

Updated Tracking Resolution

hpDIRC DSSC Meeting

21.08.25

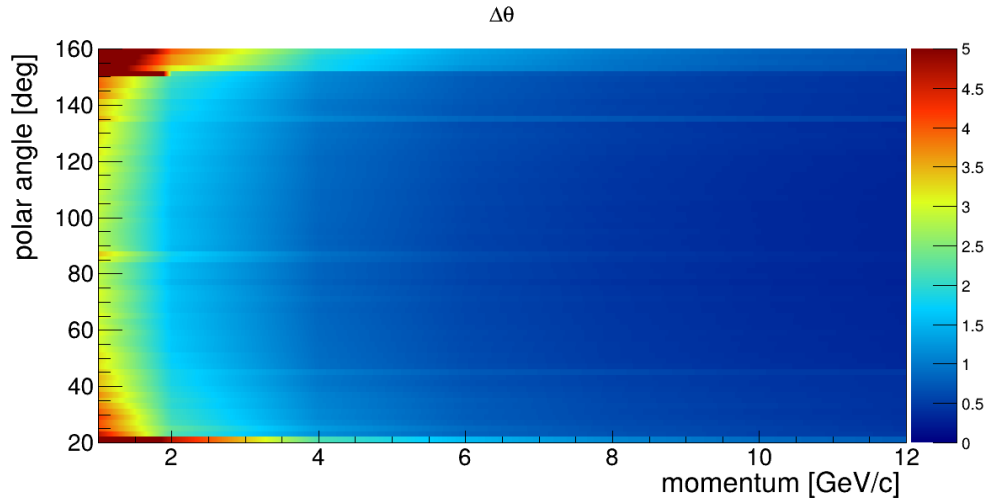
Roman Dzhygadlo 

New Version of the Tracking Resolution

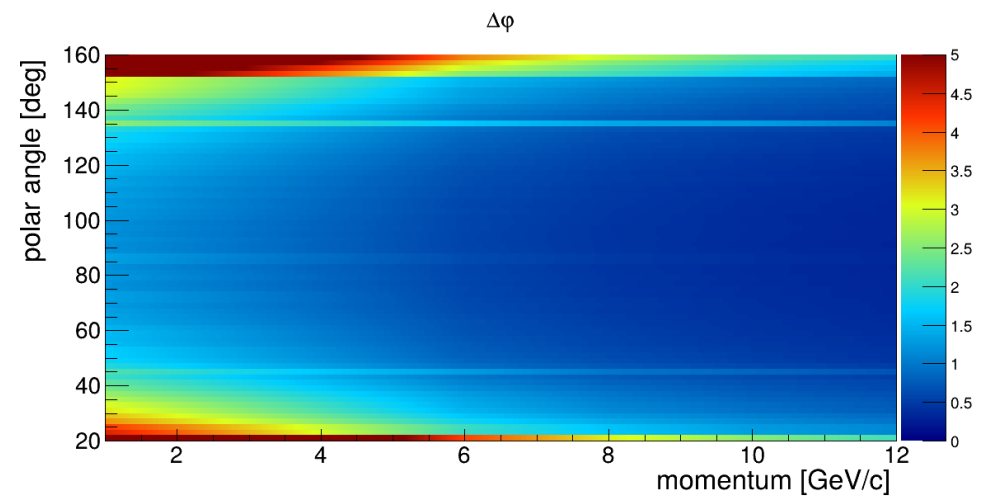
- new tracking data from Matt (05.08.25)
- more realistic material budget
- better phase space coverage
 - $p = [1, 2, 4, 6, 8, 10, 12] \text{ GeV}/c$
 - $\theta = [16, 18, \dots, 164, 166] \text{ deg}$

Interpolated Angular Resolution Map

polar angle resolution [mrad]:



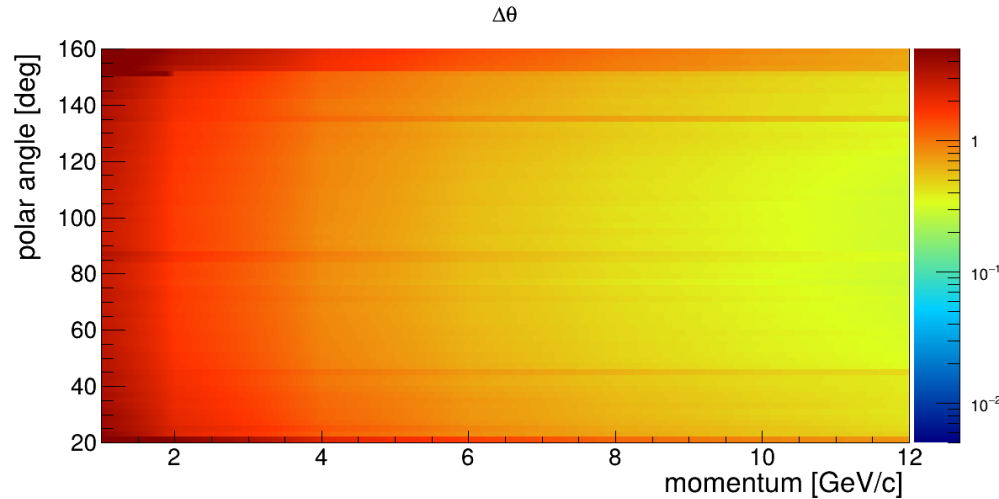
azimuthal angle resolution [mrad]:



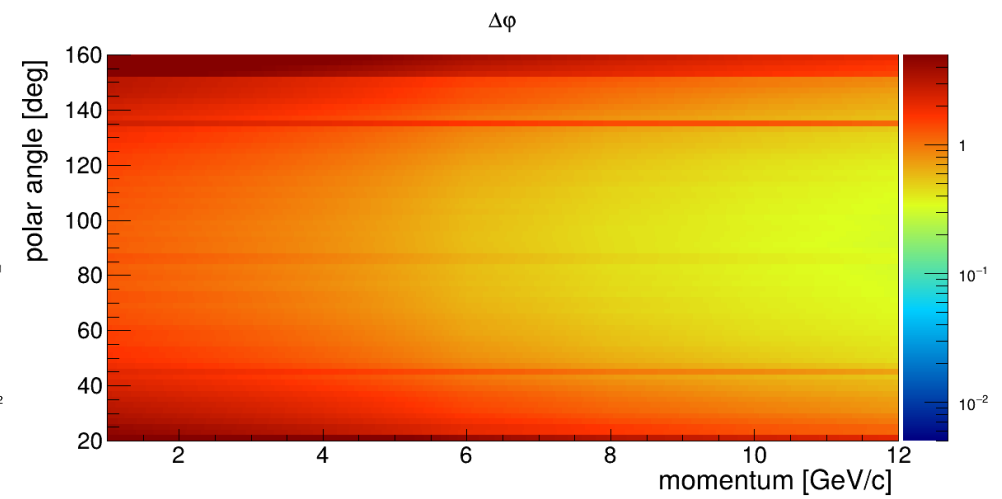
Interpolated Angular Resolution Map

Log

polar angle resolution [mrad]:

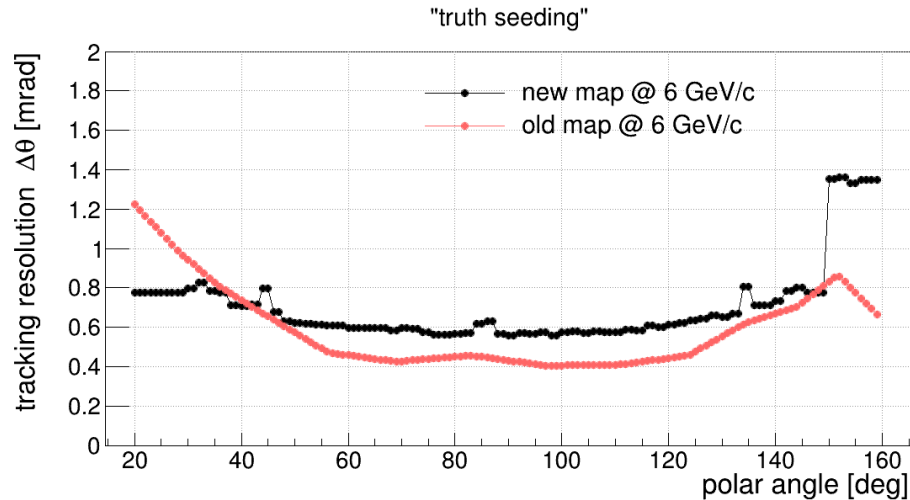


azimuthal angle resolution [mrad]:

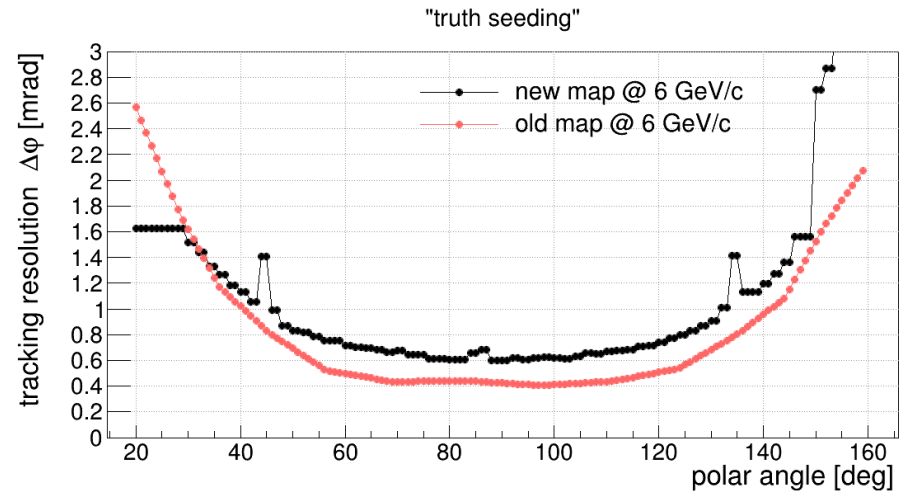


Difference from the Previous Map

polar angle resolution [mrad]:

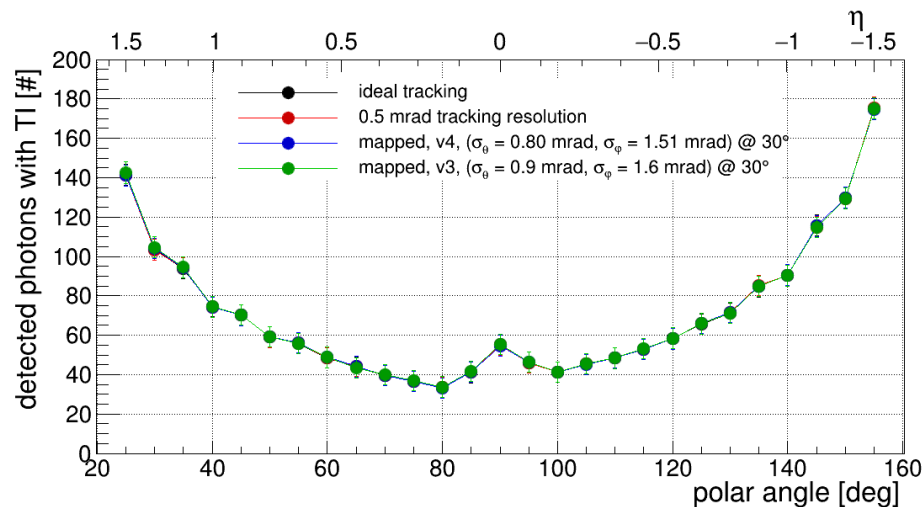


azimuthal angle resolution [mrad]:



DIRC Performance for π/K @ 6 GeV/c

photon yield



separation power using Time Imaging

