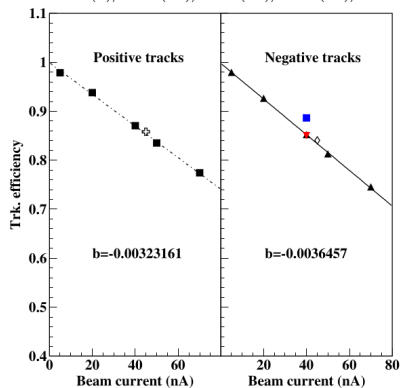
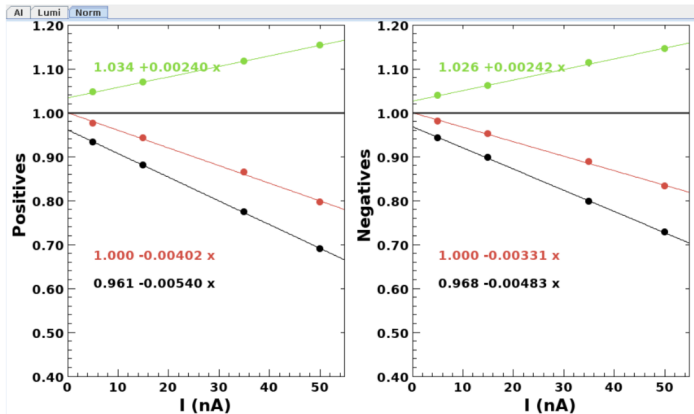


CLAS12-NOTE 2020-005

Runs 5443(5)/5444(20)/5453(40)/5543(50)/5595(70)



RGB Pass 2 Review

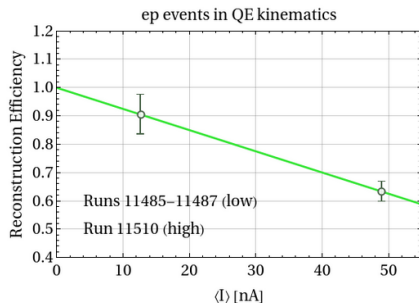
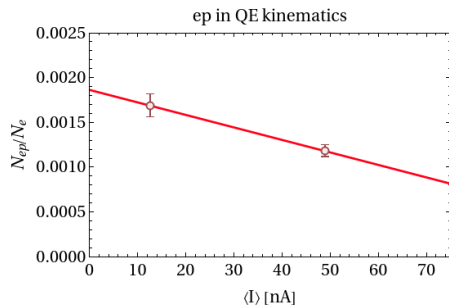


Normalized yields
of $e h^{+/-}$

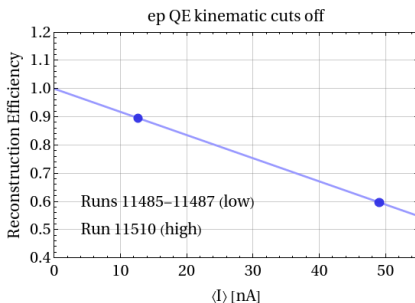
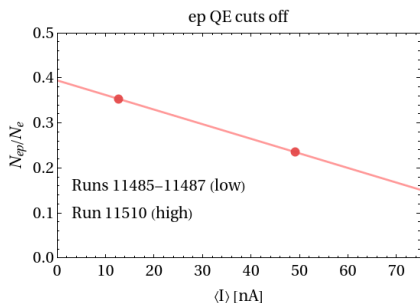
Conventional
AI-assisted
Ratio

- 1 Use NB method to get the current at frequent intervals - Get ungated Faraday cut reading in RUN::config bank which records integrated current since last time the bank was written out.
- 2 Get the timestamp from Trigger Interface board in RUN::config.
- 3 Divide by the time since the last recording of RUN::config bank.
- 4 Require the current exceed a threshold of 1 nA to remove beam trips.

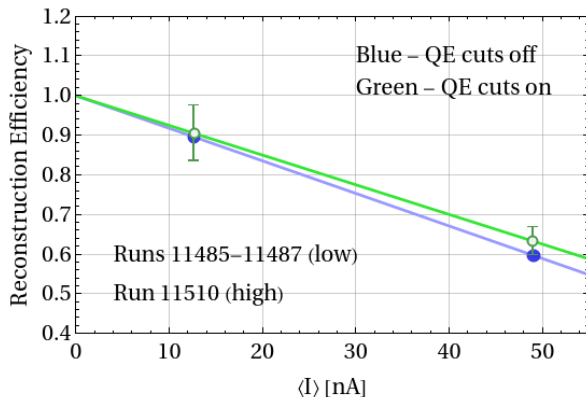
RGB N_{ep}/N_e luminosity dependence with QE cuts on



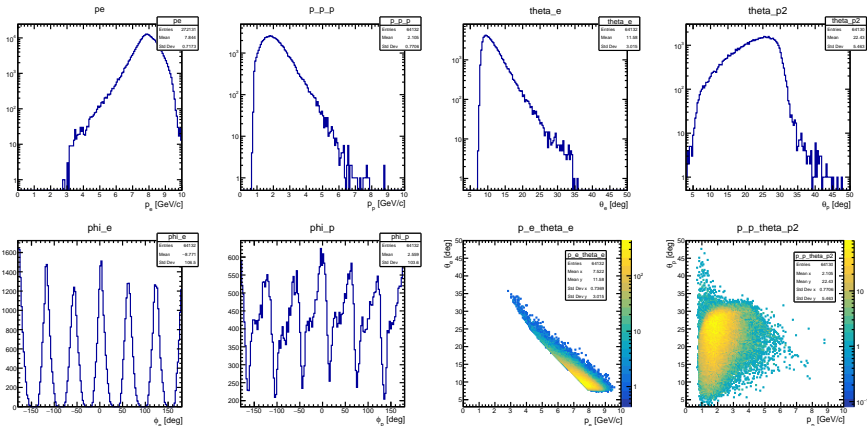
RGB N_{ep}/N_e luminosity dependence with QE cuts off - dropped cuts on beam energy calculated from particle angles, θ_{pq} , and $\Delta\phi$.



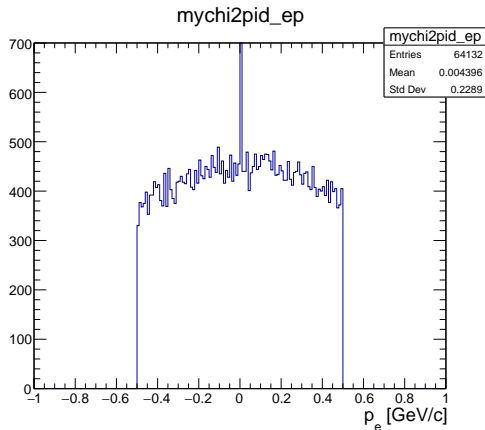
RGB N_{ep}/N_e luminosity dependence with QE cuts off



To be consistent with CLAS12-NOTE 2020-005



To be consistent with CLAS12-NOTE 2020-005



From CLAS12-NOTE 2020-005

- 1 $p_{\pm} > 0.4 \text{ GeV}/c$
- 2 $|\chi^2_{PID}| < 5, |\chi^2| < 10|$
- 3 Reject tracks with FTOF Panel 2.
- 4 Vertex $-15 < v_z < 5 \text{ cm}$ in RGA. RGB had $-13 < v_z < 12 \text{ cm}$ for inbending.
- 5 fiducial cuts