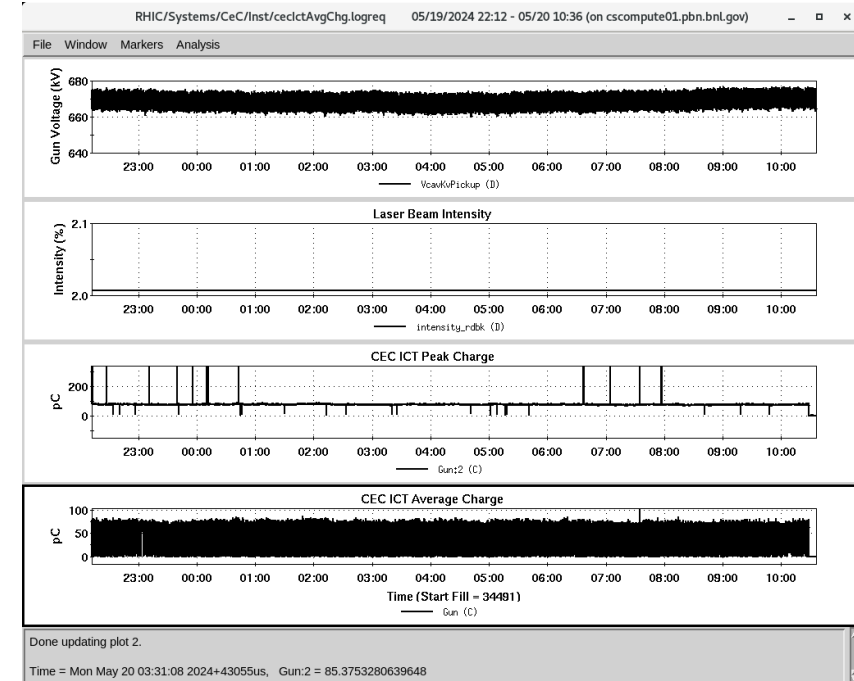
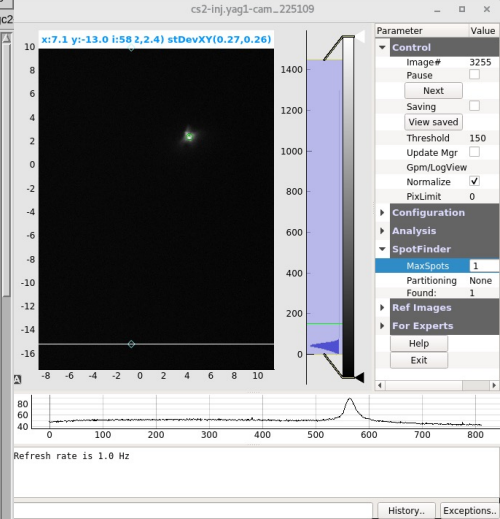
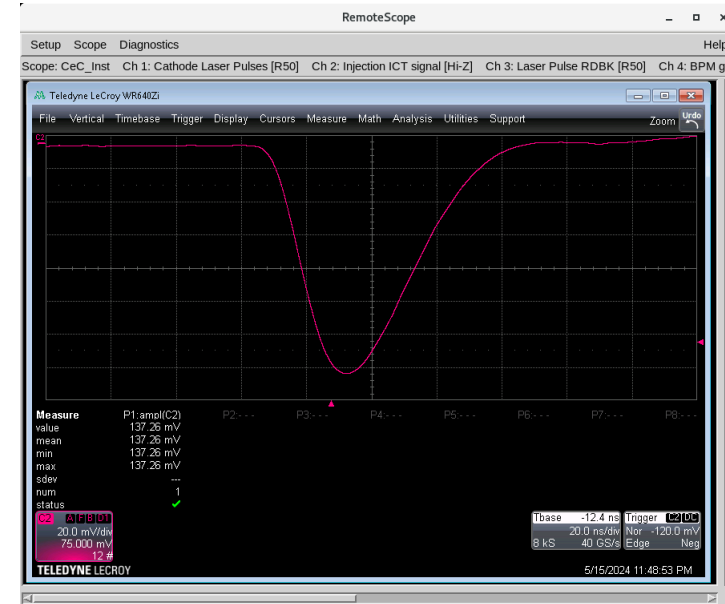


# CeC status – 5.21.24

- GaAs cathode generates photo-electrons in the SRF gun ~ 100 pC per bunch
- Little vacuum activities were observed
- Cathode operates with stable QE (0.04% - 0.08%) for days
- Characterize the cathode's performance for various voltages (200 – 700 kV) – QE, emittances (0.8 – 1  $\mu\text{m}$ )



# Beam propagation for polarization meas.

- Low energy ( $\sim 600$  kV kinetic) beam ( $\sim 250$  pC) reached downstream yag screens
- Will measure polarization when laser is ready (TBD).
- Switch to 2<sup>nd</sup> GaAs cathode on May 22

Non-uniformity of the QE map is suspect to happen during cathode transfer

