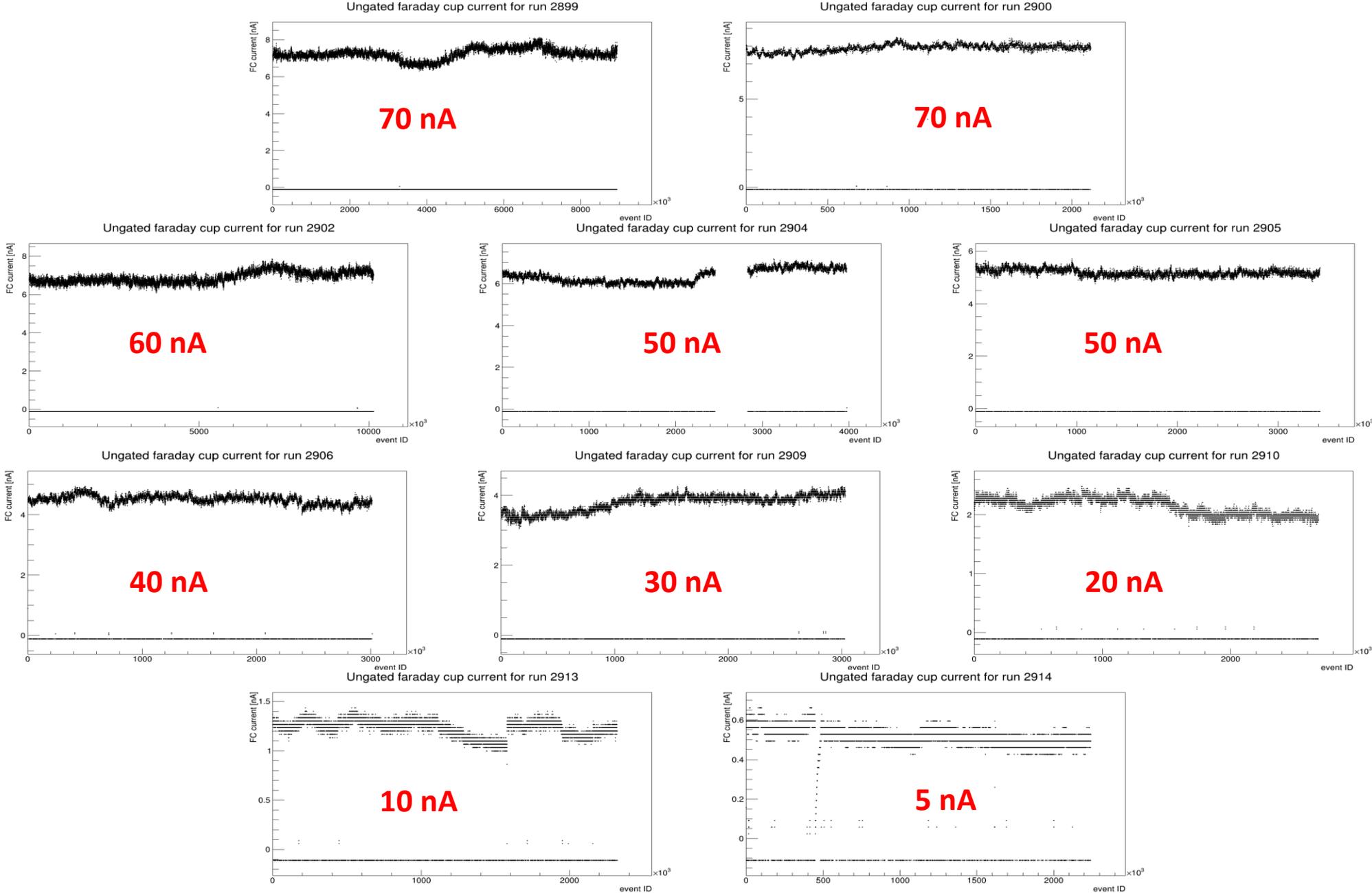


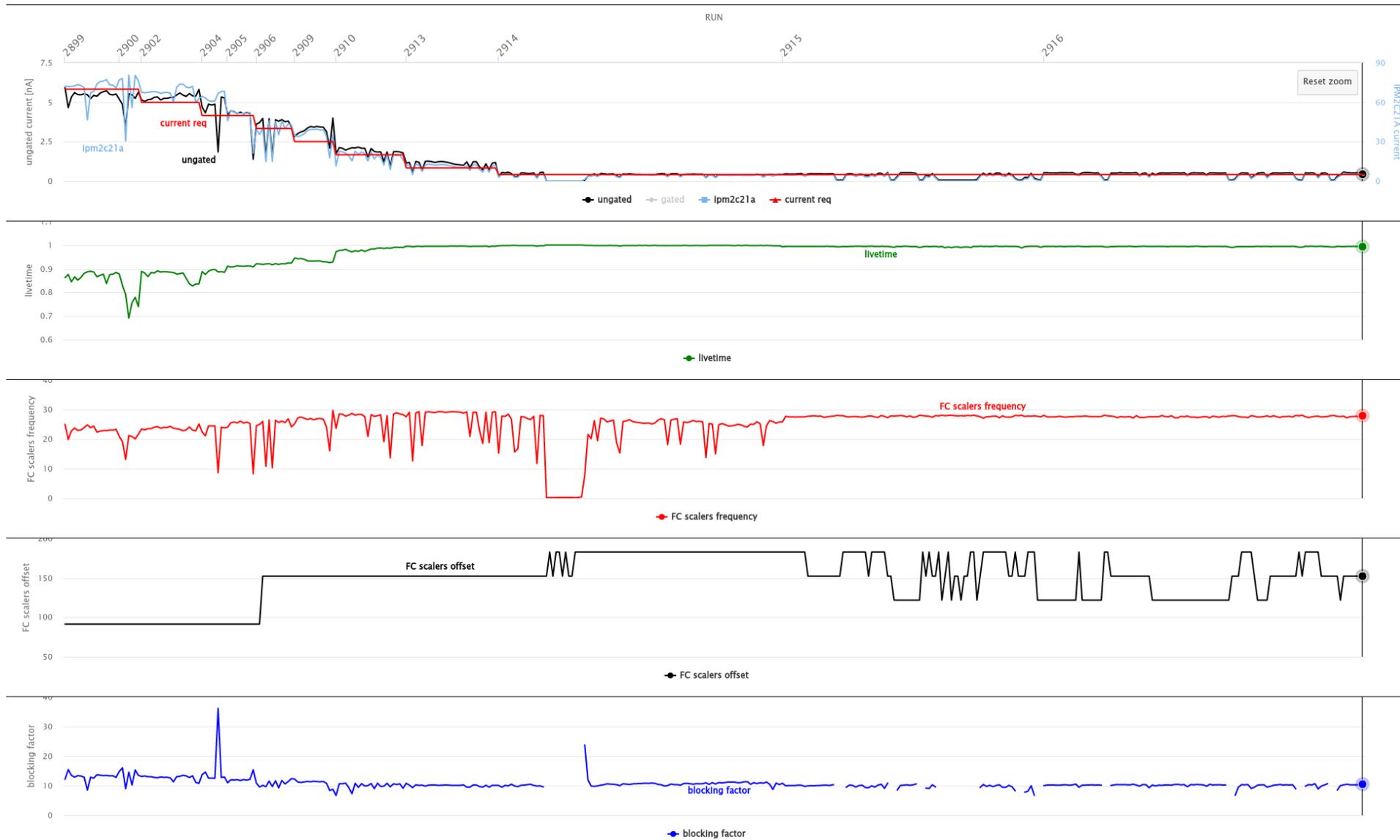
Normalized electron yield

Andrey Kim
University of Connecticut
for CLAS collaboration
03.08.2018

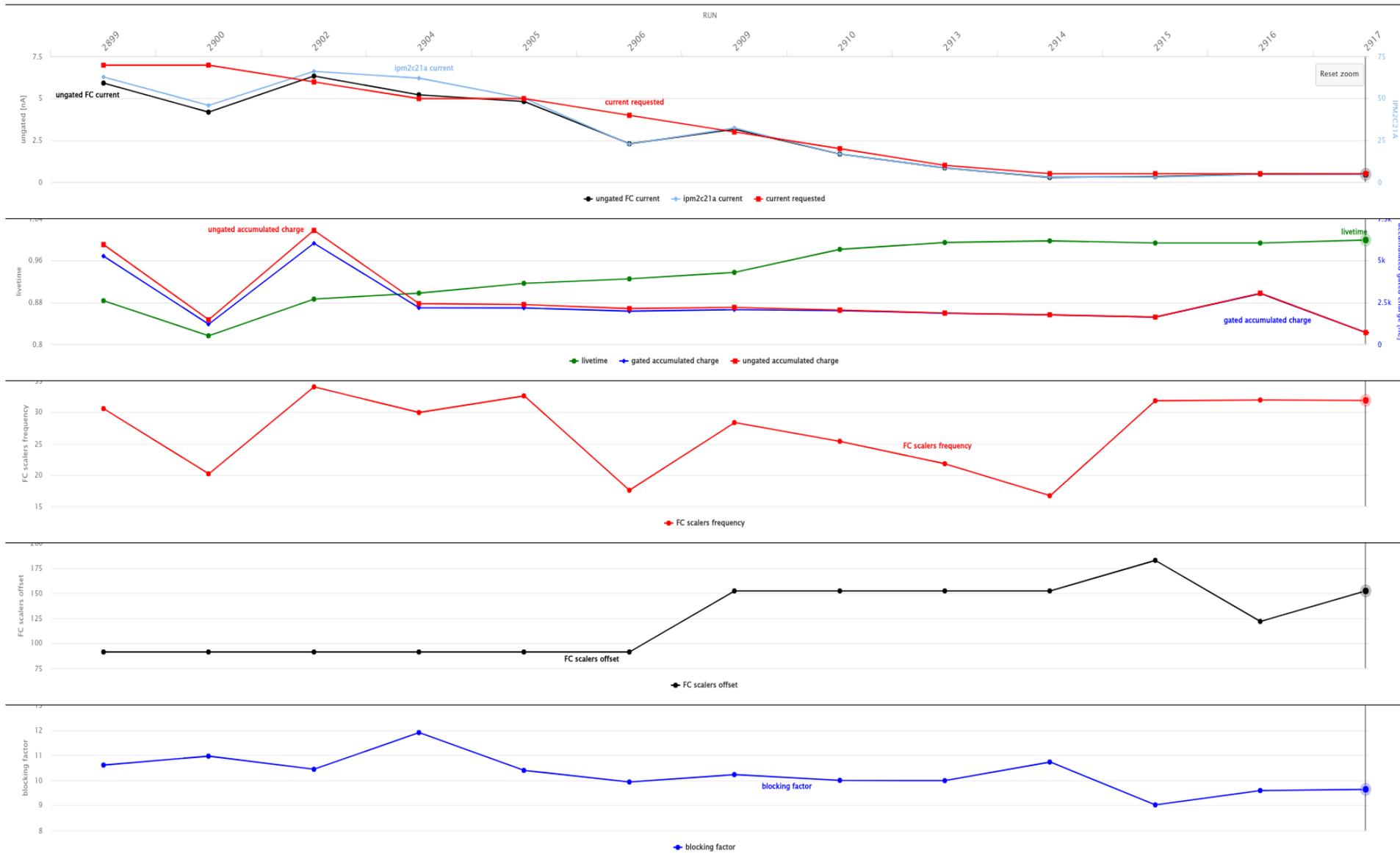
Runs for luminosity studies [Faraday Cup measurements]



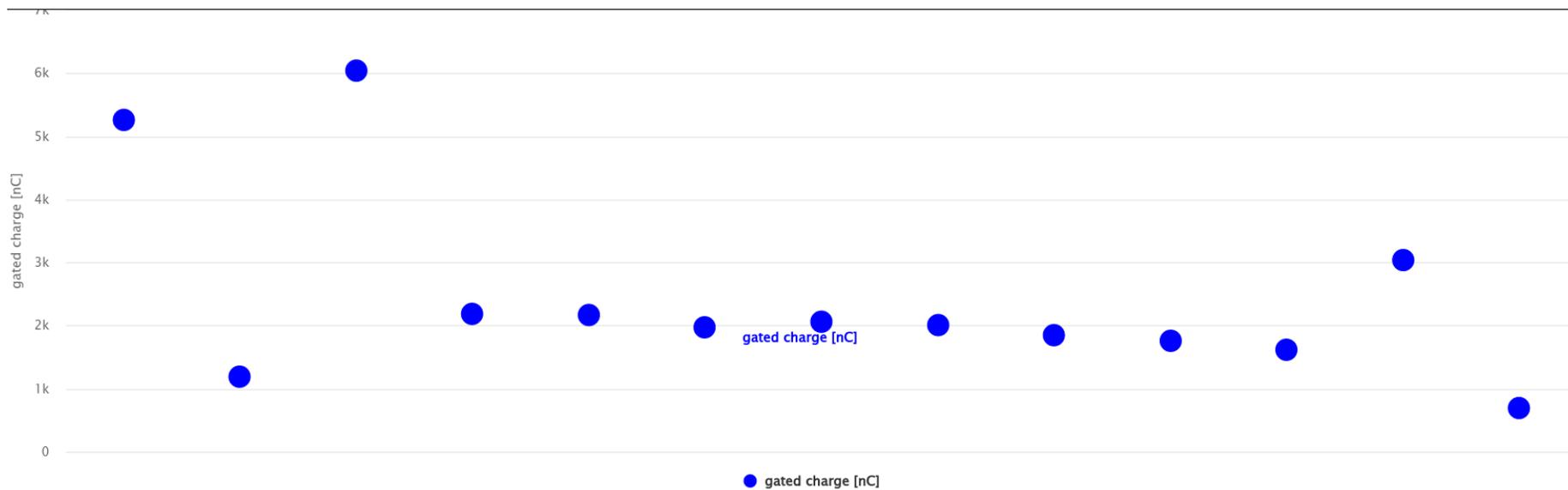
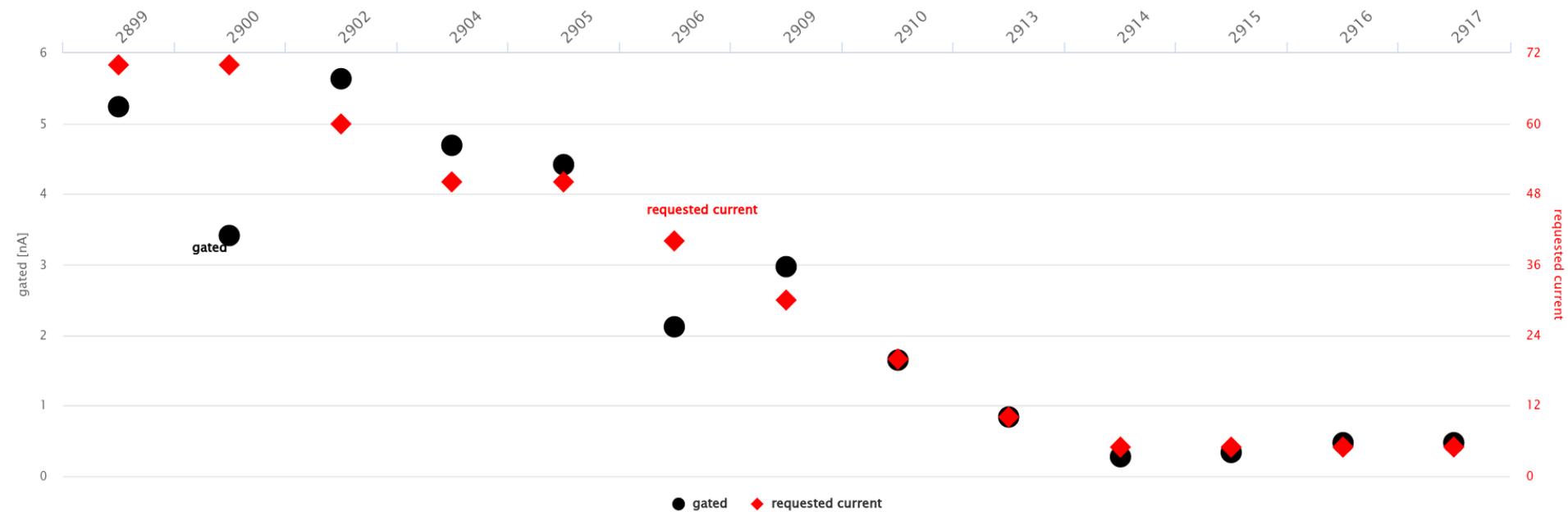
Beam quality during runs for luminosity studies



Averaged per run

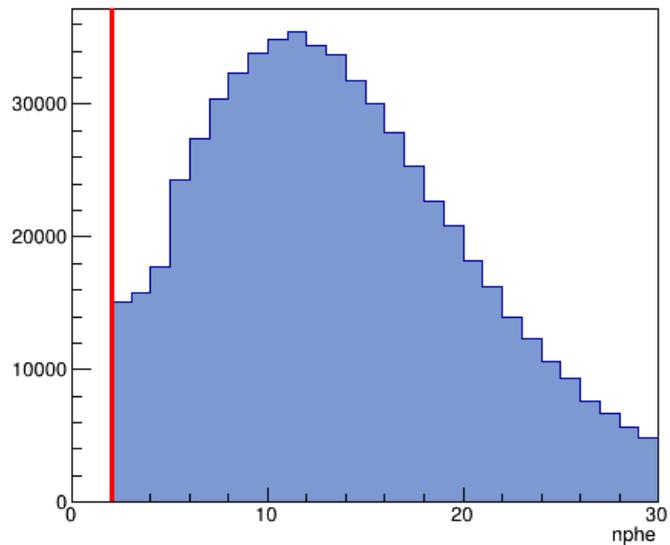


Requested current/collected charge

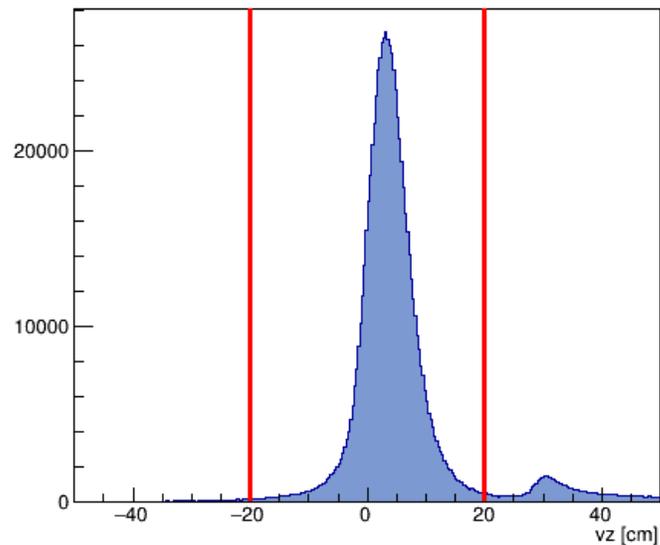


Electron PID

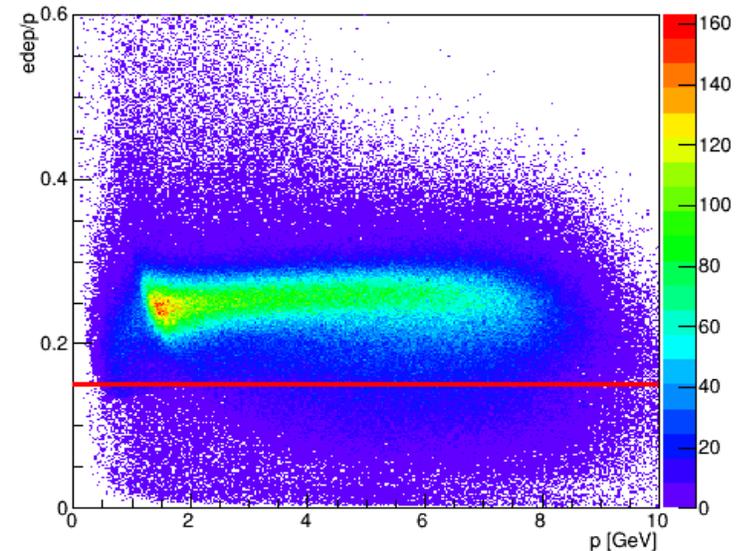
number of photoelectrons



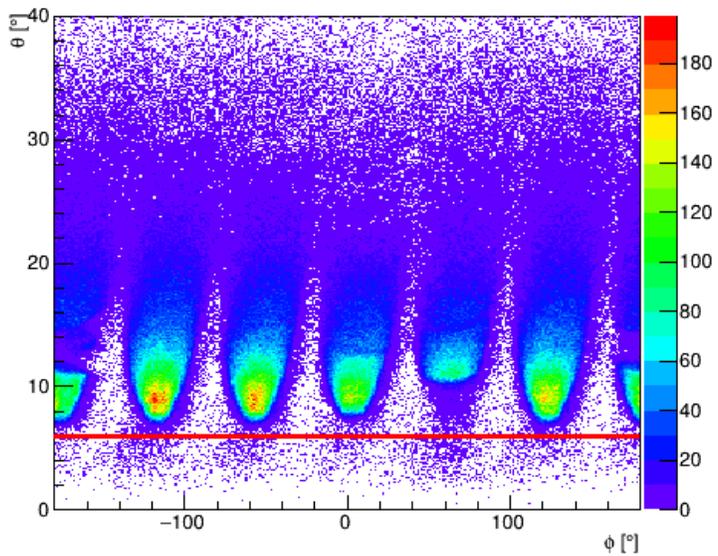
vz [cm]



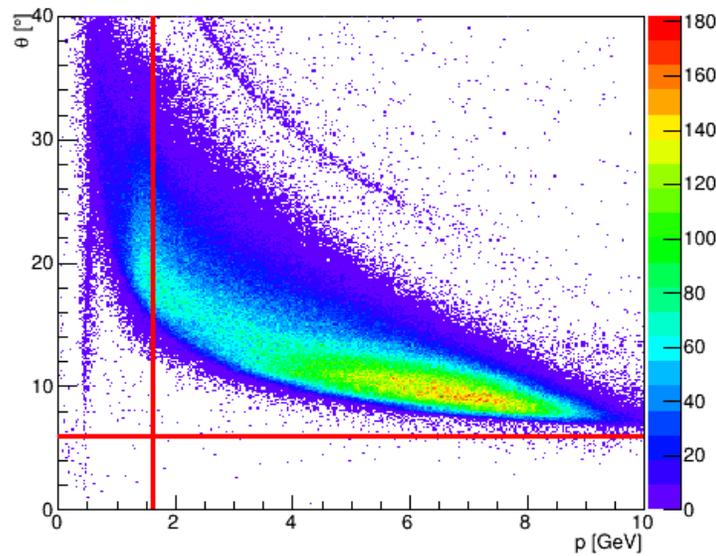
sampling fraction



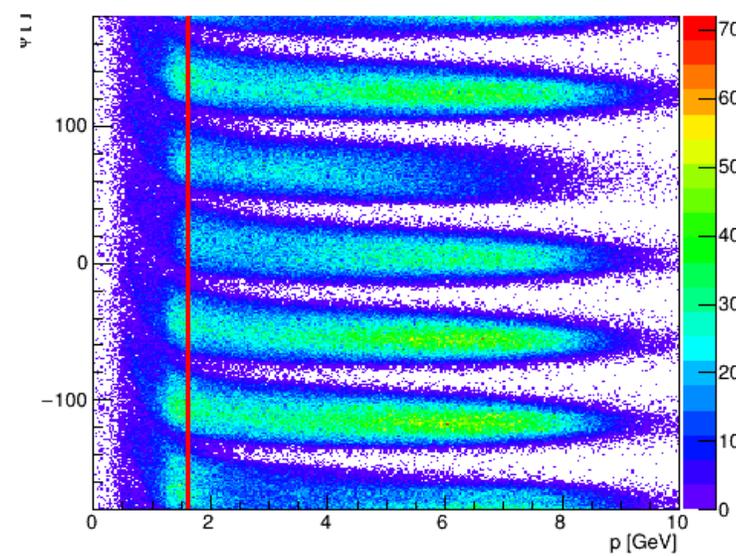
θ vs ϕ



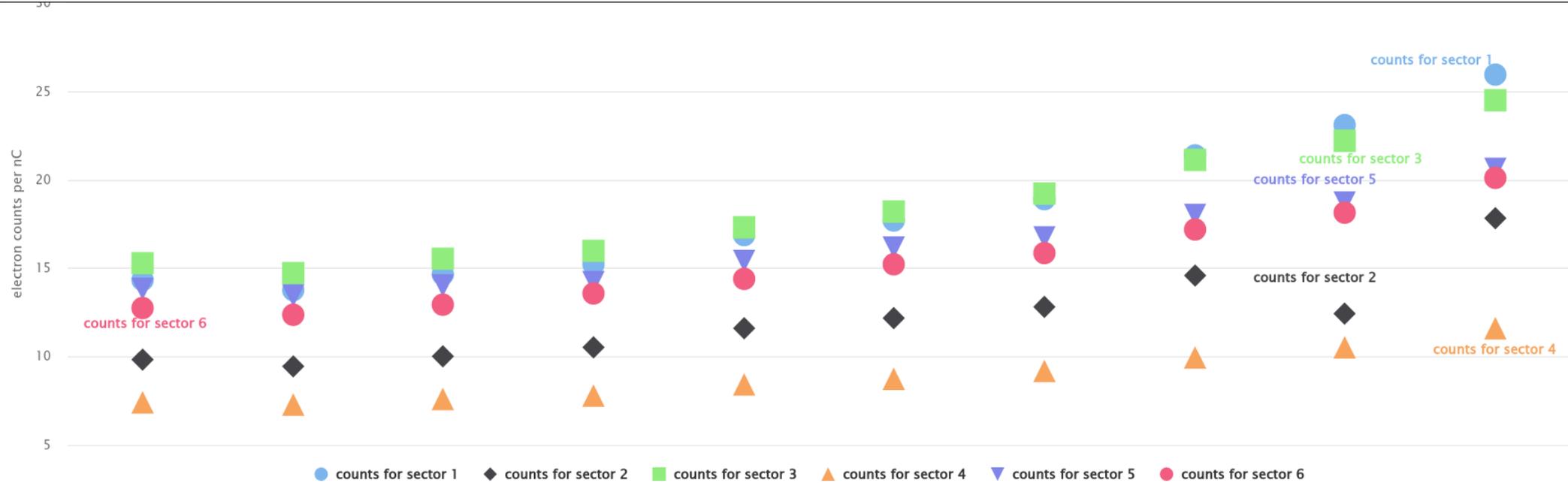
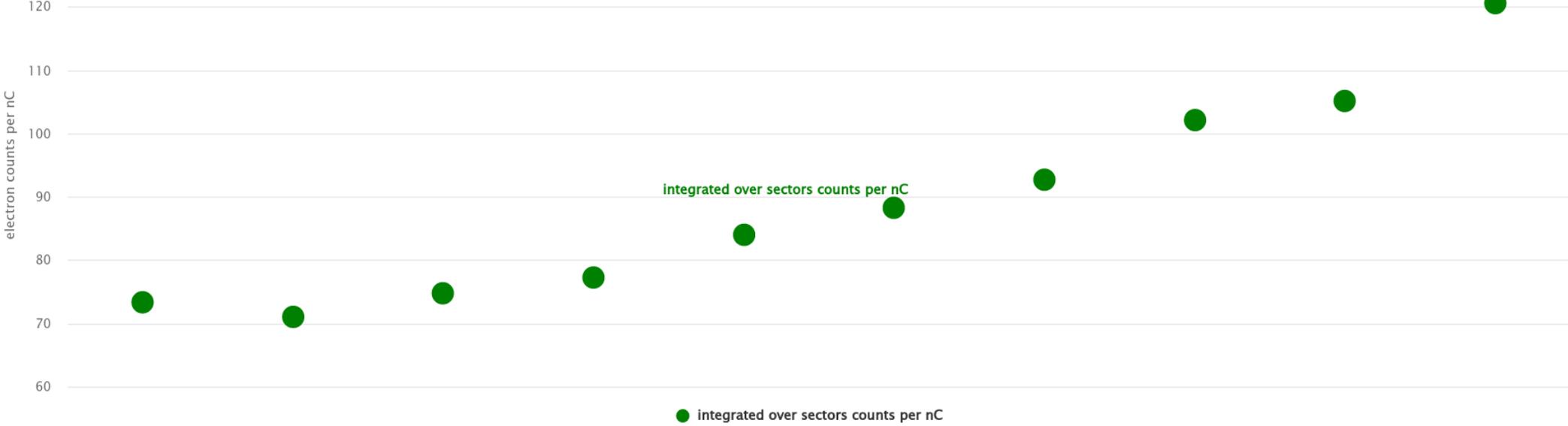
θ vs p



ϕ vs p

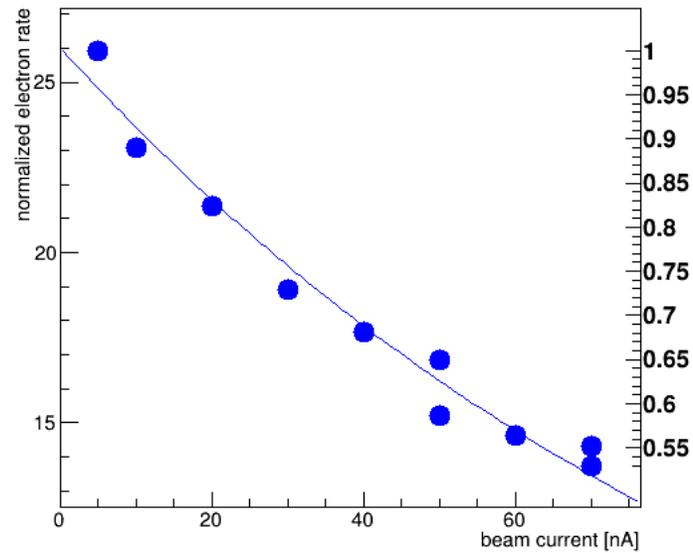


Electron rate normalized to charge

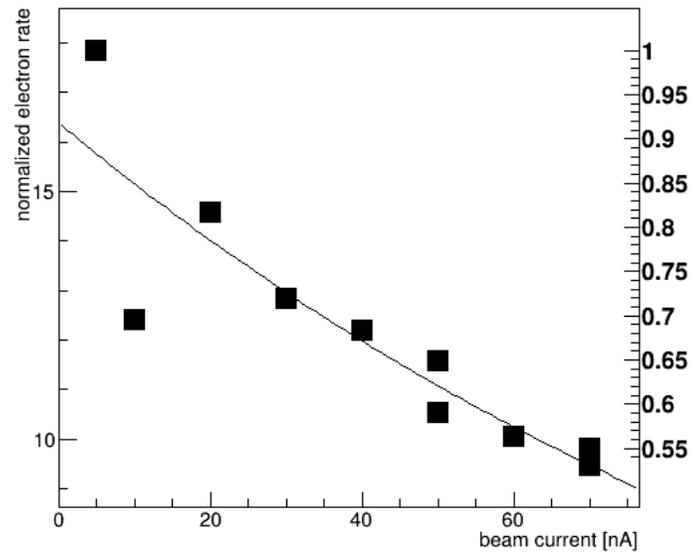


Electron rate normalized to charge

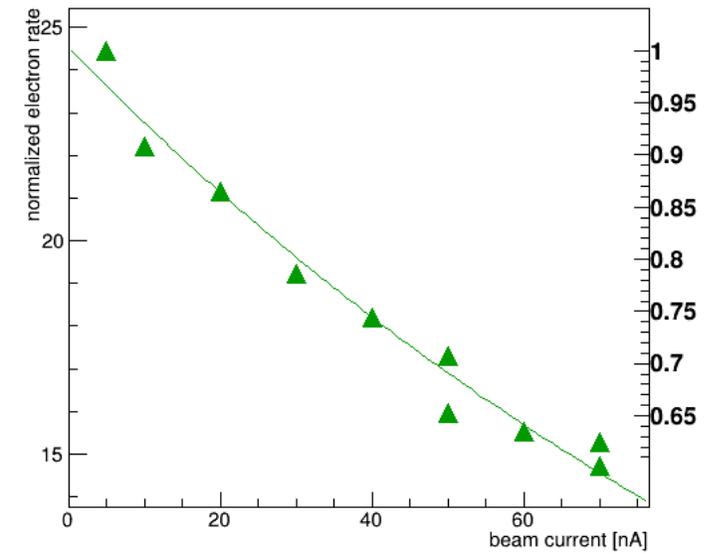
sector 1



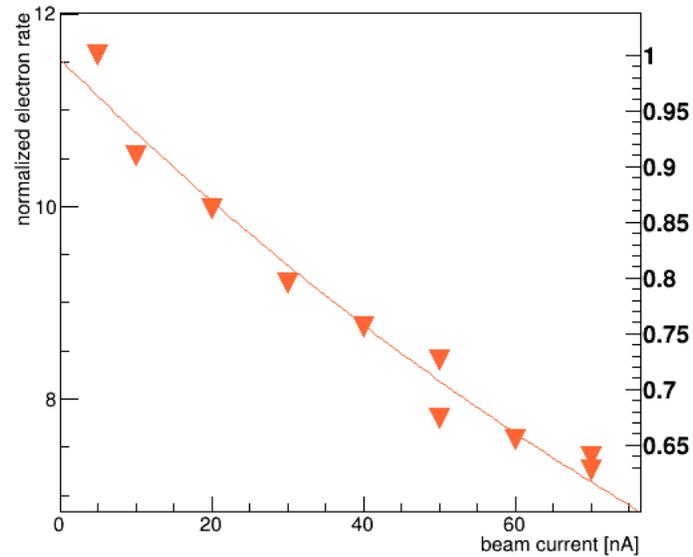
sector 2



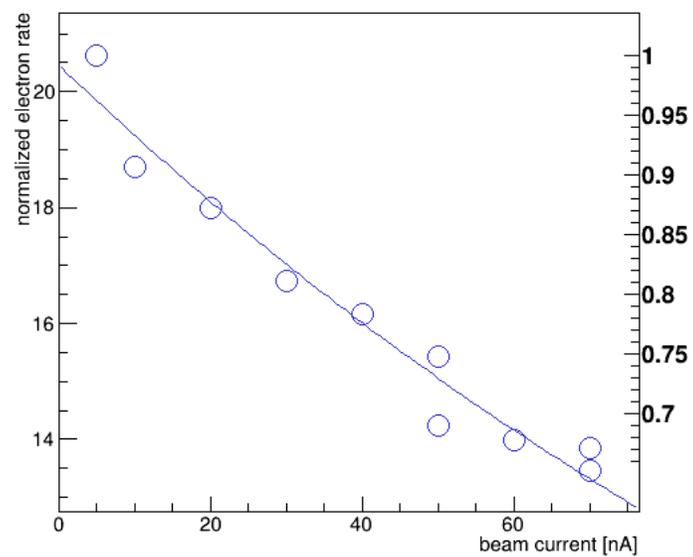
sector 3



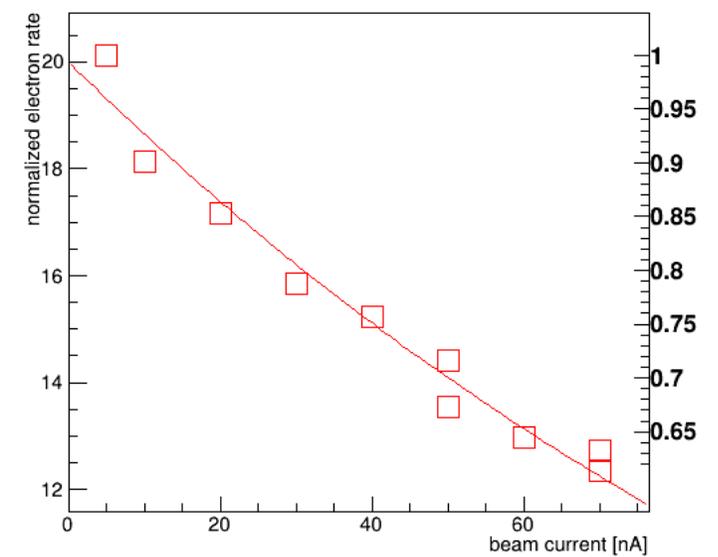
sector 4



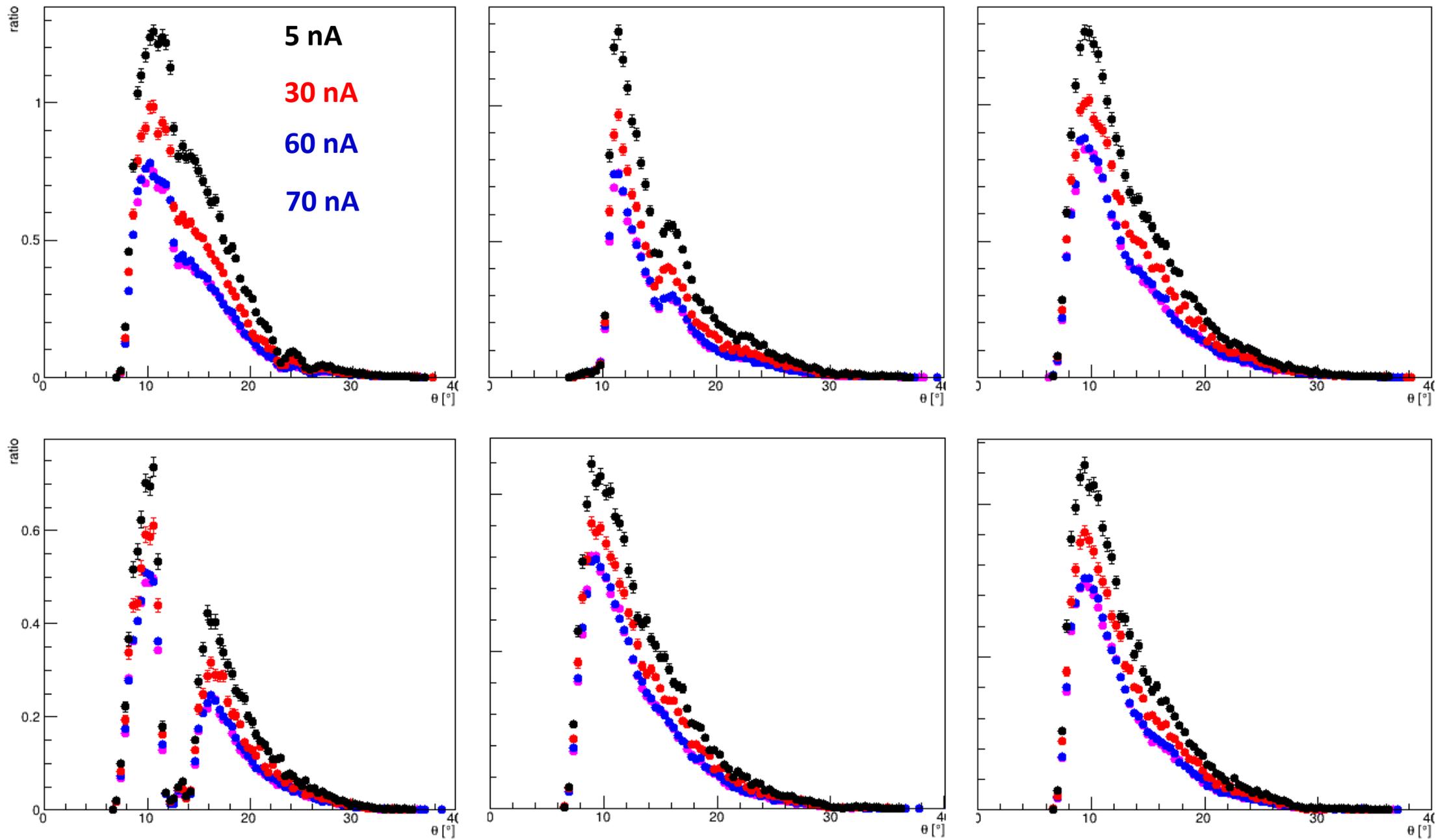
sector 5



sector 6



Angular distribution

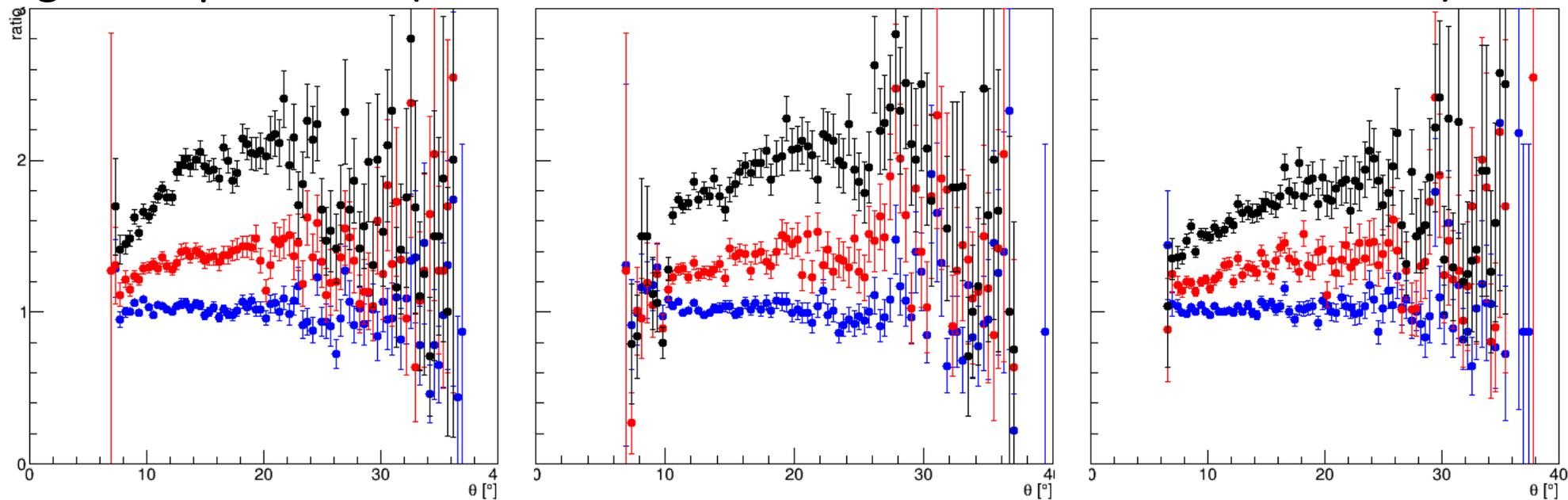


Angular dependence (ratio of electron rates at different currents to 70 nA)

5 nA/70 nA

30 nA/70 nA

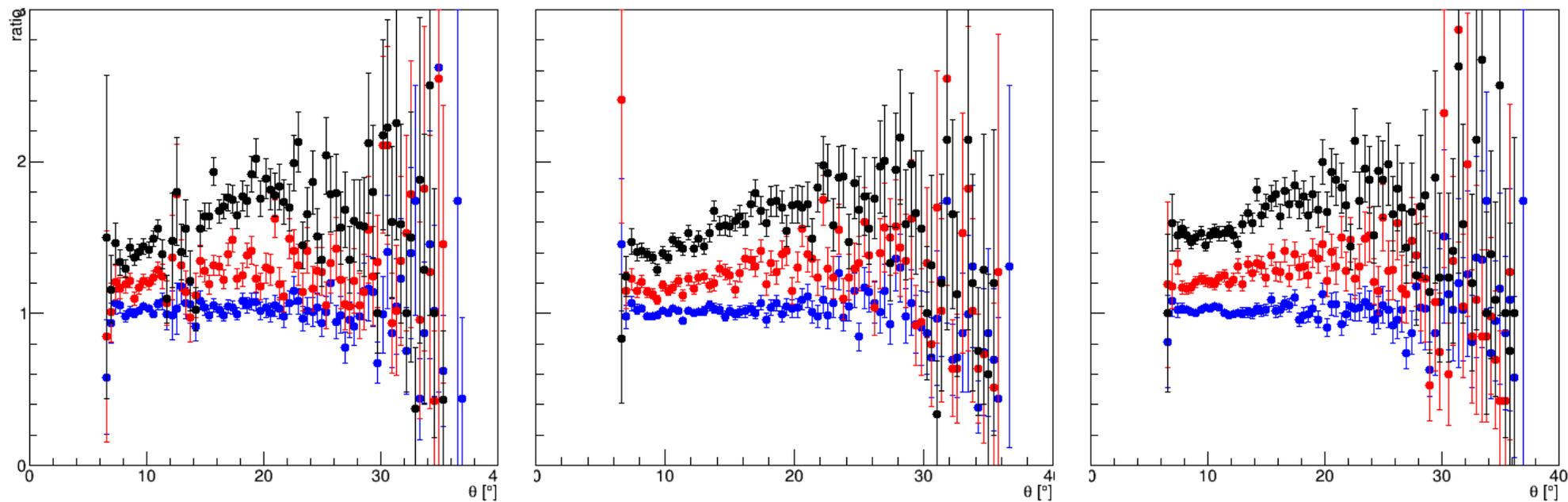
60 nA/70 nA



5 nA/70 nA

30 nA/70 nA

60 nA/70 nA



Summary

- It's an ongoing study...
- The data were collected at the beginning of the experiment, and many improvements were scheduled since these runs were cooked
- Several hardware issues were fixed
- The obtained efficiency as a function of current is a convoluted quantity and requires further accurate analysis to distinguish major contributors