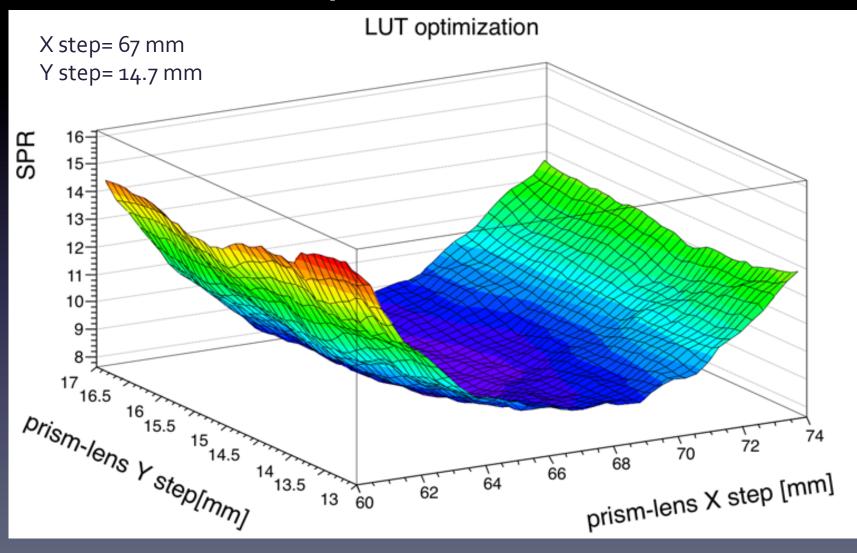
MCP by MCP $\Delta \theta_c$ Correction, Beam $\Delta \theta \Delta \Phi$ & LUT Prism-lens X & Y optimization

A.A

LUT Prism-lens X & Y optimization

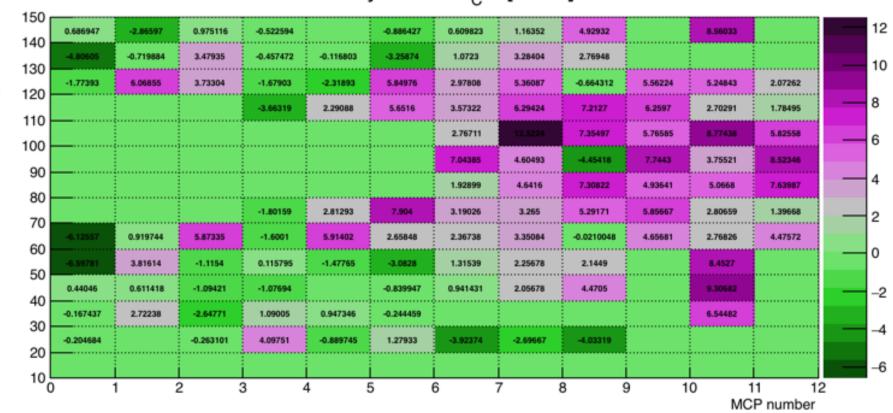


$P \Delta \theta_{c \text{ correction}}$

150 Polar angle [degree] 8 1.17562 -2.74411-0.50551 -2.71978-0.578674 1.40766 -0.241595.4167 2.88773 140 **.**................ -3.75212 -4.02245 0.0578799 0.167143 -2.920171.61571 3.51941 3.31334 130 6 -1.30951-0.206657 5.20793 0.870121 0.665123 3.54464 3.88248 -0.0395709 1.87079 3.90263 4.70851 120 6.11611 -2.328894.28743 -0.0485167 3.87198 5.03845 2.8168 3.02321 110 4 4.27901 4.71495 1.04644 100 3.61811 -3.751362.08208 2 90 3.42907 3.34695 4.14428 80 0 -2.72 -4.88619 2.69788 2.58091 0.291305 3.21599 2.1549 70 -4.67417 -0.755414 -0.696869 3.52862 3.71636 2.46812 3.08988 0.586403 3.36604 3.14343 3.037 60 -2 -3.9061 -2.351543.36188 -0.294134-0.102314-2.792861.79221 2.75634 2.89899 2.88362 50 1.87673 -2.44975 -1.03689-1.393660.00161654 1.54321 -0.755452 4.91693 2.61197 40 -4 1.32871 2.05366 -5.68198 -1.252781.4853 0.909951 0.0122961 30 -0.552563-0.02601830.53028 -0.884074-1.89250.118507 -0.515171--6 20 10 10 12 Ό 2 3 5 6 7 8 9 11 1 4 MCP number

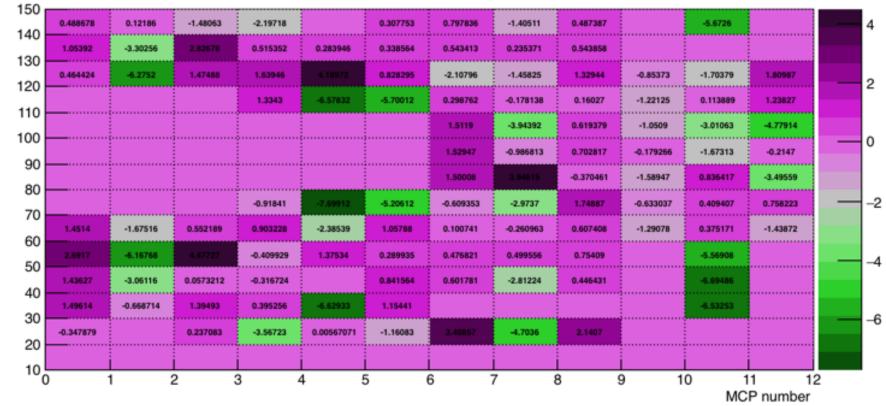
MCP by MCP $\Delta \theta_{\rm C} P$ [mrad]

$\pi \Delta \theta_{c \text{ correction}}$



MCP by MCP $\Delta \theta_{c} \pi$ [mrad]

$P \Delta \theta_{c \text{ correction}} - \pi \Delta \theta_{c \text{ correction}}$

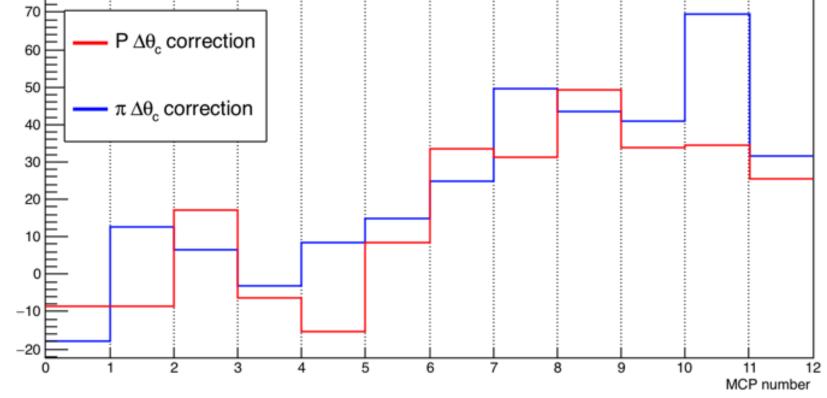


MCP by MCP ($\Delta \theta_{\rm C} P - \Delta \theta_{\rm C} \pi$ [mrad])

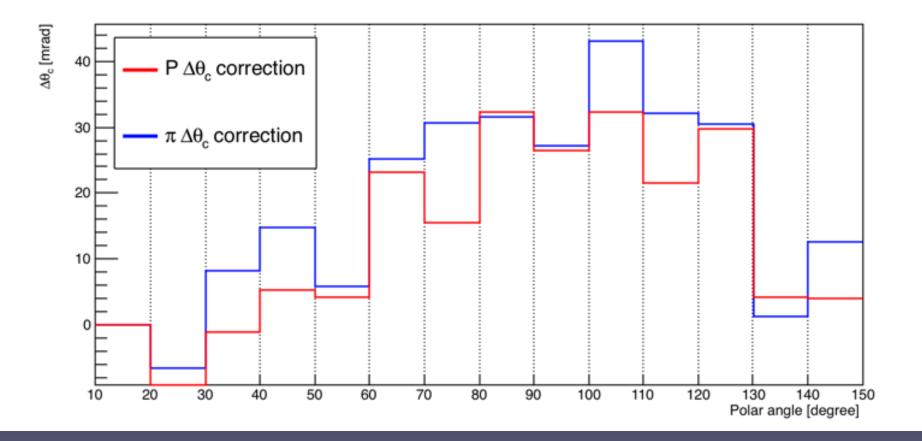
Polar angle [degree]

MCP projection (all angles)

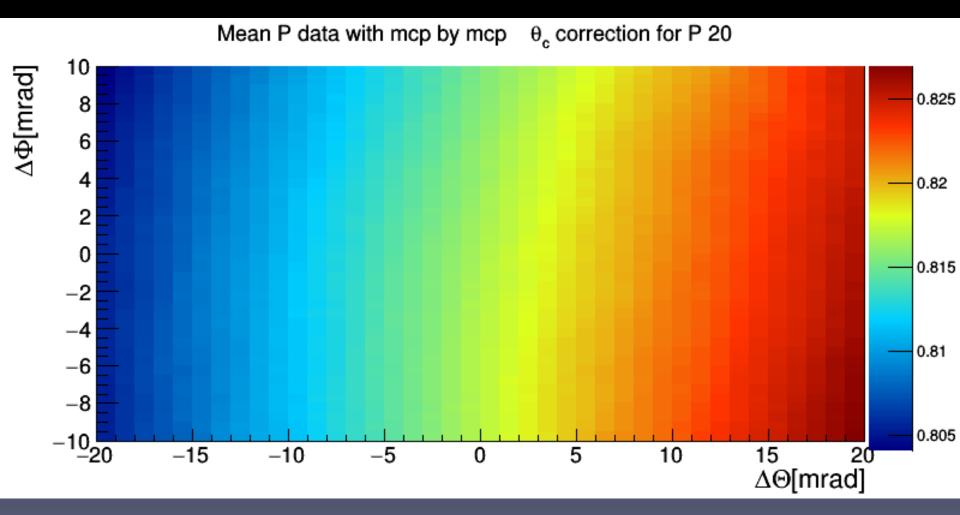




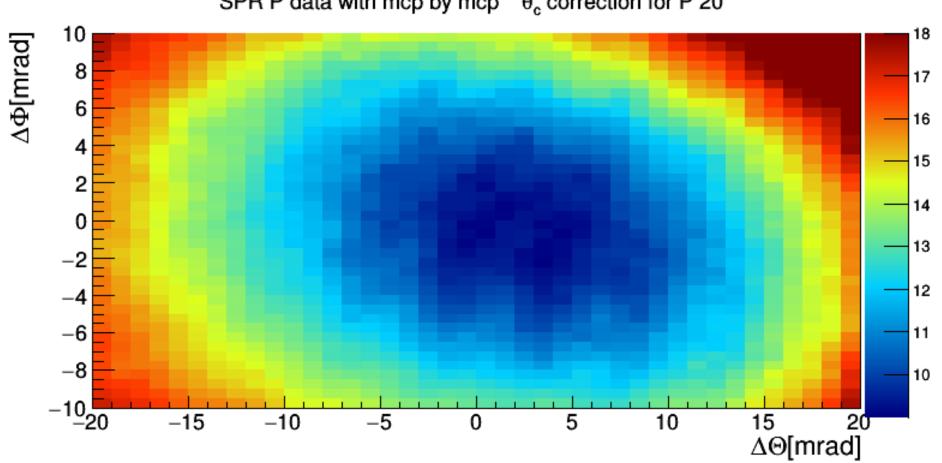
Polar angle projection (all PMT's)



θ_{c} Mean Value

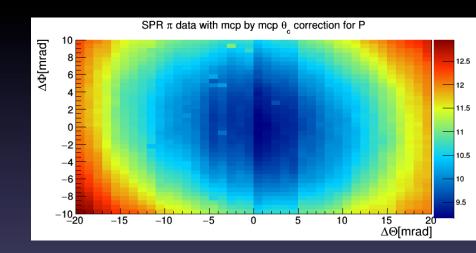


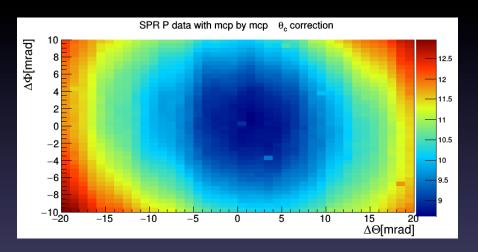
$\theta c SPR$



SPR P data with mcp by mcp θ_c correction for P 20

θc SPR all angles





Conclusion & Outlook

• No significant difference between:

 $P \Delta \theta_{c \text{ correction}}$ and $\pi \Delta \theta_{c \text{ correction}}$ Next Steps:

- Apply $\Delta \theta_{c \ correction}$ and Beam $\Delta \theta \ \Delta \varphi_{correction}$
- Calculate the figure of merits
- Create geometrical reconstruction PDF and calculate π/K separation power