

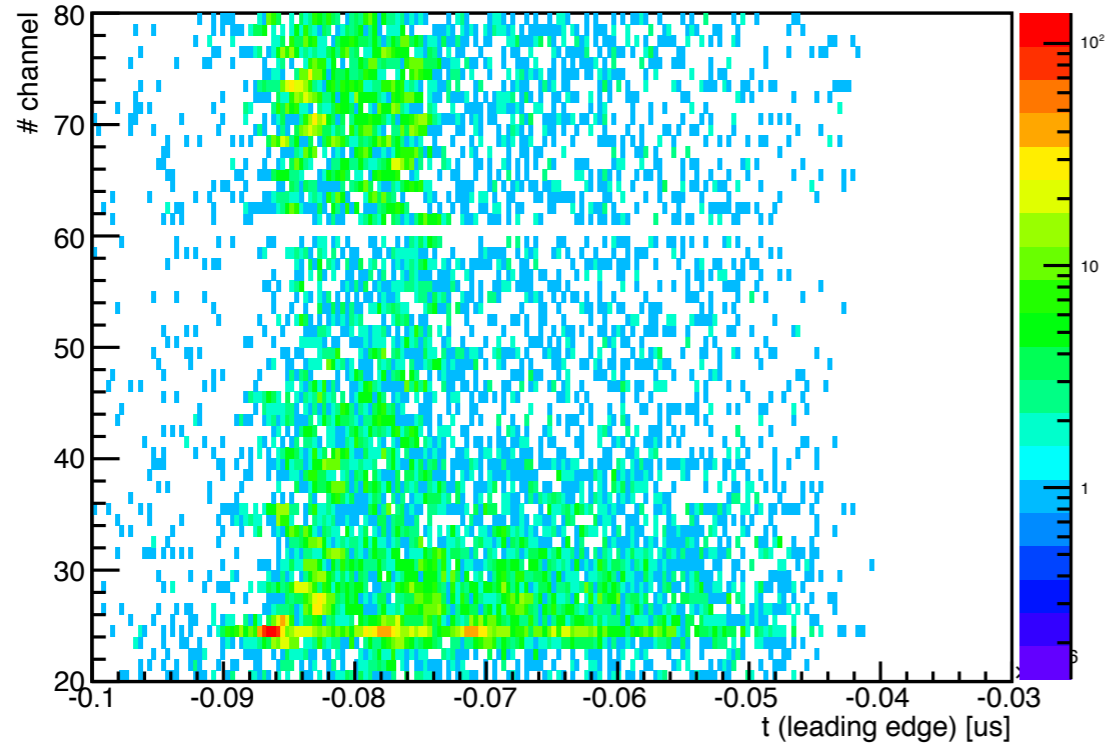


Status Testbeam Analysis

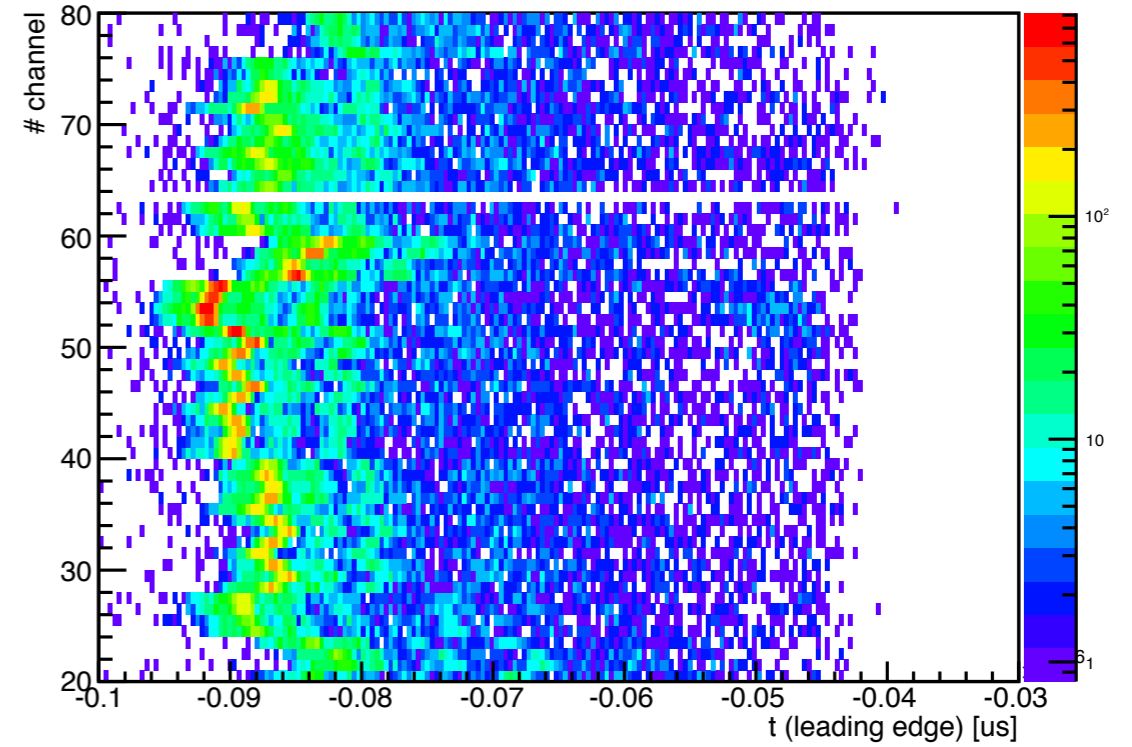
Erik Etzelmüller, Michael Düren, Avetik Hayrapetyan, Kristof Kreuzfeldt,
Julian Rieke, Mustafa Schmidt

PANDA LVI. Collaboration Meeting
29.02.2016

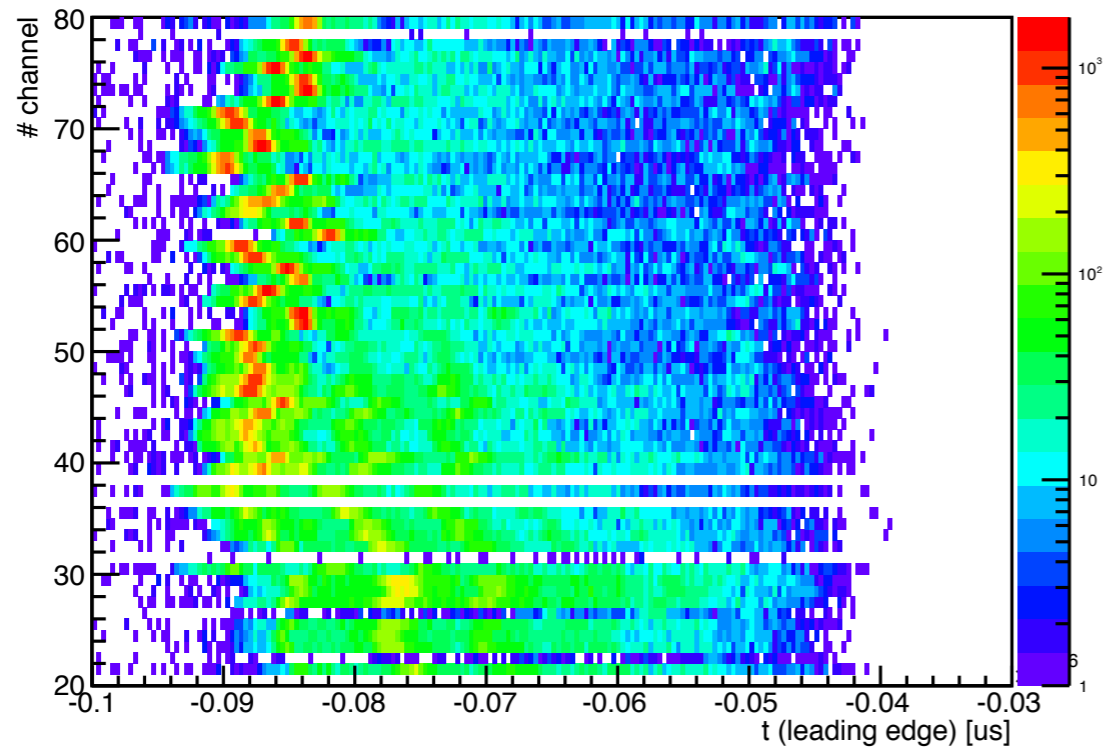
leading edge vs. channel (Photonis 1)



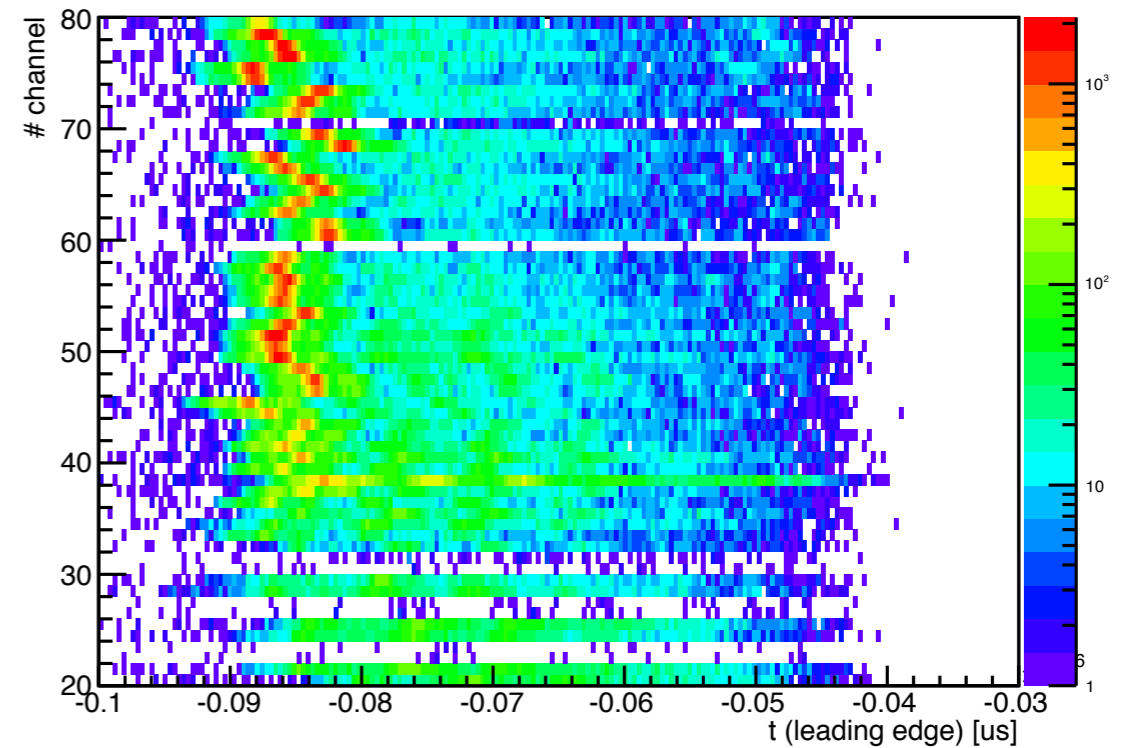
leading edge vs. channel (Photonis 2)



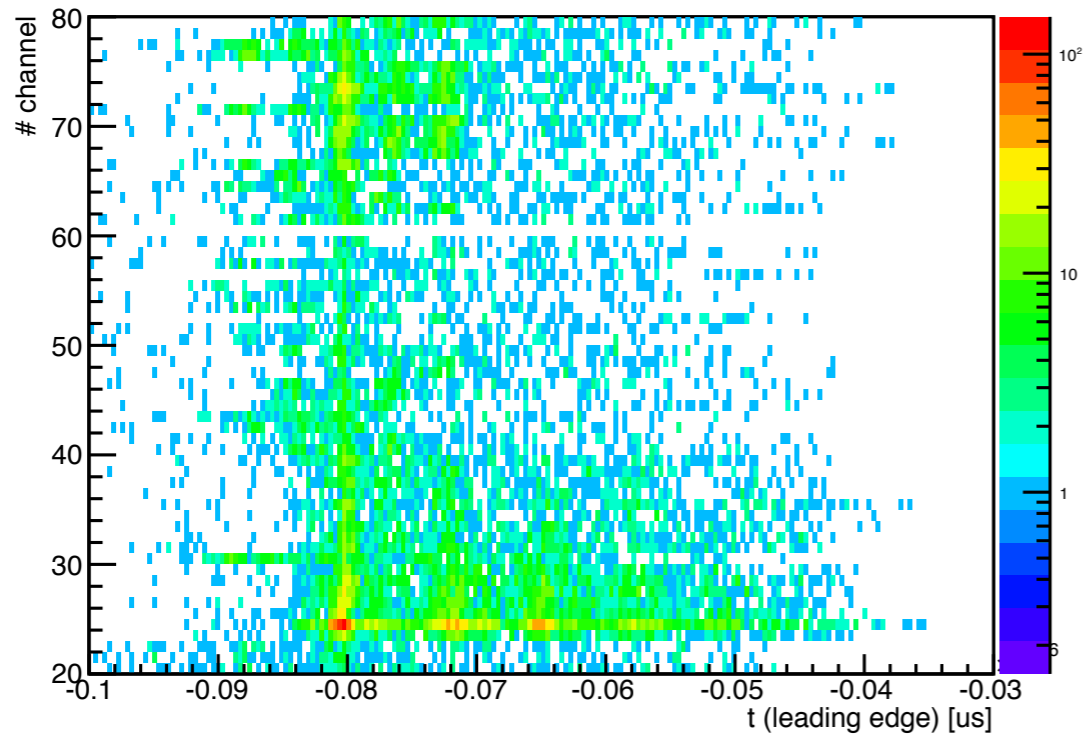
leading edge vs. channel (Hamamatsu 1)



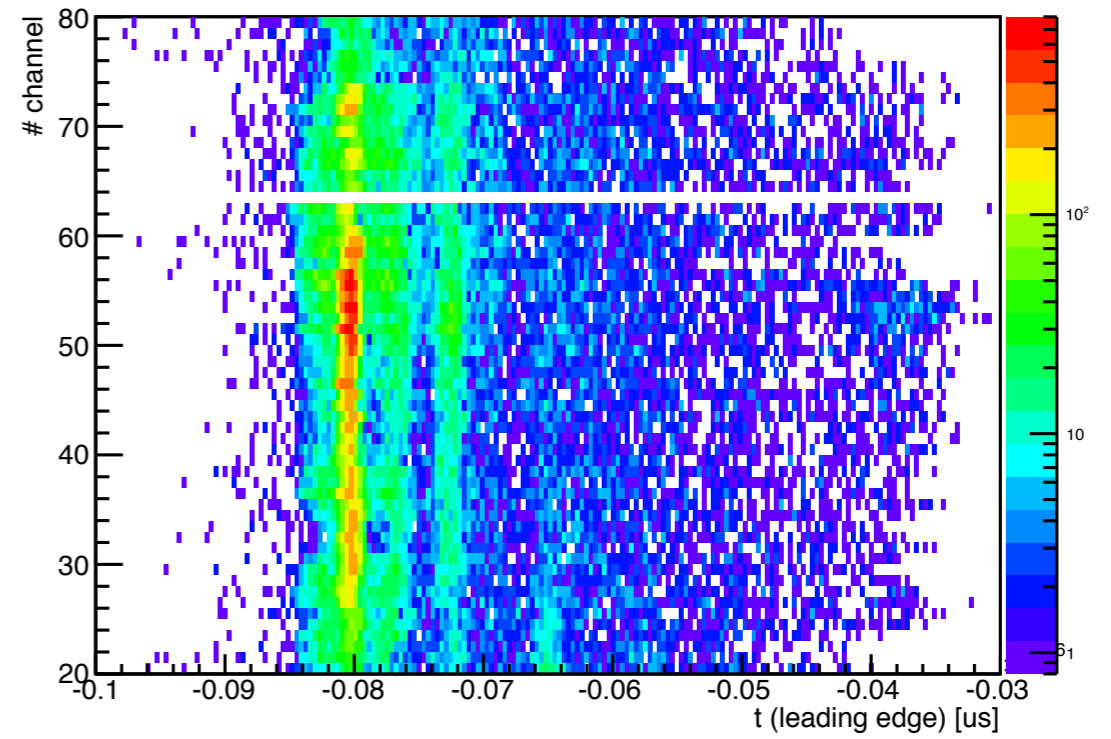
leading edge vs. channel (Hamamatsu 2)



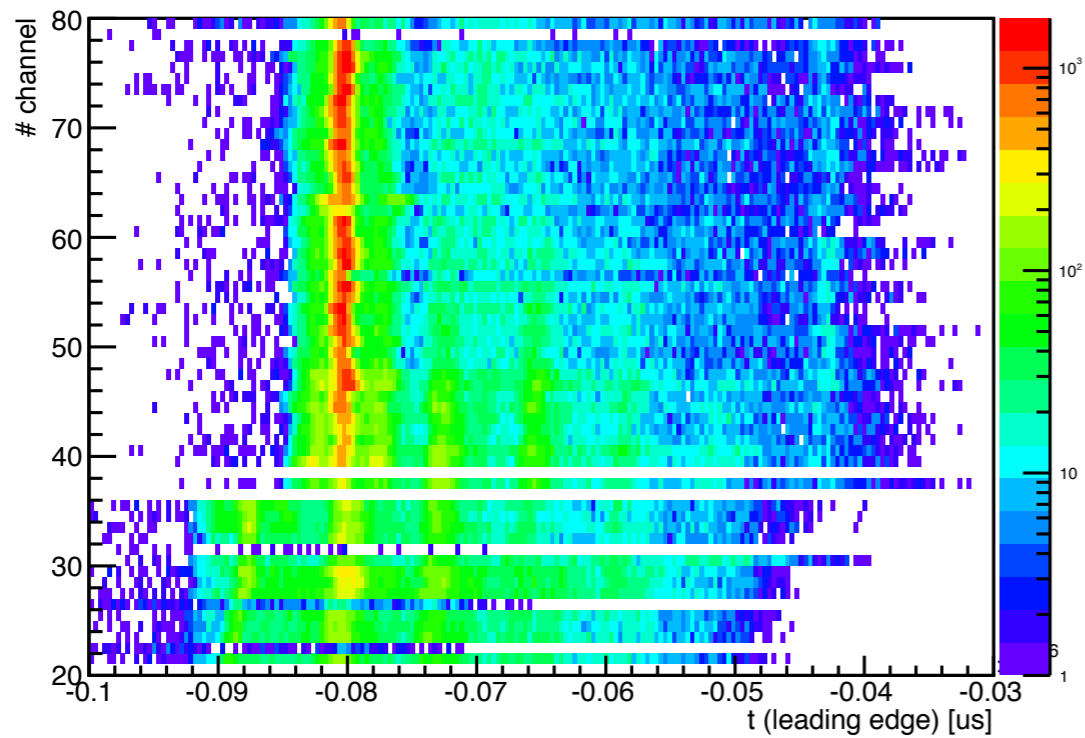
leading edge vs. channel (Photonis 1)



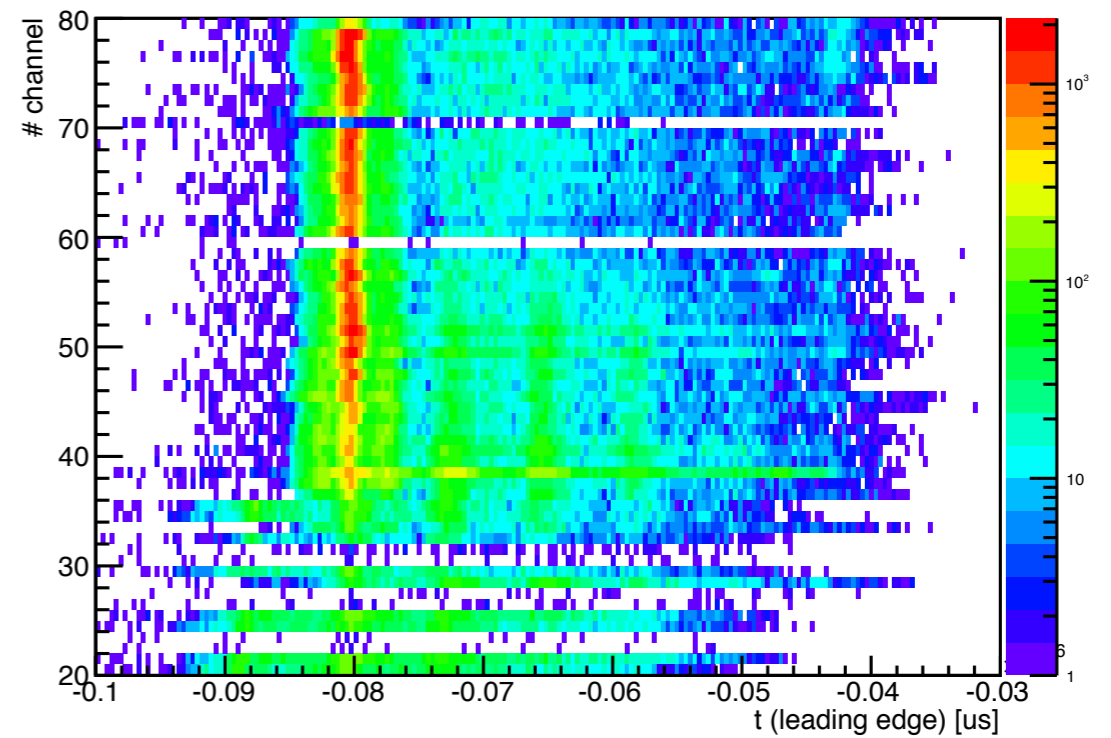
leading edge vs. channel (Photonis 2)



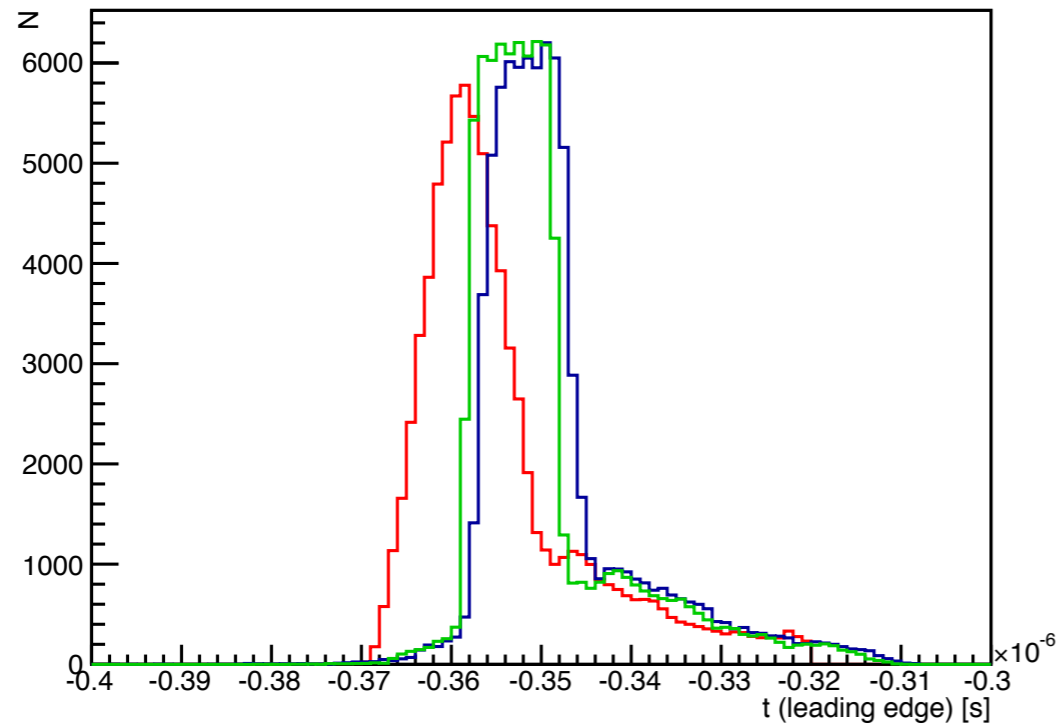
leading edge vs. channel (Hamamatsu 1)



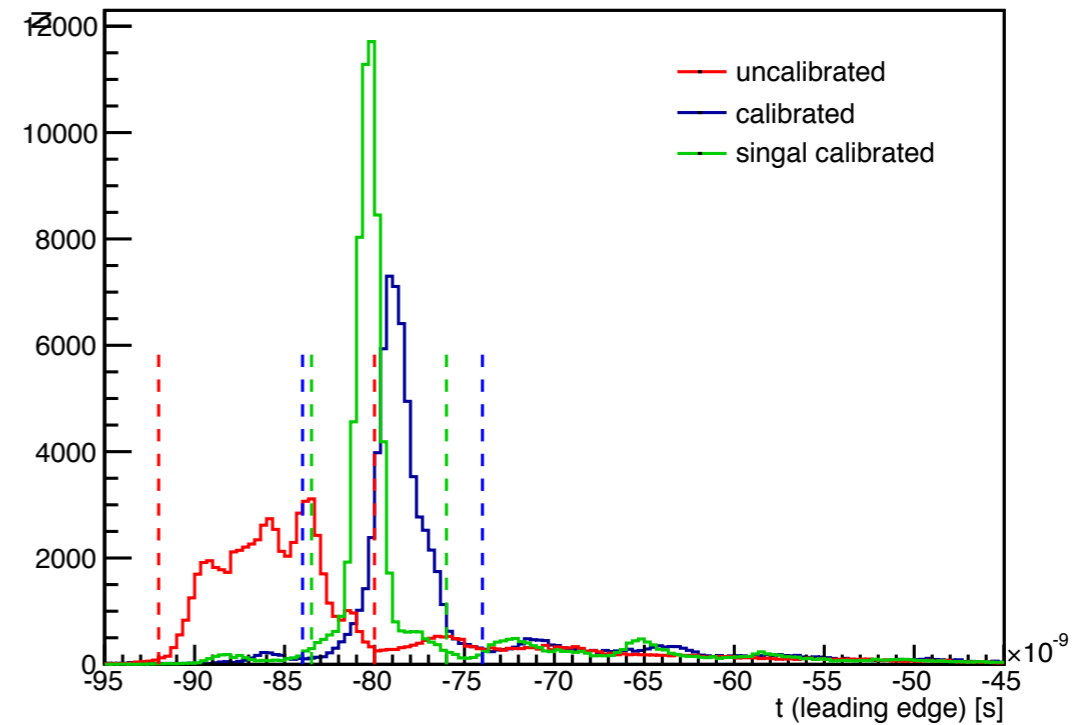
leading edge vs. channel (Hamamatsu 2)



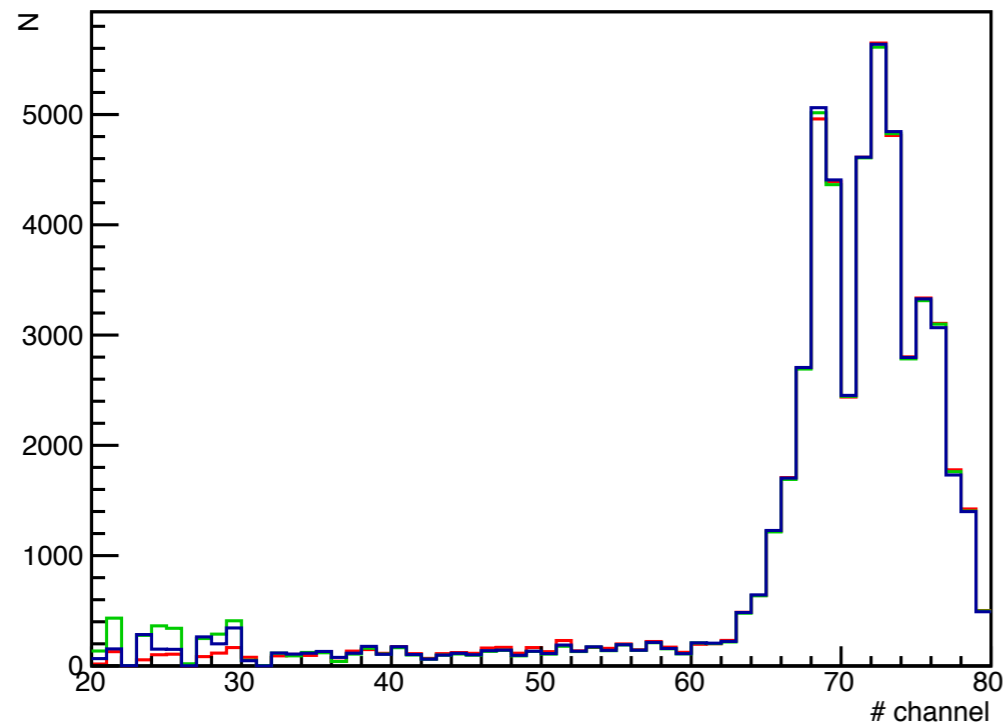
photon t.o.a. leading edge



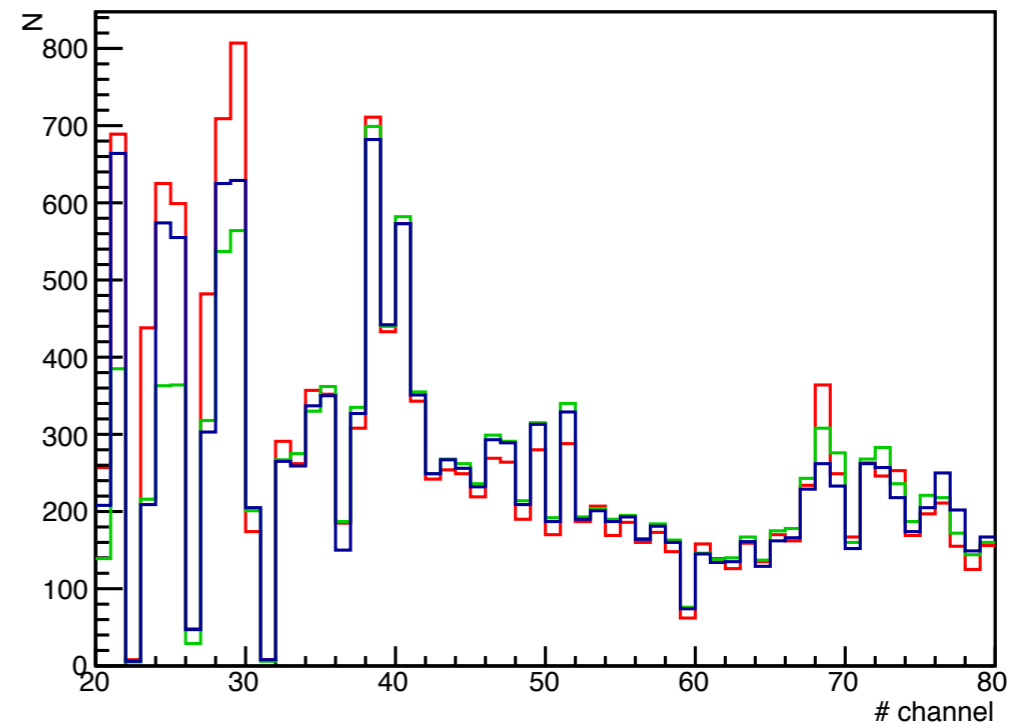
relative photon t.o.a. leading edge



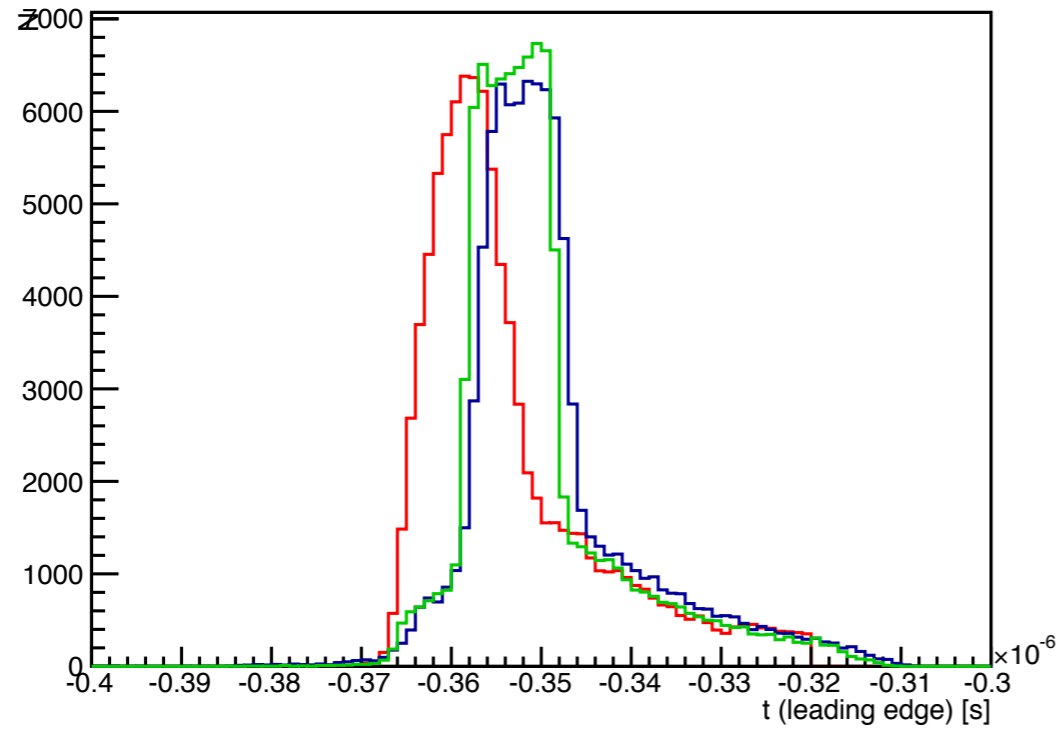
Channel Distribution (Hamamatsu)



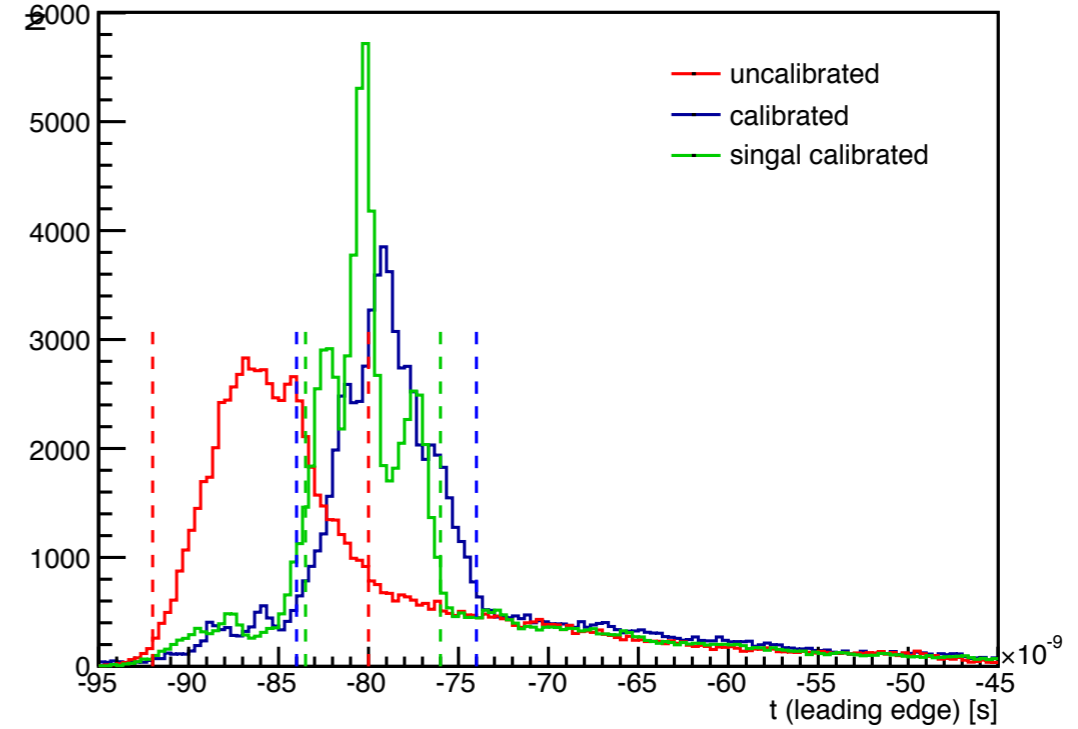
Excluded Background Distribution (Hamamatsu)



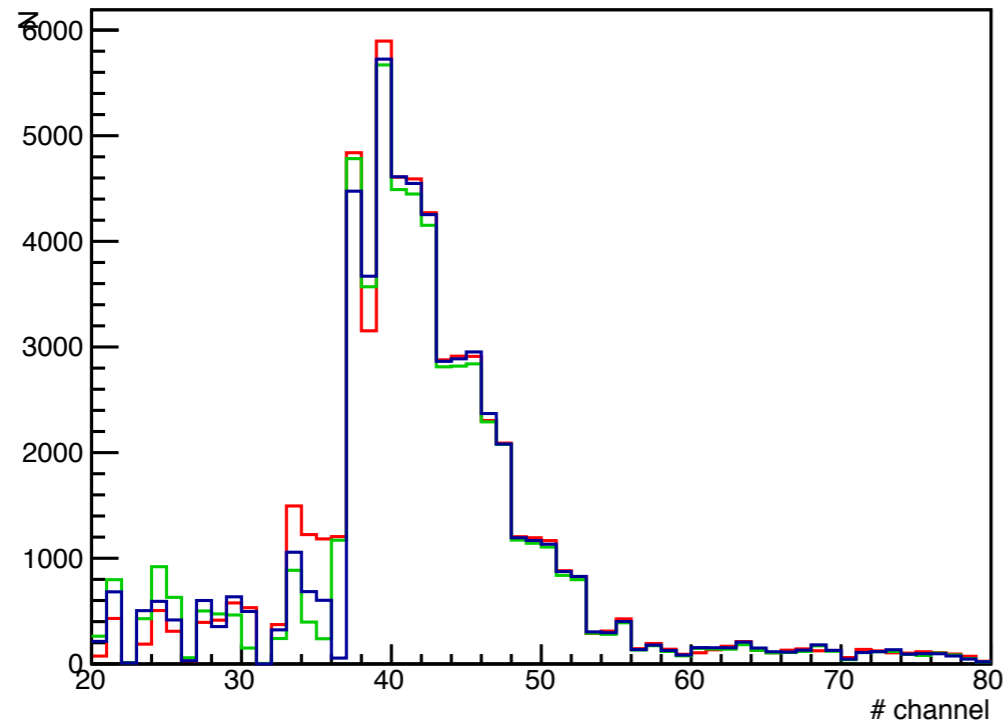
photon t.o.a. leading edge



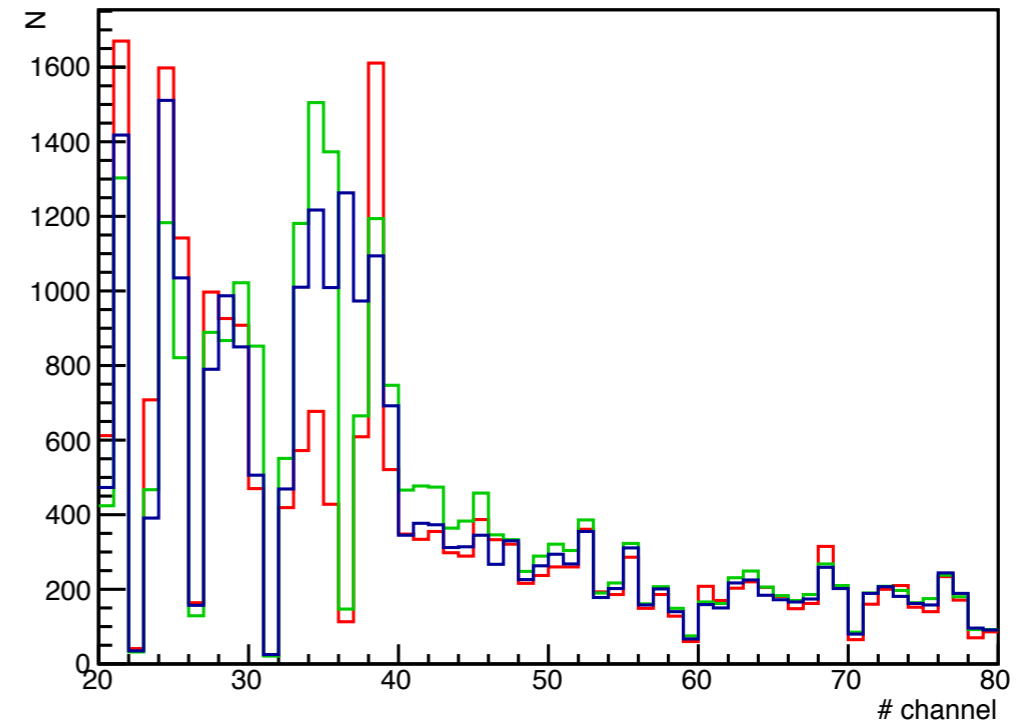
relative photon t.o.a. leading edge



Channel Distribution (Hamamatsu)

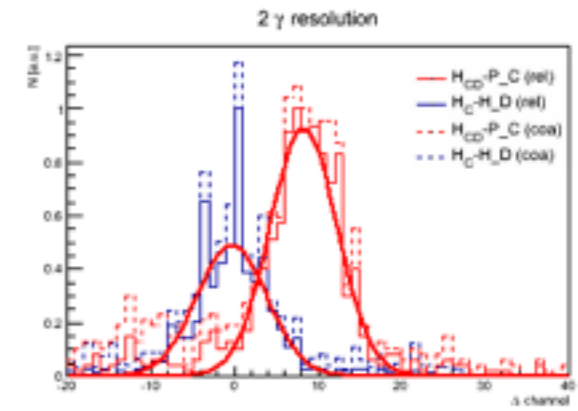
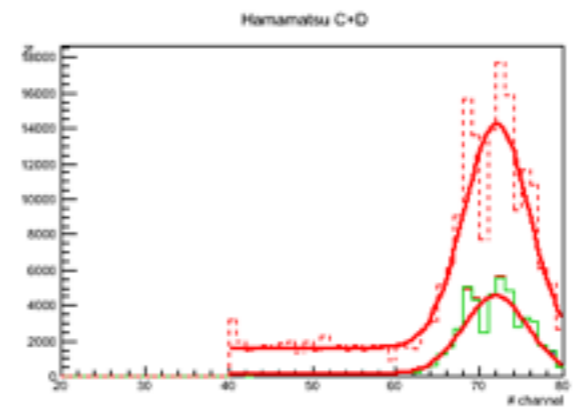
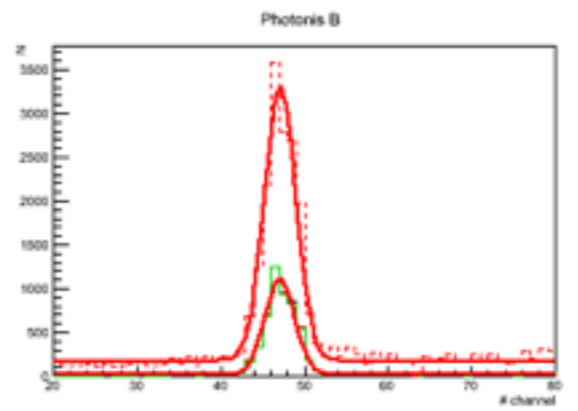
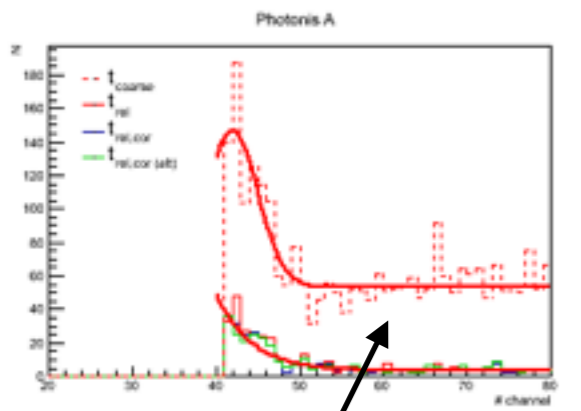
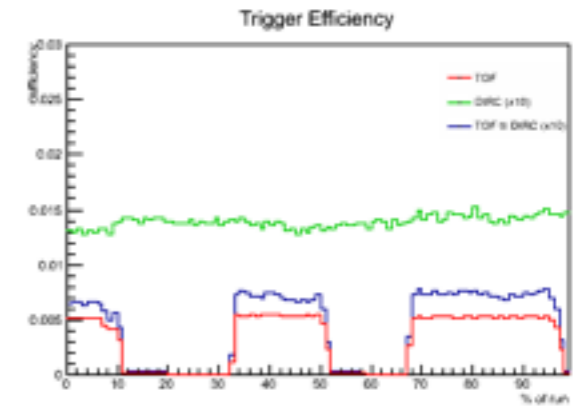
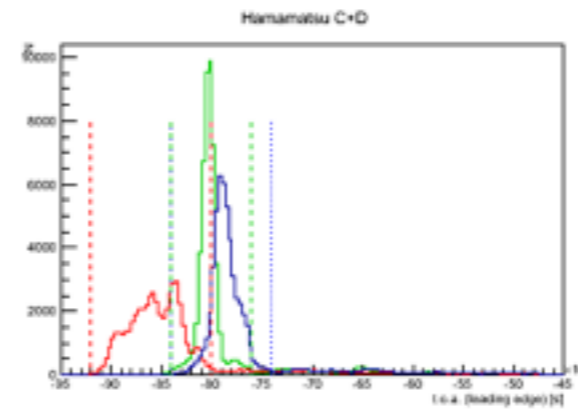
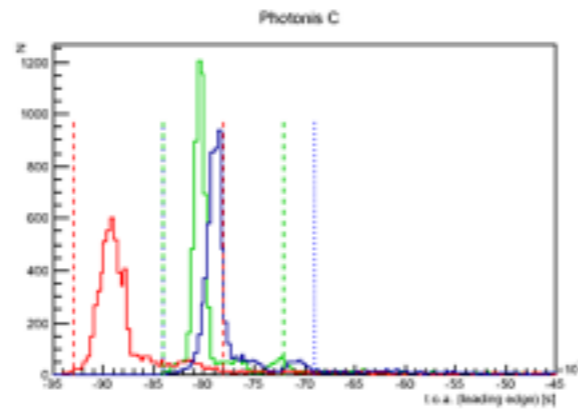
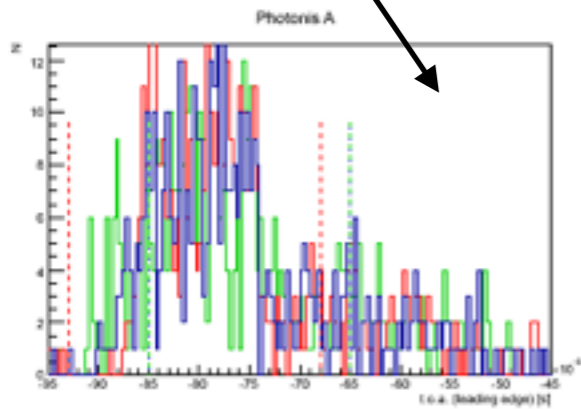


Excluded Background Distribution (Hamamatsu)



10 deg, 10 GeV/c

time

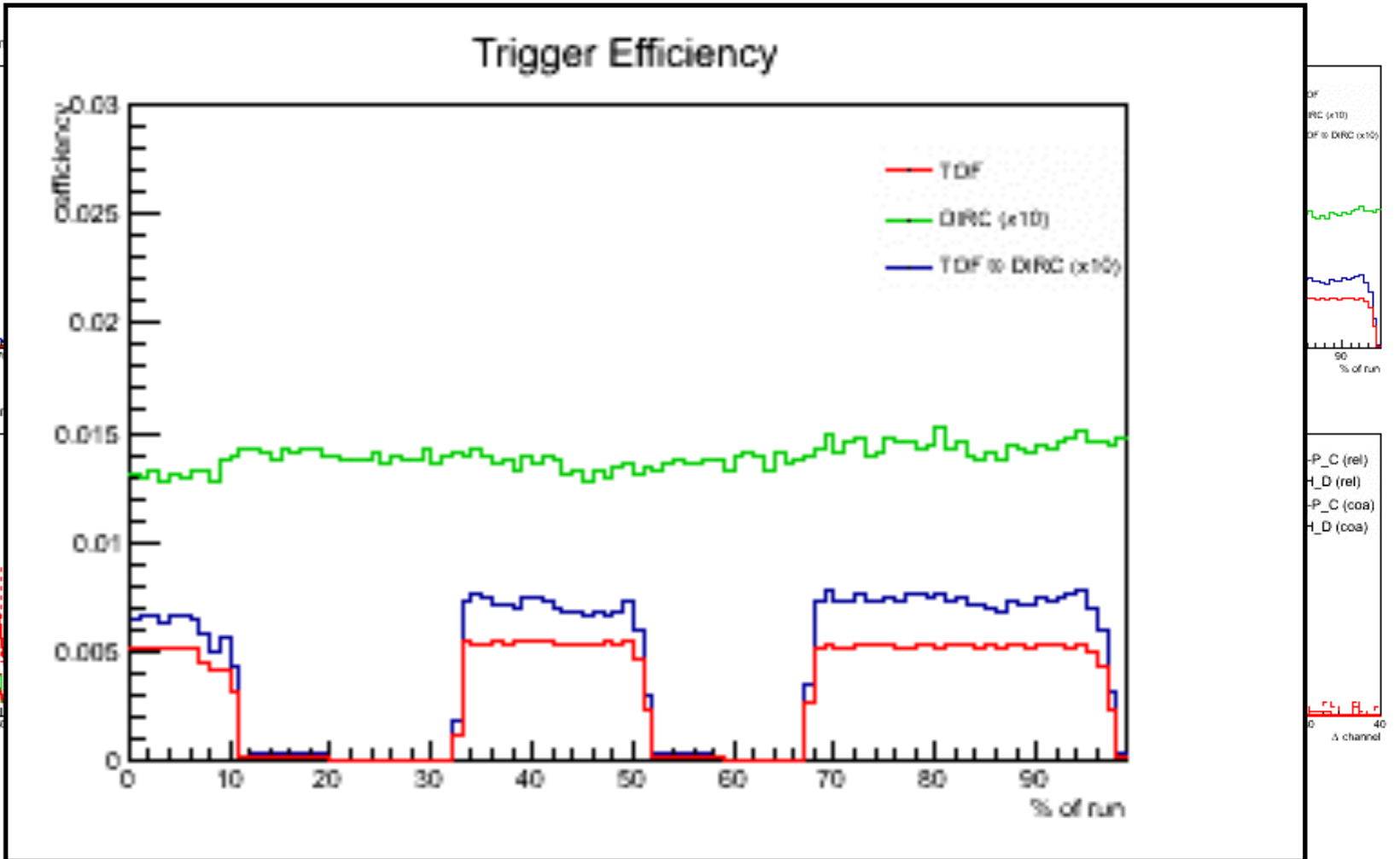
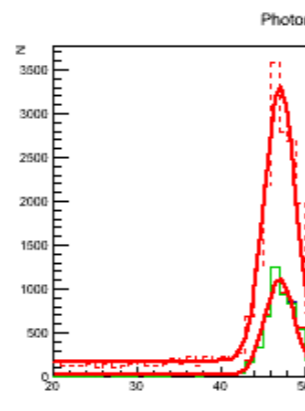
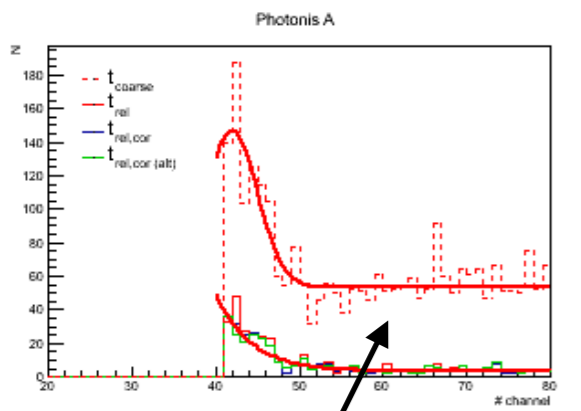
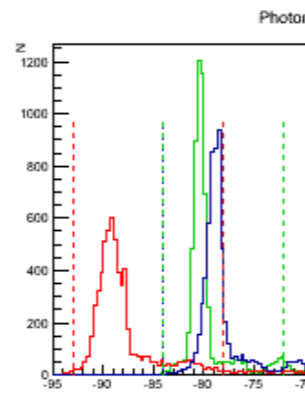
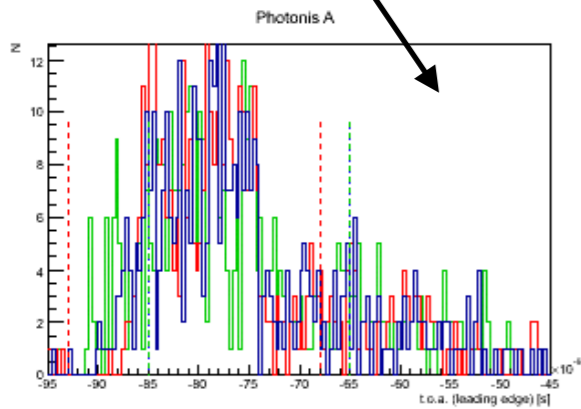


channel

- Good run, all fits converge, TOF-MCP has black outs

10 deg, 10 GeV/c

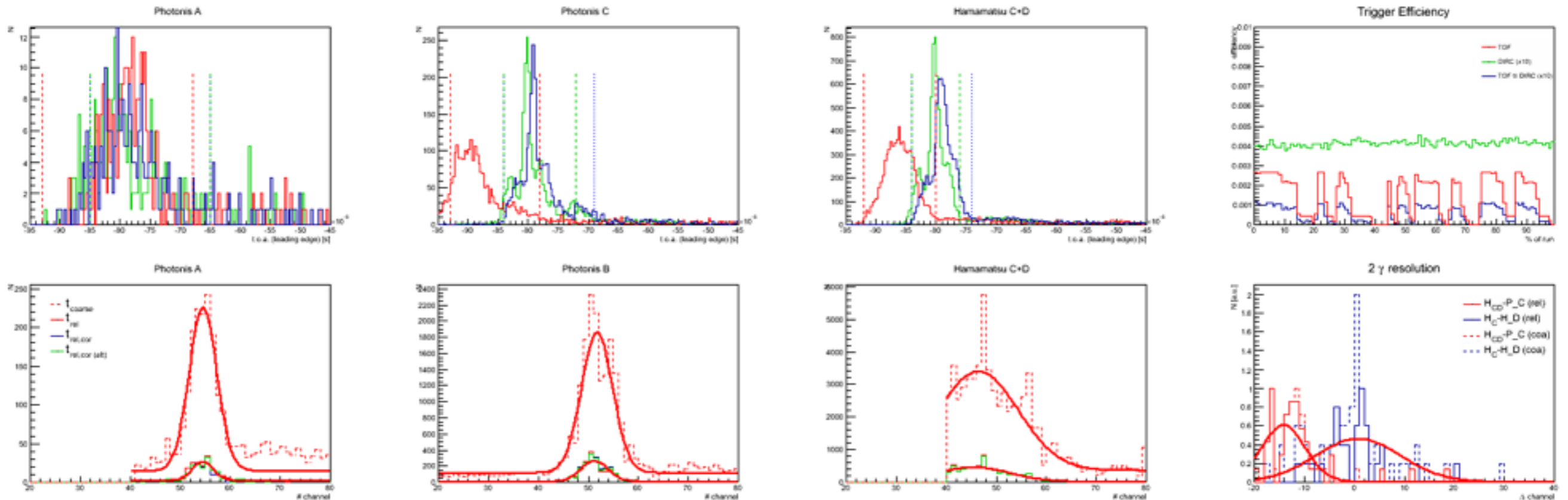
time



channel

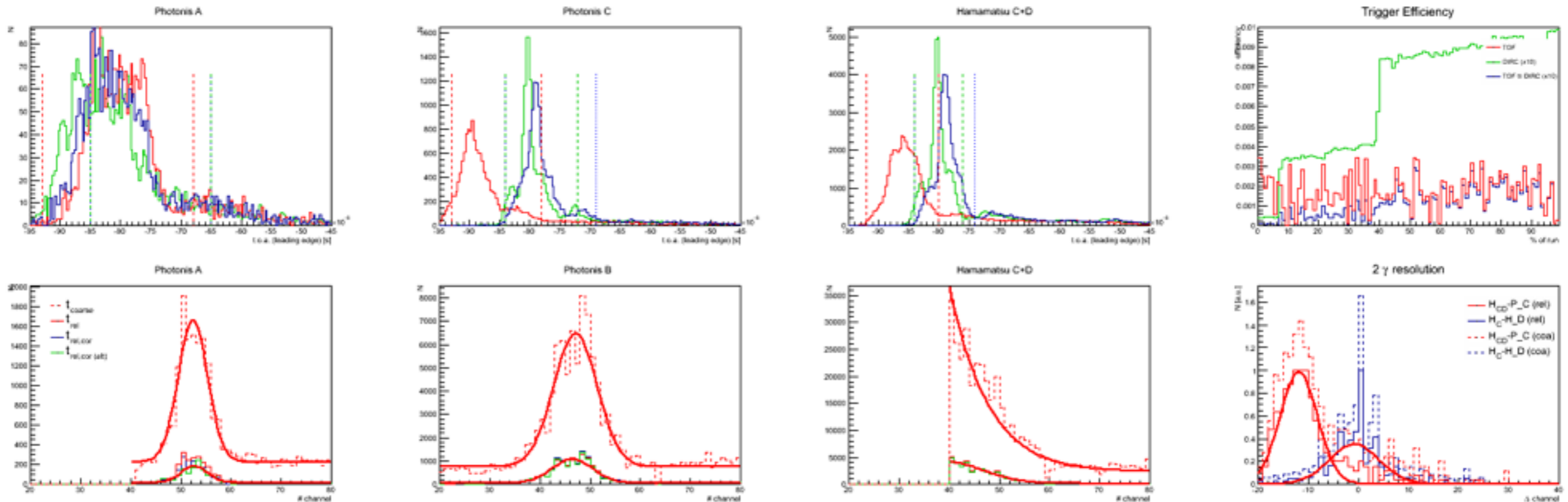
- Good run, all fits converge, TOF-MCP has black outs

11,2 deg, 6 GeV/c



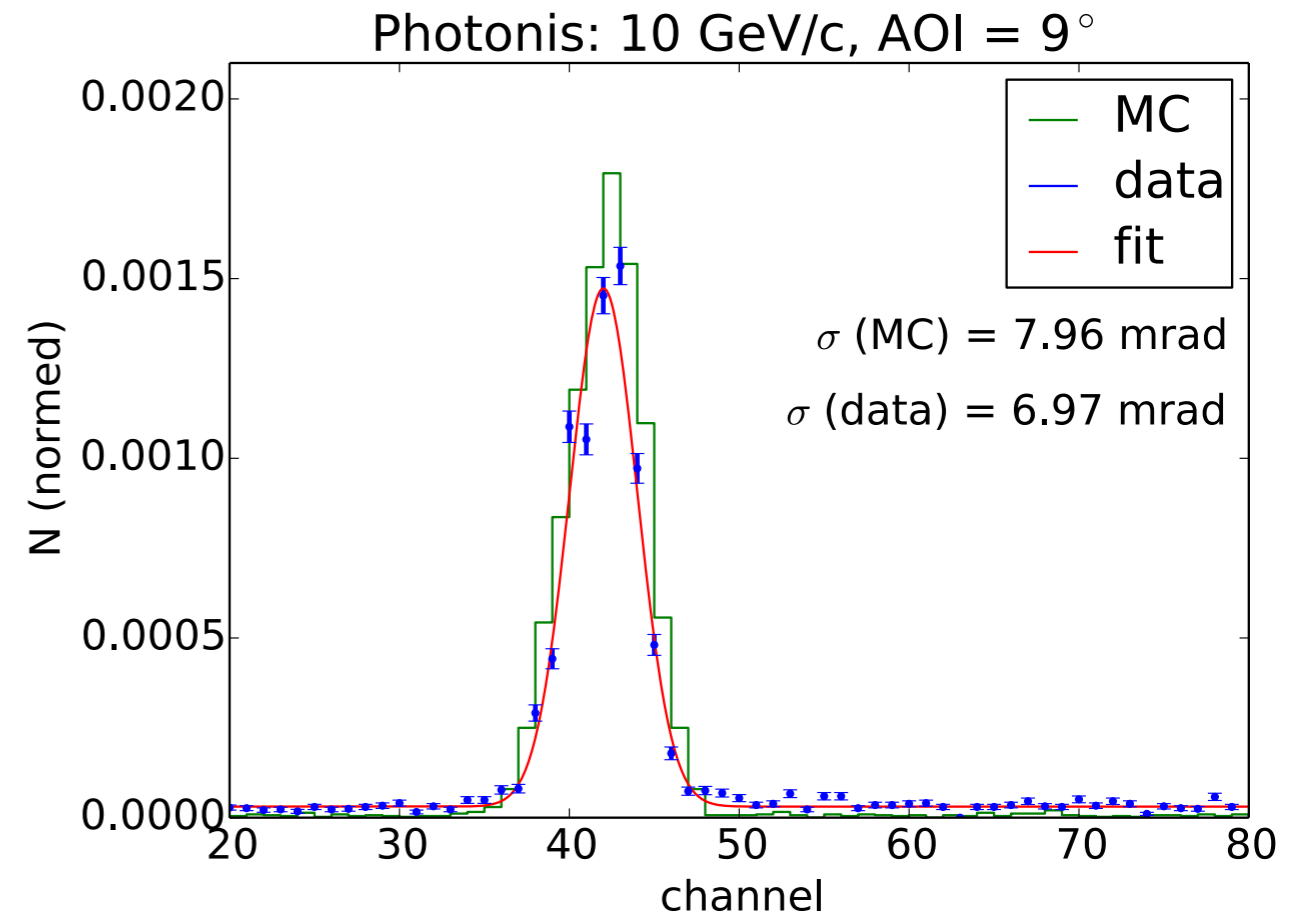
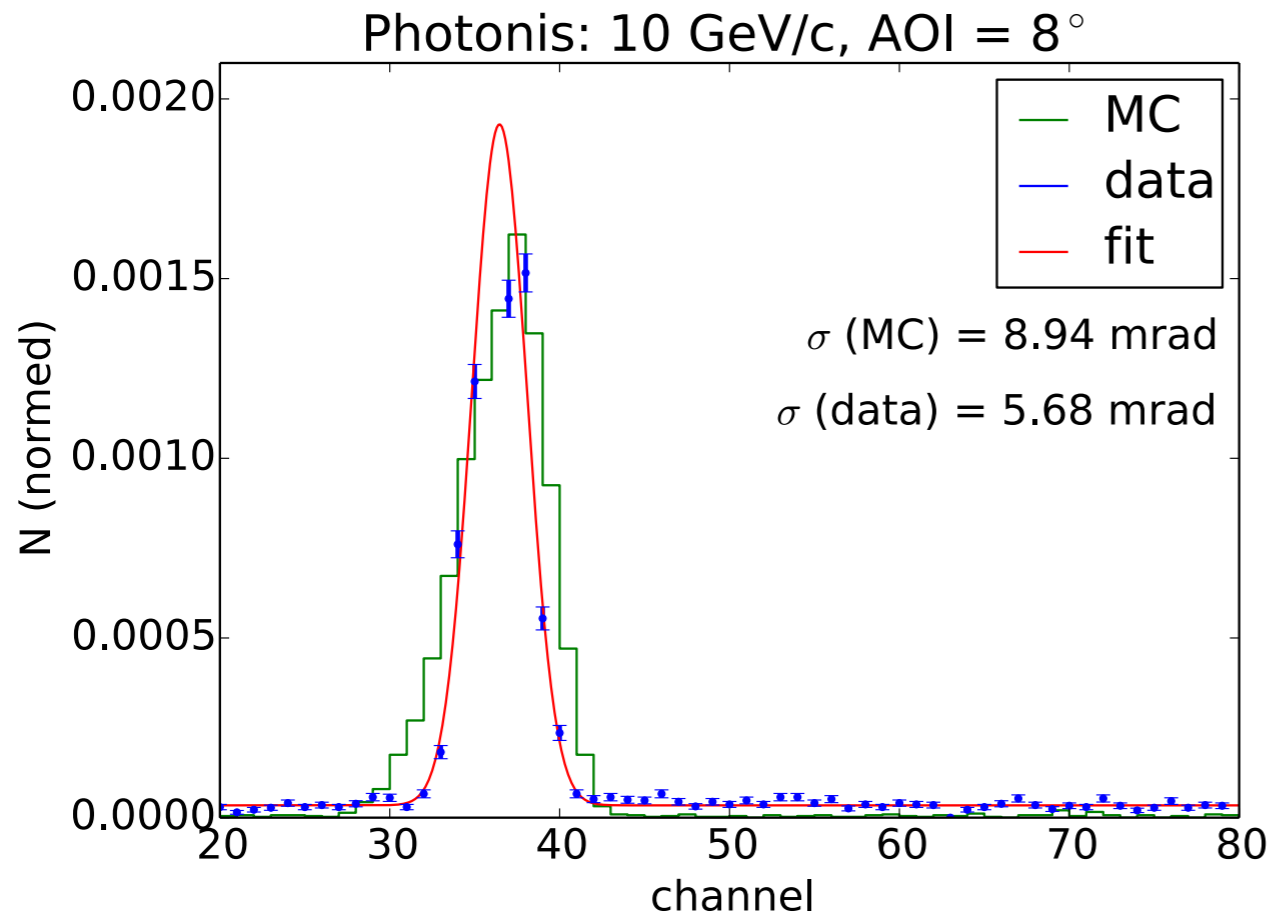
- Good run, not all fits converge, TOF-MCP one black out

11,2 deg, 5 GeV/c (x,y-scan)



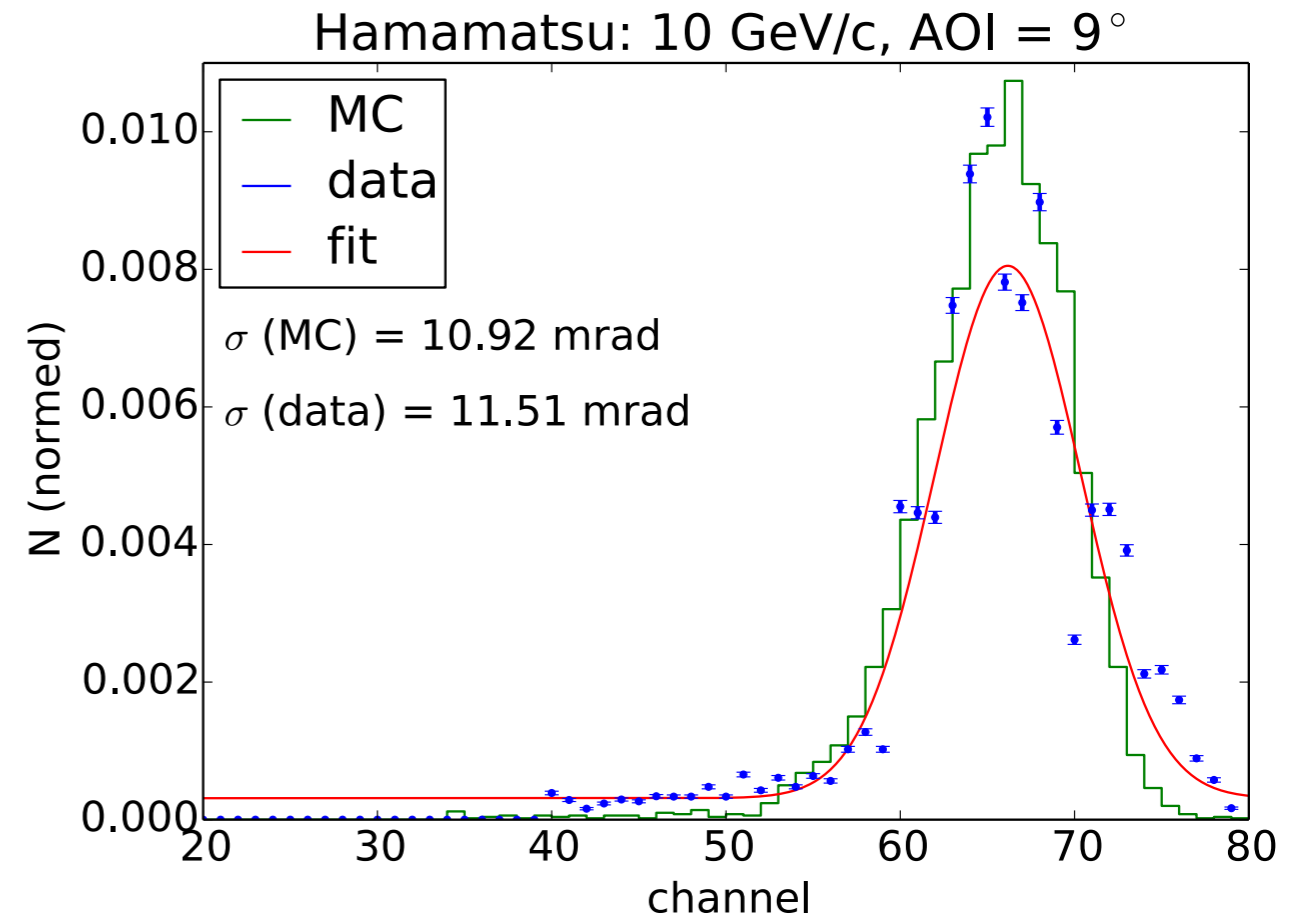
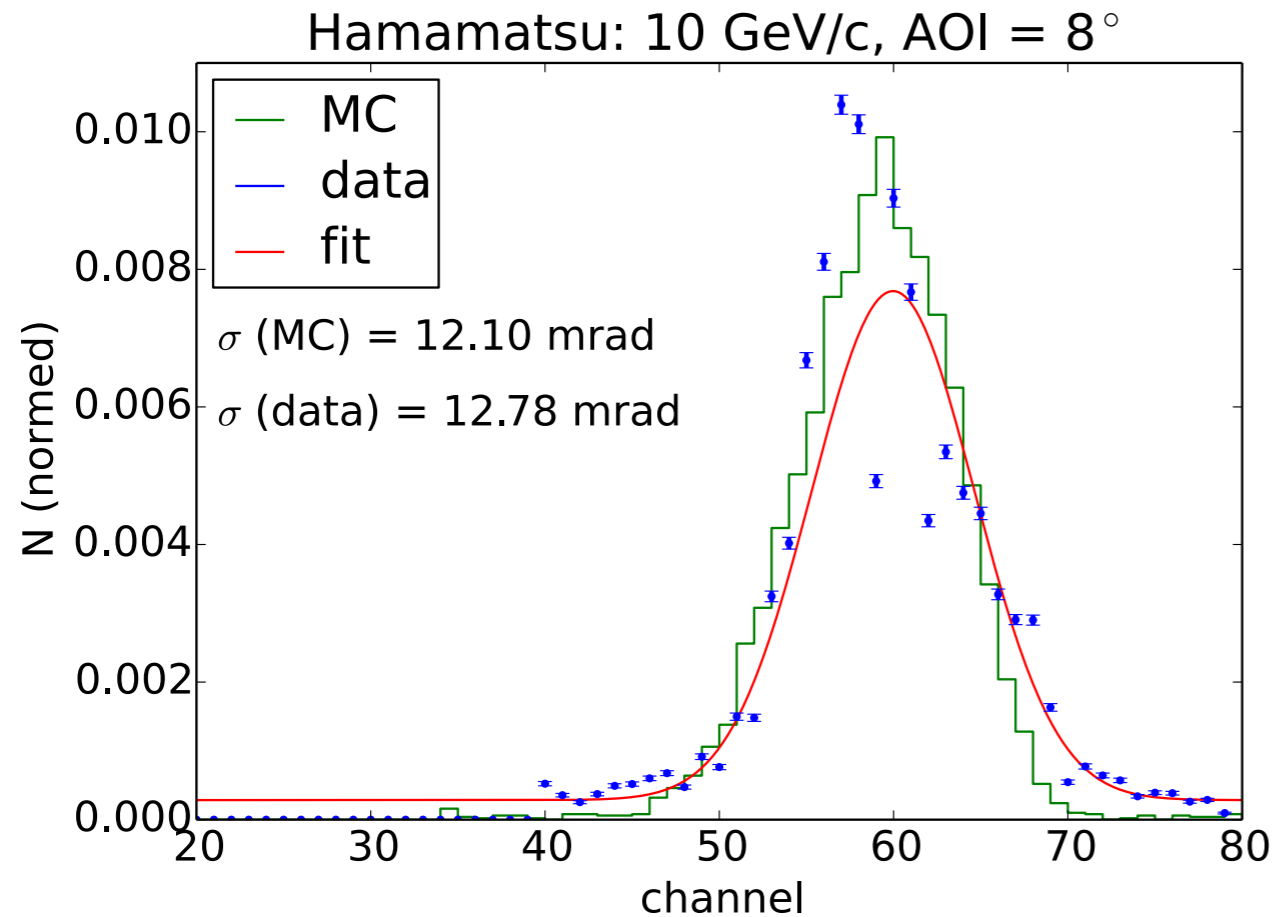
- change in efficiency during data taking
- data taking over about 10 hours

data vs. MC Photonis



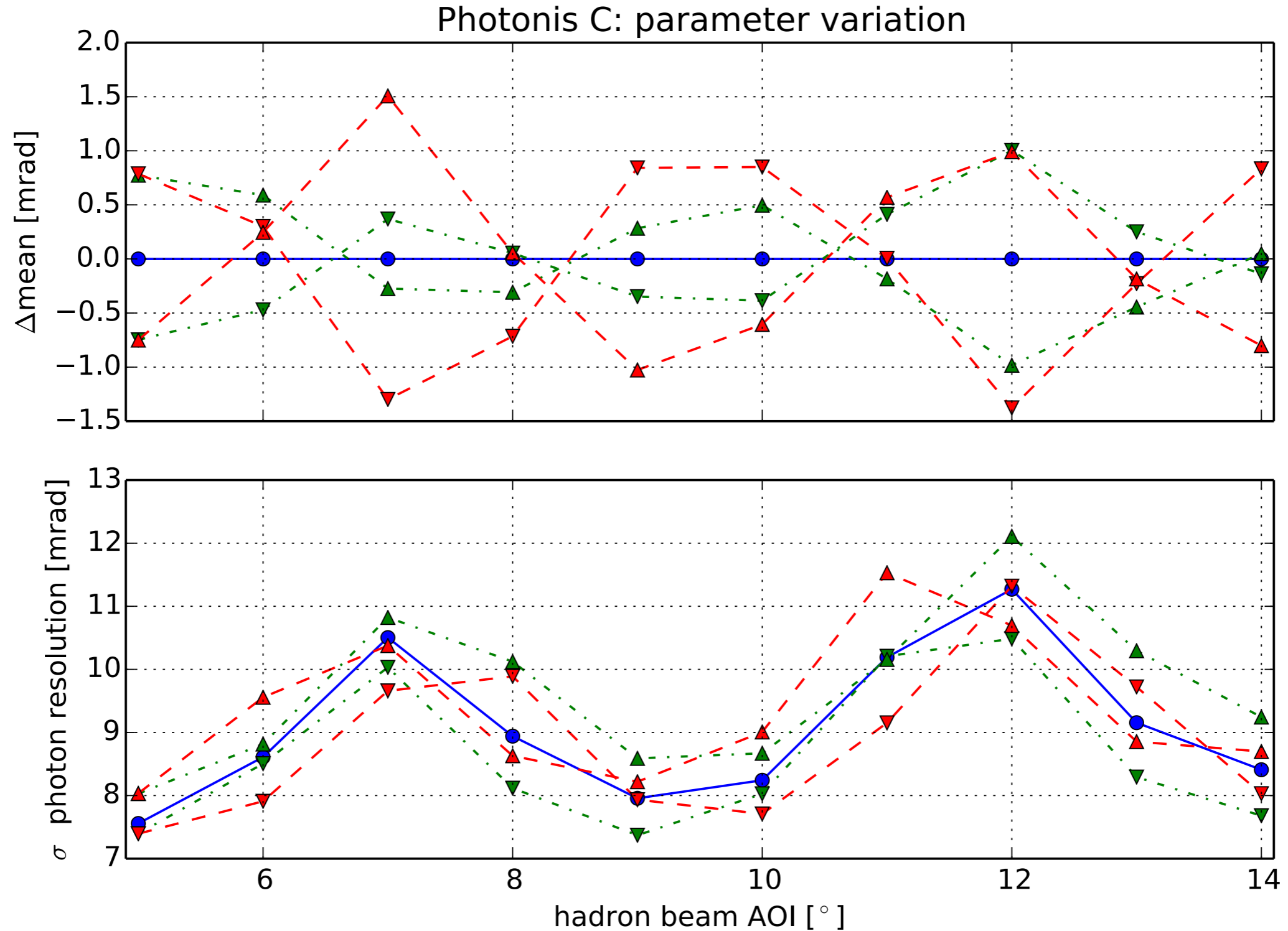
- Resolution varies for different AOIs

data vs. MC Hamamatsu

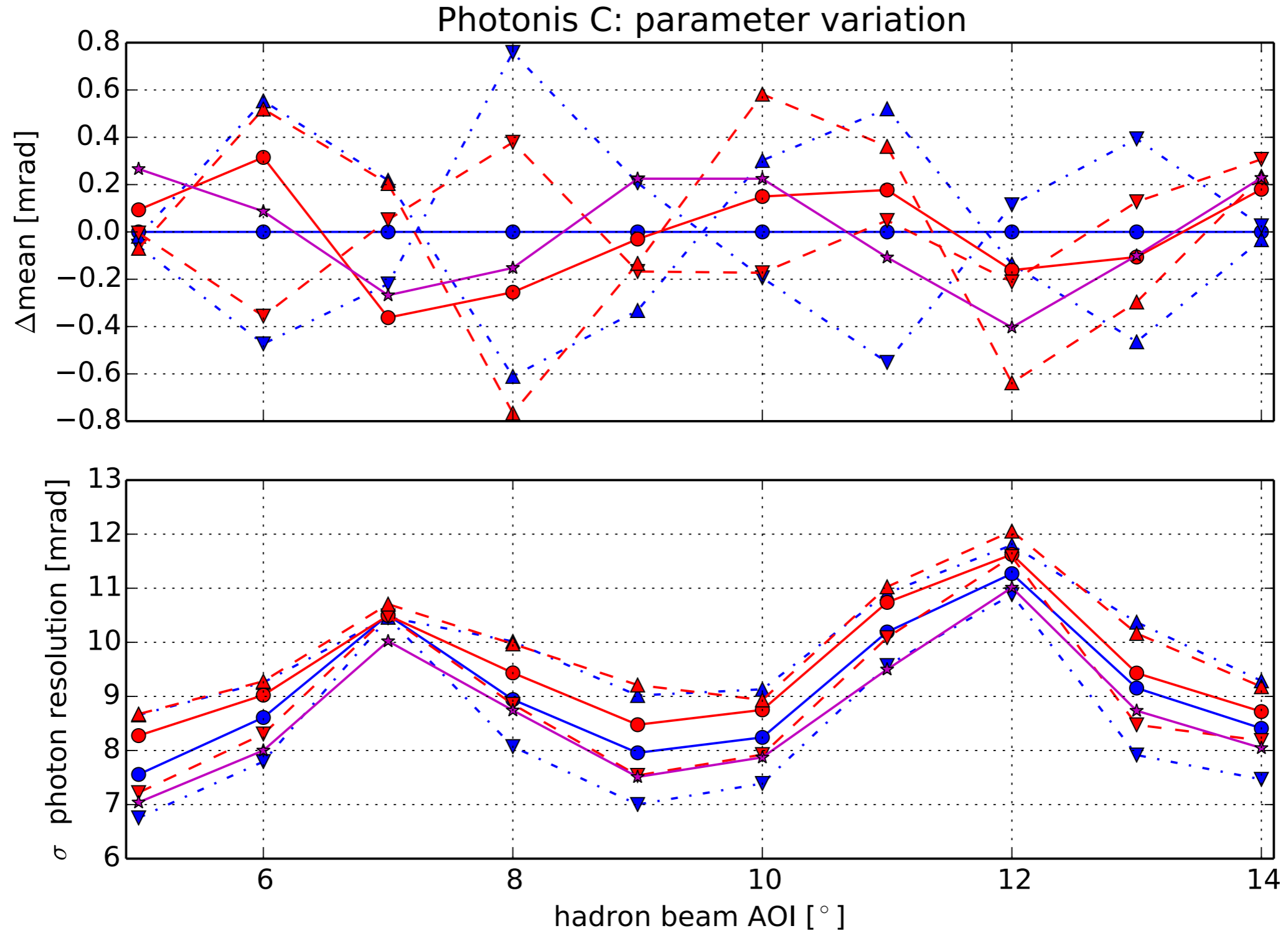


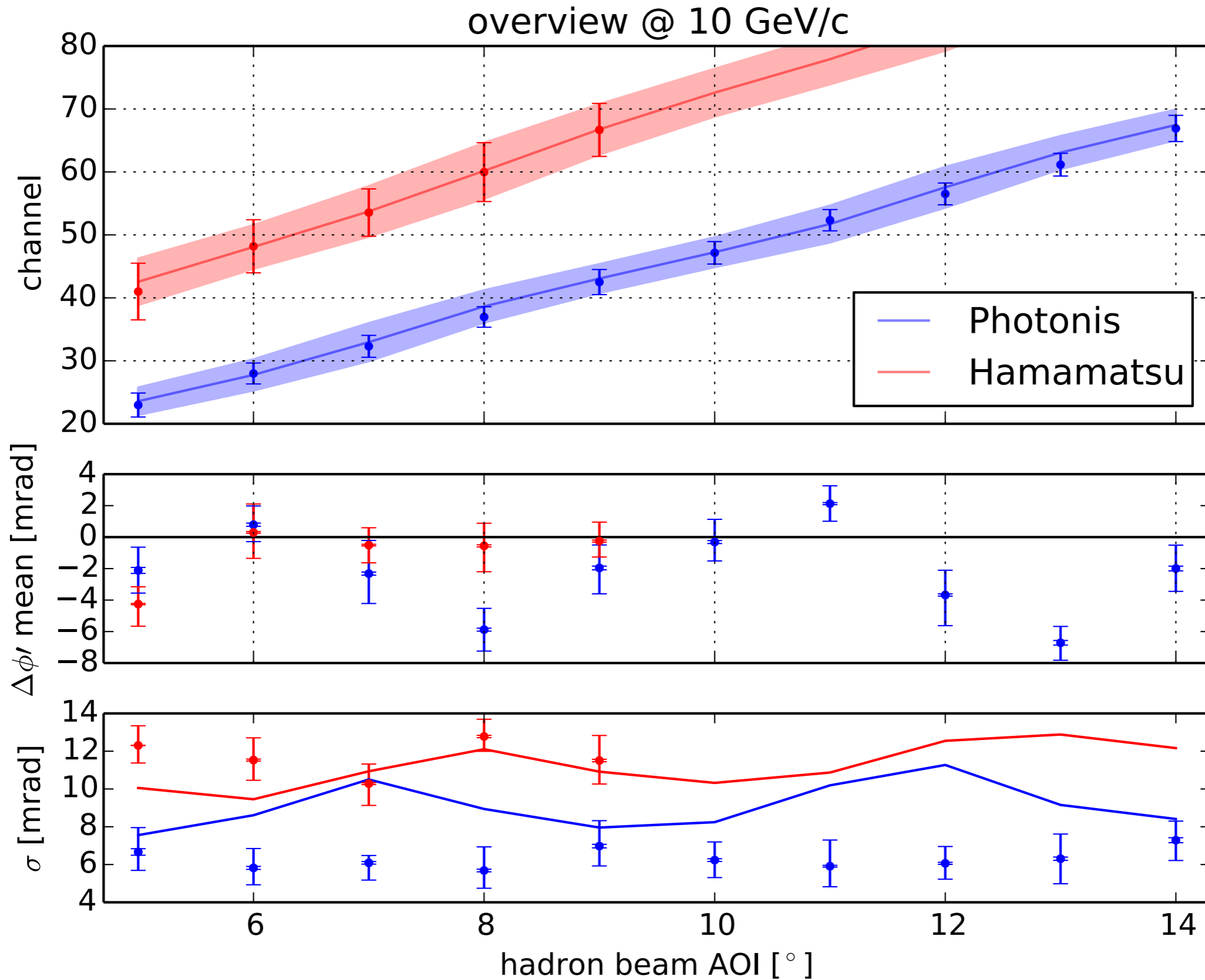
- Resolution matches well

impact of beam position



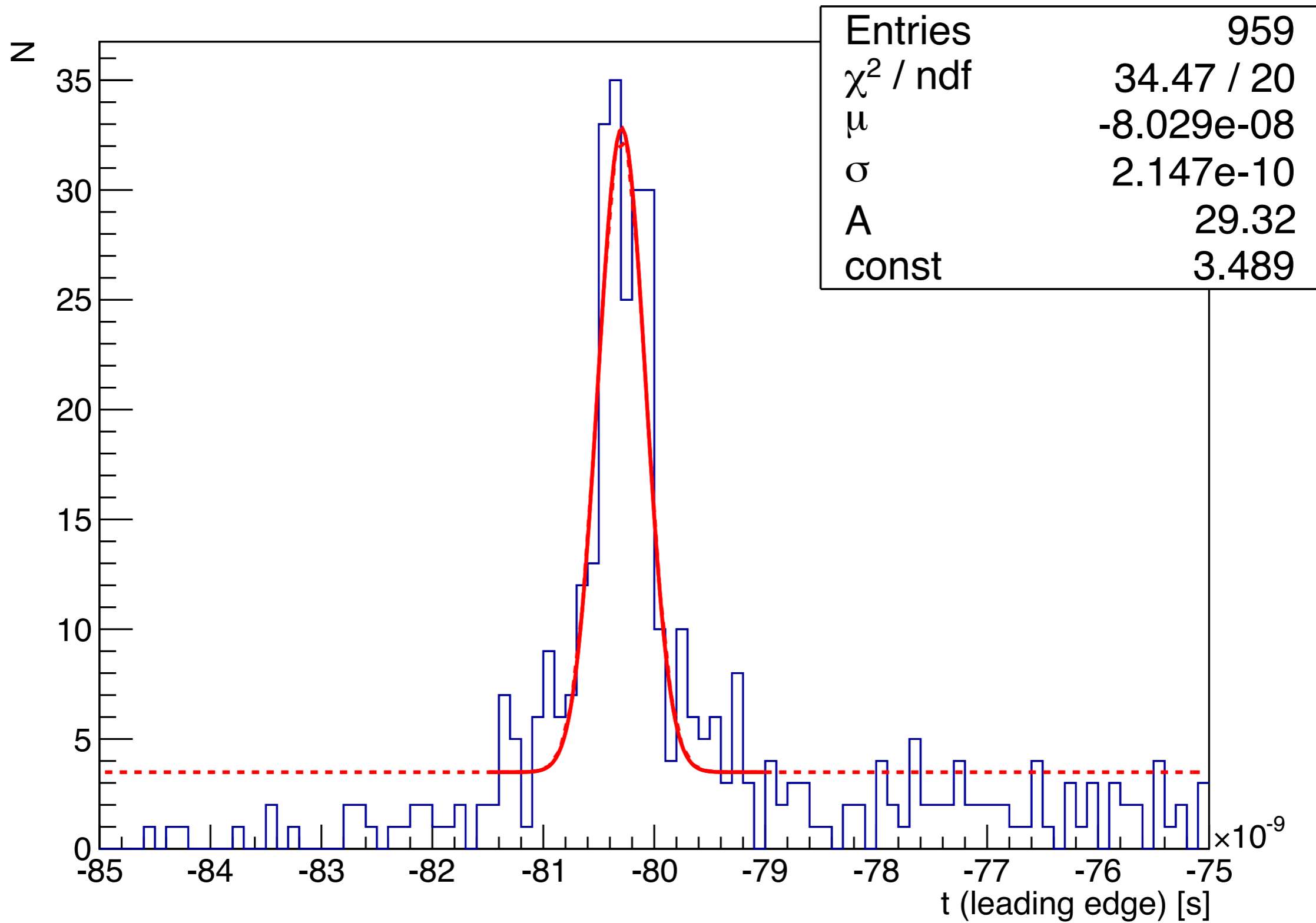
impact of beam profile



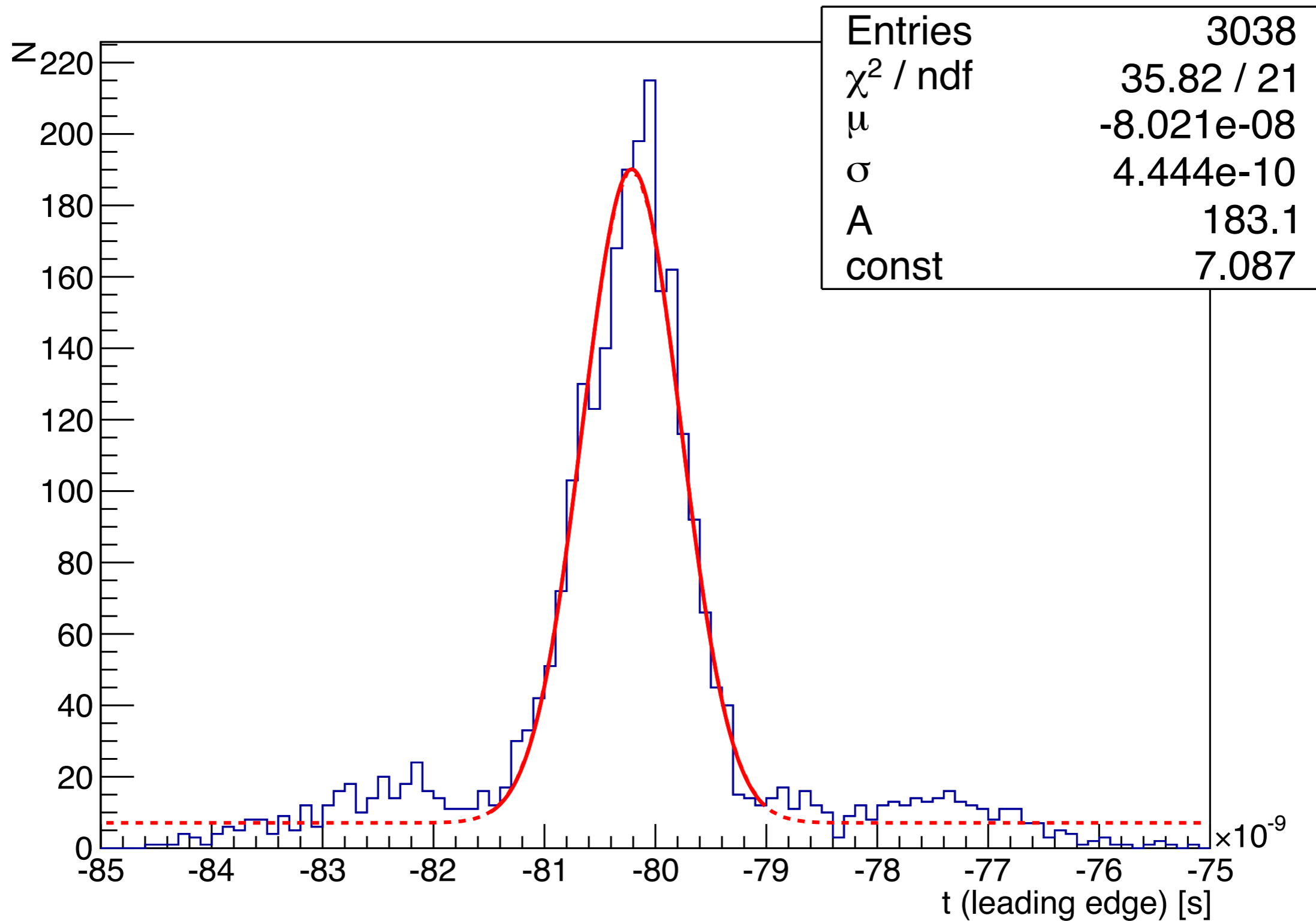


Backup

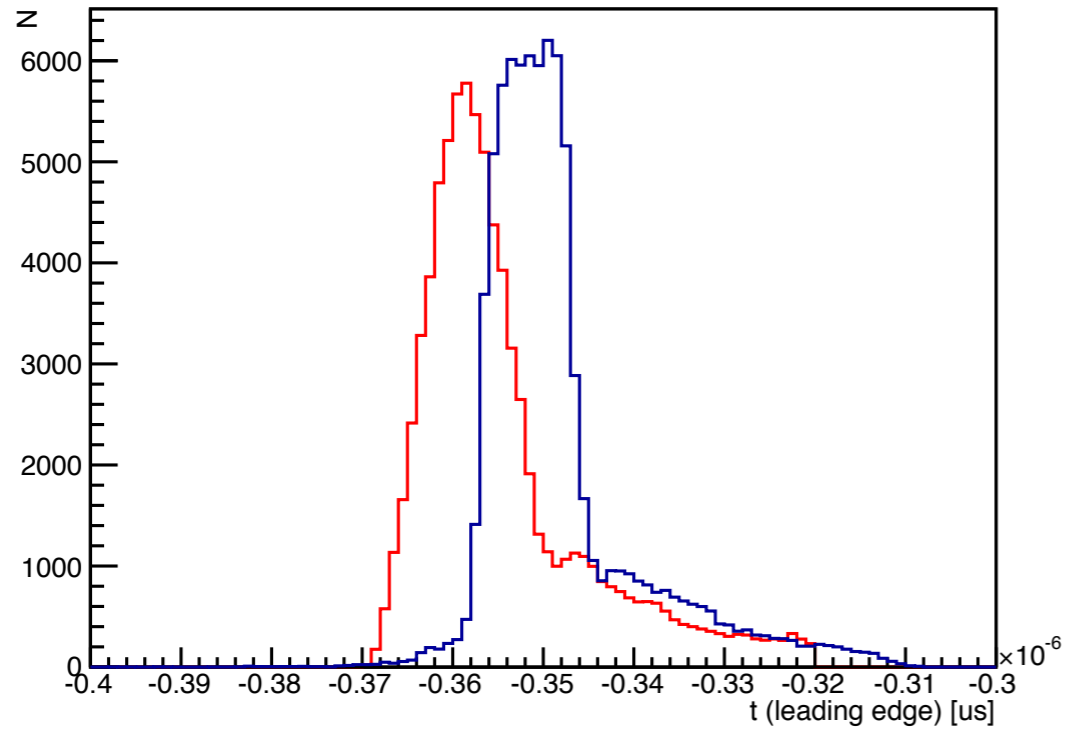
Time Resolution (Photonis A)



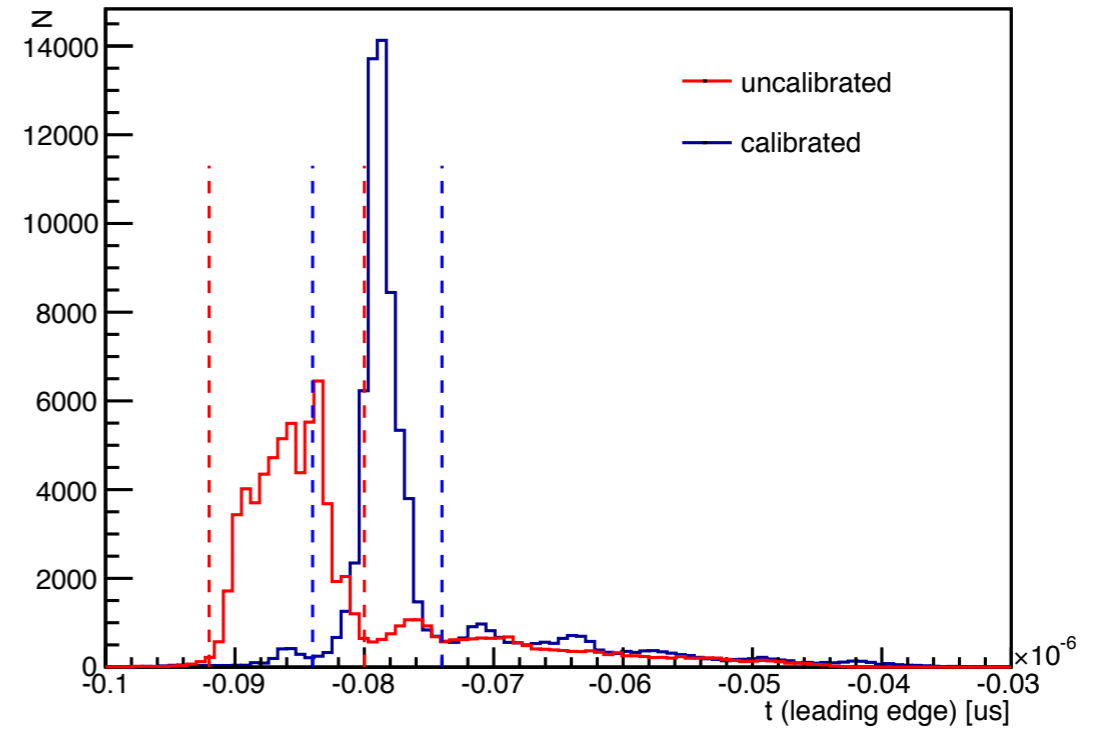
Time Resolution (Hamamatsu A, Channel 57)



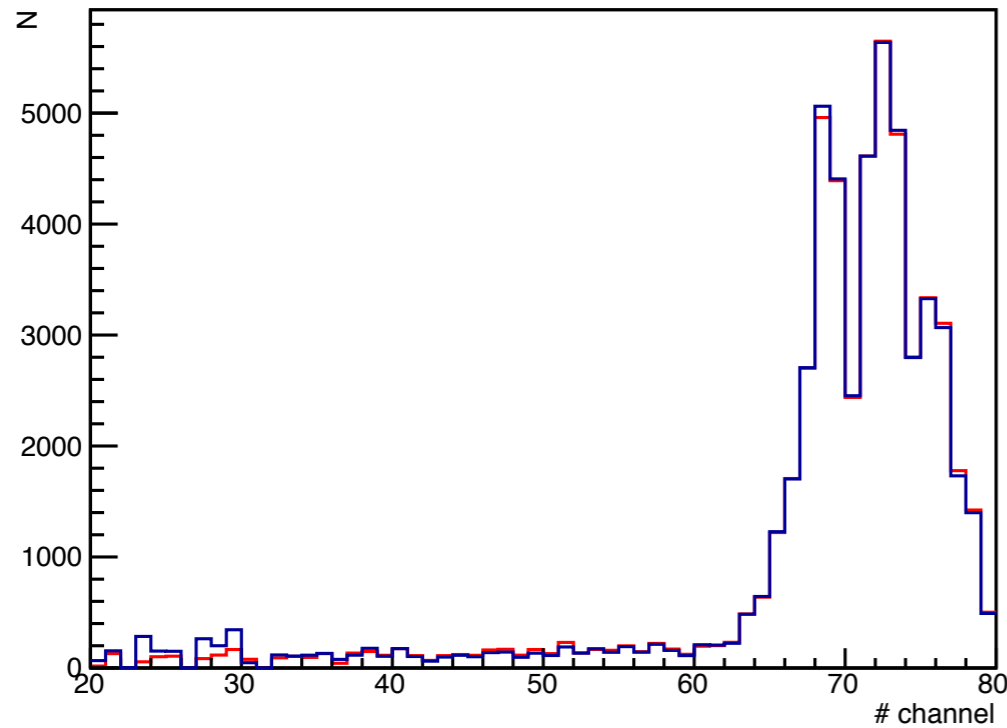
photon t.o.a. leading edge



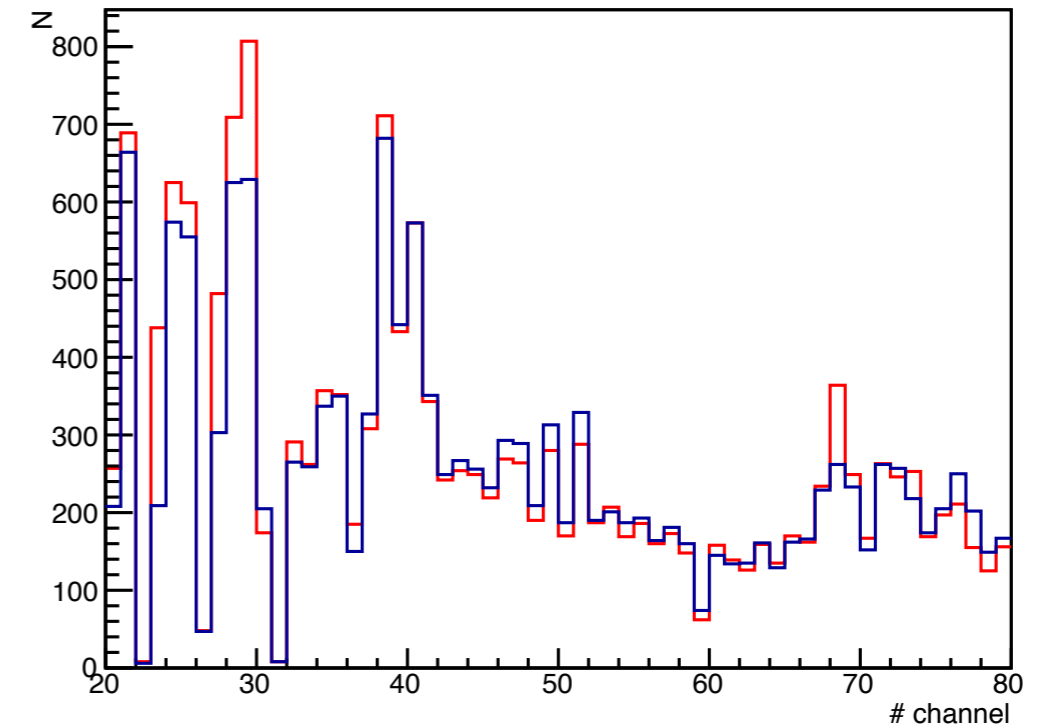
relative photon t.o.a. leading edge



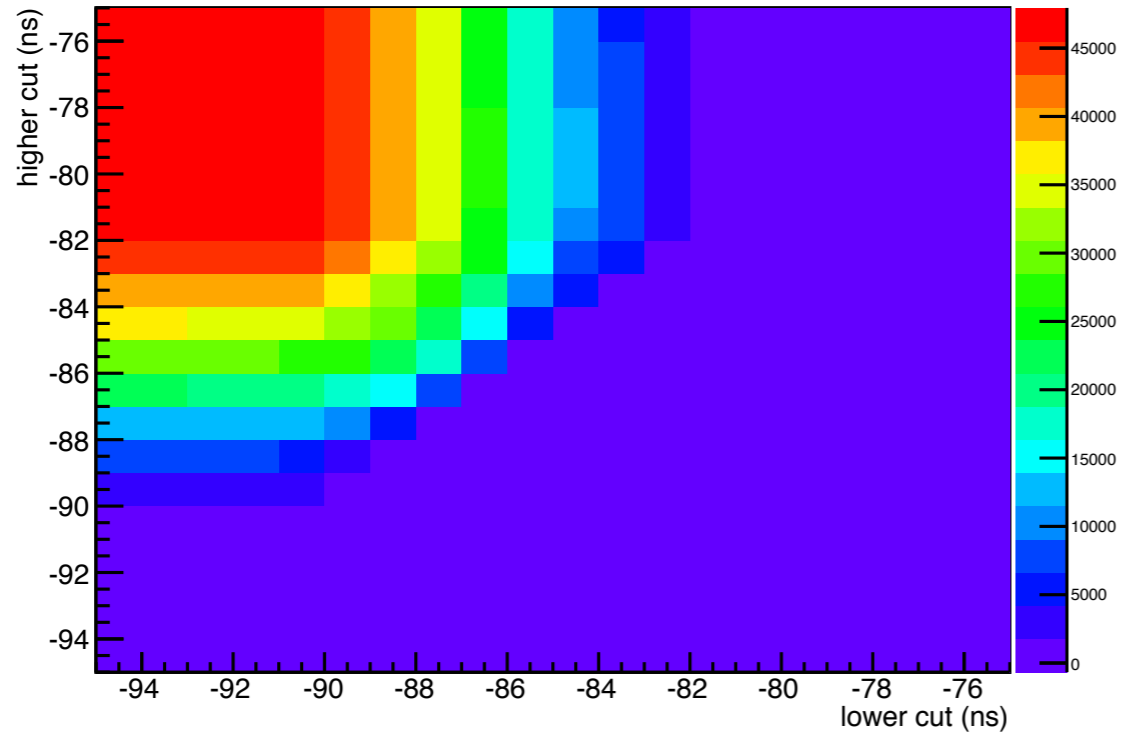
Channel Distribution (Hamamatsu)



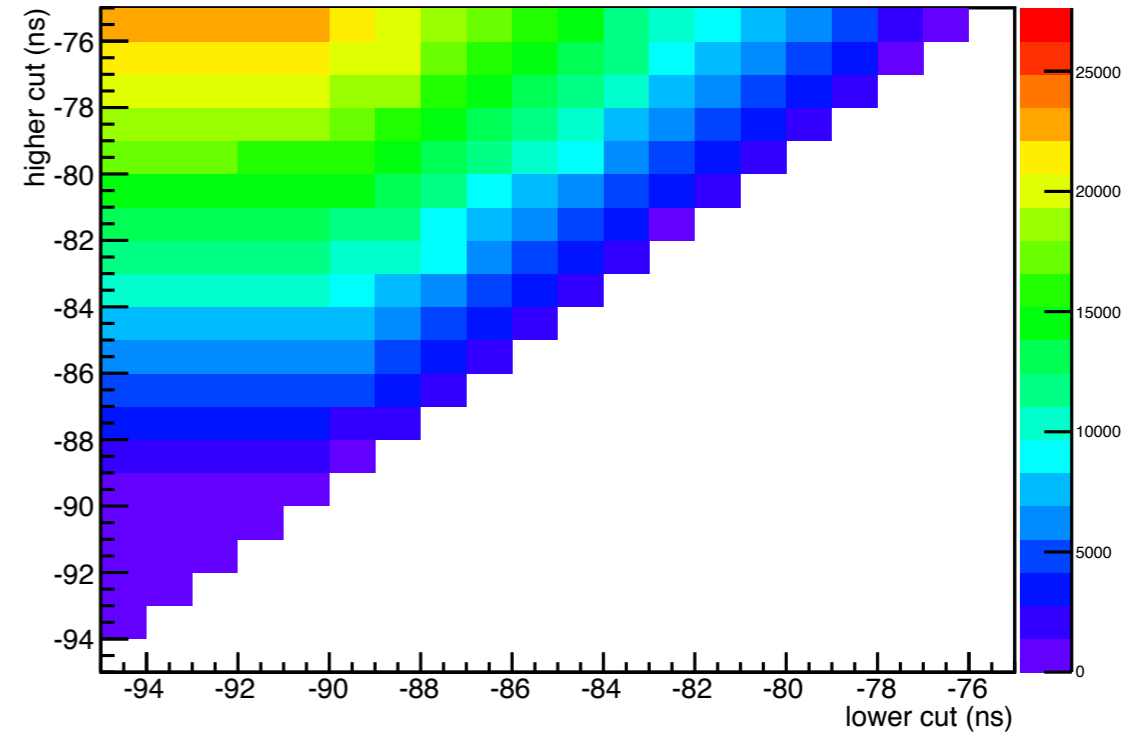
Excluded Background Distribution (Hamamatsu)



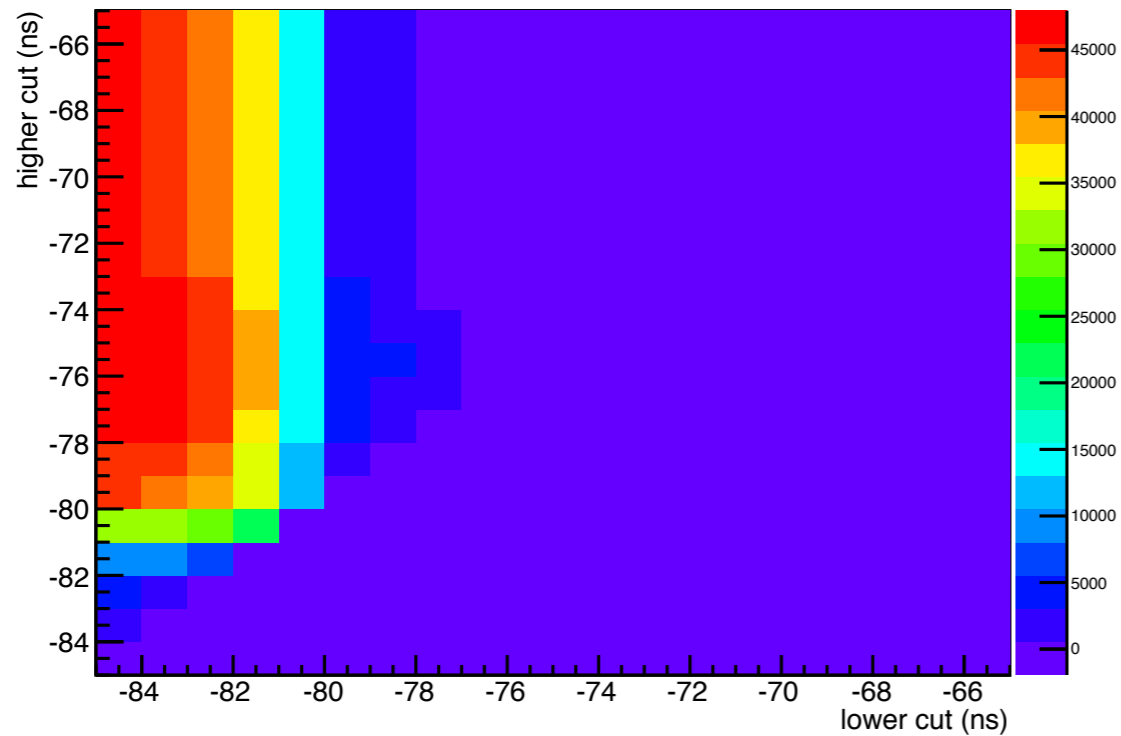
Signal



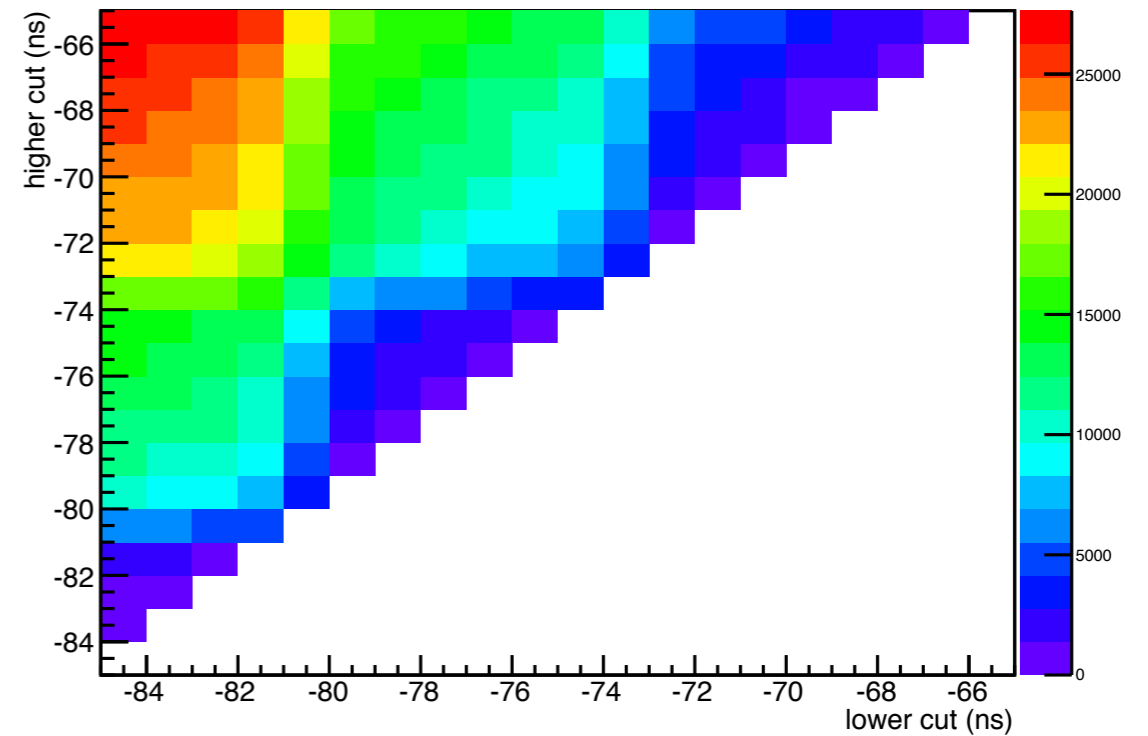
Background



Signal (calibrated)

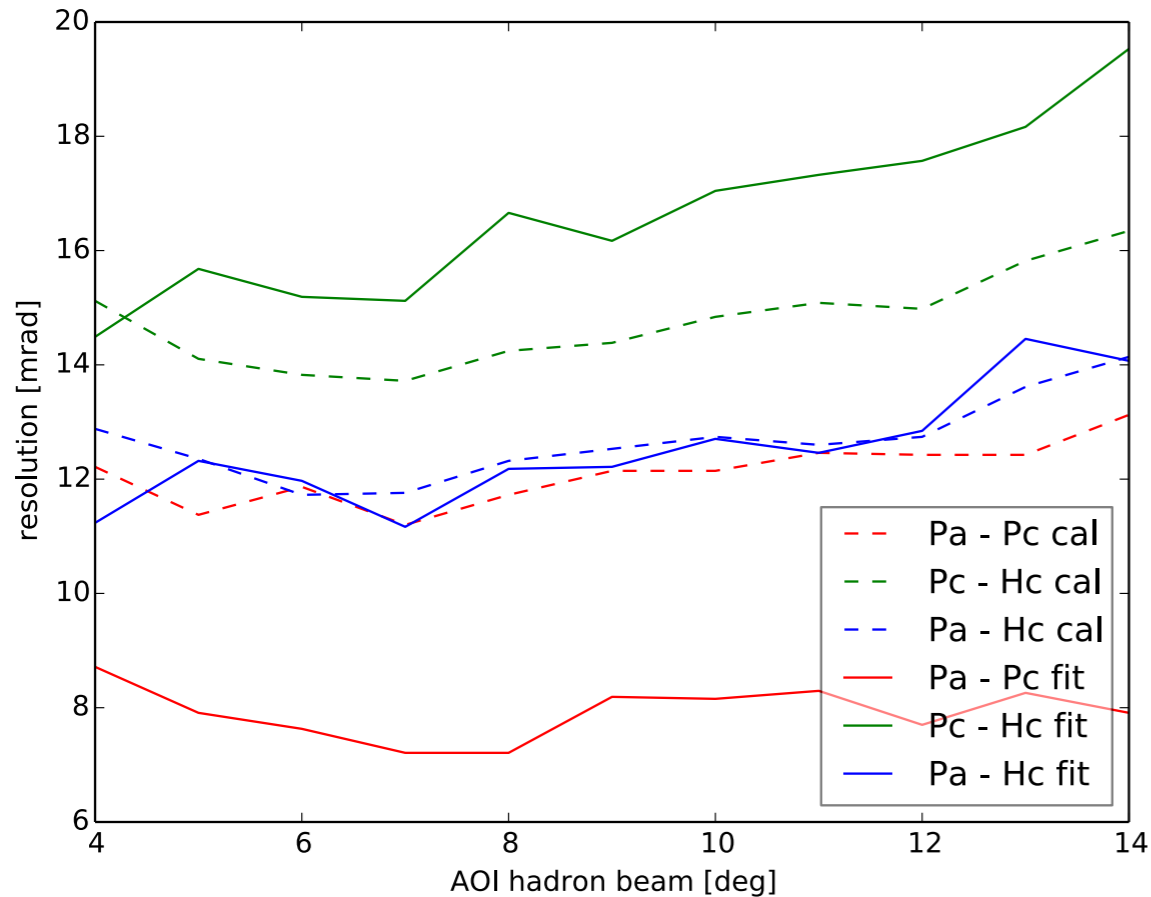


Background (calibrated)

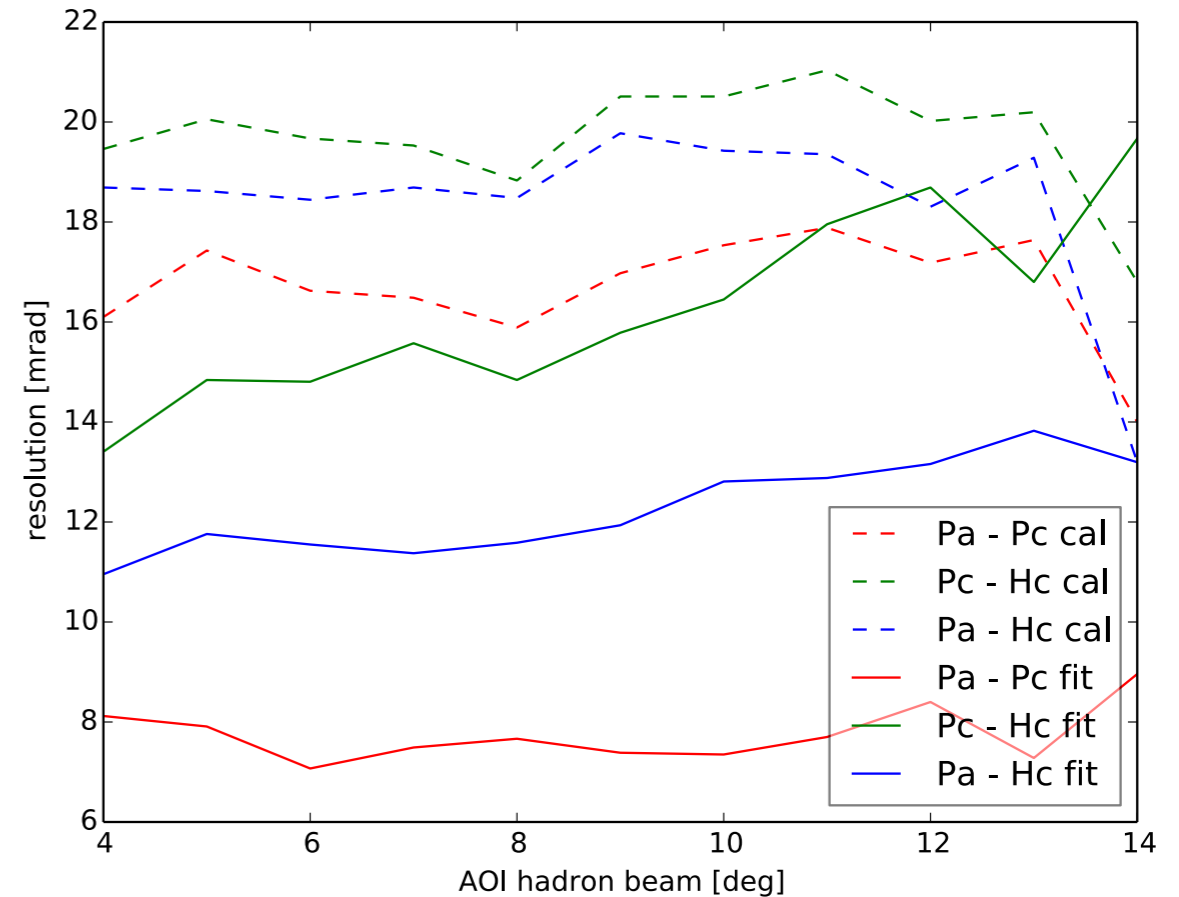


comparison for different momenta

overview 10 GeV/c



overview 5 GeV/c



- Positive/negative correlation depending on (relative) position?