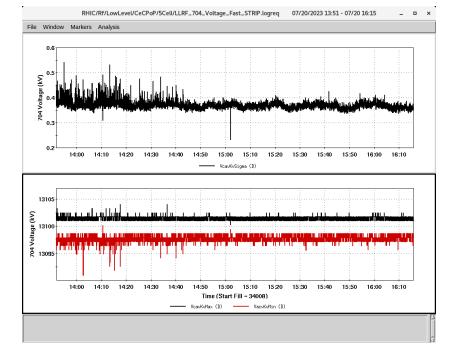
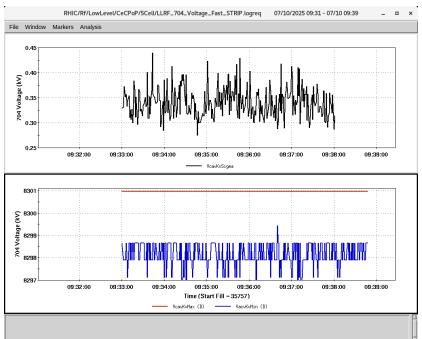
CeC status – 7/15/25

Cryo and RF group improved 704 MHz stability

- Voltage variation (sigma) is ~ 0.4 kV/p2p 2 kV when operated at 8.3 MV (RMS 5e-5/p2p 2.5e-4).
- Comparable with best performance (in abs. value) in 2023 when operated at 13.1 MV.
- 704 MHz has been monitored to see if further improvement can be achieved by cryo setup.





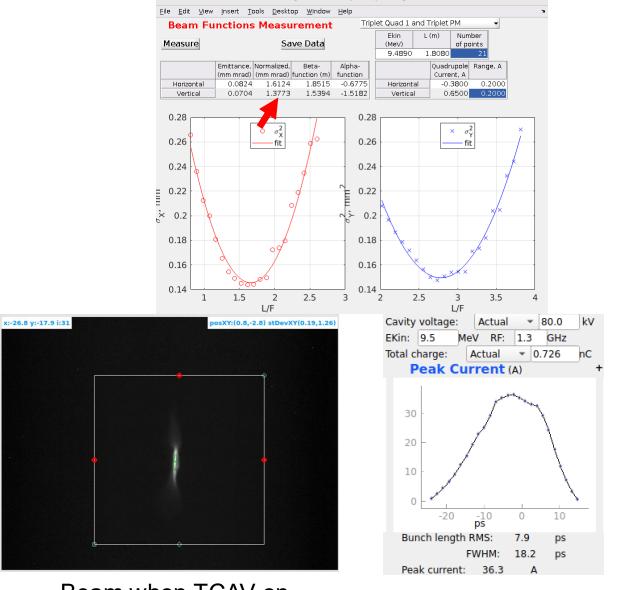


2025

Preliminary beam parameters

Work in progress to achieve key performance parameters needed for cooling demonstration.

- Projected normalized emittance at full energy ~ 1.7 /1.3 um in x/y.
- Peak current 20 40 A with various RF setups.
- Bugs found in scripts (wrong magnet calibration) and fixes are going-on to measure slice emittance and slice energy spread correctly.



Beam when TCAV on