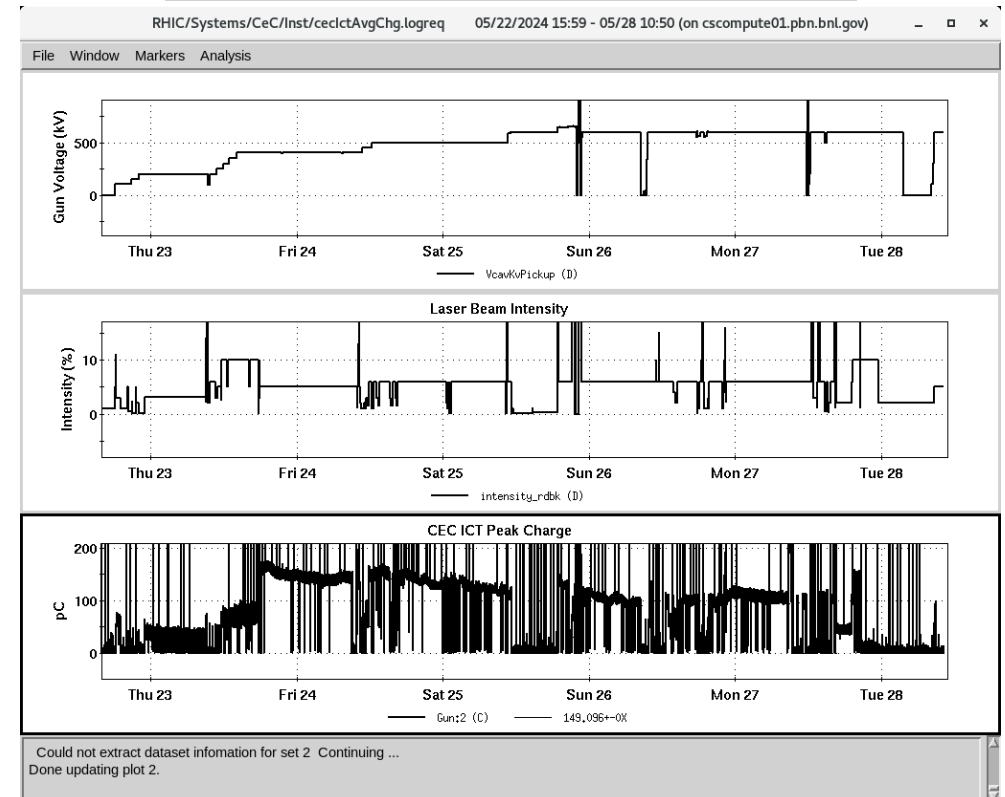
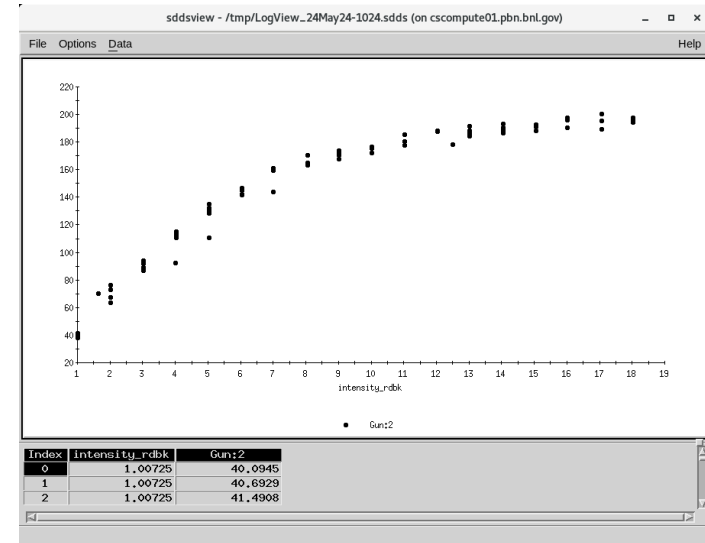


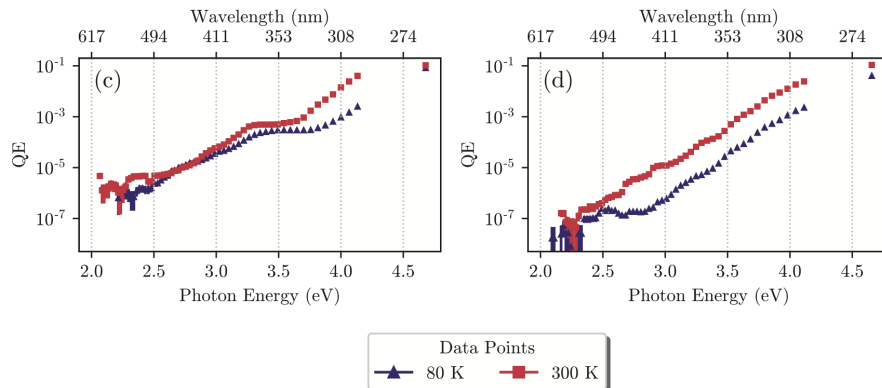
# CeC status – 5.28.24

- Operate the 2<sup>nd</sup> GaAs cathode in low voltages (< 1 MV)
- Generates photo-electrons in linear regime ~ 100 pC per bunch due to low QE (< 0.1%)
- Little vacuum activities were observed
- Cathode operates with reasonably stable QE (0.08% -> 0.04% over the week)
- Characterize the cathode's performance for various voltages (200 – 700 kV) – QE, emittances ~0.8 um for 100 pC

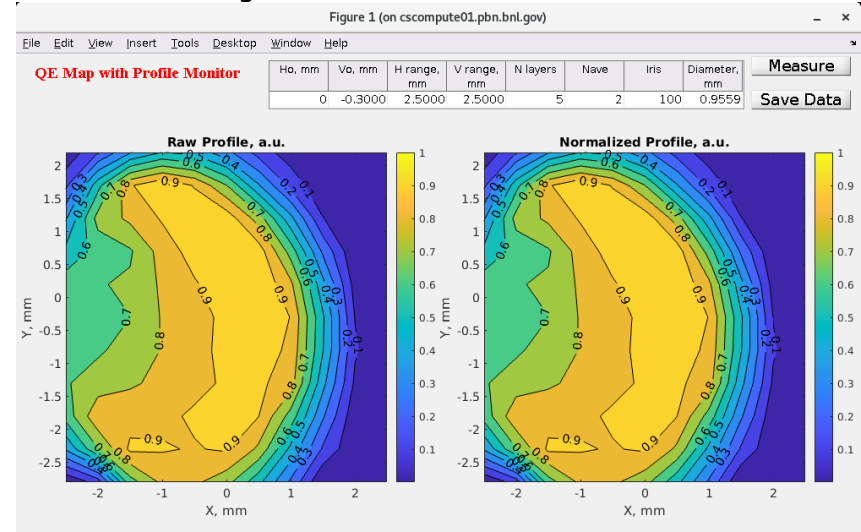


# Finishing the GaAs cathode study

- RF group switched gear to synchronize the high voltages (> 1 MV) with laser/diagnostic
- QE map indicates cathode is burning off slowly
- Preliminary discussion showed the electrons are unlikely to be generated from CsTe layout
- Real demonstration will wait till Run 25 when polarization can be measured.



Day 2



Day 5

