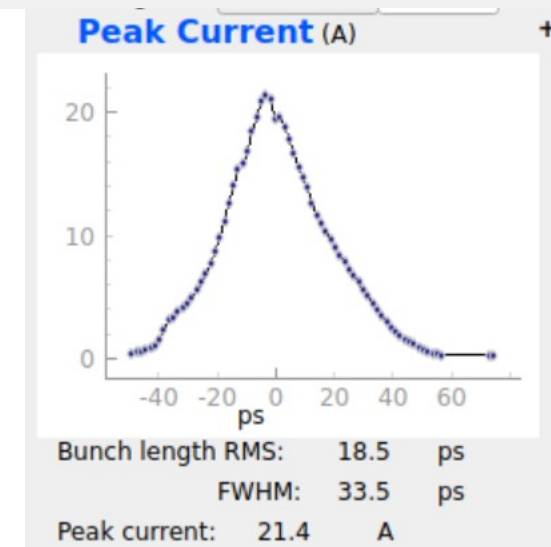
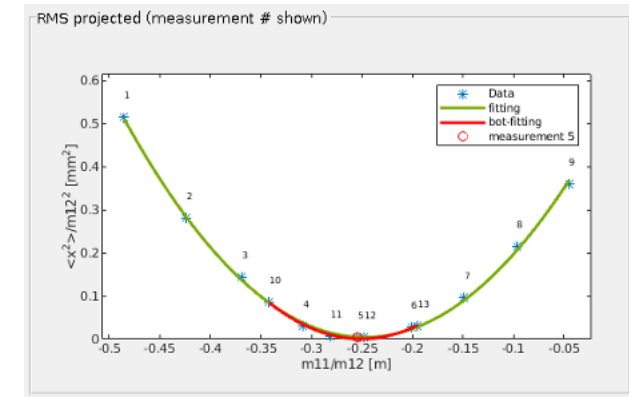
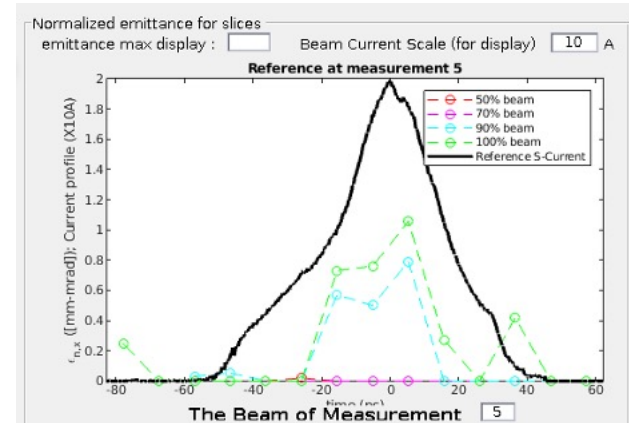


CeC status, 8/19/25

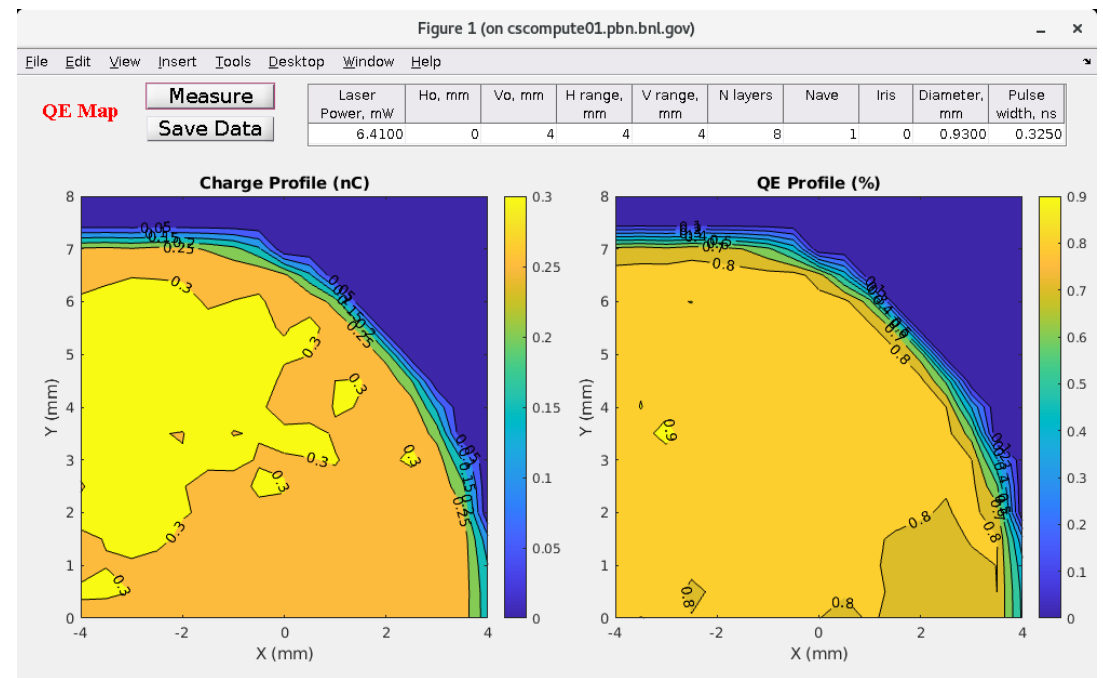
Continue work on improving beam (slice) quality

- So far the best measured slice emittance ($\sim 1 \text{ } \mu\text{m}$) for core, which satisfies cooling requirement
- The result is very sensitive to orbit in low energy section, quadrupole focusing and can easily be spoiled by other contributions (large size in deflecting cavity, non-zero orbit through magnets etc) up to $2 \text{ } \mu\text{m}$.
- We are working on developing routine to return to same working point reliably.
- Peak current for the beam is $\sim 20 \text{ A}$.

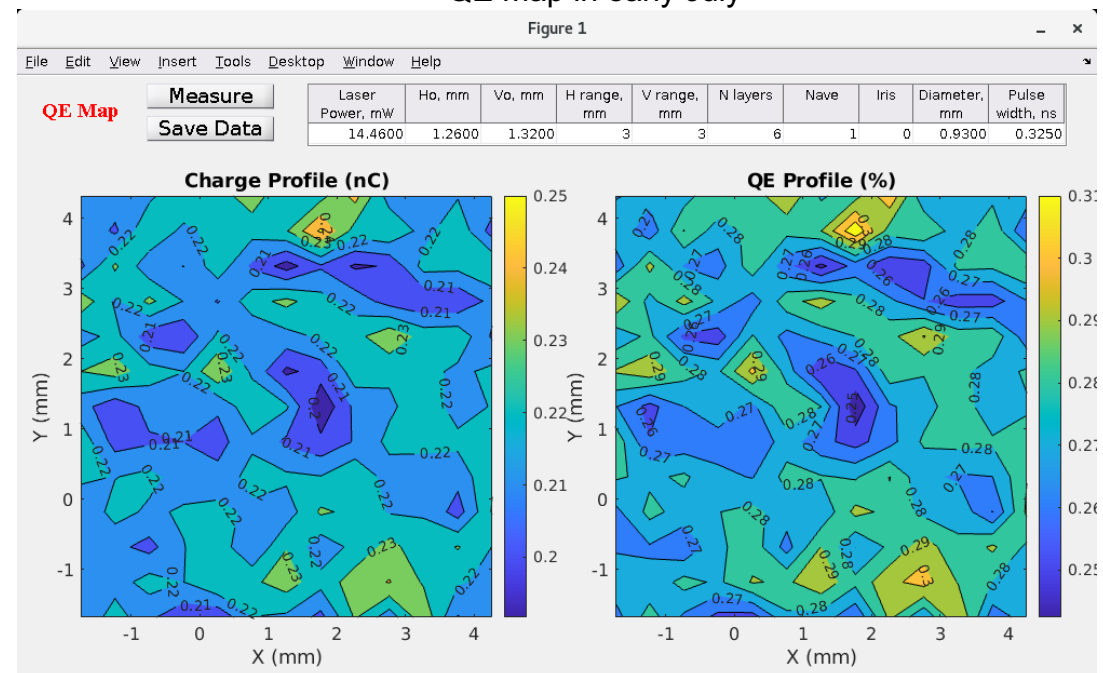


Cathode QE dropped over time

- QE decreased over time (0.8% in July and 0.3% now). The cathode went through extraction/reinjection, He conditioning etc.
- New garage of cathode is being prepared (3 of the NaKSb cathodes are ready) and garage exchange will be set up.
- If cathode production is delayed (unlikely), there is one more Na cathode in the installed garage which will be inserted next Wednesday for 2 weeks till next maintenance.



QE map in early July



QE map now