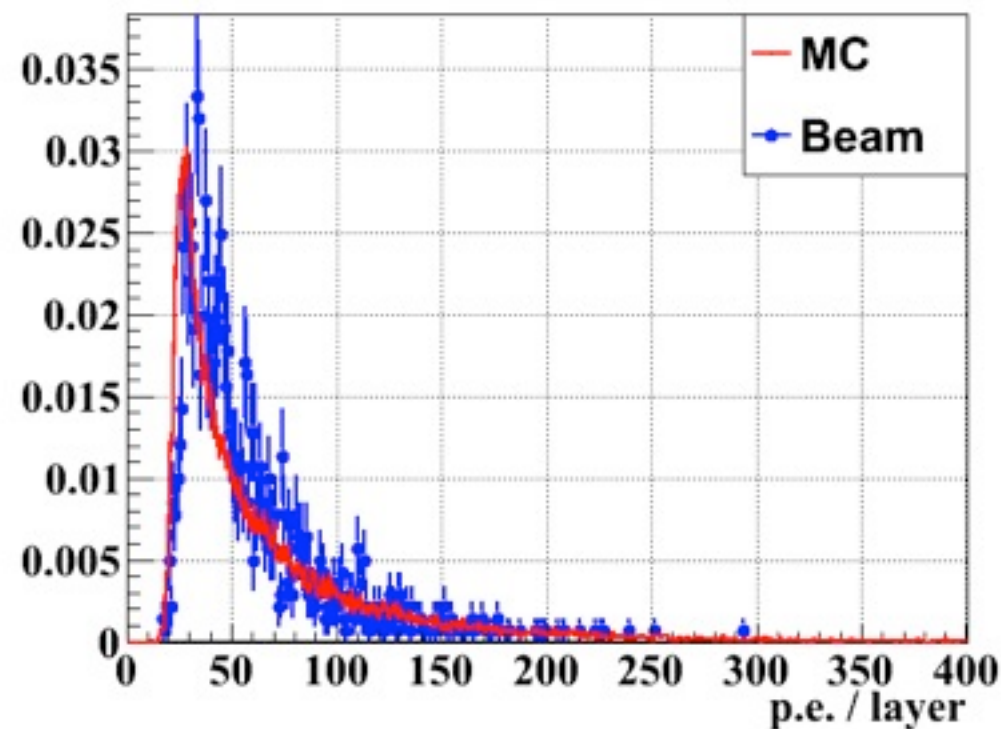
p.e. / layer at module 10 (neutrino event)



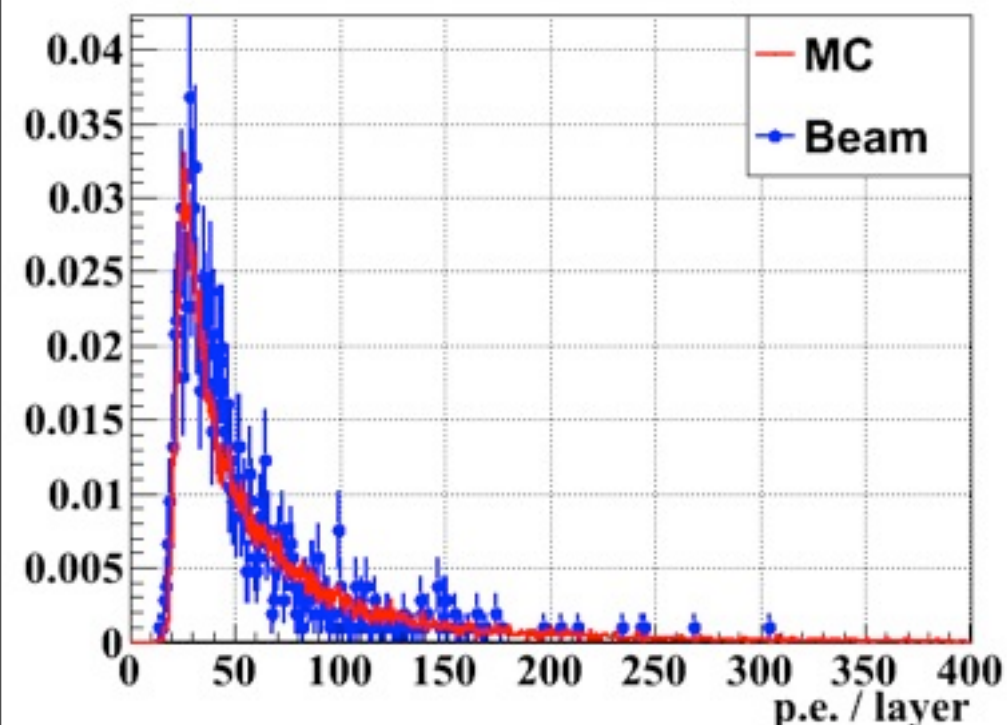
p.e. / layer at module 11 (neutrino event)



p.e. / layer at module 12 (neutrino event)

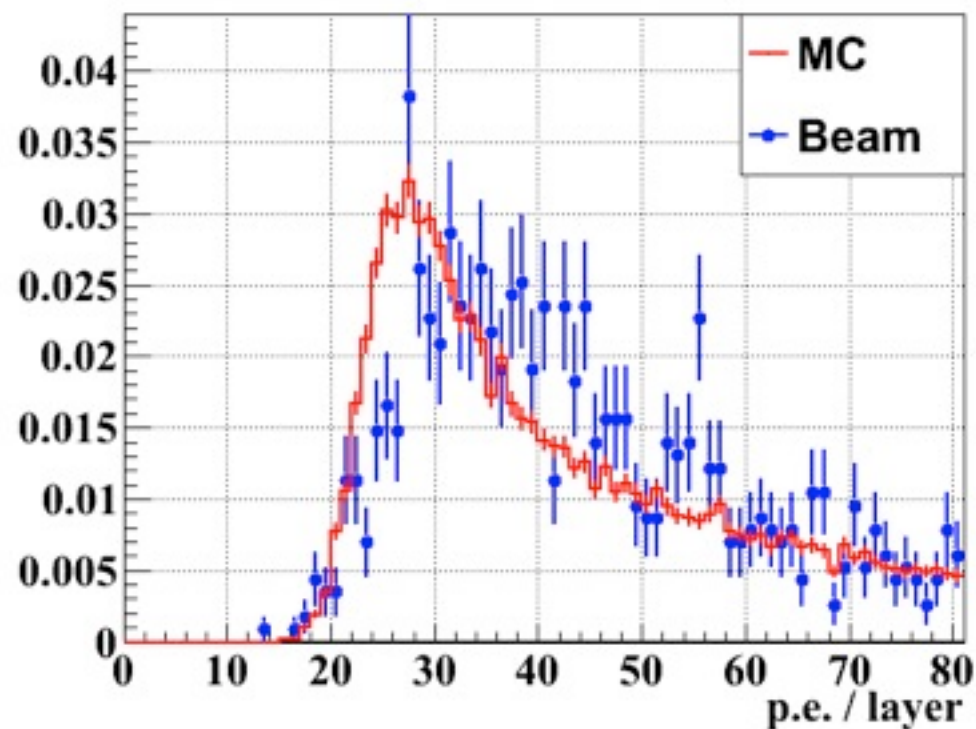


p.e. / layer at module 13 (neutrino event)

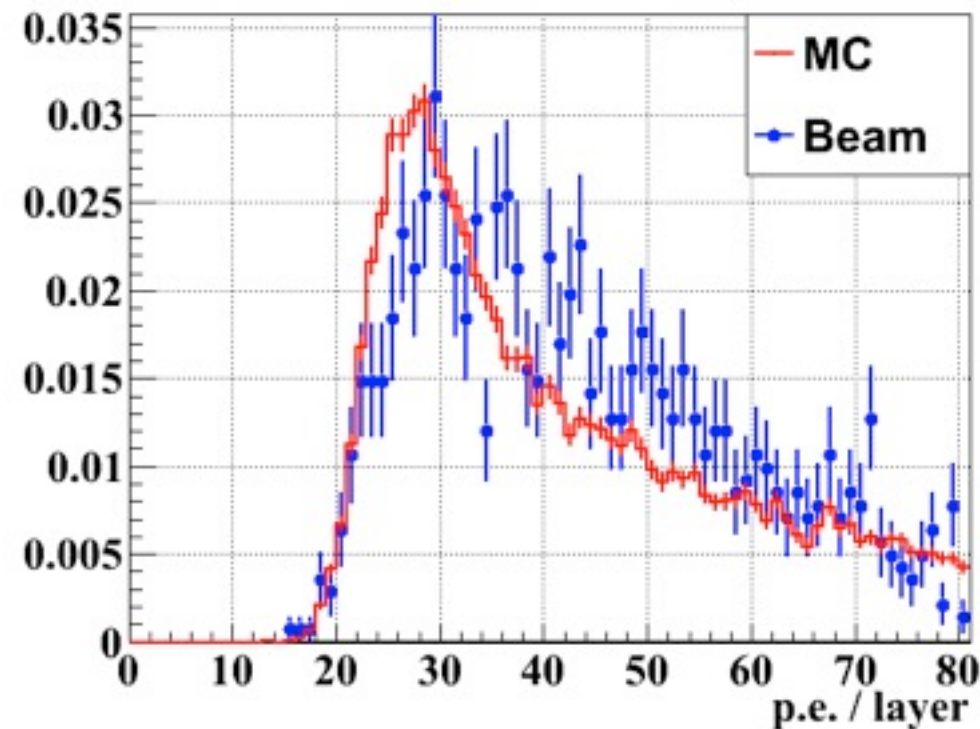


- 0 ~ 80 p.e. の領域を拡大表示

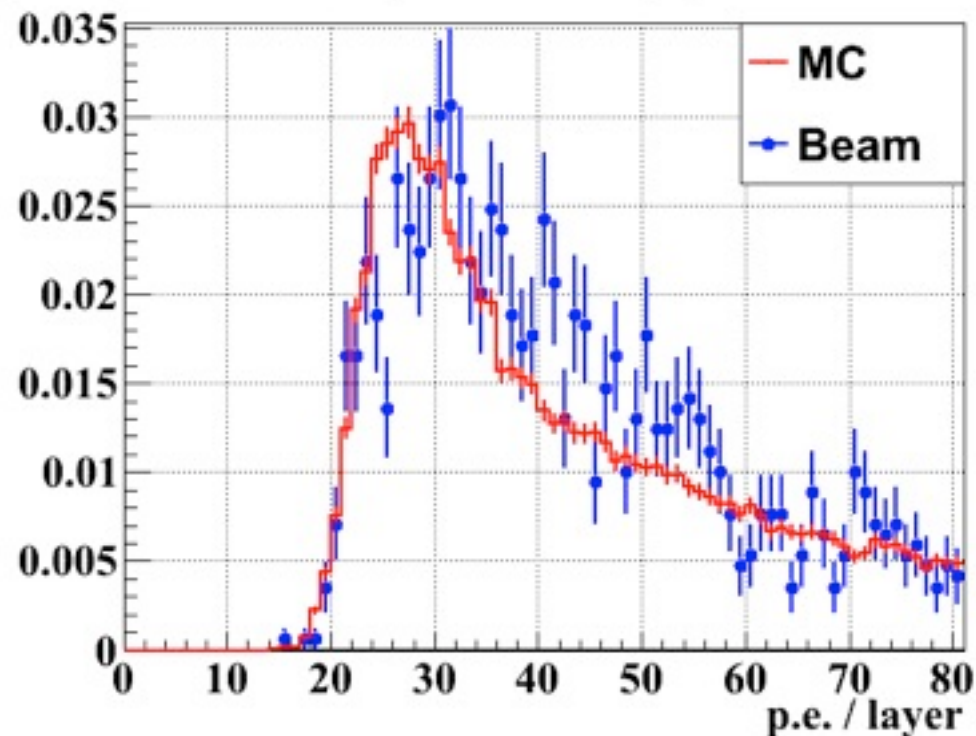
p.e. / layer at module 7 (neutrino event)



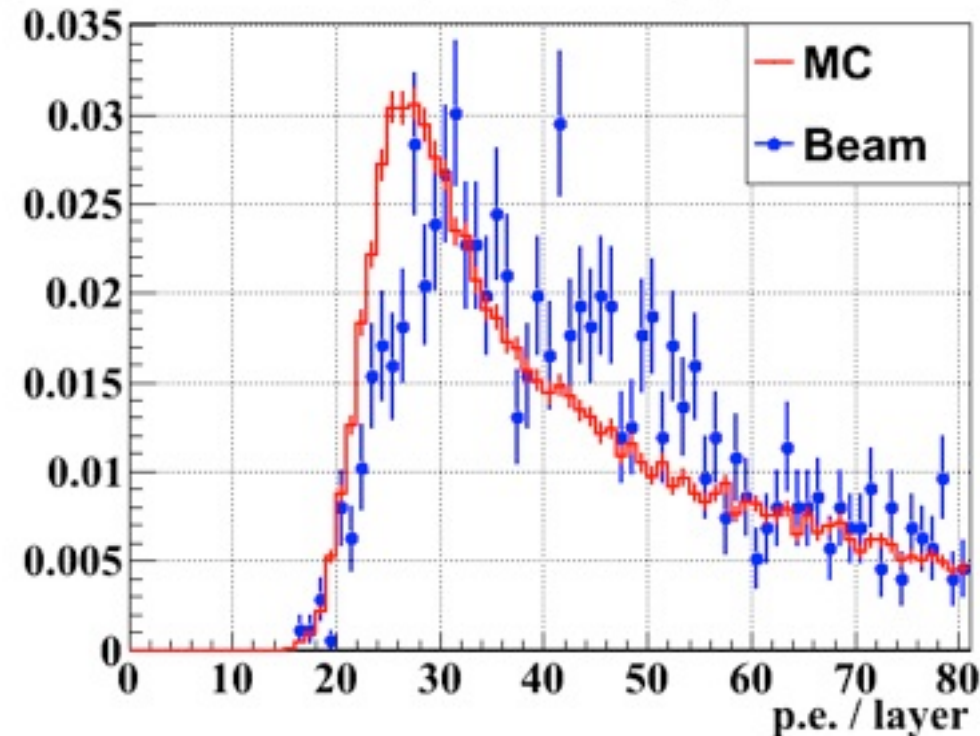
p.e. / layer at module 8 (neutrino event)



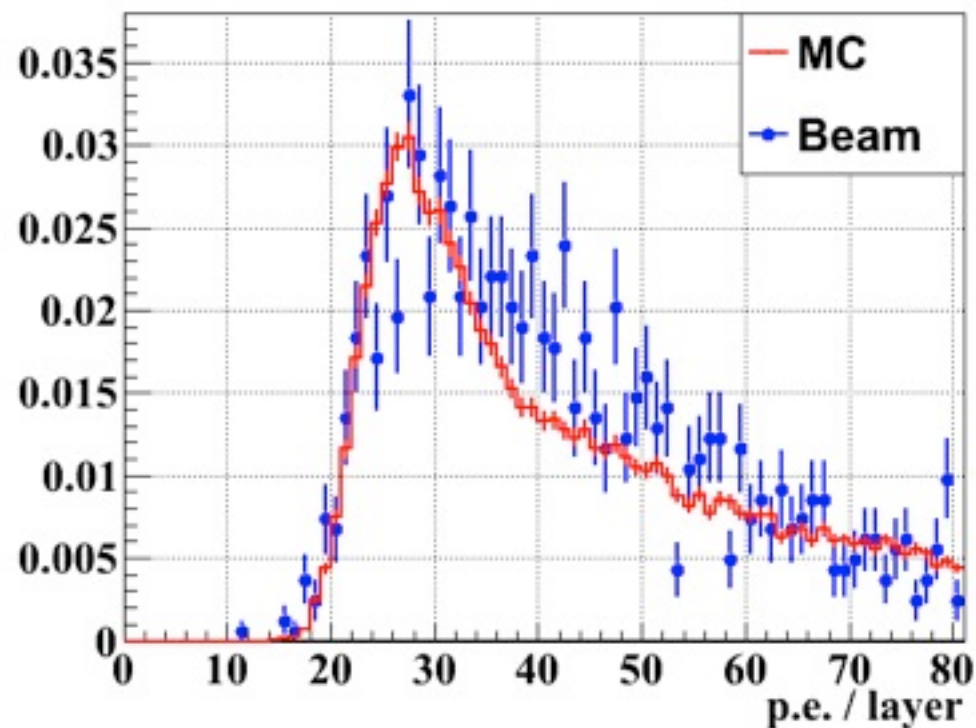
p.e. / layer at module 9 (neutrino event)



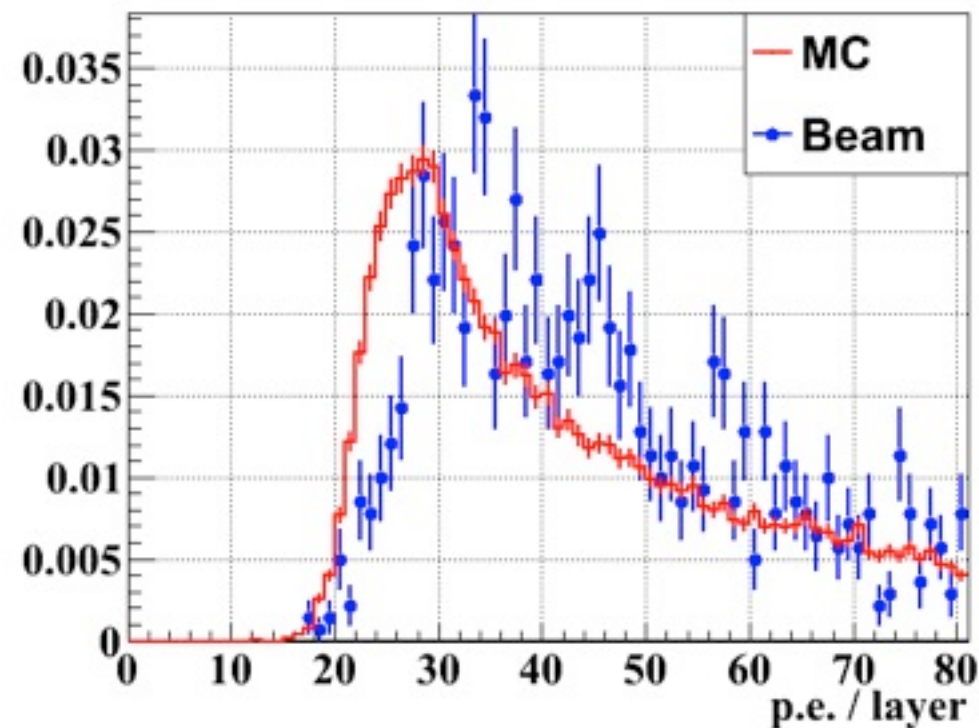
p.e. / layer at module 10 (neutrino event)



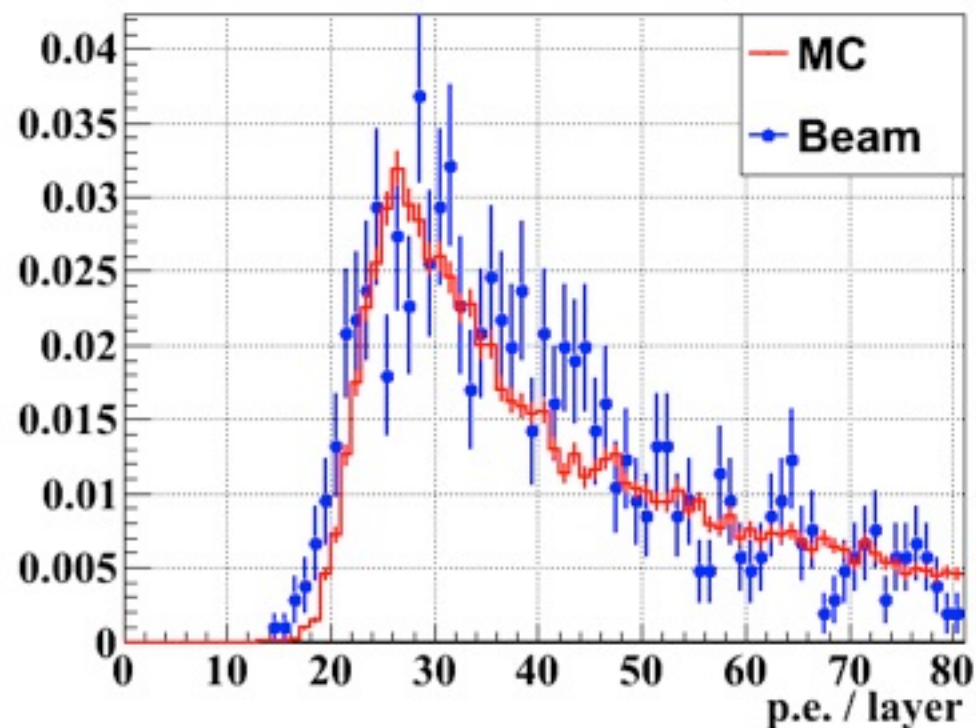
p.e. / layer at module 11 (neutrino event)



p.e. / layer at module 12 (neutrino event)

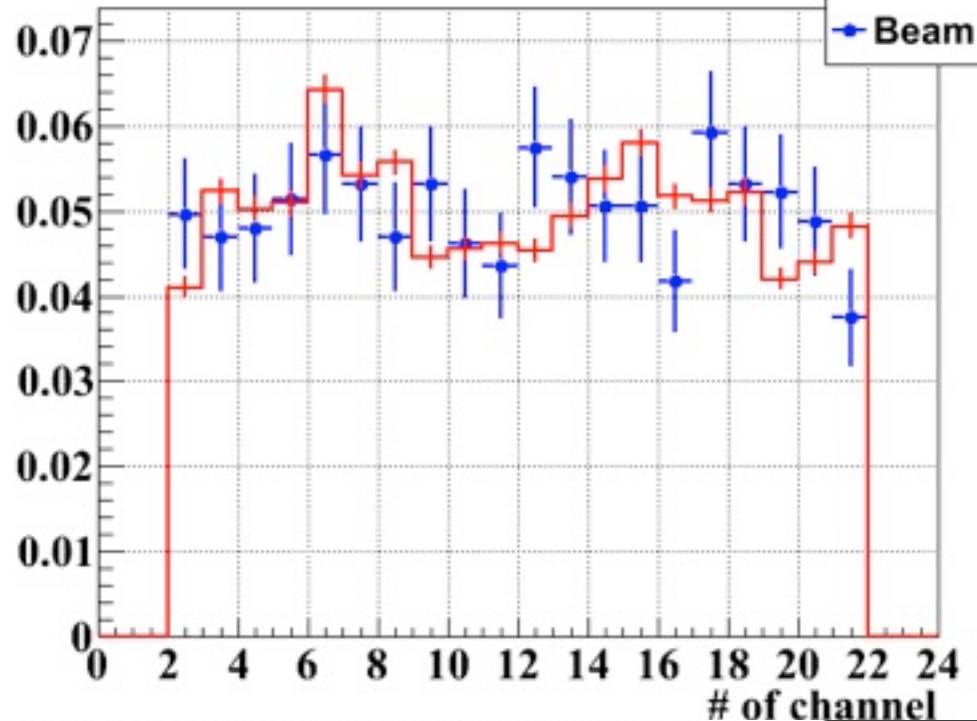


p.e. / layer at module 13 (neutrino event)

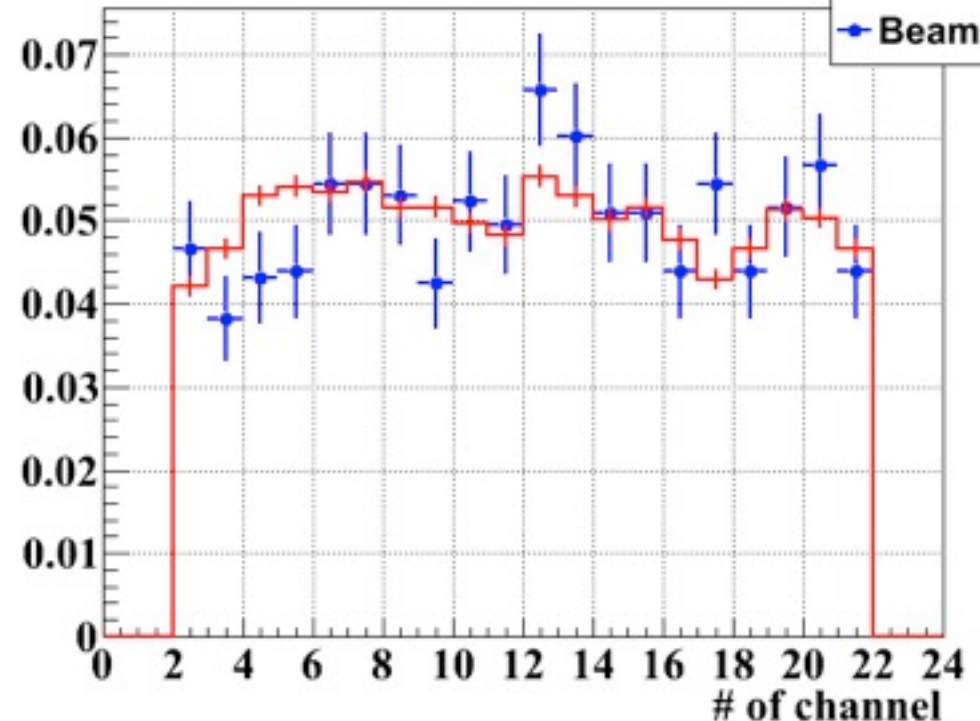


**vertex channel
(top view)**

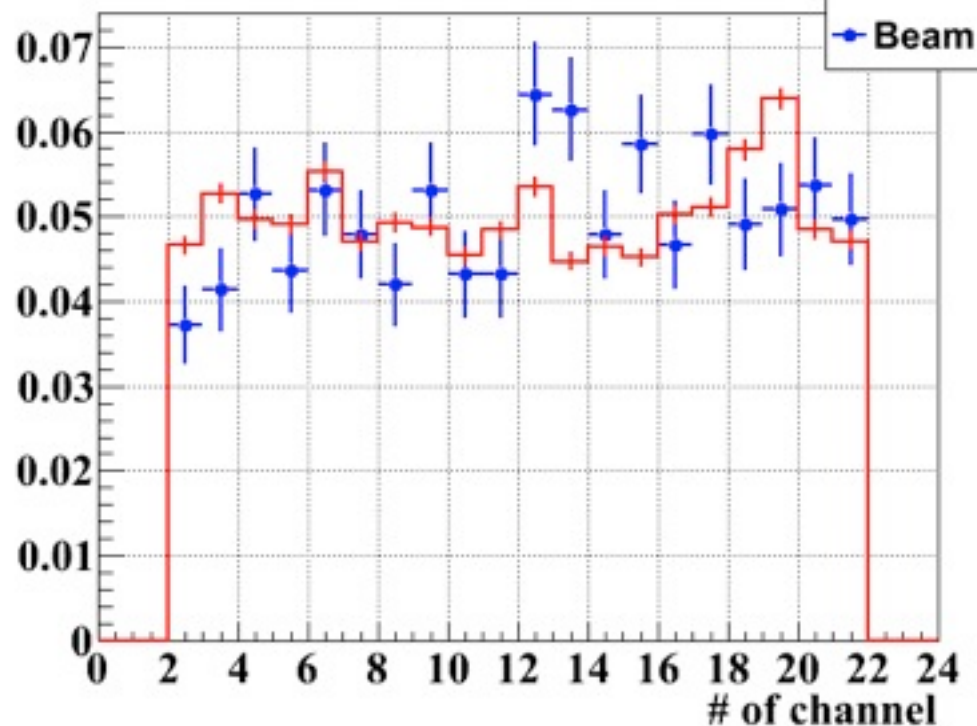
Vertex channel (top view) Mod7 (neutrino event)



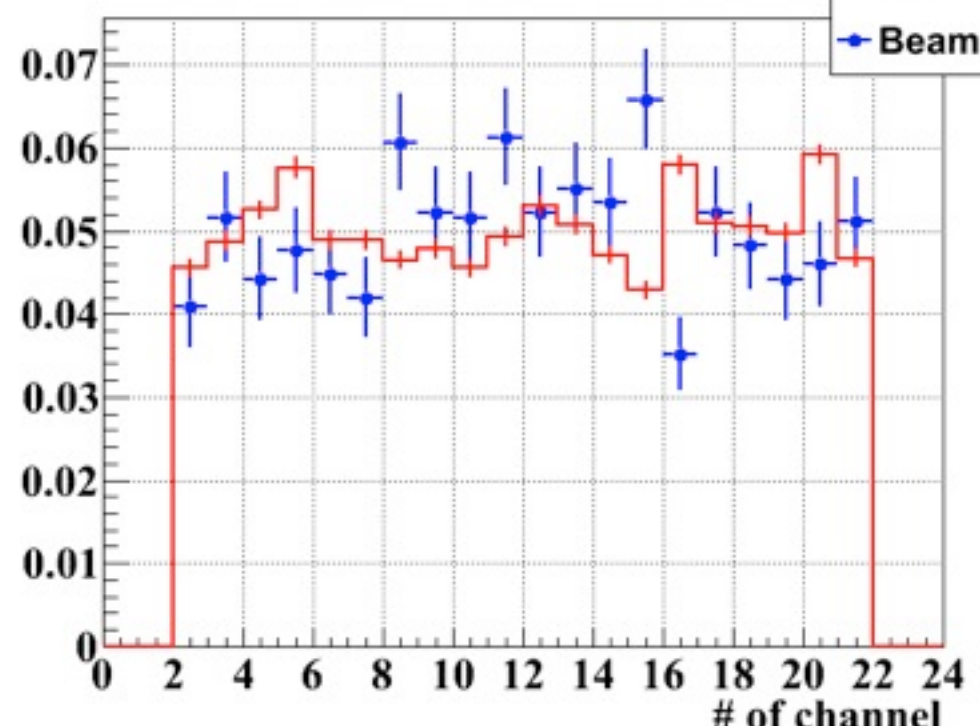
Vertex channel (top view) Mod8 (neutrino event)

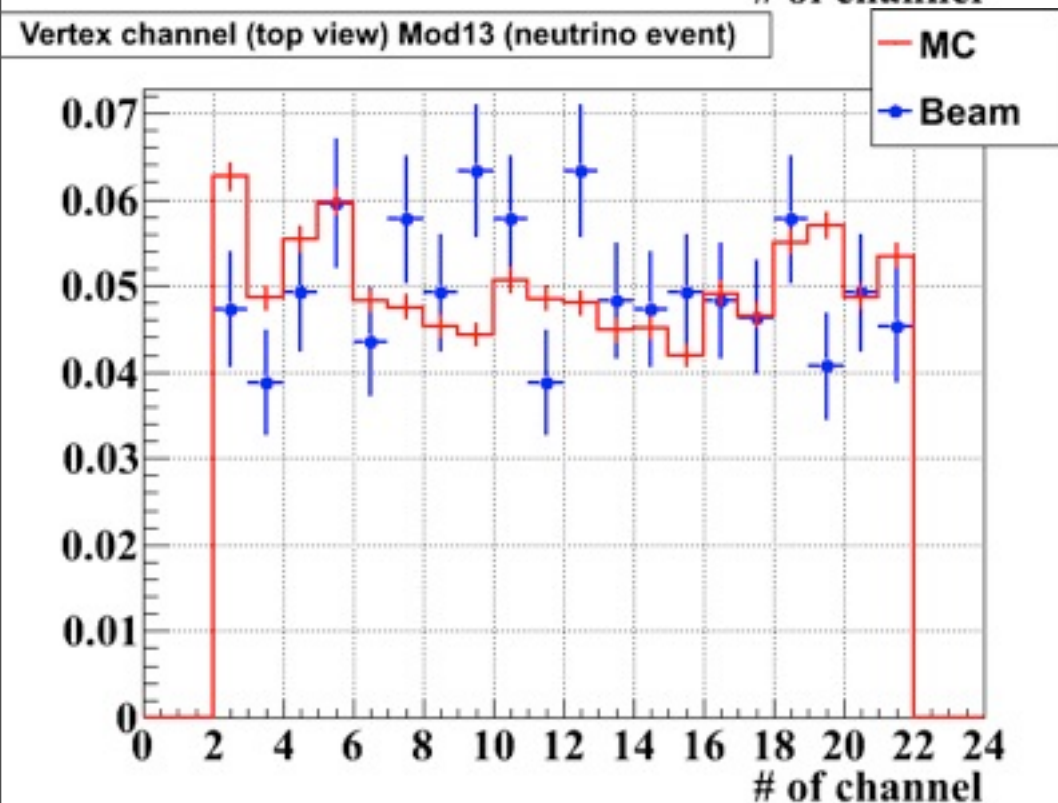
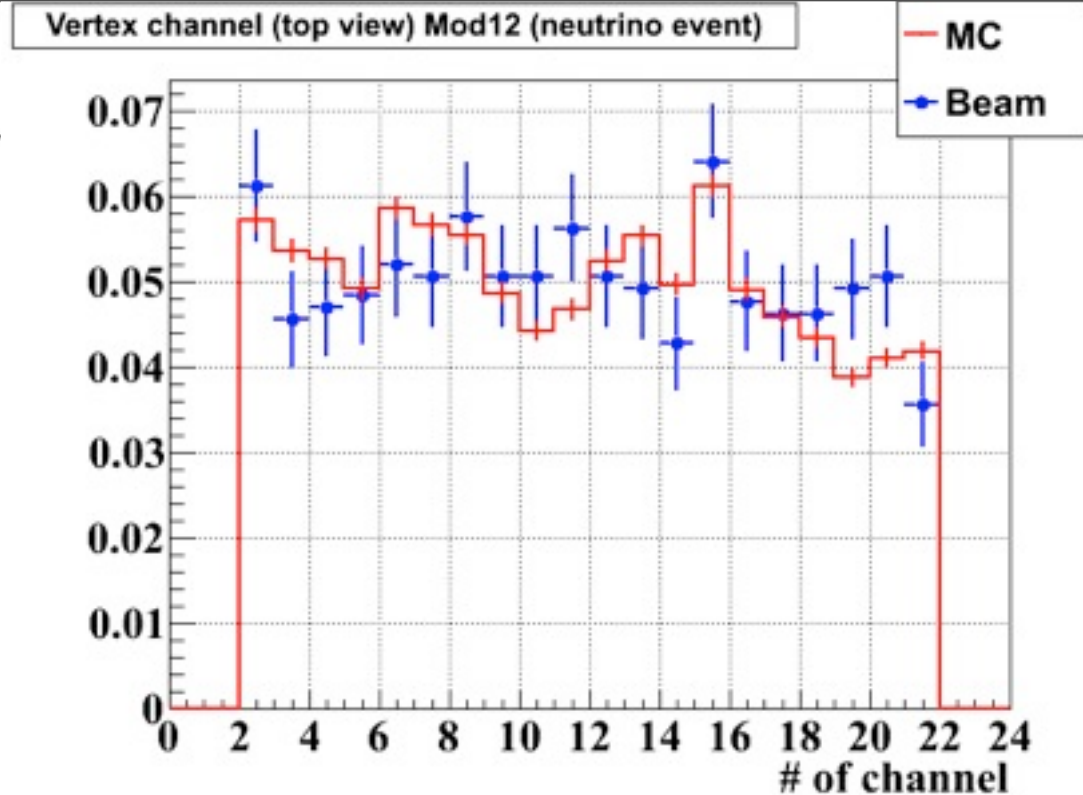
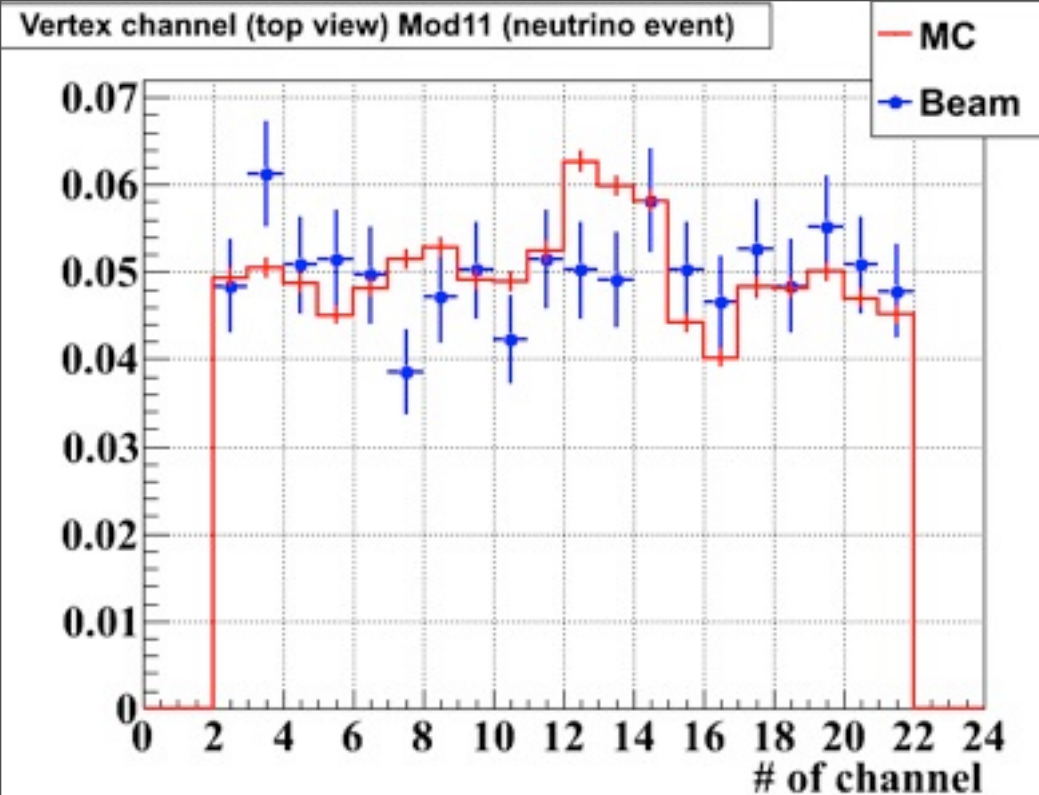


Vertex channel (top view) Mod9 (neutrino event)

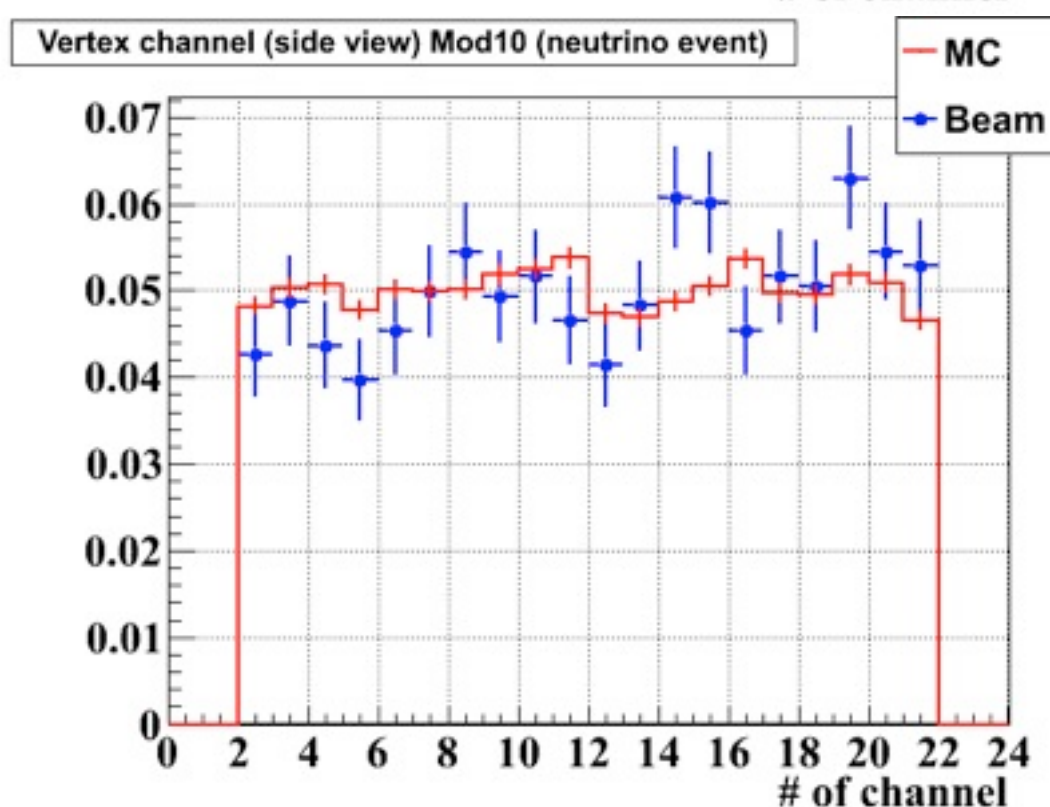
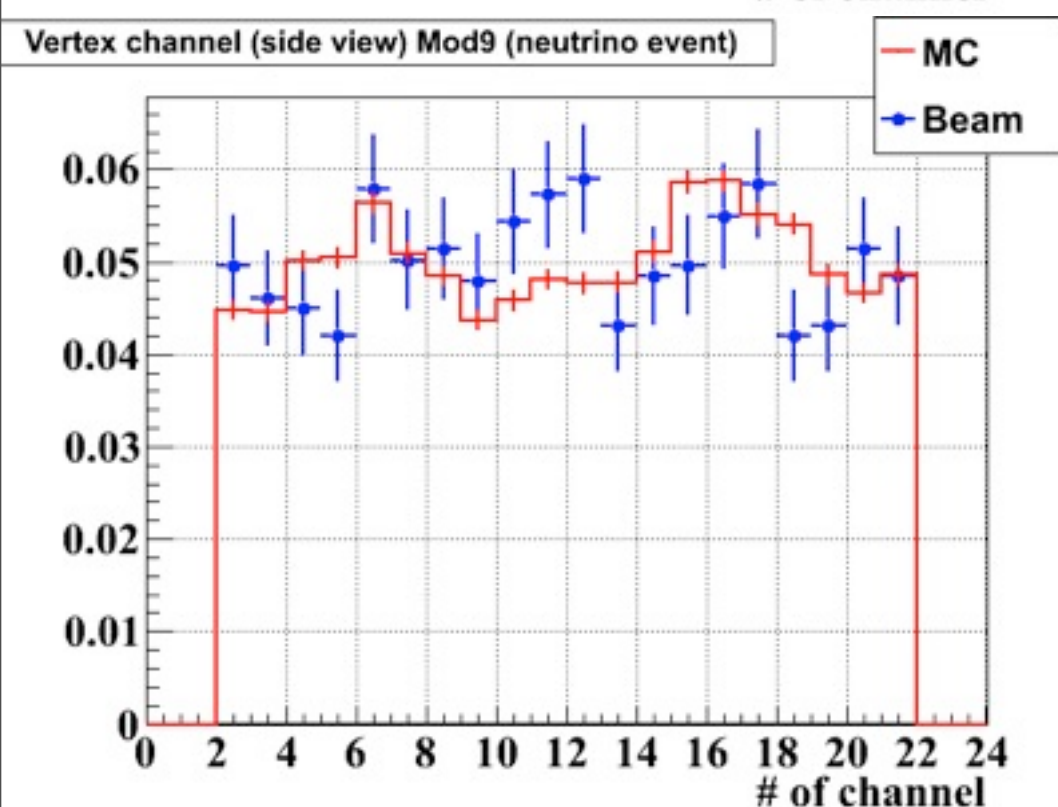
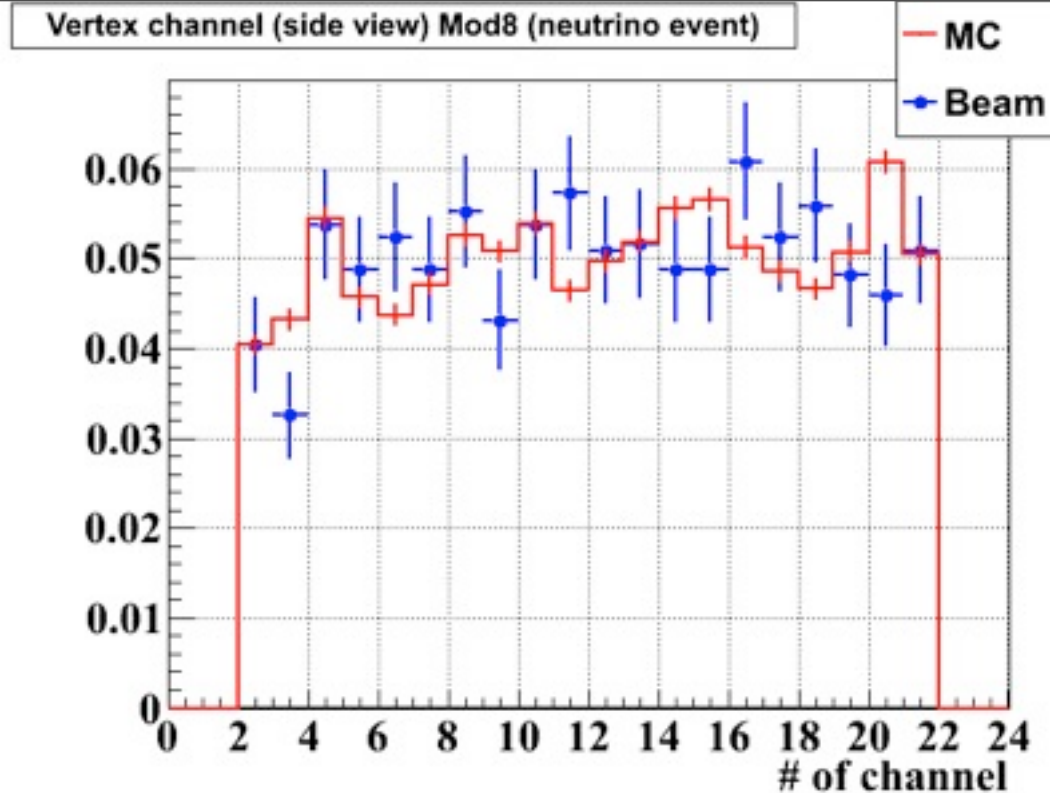
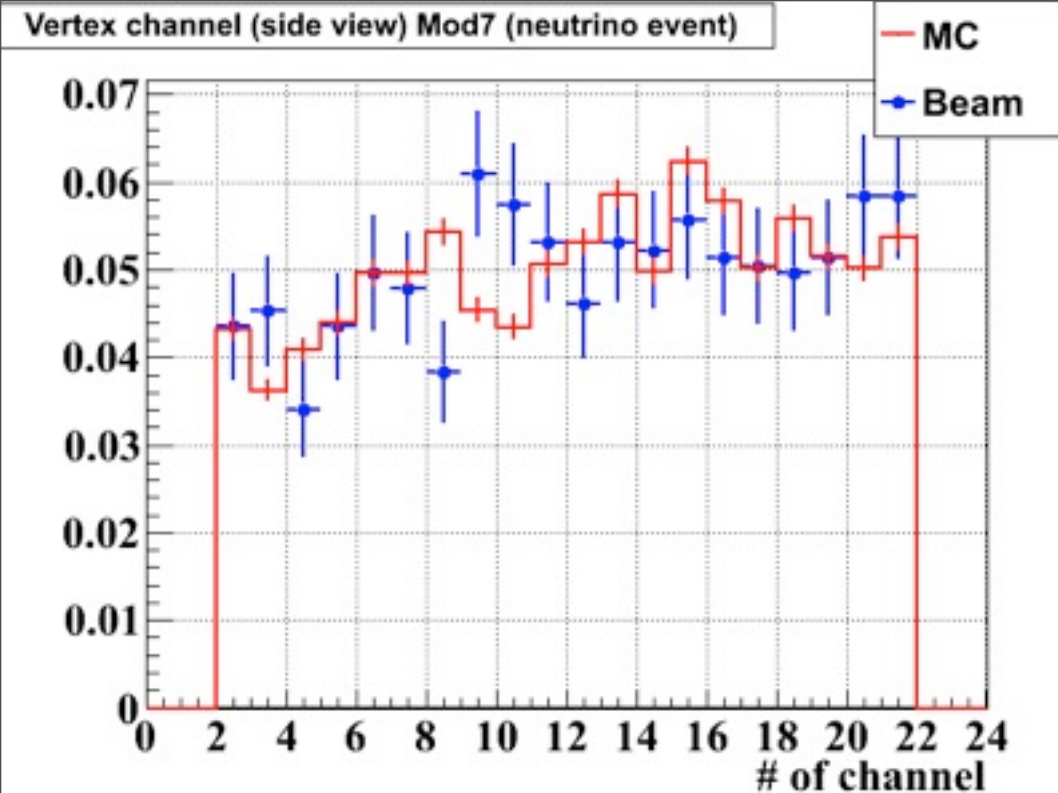


Vertex channel (top view) Mod10 (neutrino event)

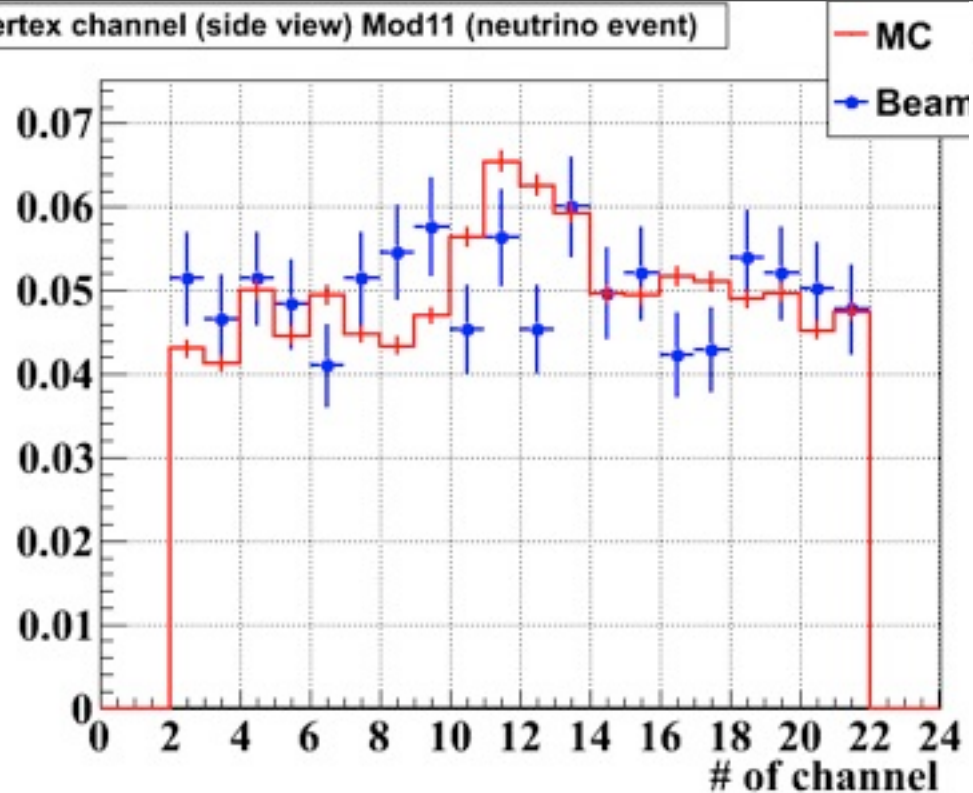




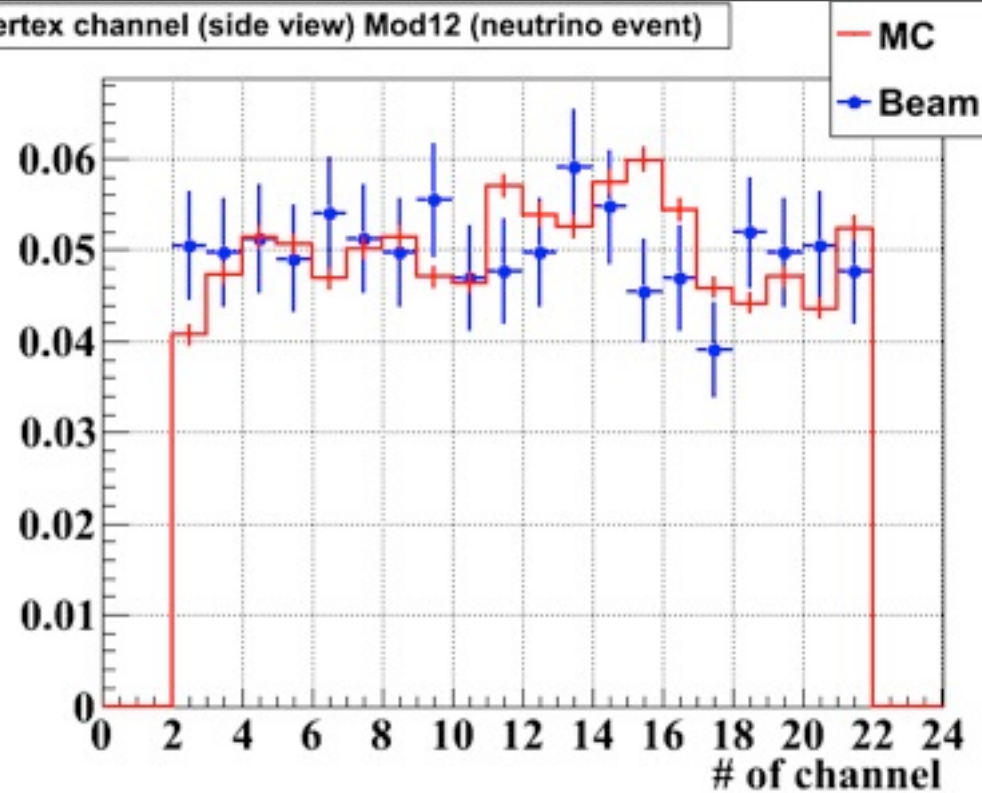
**vertex channel
(side view)**



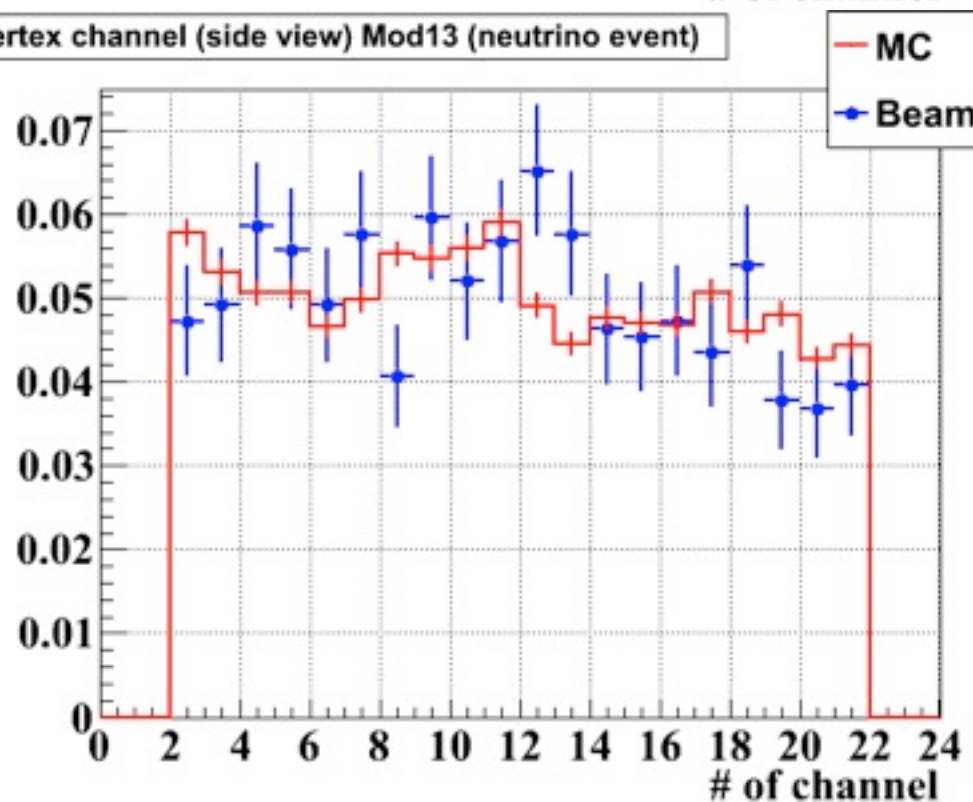
Vertex channel (side view) Mod11 (neutrino event)



Vertex channel (side view) Mod12 (neutrino event)

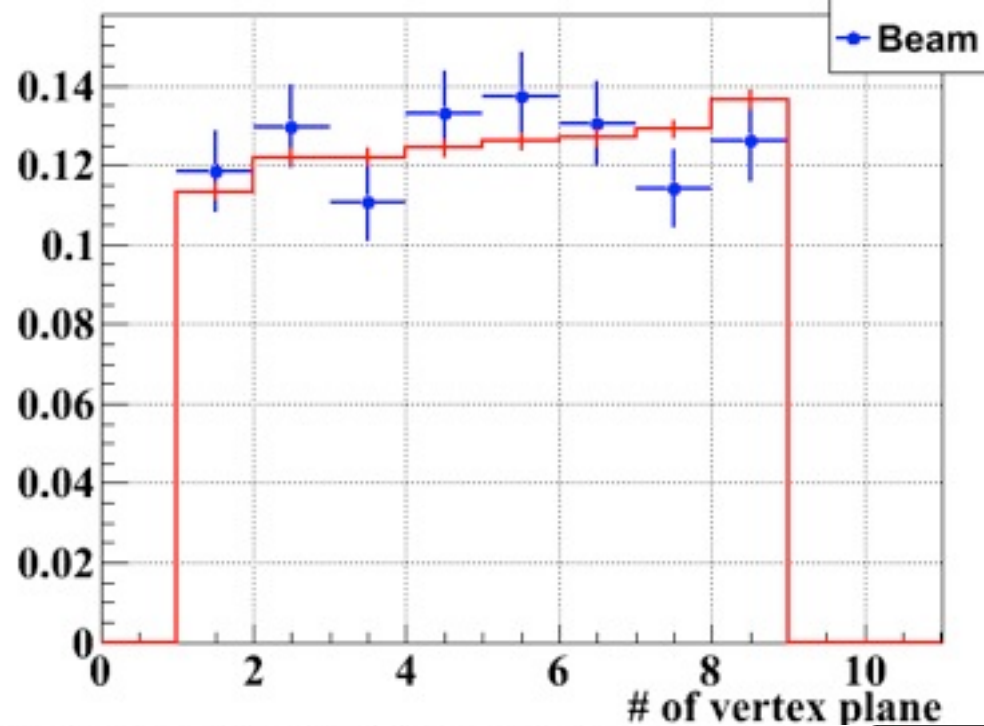


Vertex channel (side view) Mod13 (neutrino event)

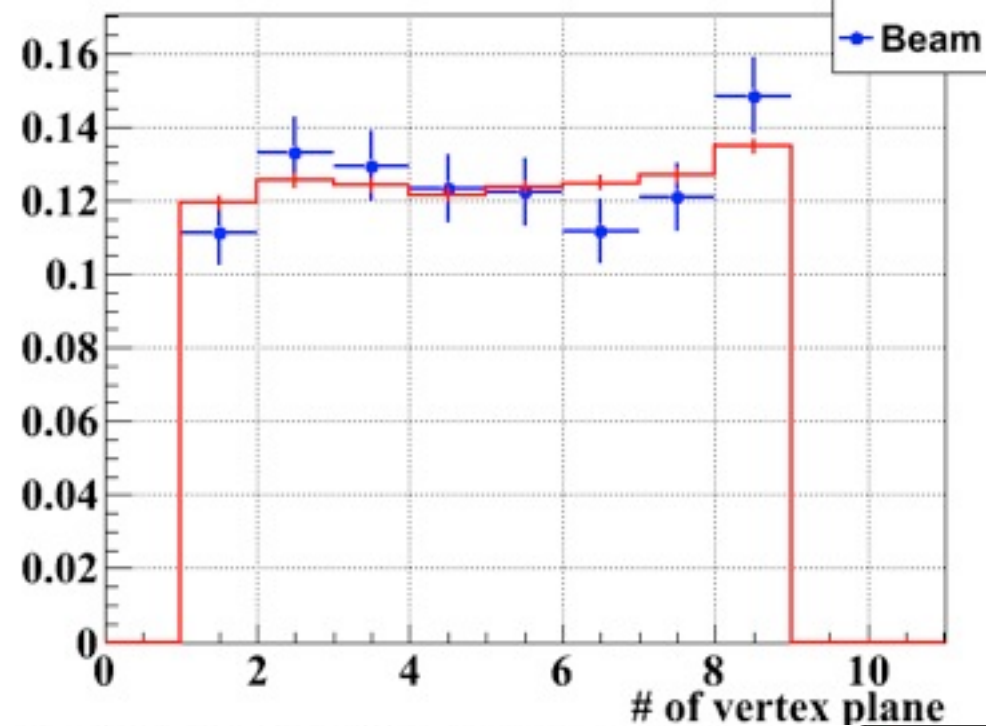


vertex plane
(top view)

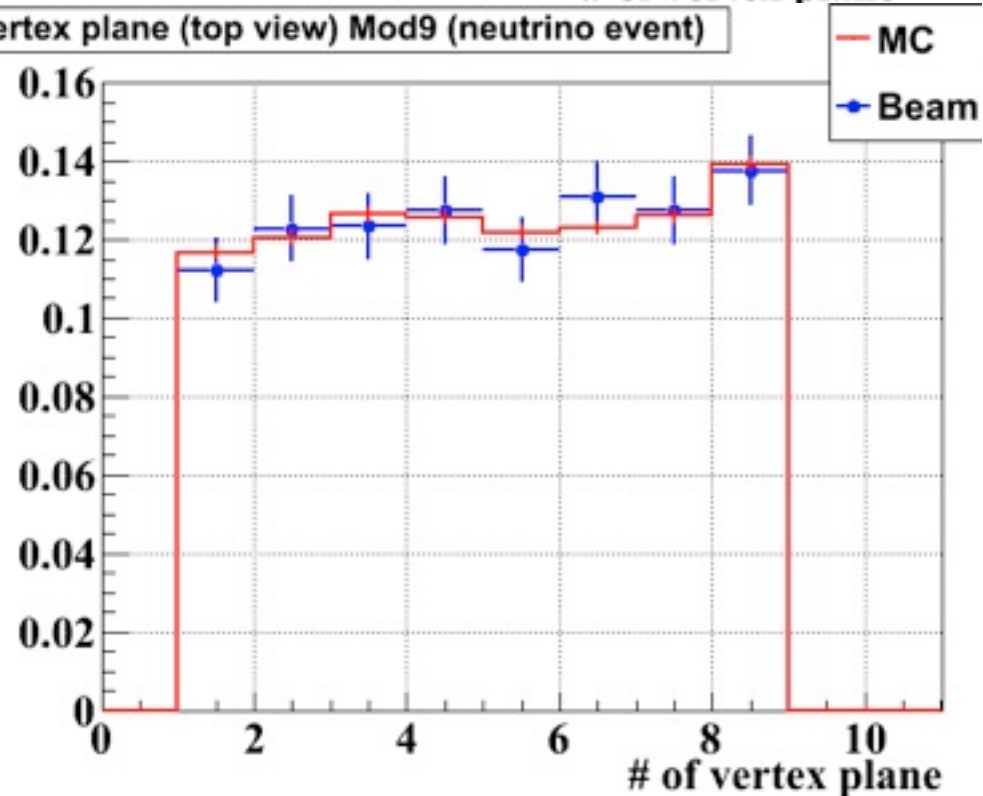
Vertex plane (top view) Mod7 (neutrino event)



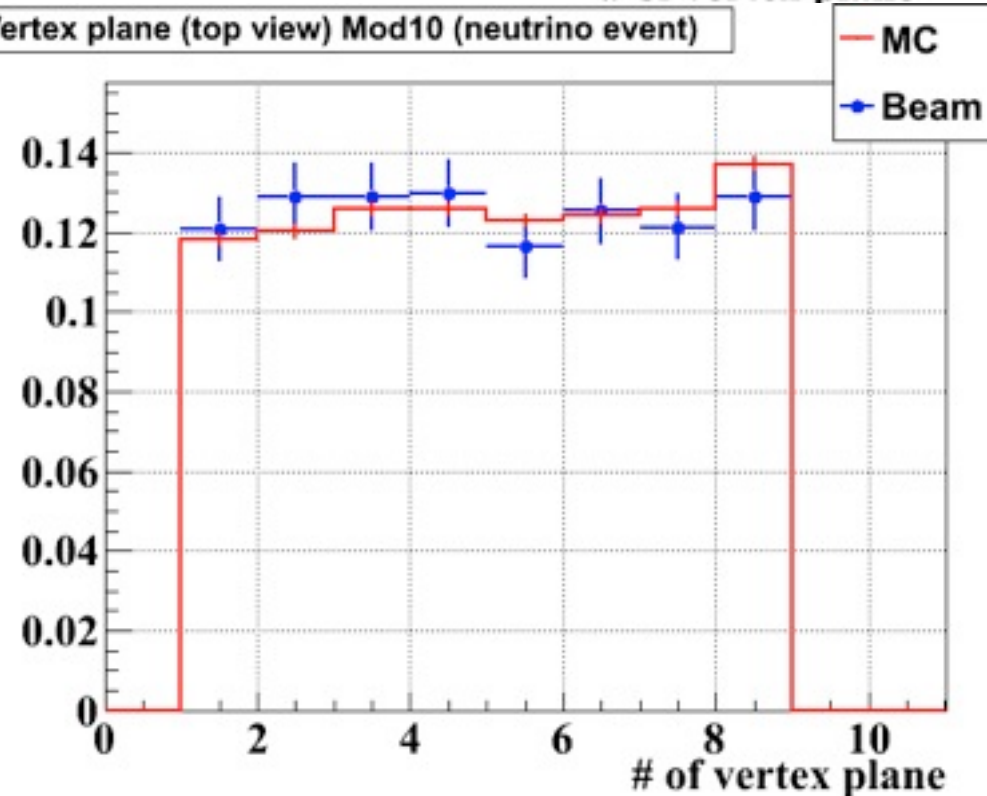
Vertex plane (top view) Mod8 (neutrino event)



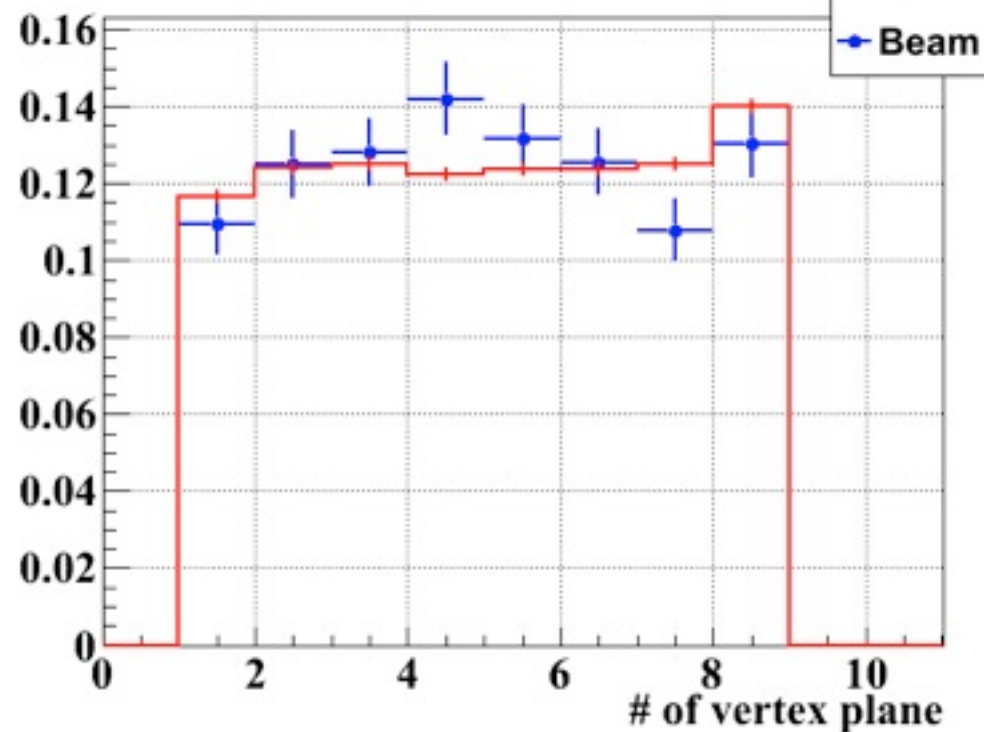
Vertex plane (top view) Mod9 (neutrino event)



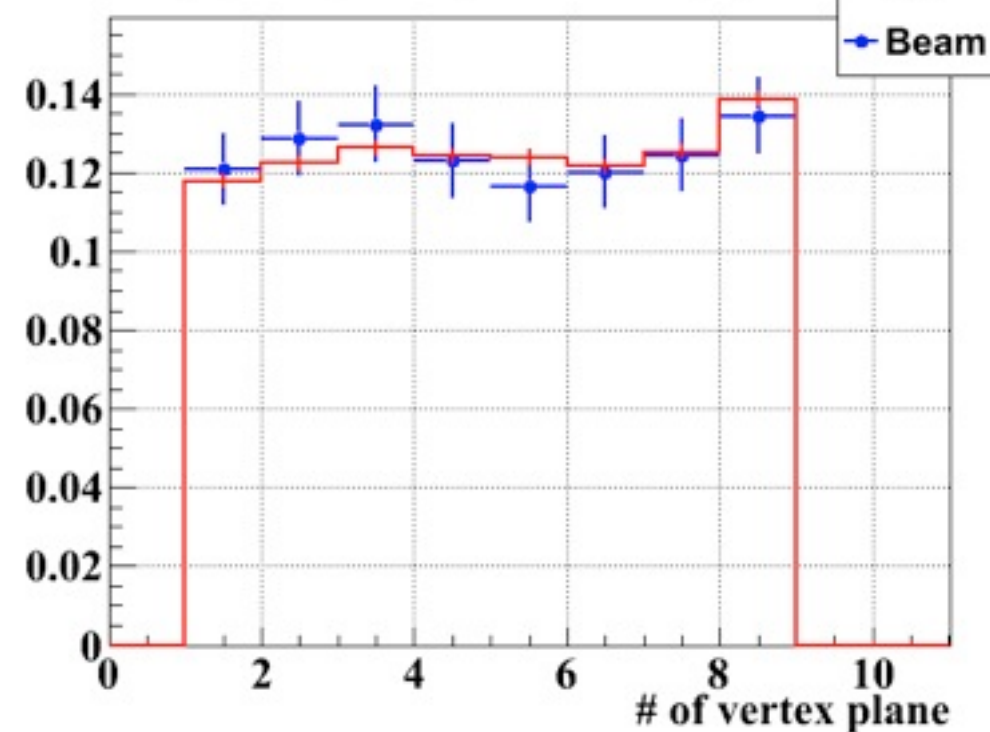
Vertex plane (top view) Mod10 (neutrino event)



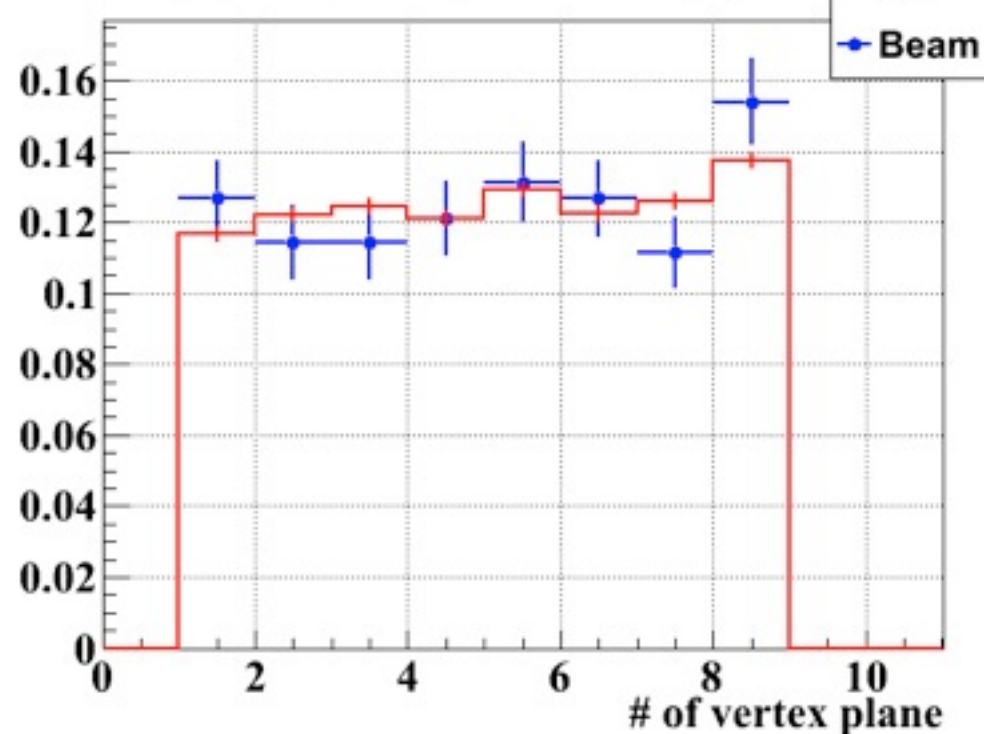
Vertex plane (top view) Mod11 (neutrino event)



Vertex plane (top view) Mod12 (neutrino event)

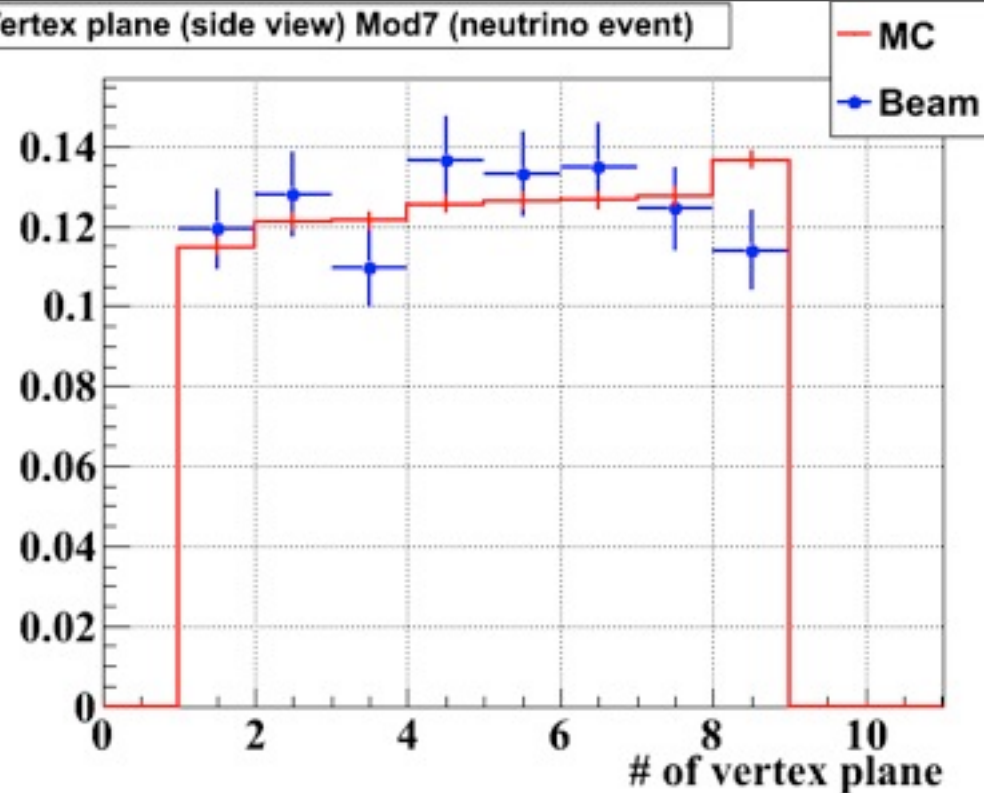


Vertex plane (top view) Mod13 (neutrino event)

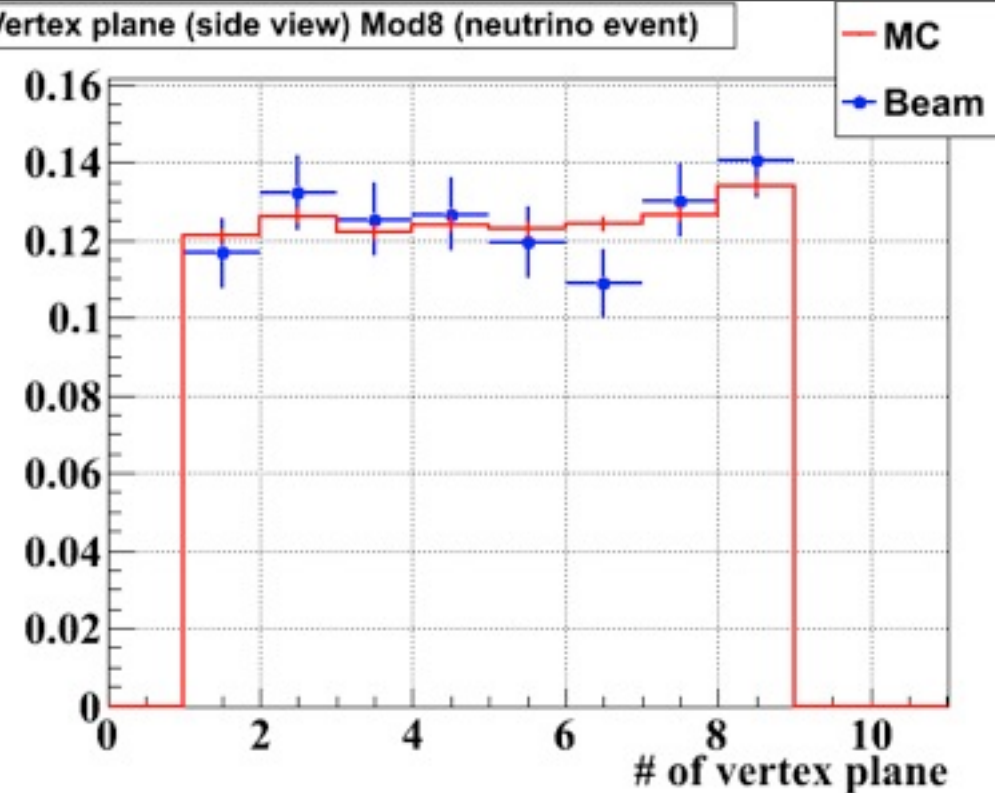


vertex plane
(side view)

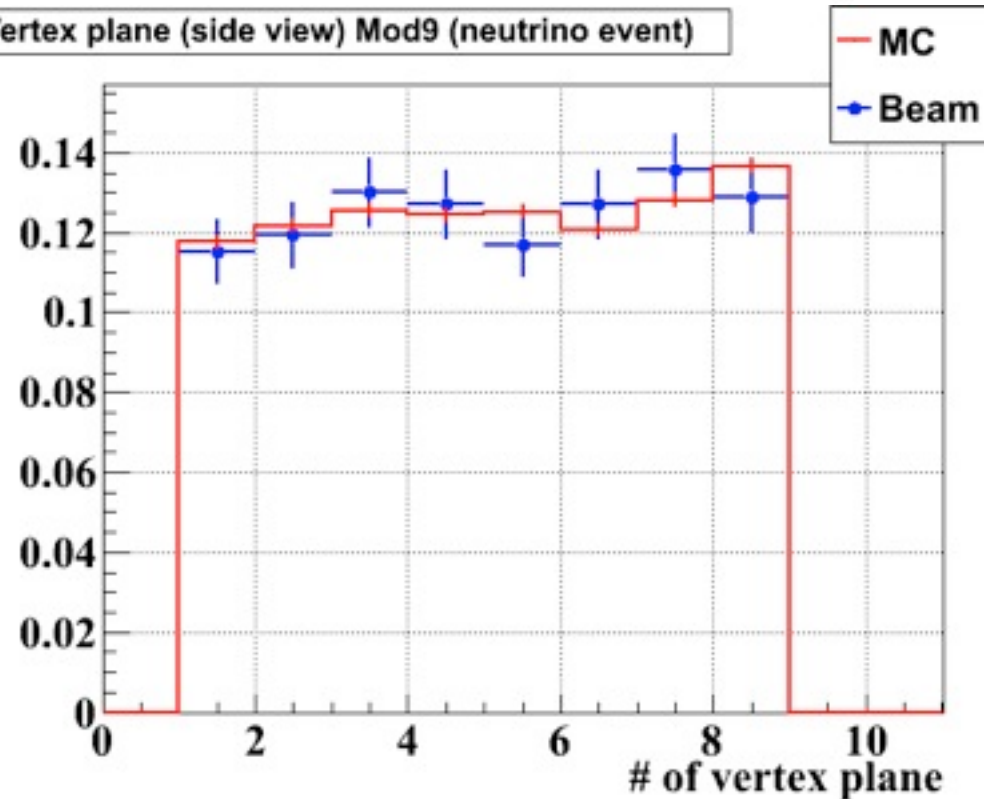
Vertex plane (side view) Mod7 (neutrino event)



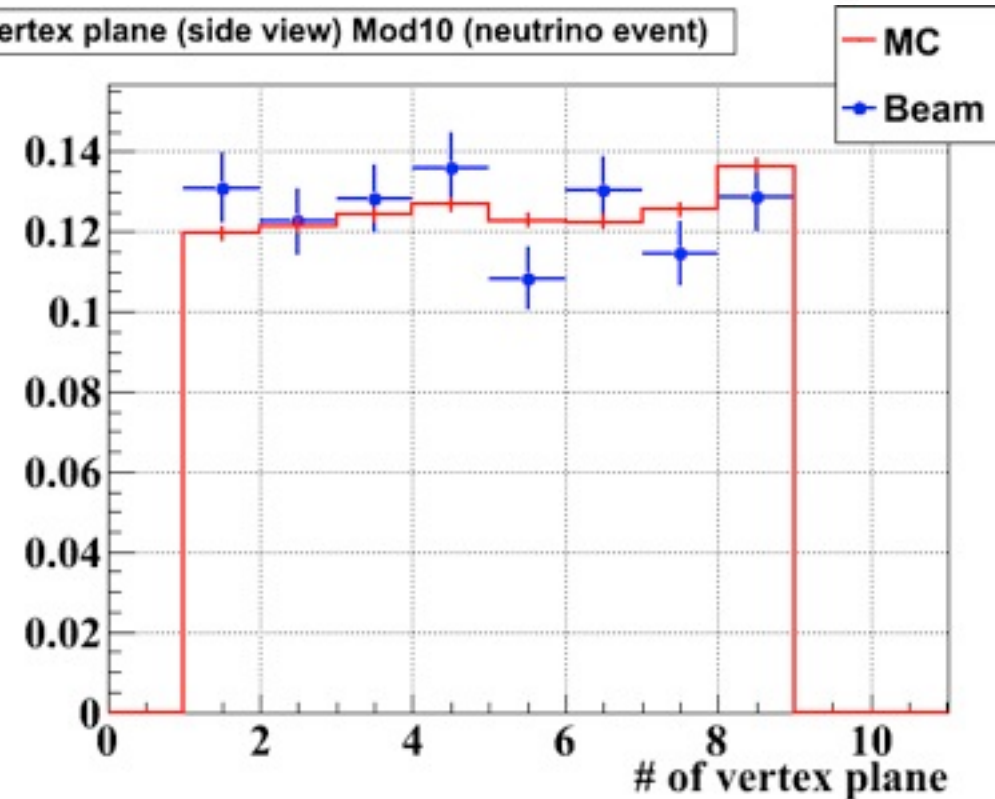
Vertex plane (side view) Mod8 (neutrino event)



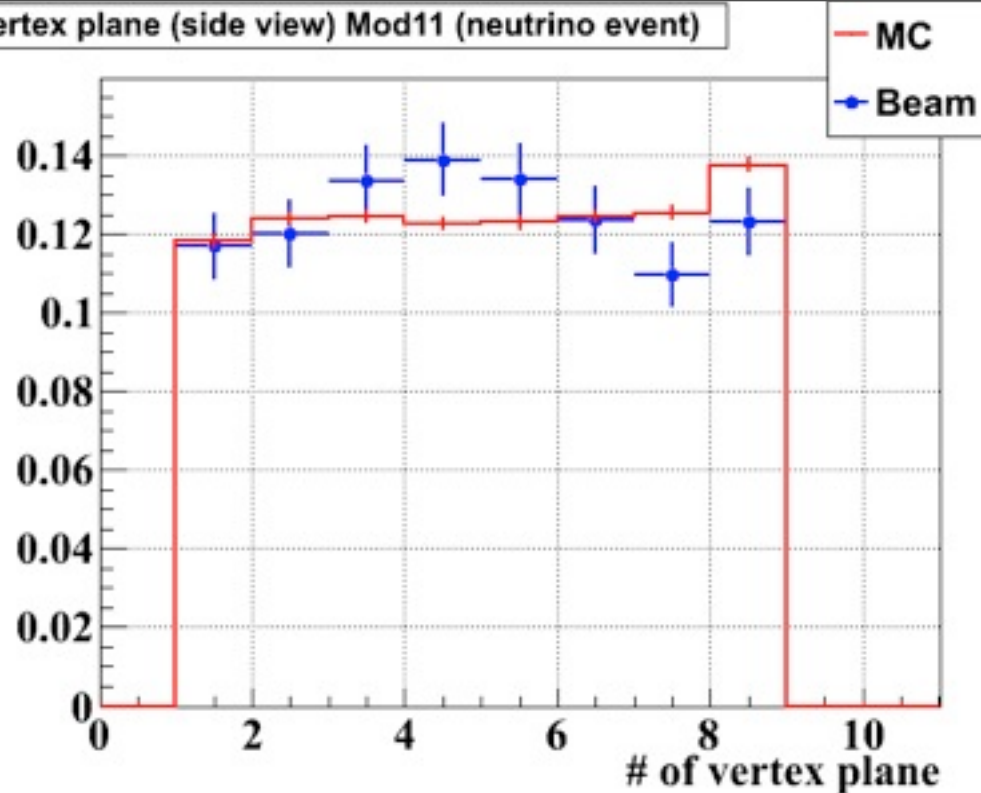
Vertex plane (side view) Mod9 (neutrino event)



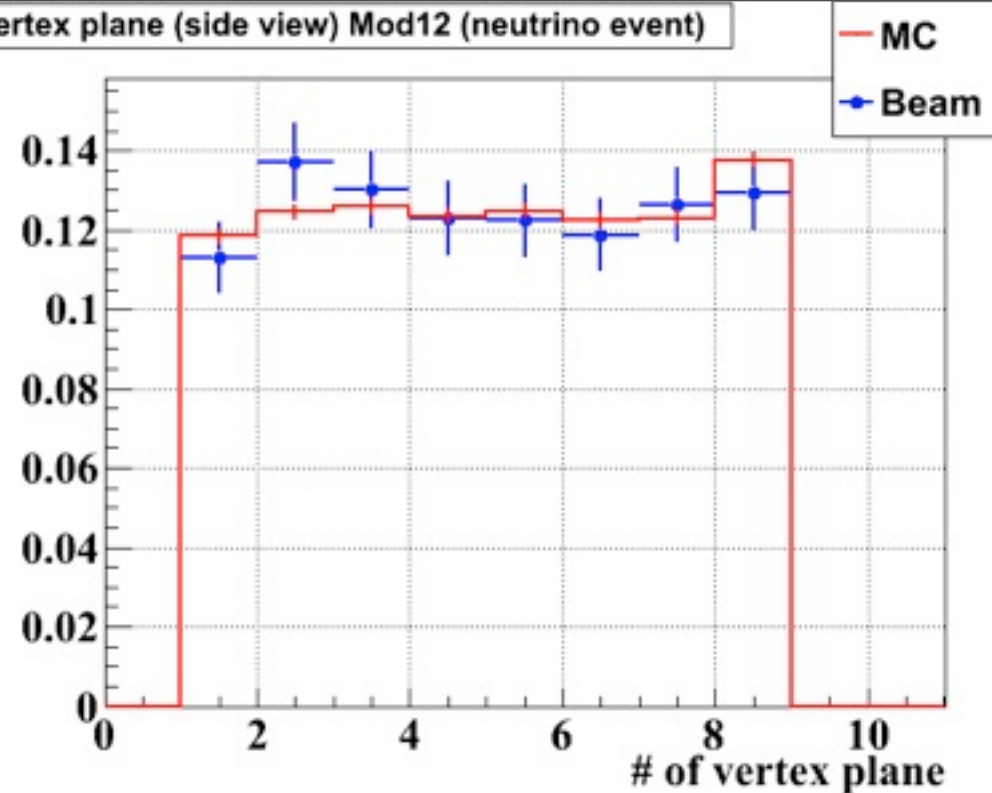
Vertex plane (side view) Mod10 (neutrino event)



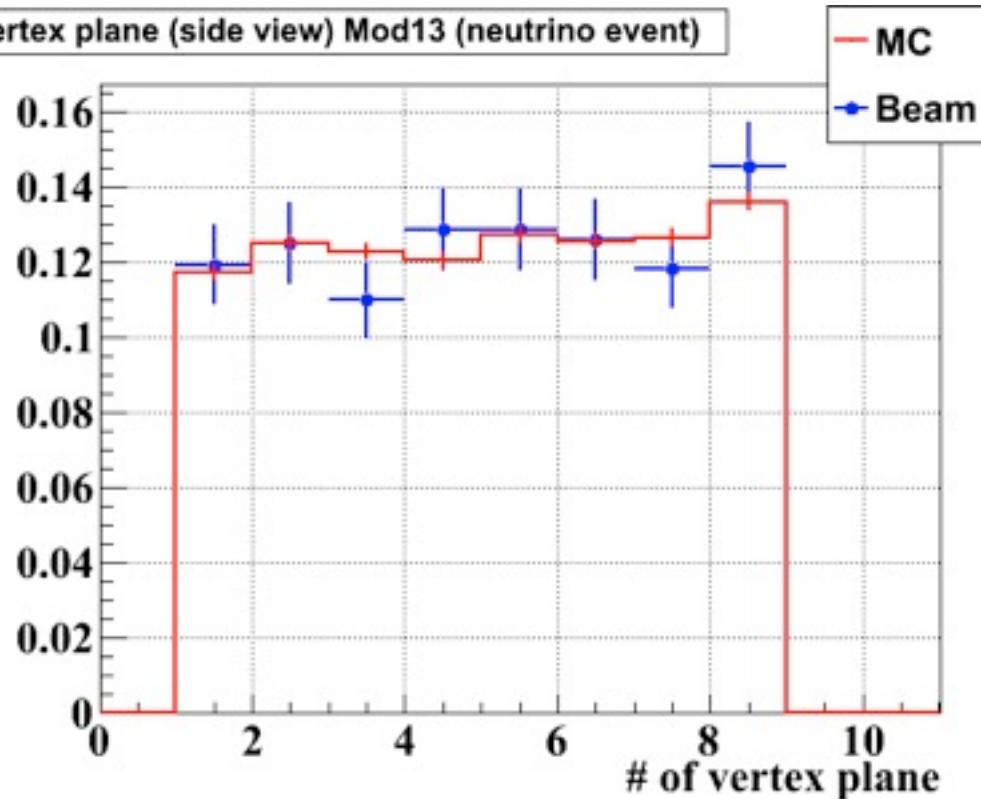
Vertex plane (side view) Mod11 (neutrino event)



Vertex plane (side view) Mod12 (neutrino event)



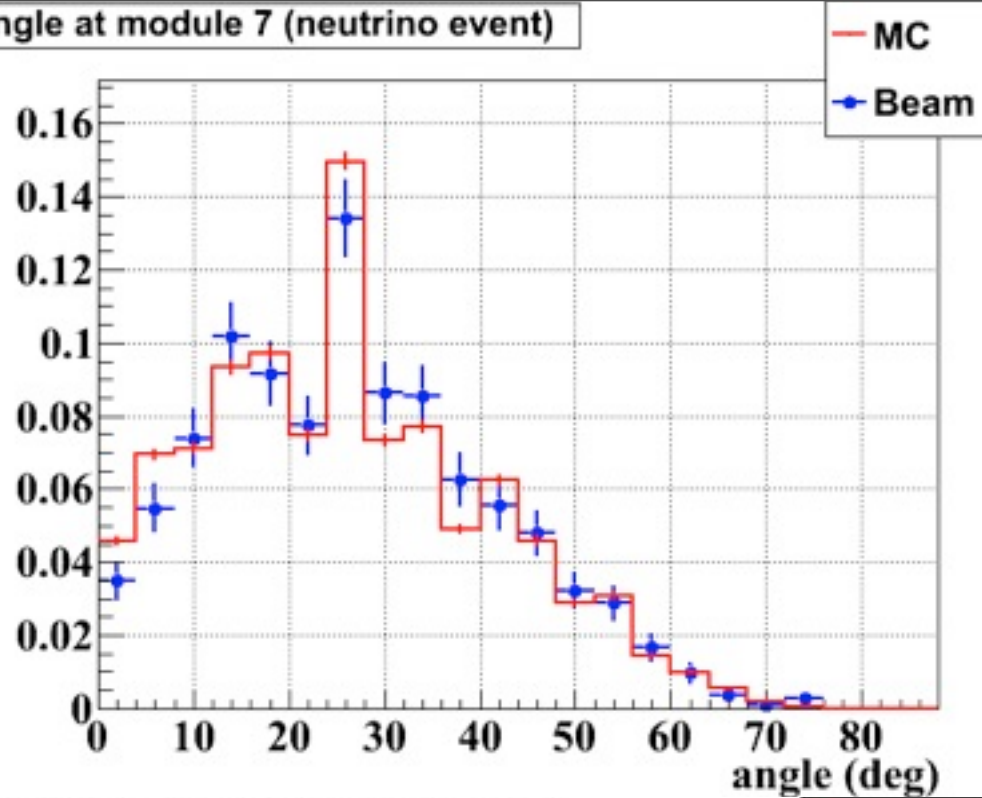
Vertex plane (side view) Mod13 (neutrino event)



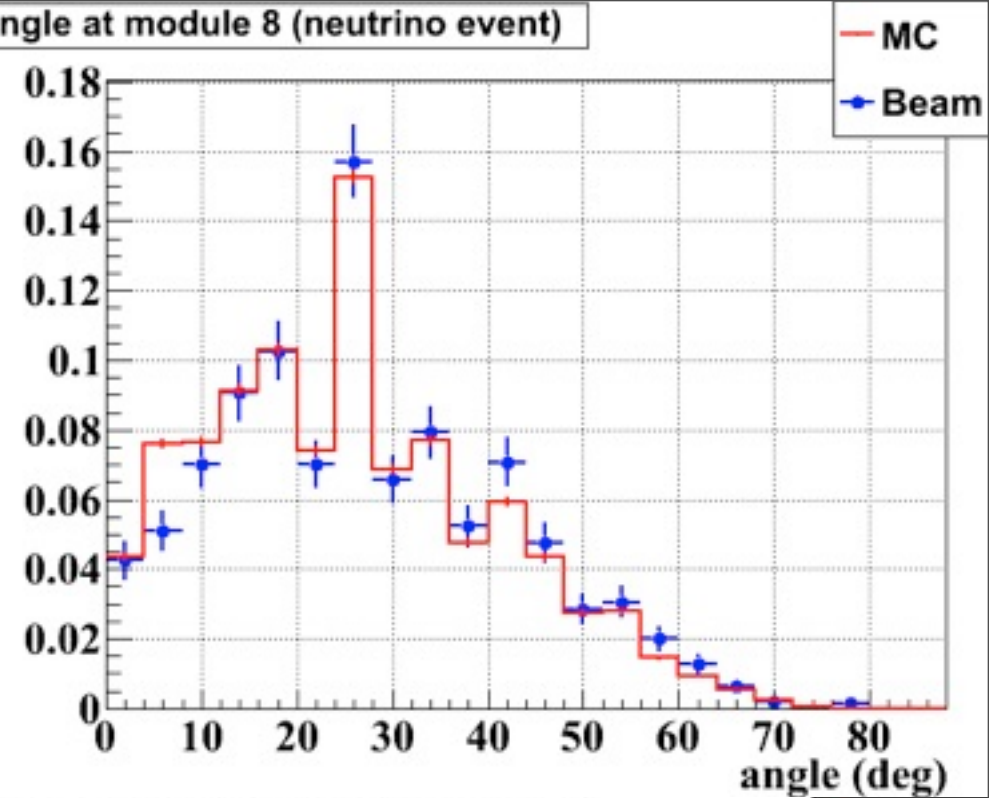
Reconstructed Angle

- トラッキングして得たビーム軸との角度
- ビン幅は 4° に設定

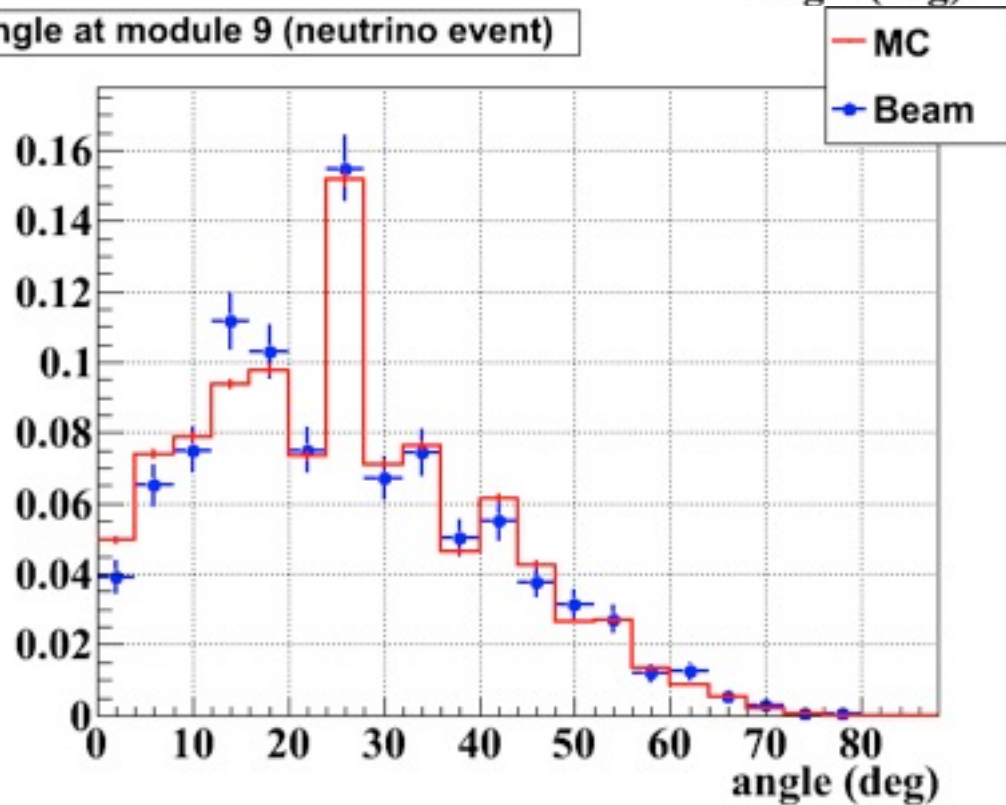
Angle at module 7 (neutrino event)



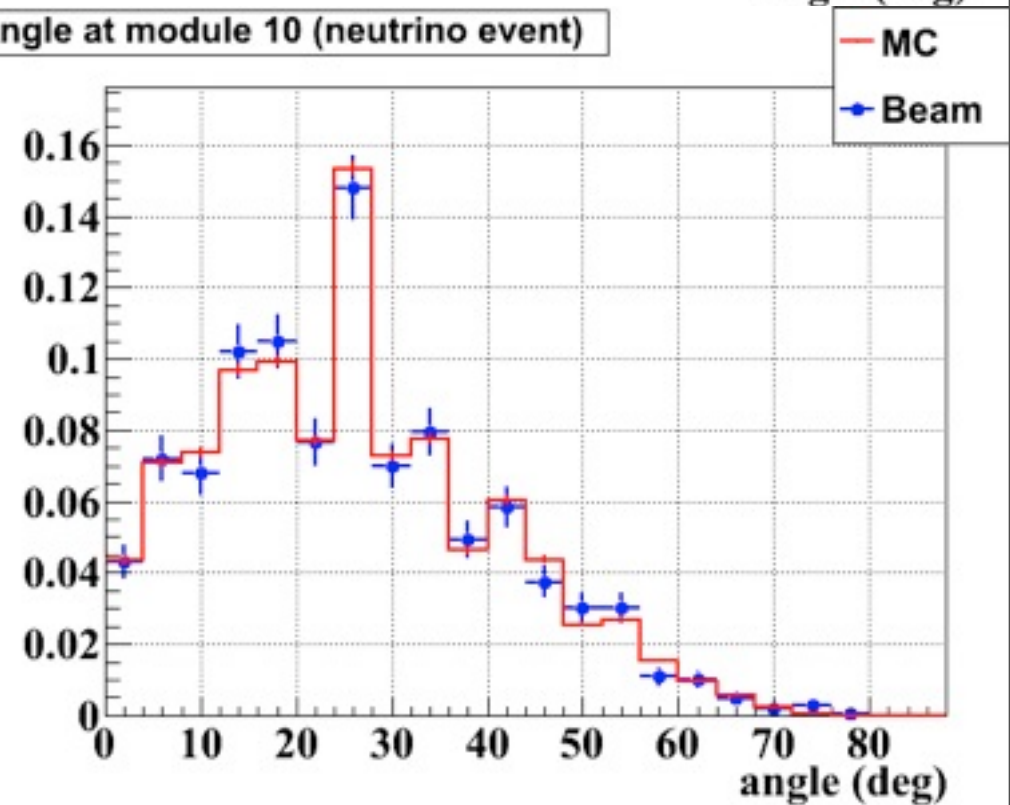
Angle at module 8 (neutrino event)



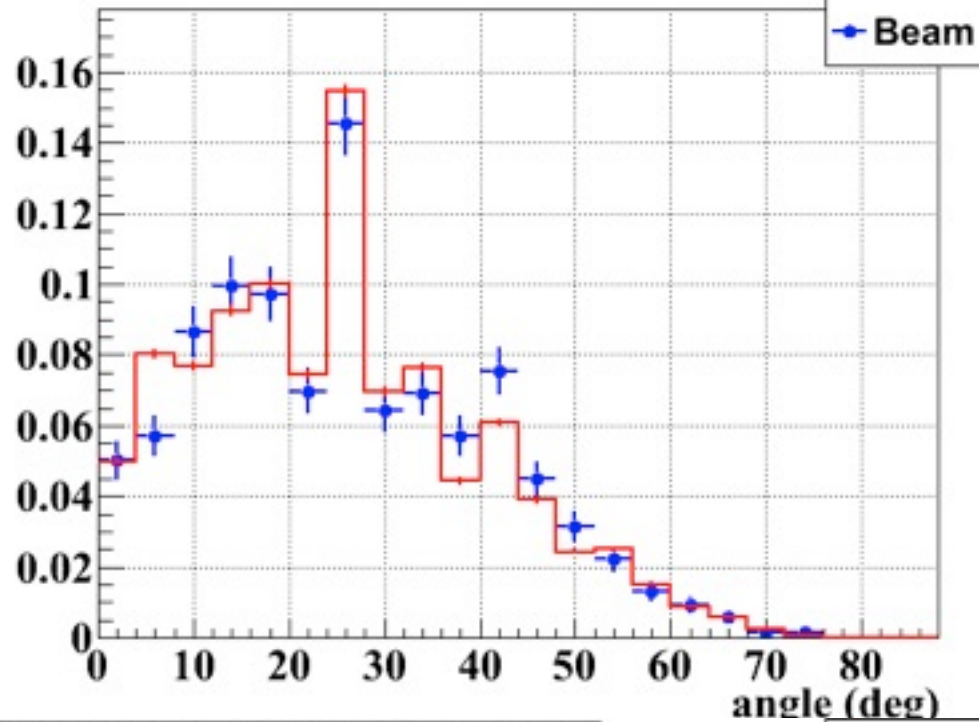
Angle at module 9 (neutrino event)



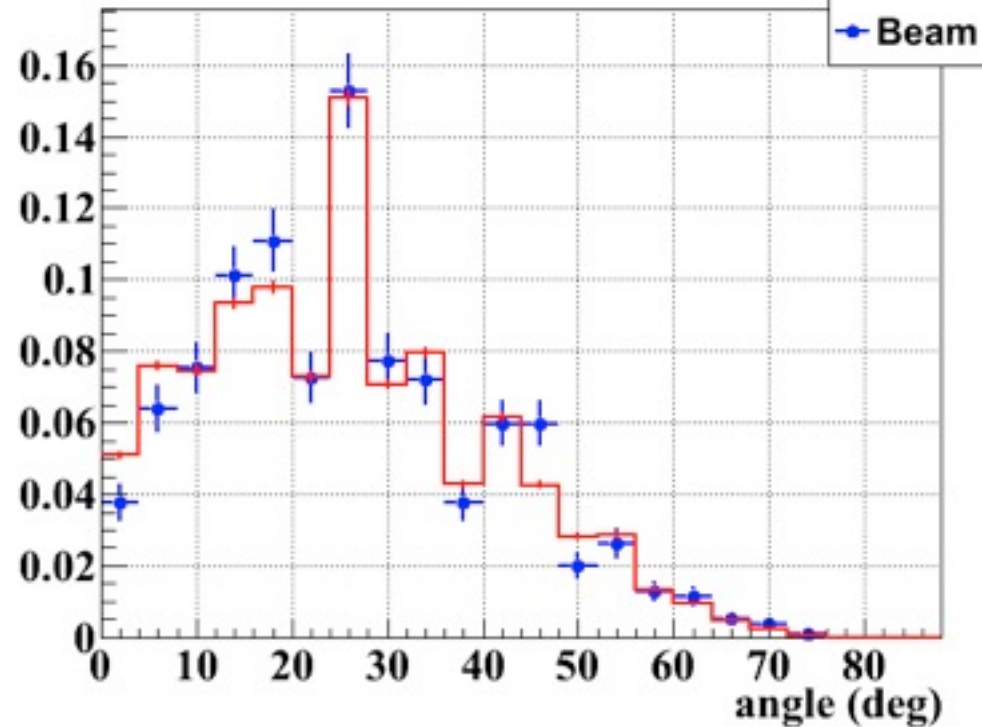
Angle at module 10 (neutrino event)



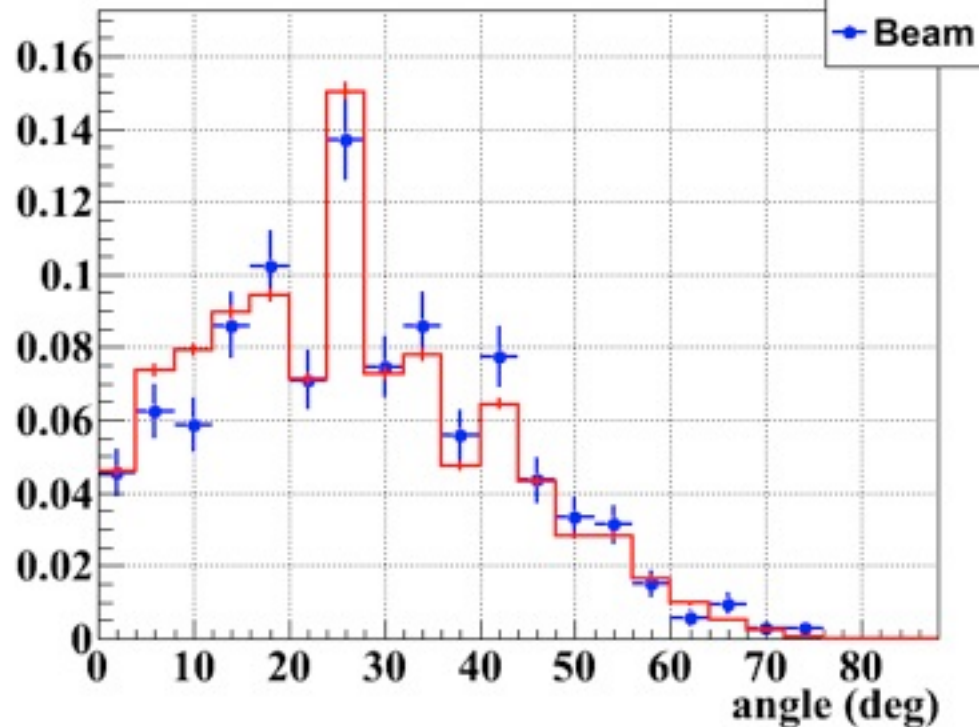
Angle at module 11 (neutrino event)



Angle at module 12 (neutrino event)



Angle at module 13 (neutrino event)

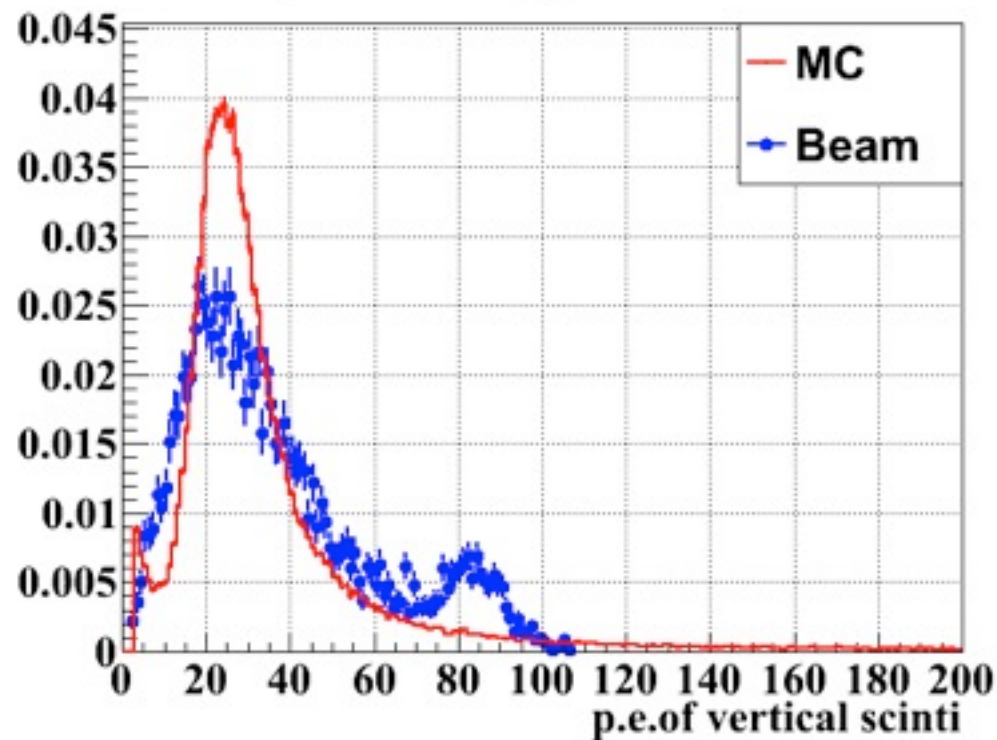


p.e. of hit of reconstructed track

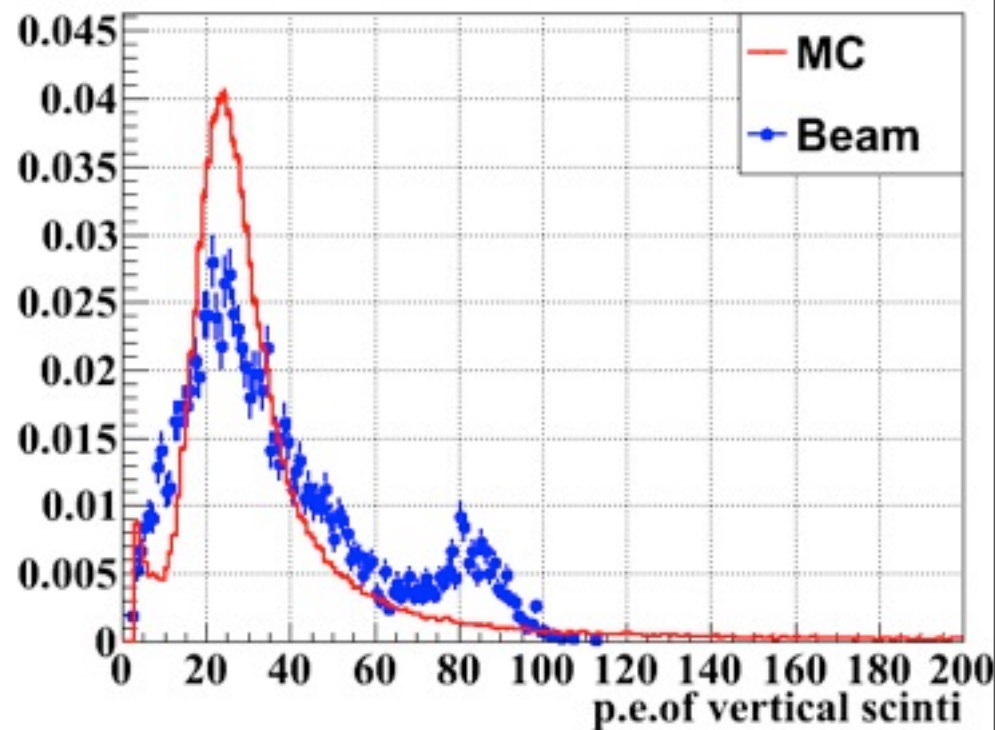
- トラッキングした際に用いたヒットの光量分布
 - トラックが残したヒットの光量のみを記録
- 今回用いたビームデータ(run3I)では low gain の情報が使えなかったため、高い光量(80p.e. ~)は正しくADC値を光量に変換できていない。
- 現在はこの問題は解決済み。なので最近のデータでは大丈夫なはず？

p.e. of vertical scintillator
(top view)

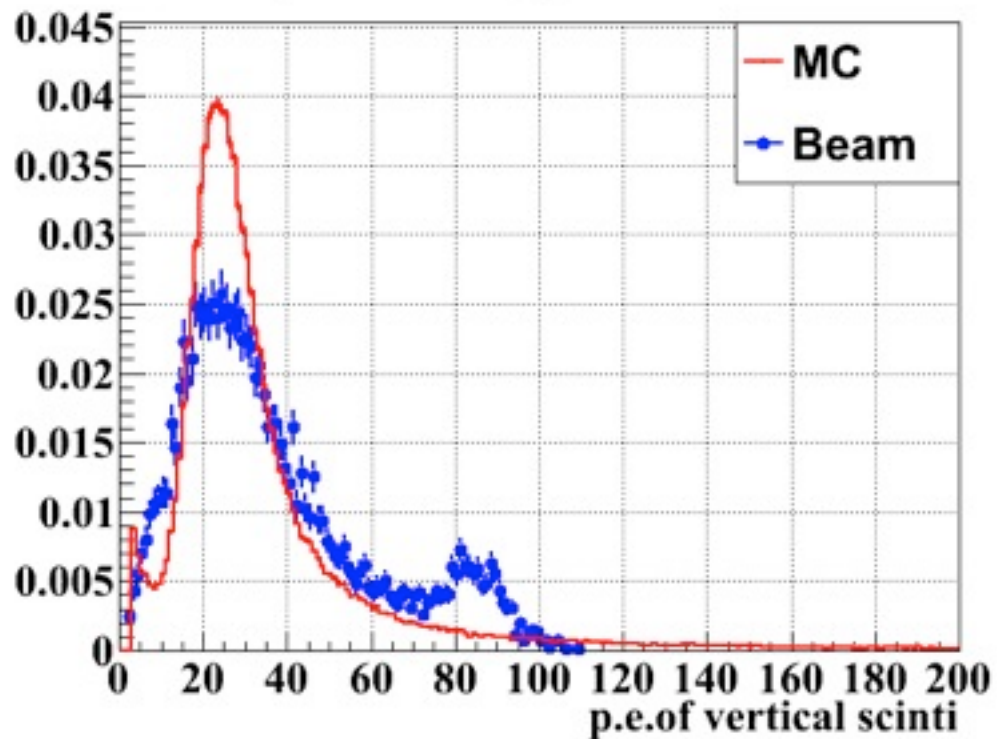
p.e. at module 7 (neutrino event)



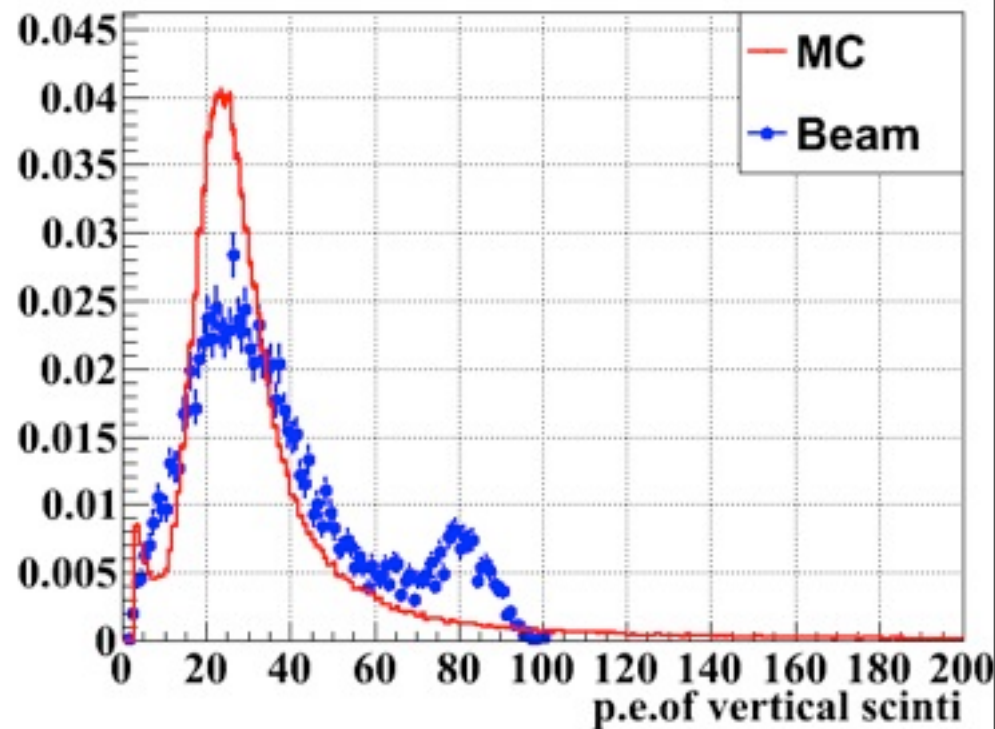
p.e. at module 8 (neutrino event)



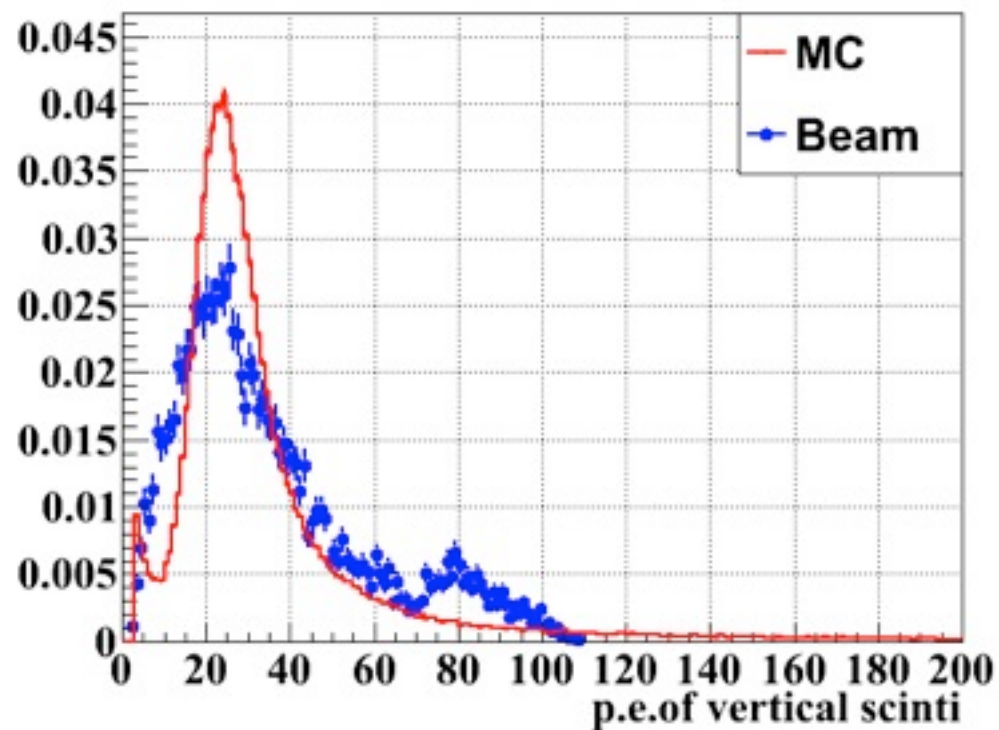
p.e. at module 9 (neutrino event)



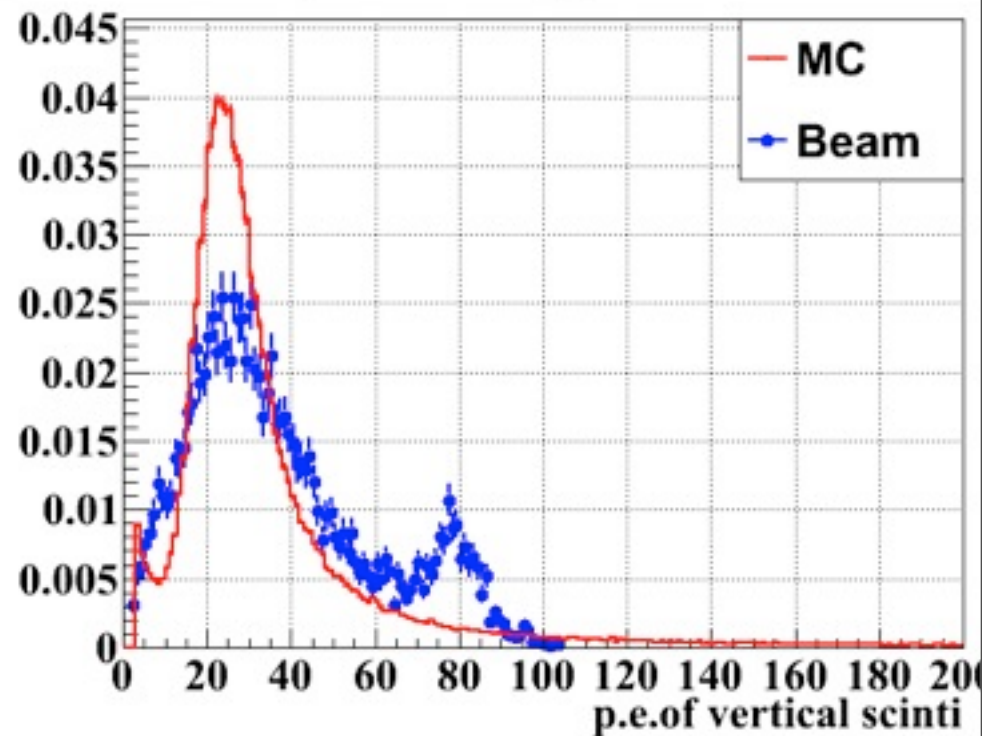
p.e. at module 10 (neutrino event)



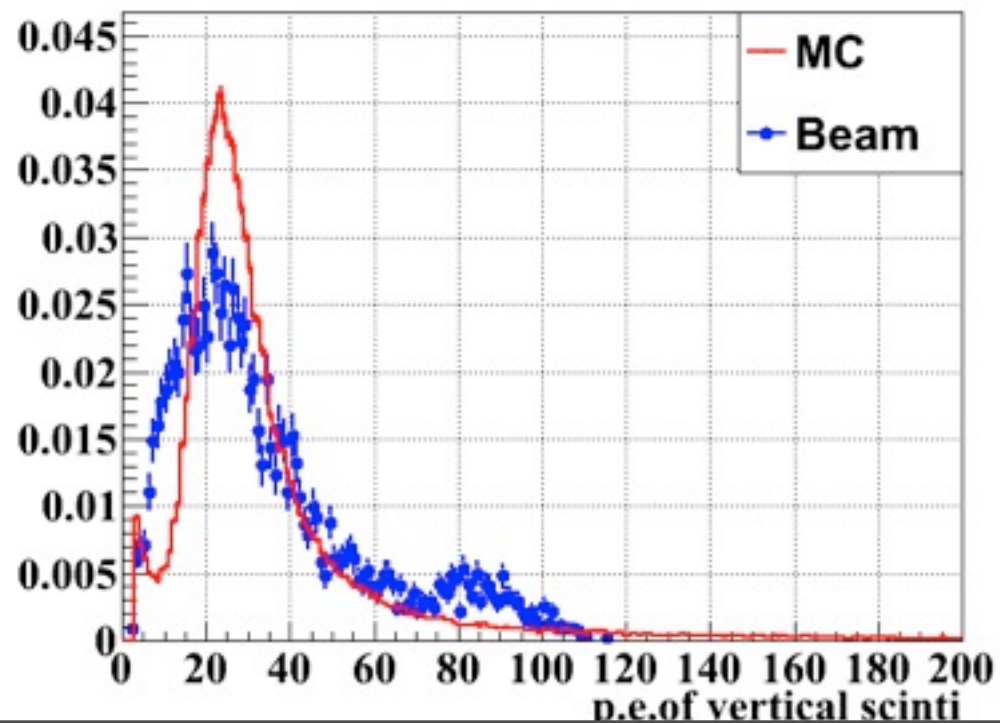
p.e. at module 11 (neutrino event)



p.e. at module 12 (neutrino event)

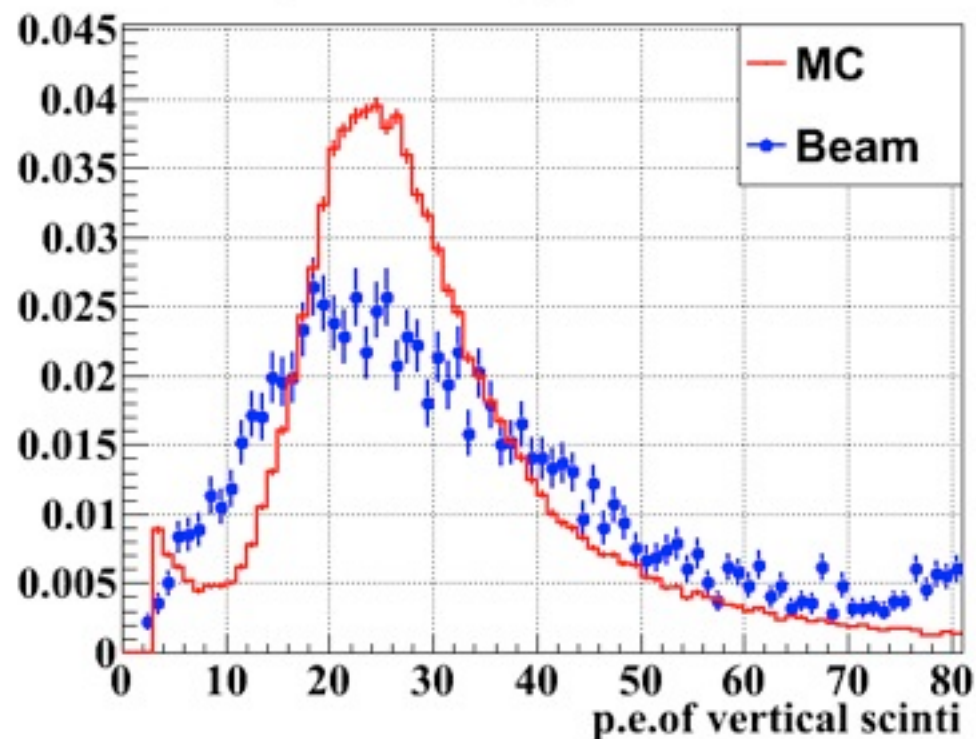


p.e. at module 13 (neutrino event)

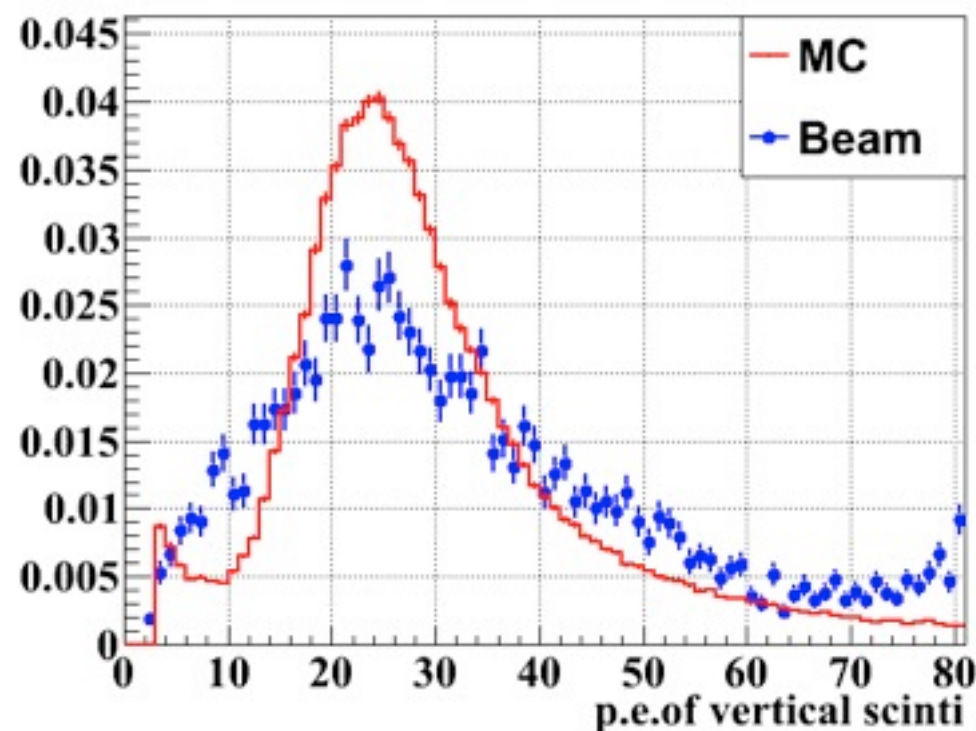


- 80 p.e. 以下の領域を拡大表示

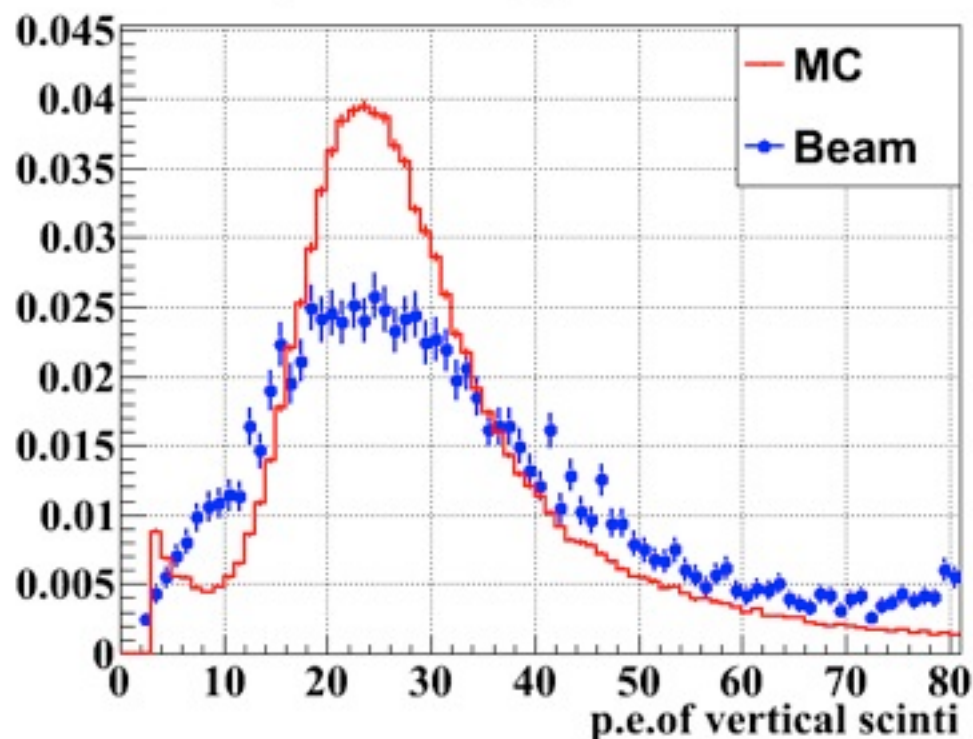
p.e. at module 7 (neutrino event)



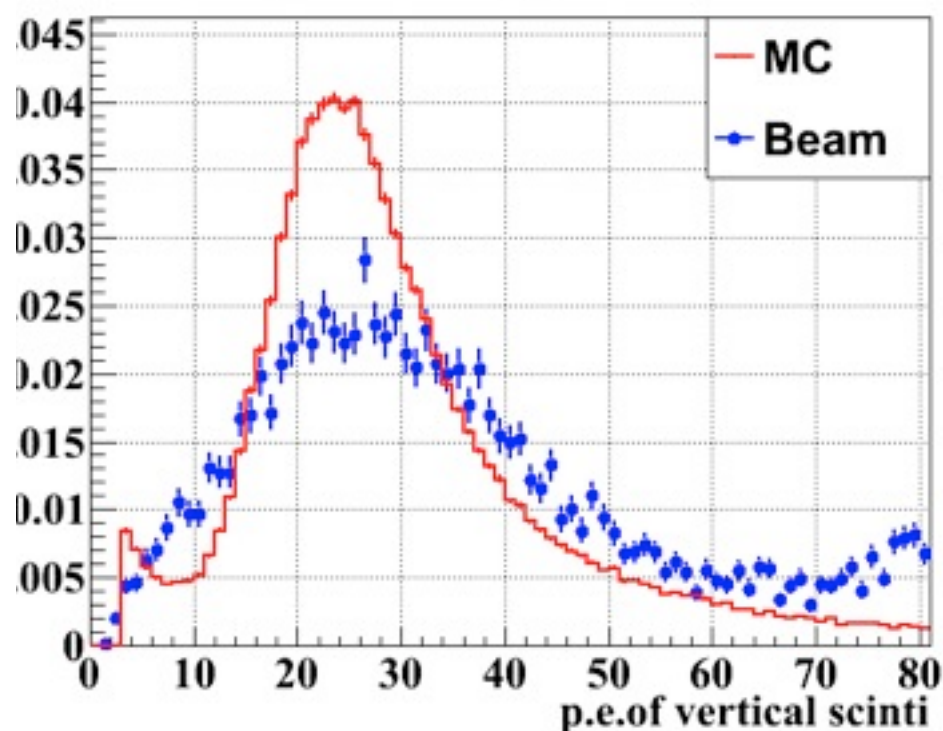
p.e. at module 8 (neutrino event)



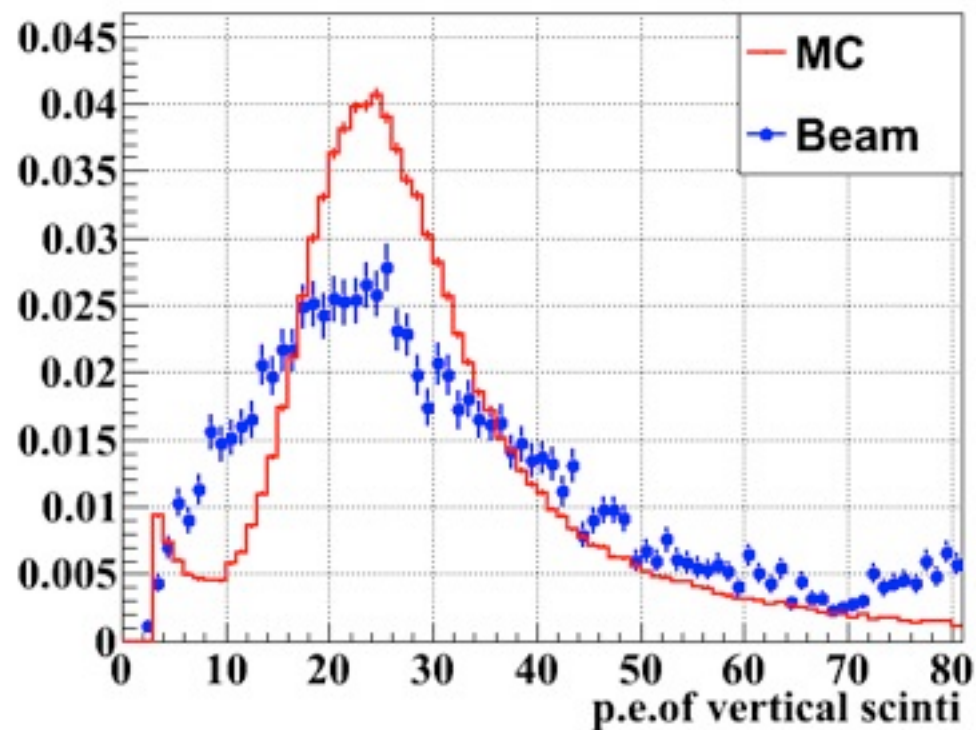
p.e. at module 9 (neutrino event)



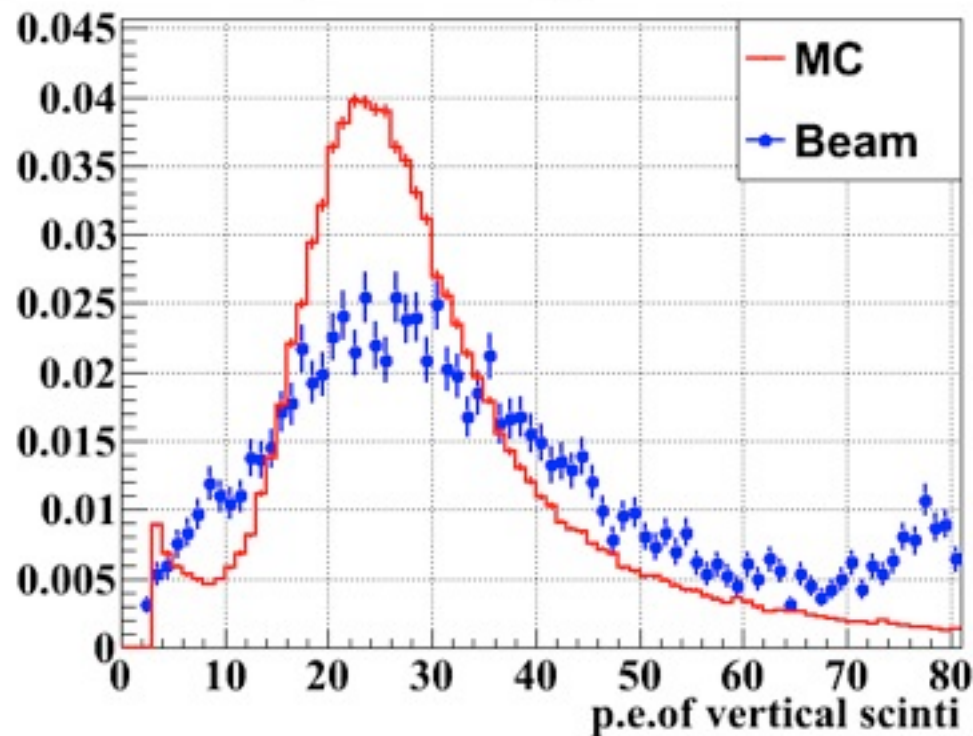
p.e. at module 10 (neutrino event)



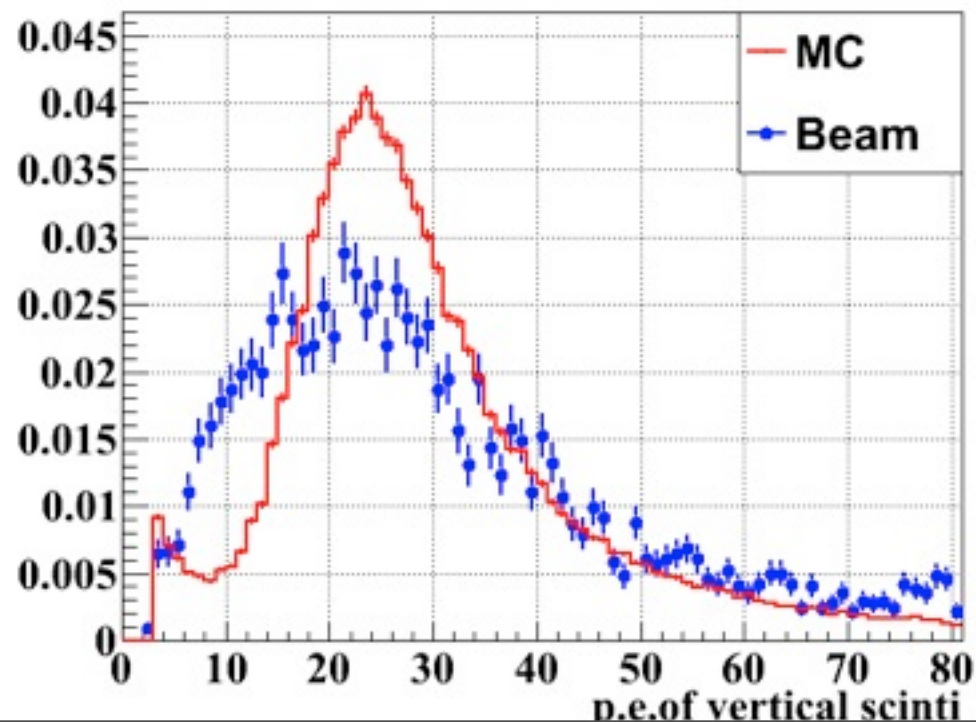
p.e. at module 11 (neutrino event)



p.e. at module 12 (neutrino event)

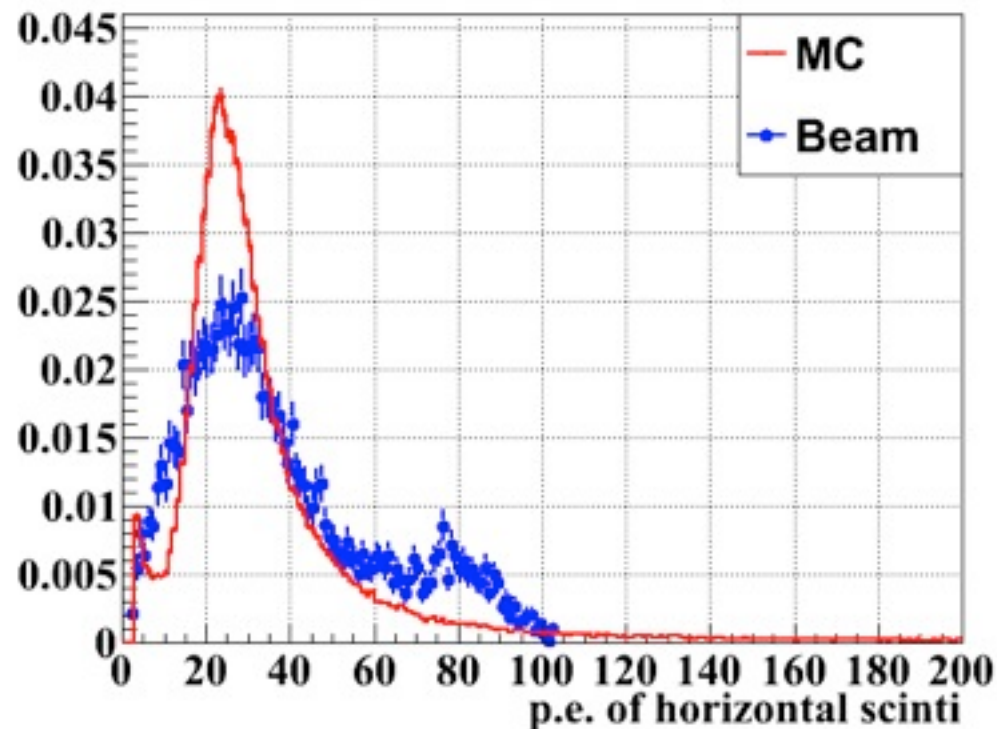


p.e. at module 13 (neutrino event)

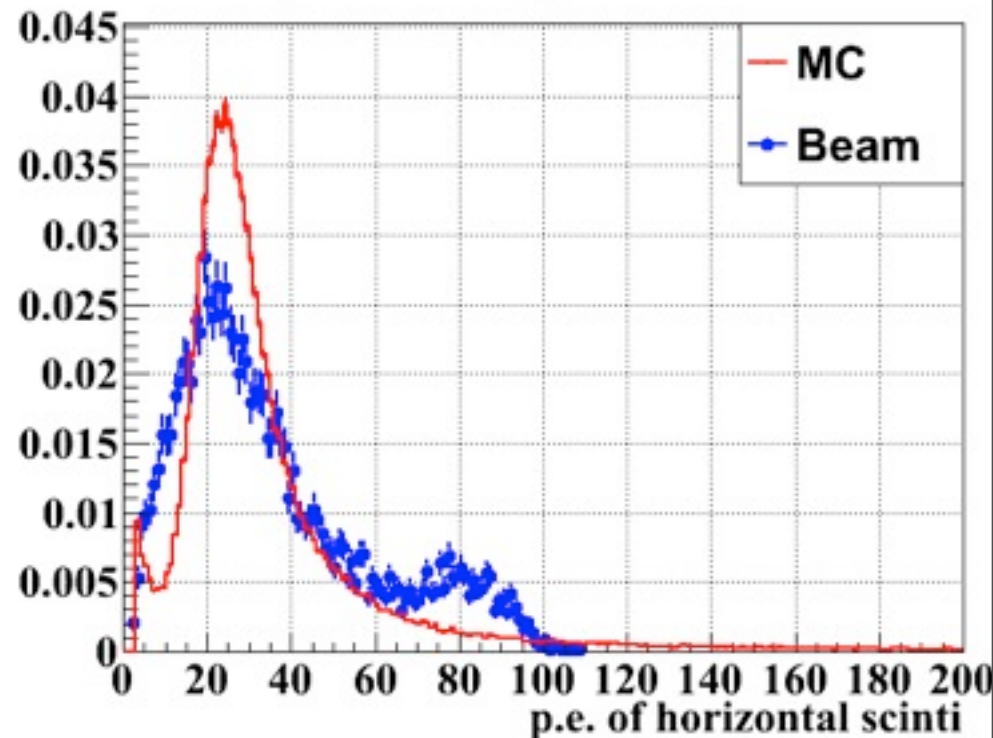


**p.e. of horizontal scintillator
(side view)**

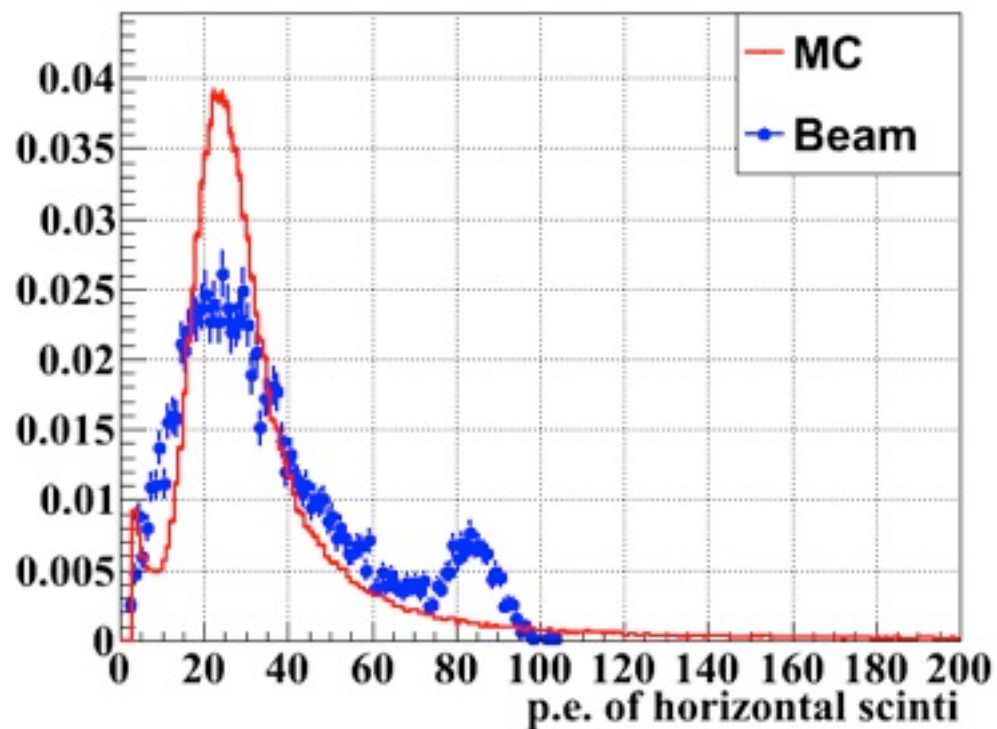
p.e. at module 7 (neutrino event)



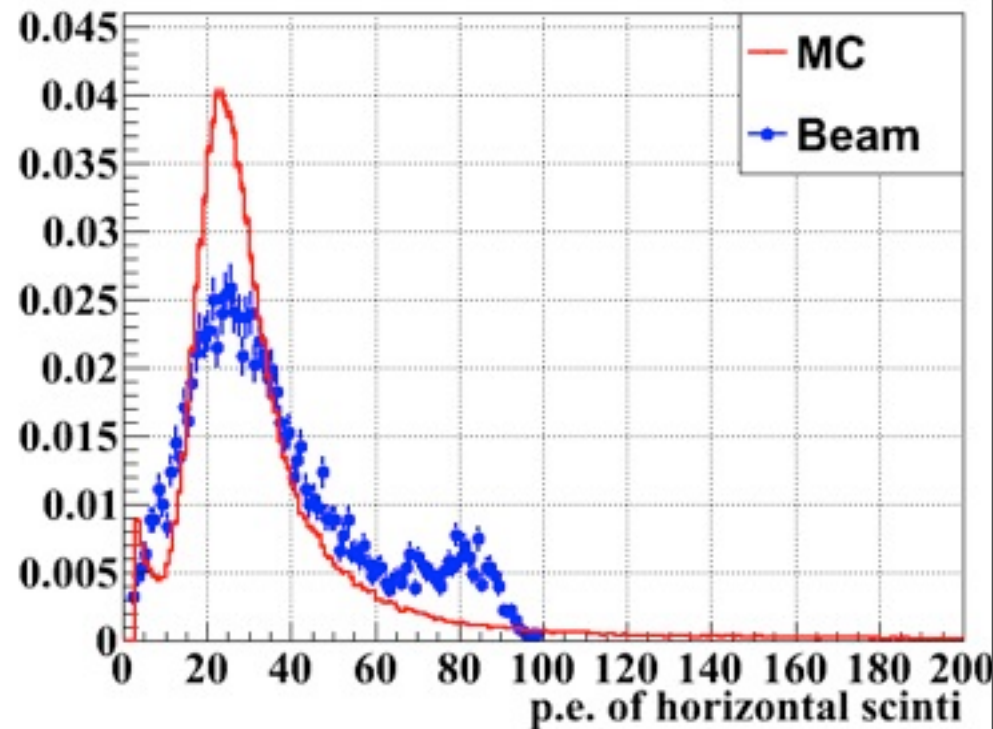
p.e. at module 8 (neutrino event)



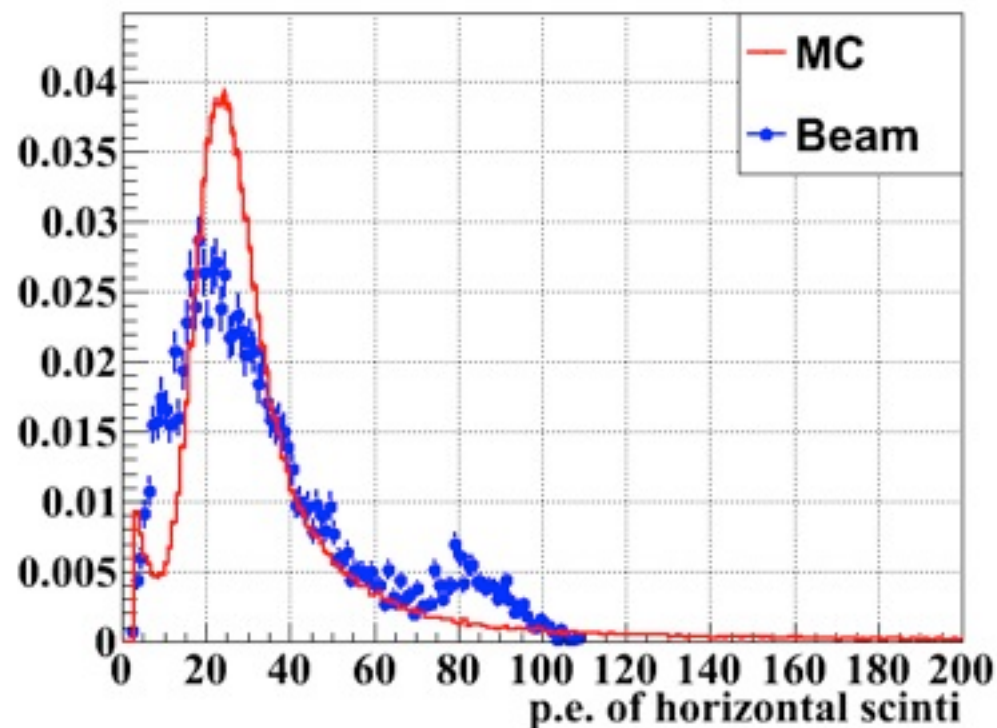
p.e. at module 9 (neutrino event)



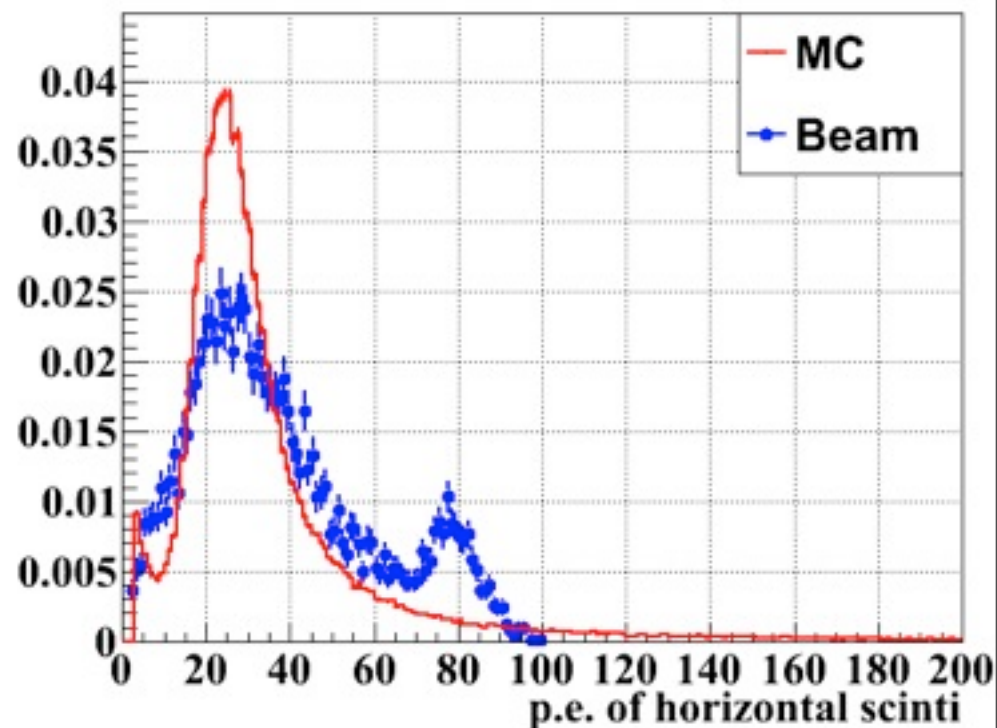
p.e. at module 10 (neutrino event)



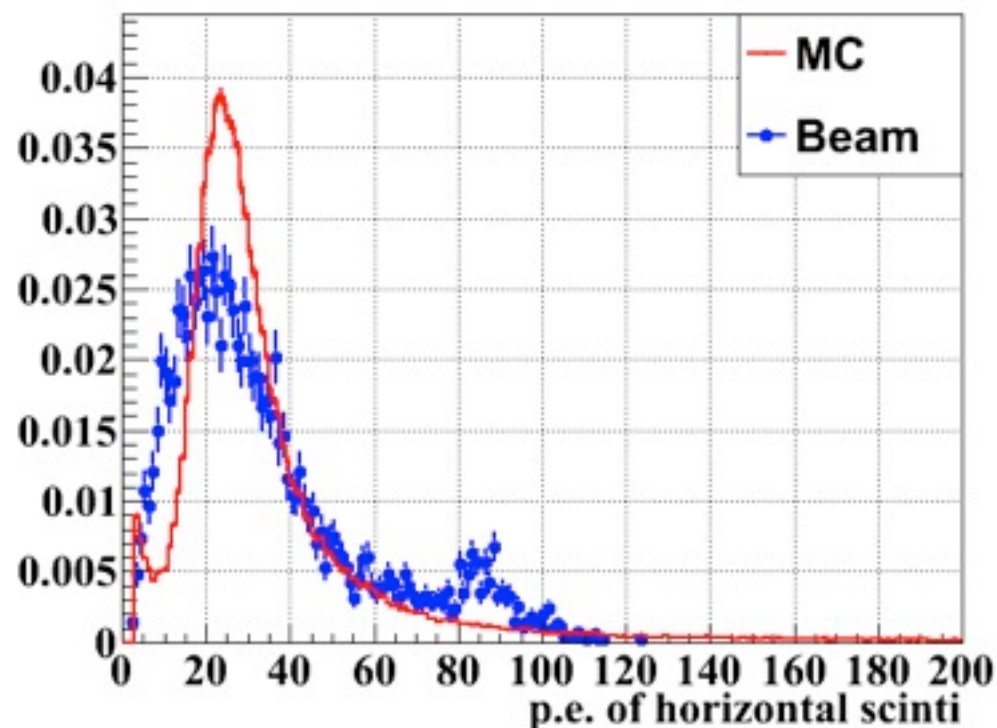
p.e. at module 11 (neutrino event)



p.e. at module 12 (neutrino event)

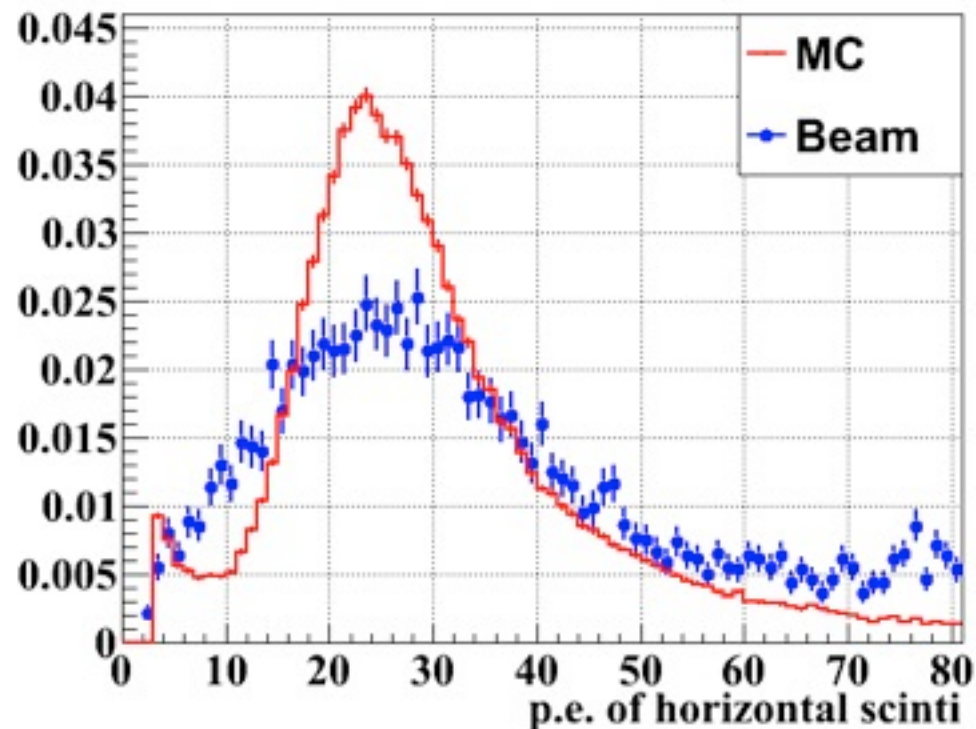


p.e. at module 13 (neutrino event)

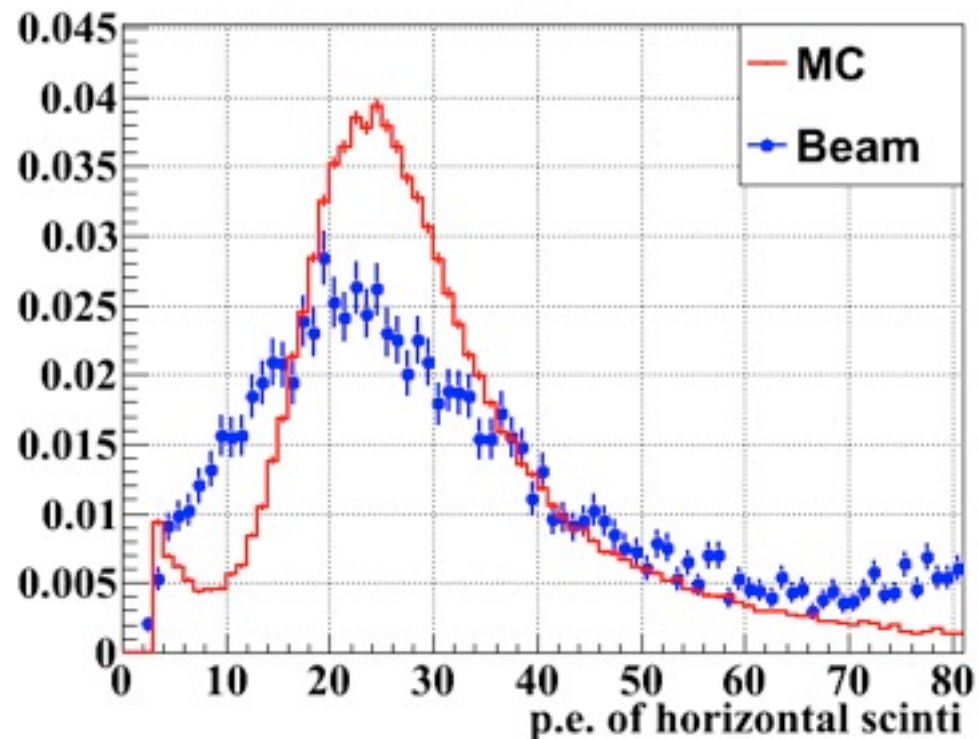


- 80 p.e. 以下の領域を拡大表示

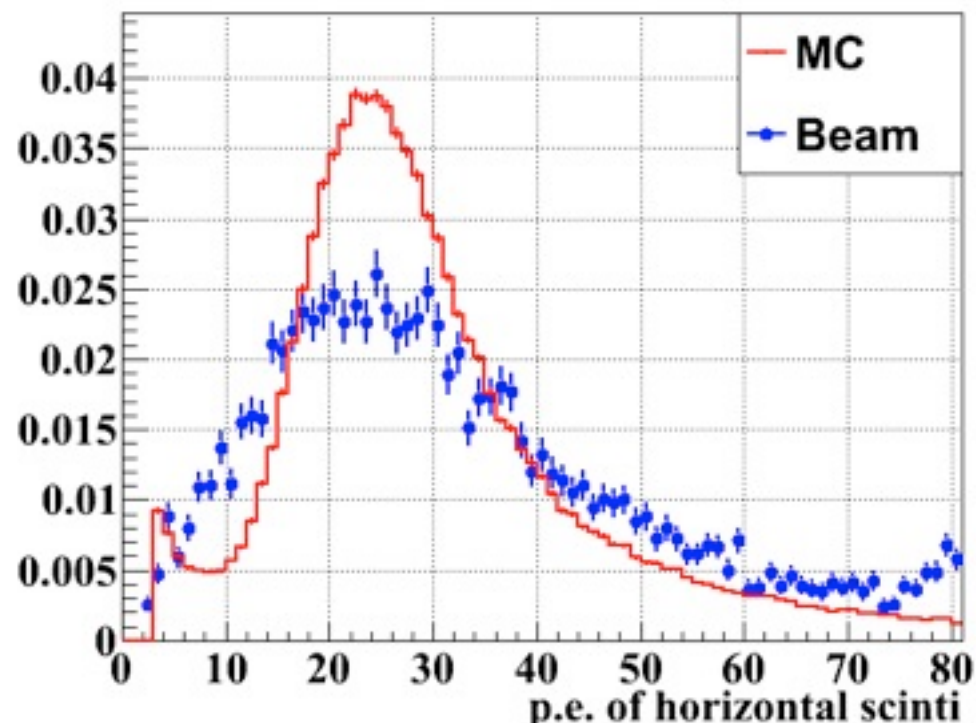
p.e. at module 7 (neutrino event)



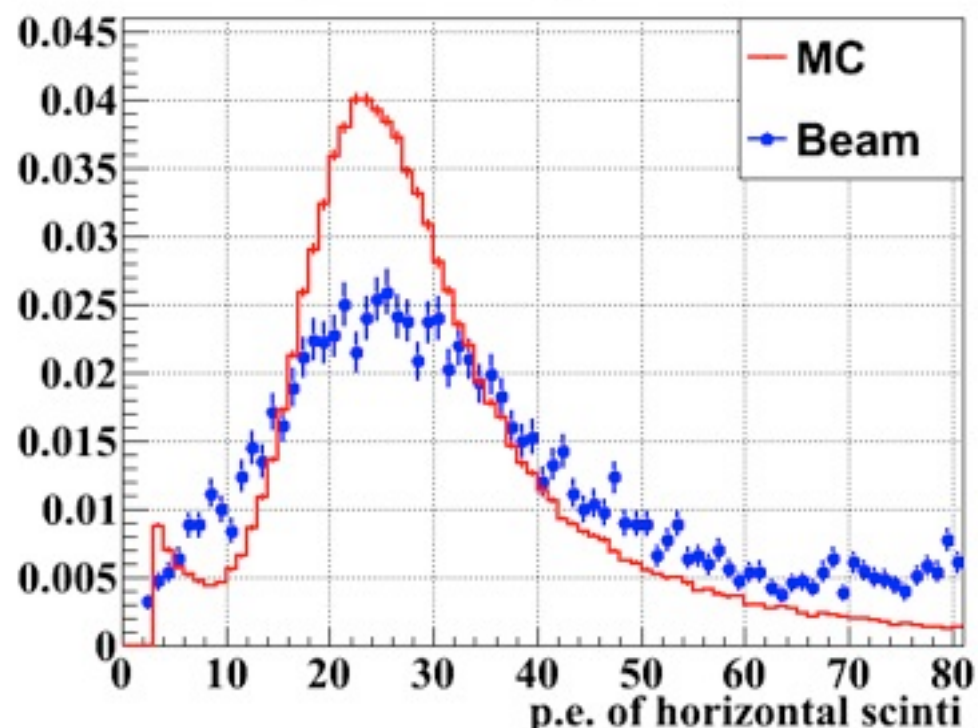
p.e. at module 8 (neutrino event)



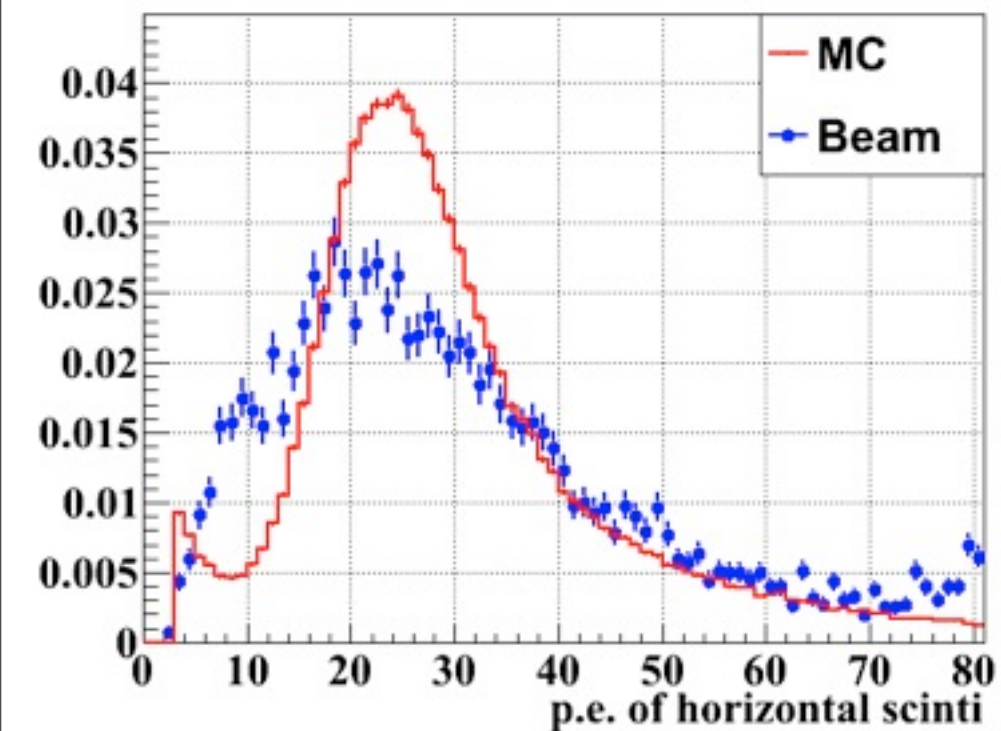
p.e. at module 9 (neutrino event)



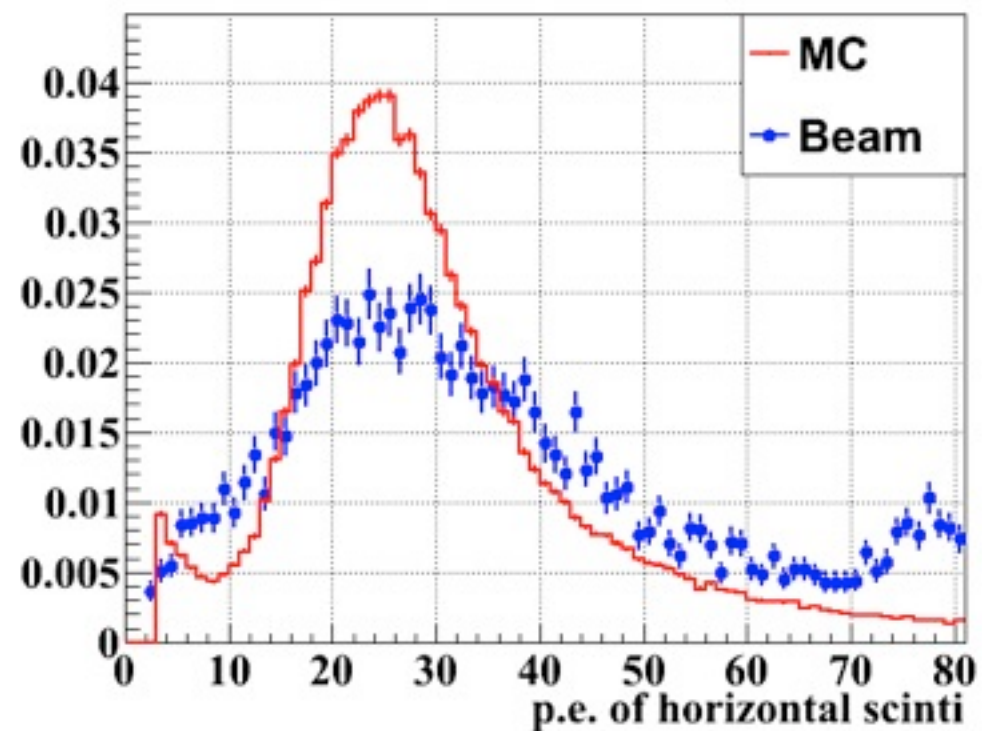
p.e. at module 10 (neutrino event)



p.e. at module 11 (neutrino event)



p.e. at module 12 (neutrino event)



p.e. at module 13 (neutrino event)

