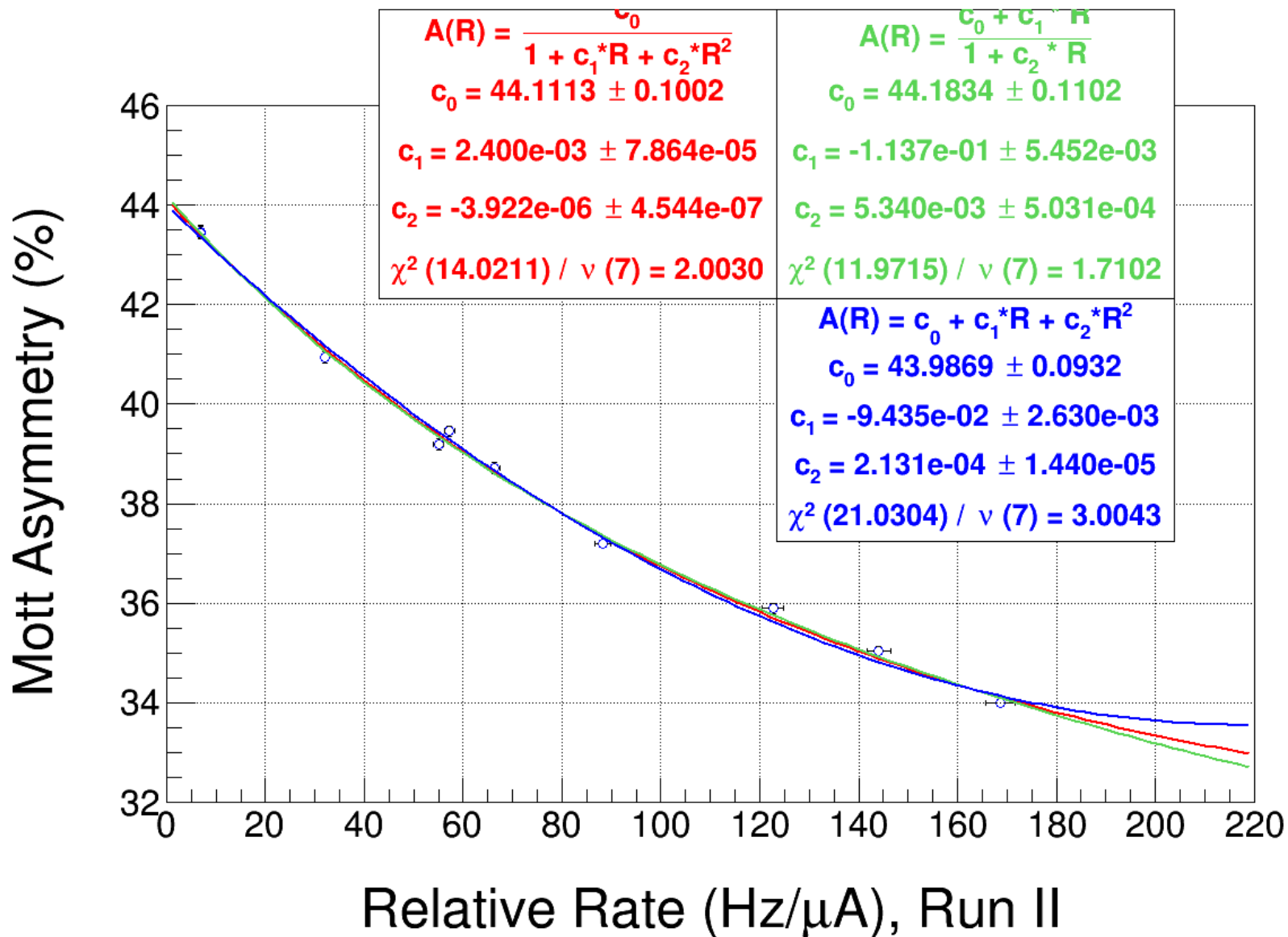


Status of Instrumental Beam Studies and Technical Description of Detectors and DAQ

February 24, 2017

Official Run II



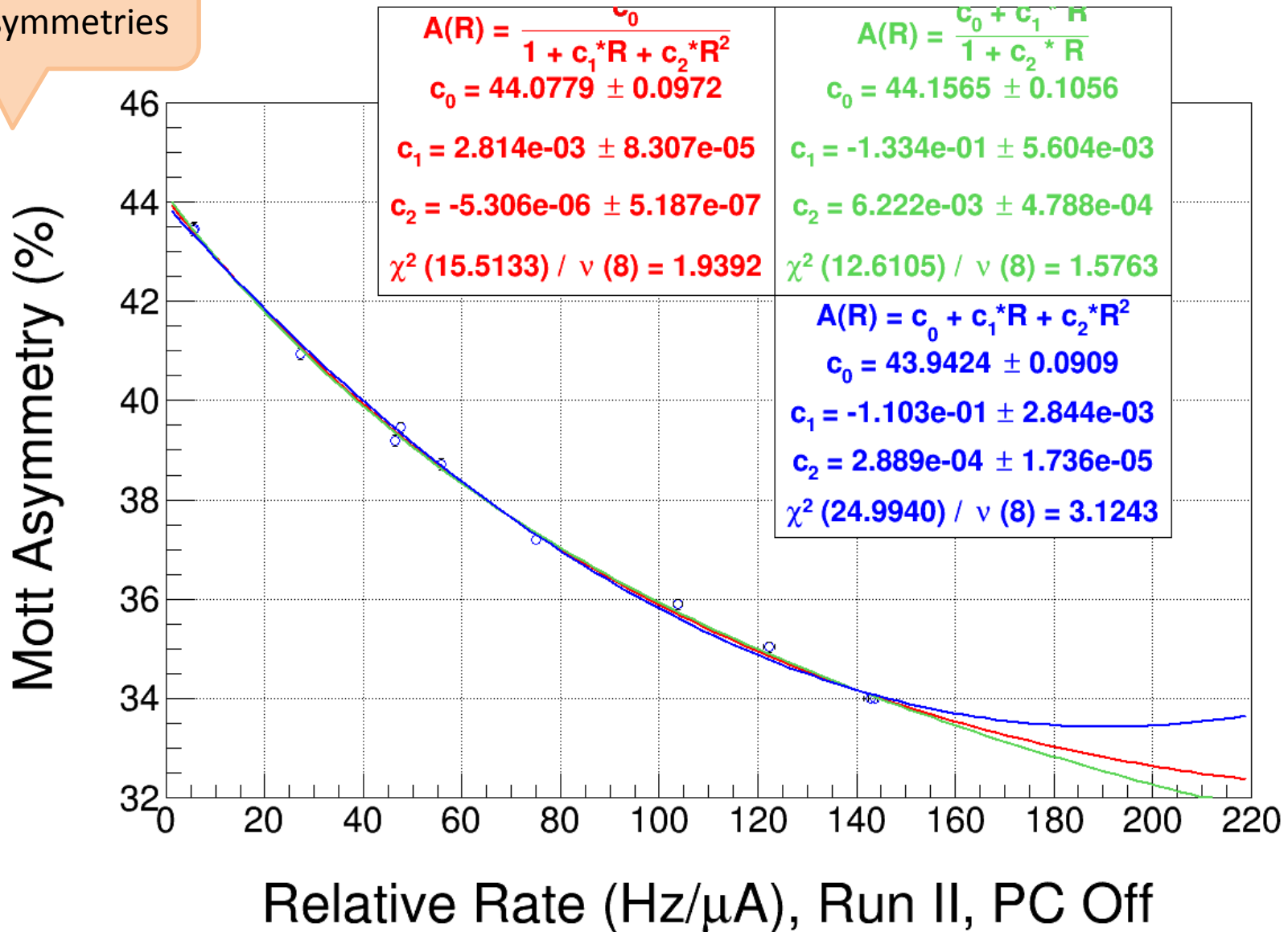
Rate Systematic Studies

I. Run II:

- I. Relative rate scan of all foils at constant beam current of $1 \mu\text{A}$ with Pockels Cell OFF: 8413 – 8424
- II. Relative rate scan of all foils at constant beam current of $1 \mu\text{A}$ and no timing veto: 8548 – 8560

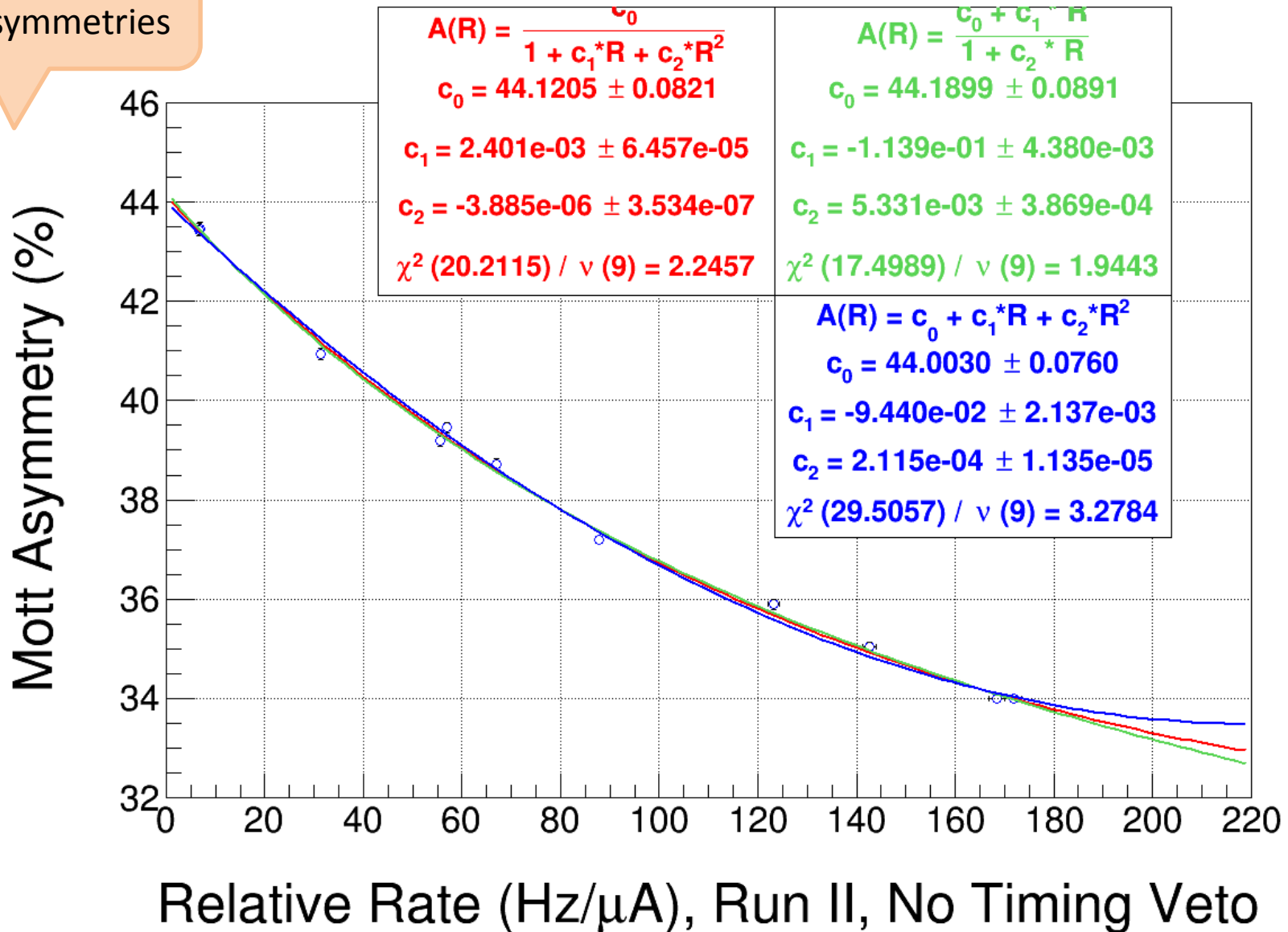
PC Off Rates

With official asymmetries



No Timing Veto Rates

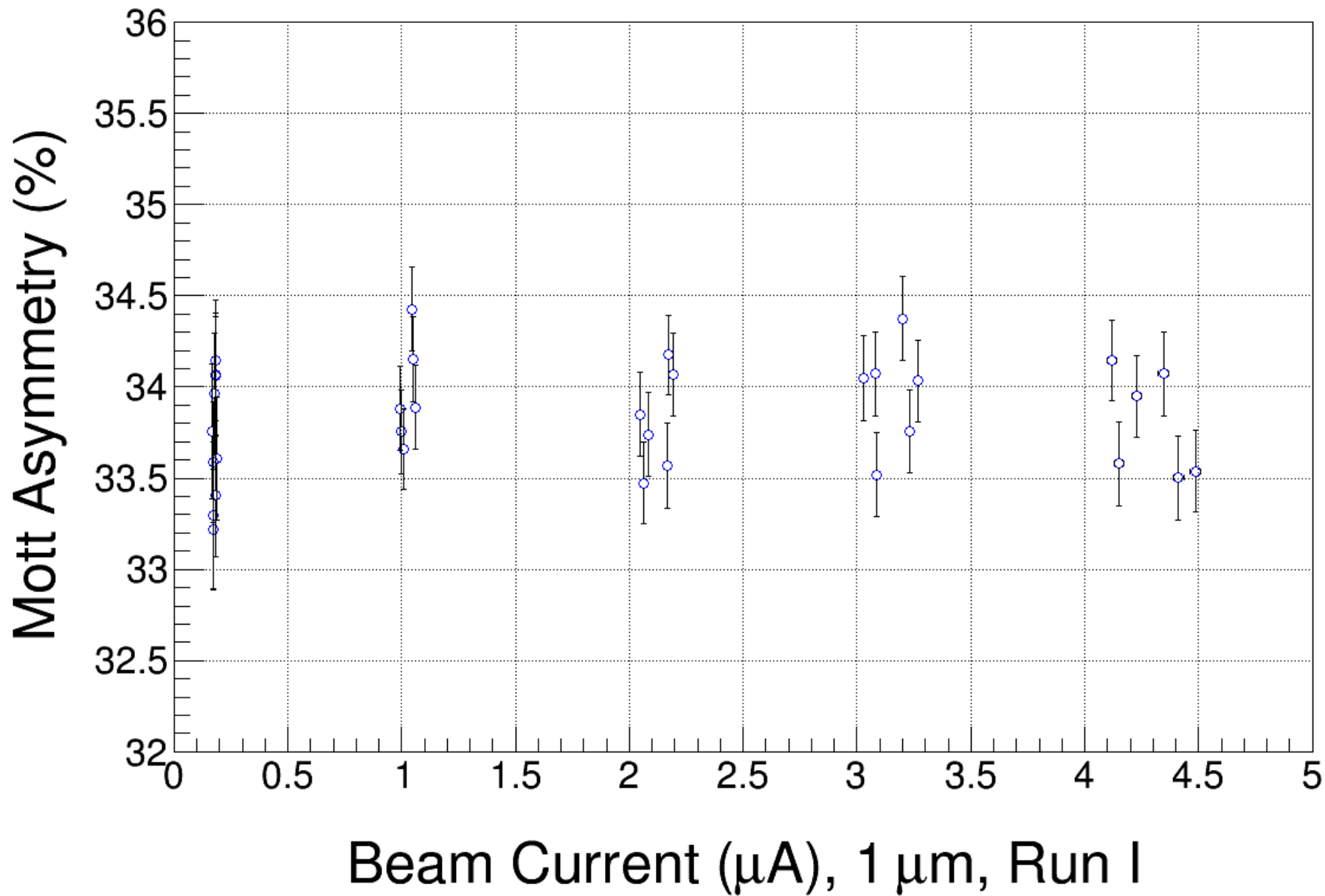
With official asymmetries

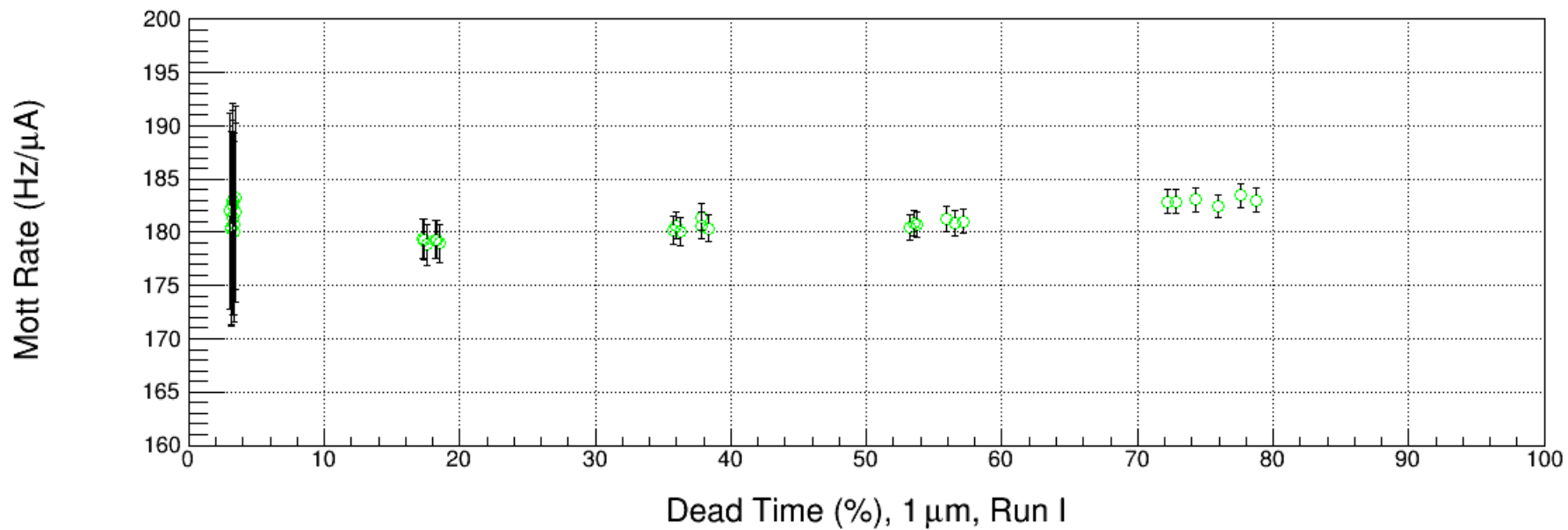
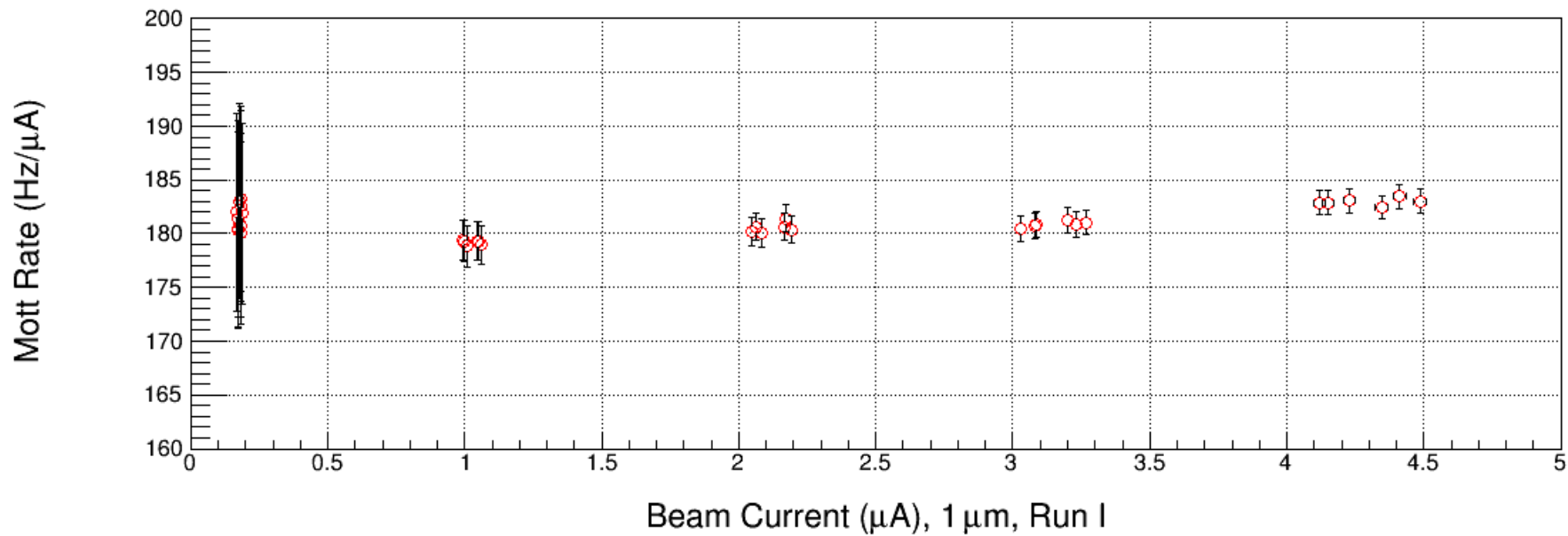


Summary

- I. Relative rates depend on range of Gaussian fit of energy spectra (i.e., 7500-11000 or 8000-9000) since each fit-range gives different mean and sigma
- II. RUN II rate scan with Pockels Cell Off – taken at start of RUN II with initial beam steering – is very consistent with rates from asymmetry runs and with correction applied
- III. Run II rate scan with no timing veto – taken at end of RUN II – is very consistent with rates from asymmetry runs and with correction applied

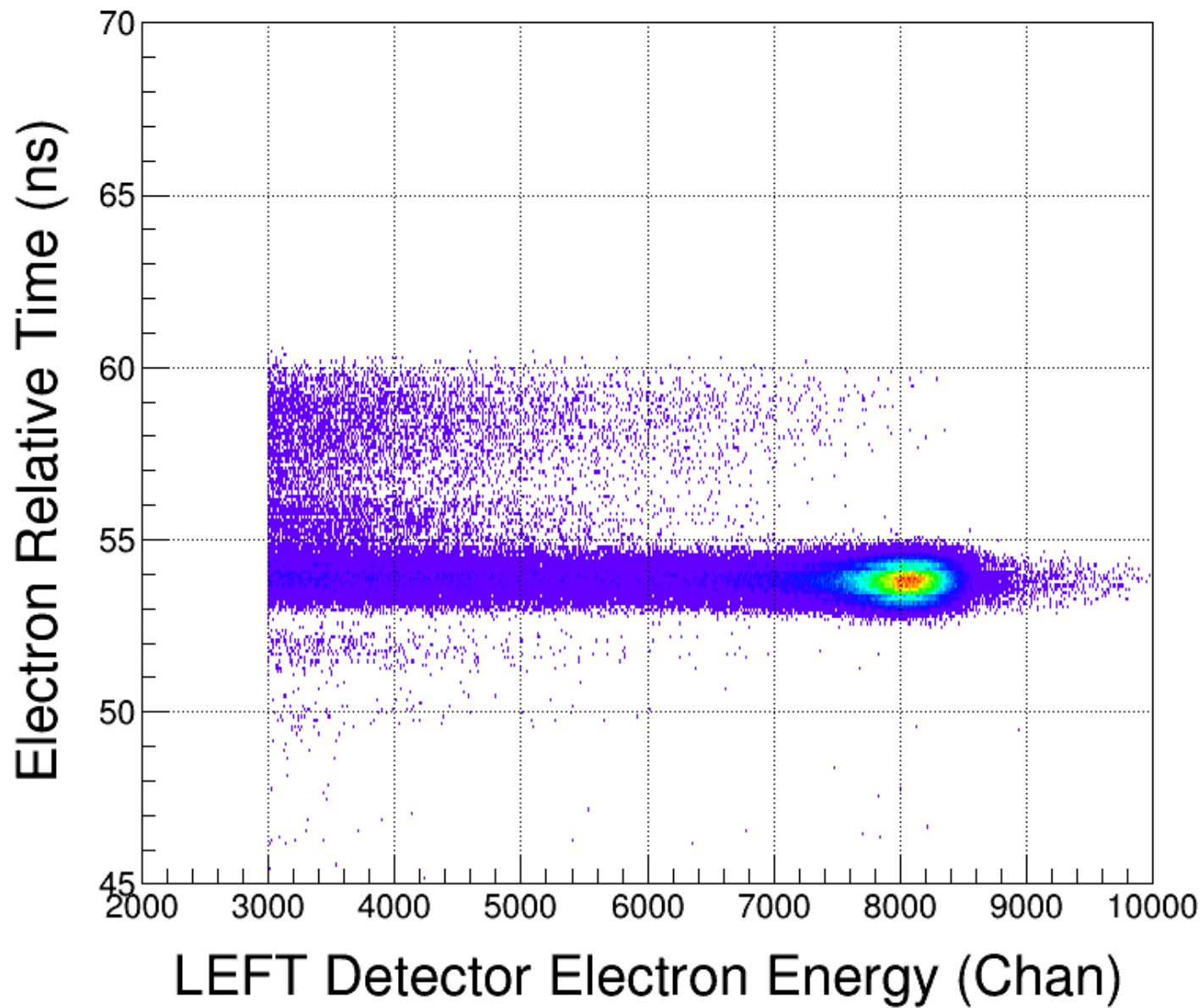
DAQ Dead Time Study

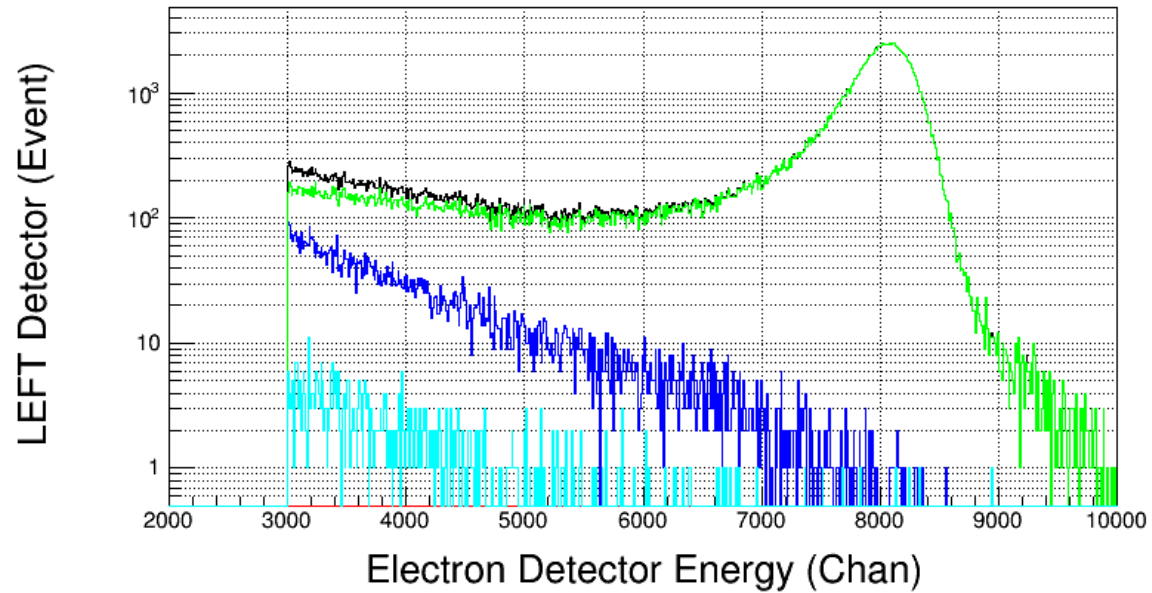
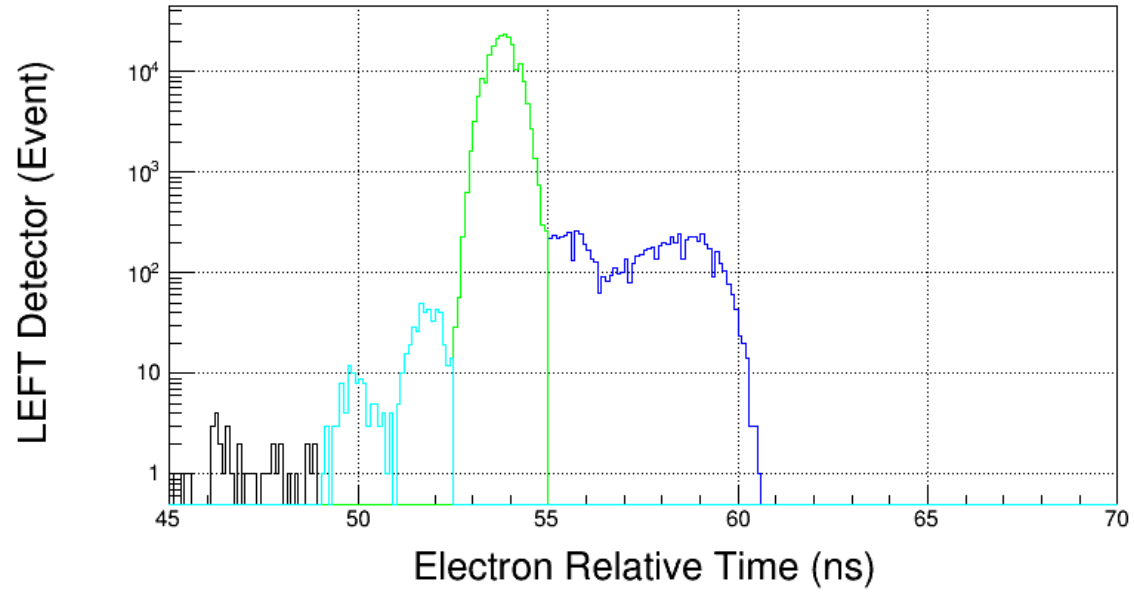




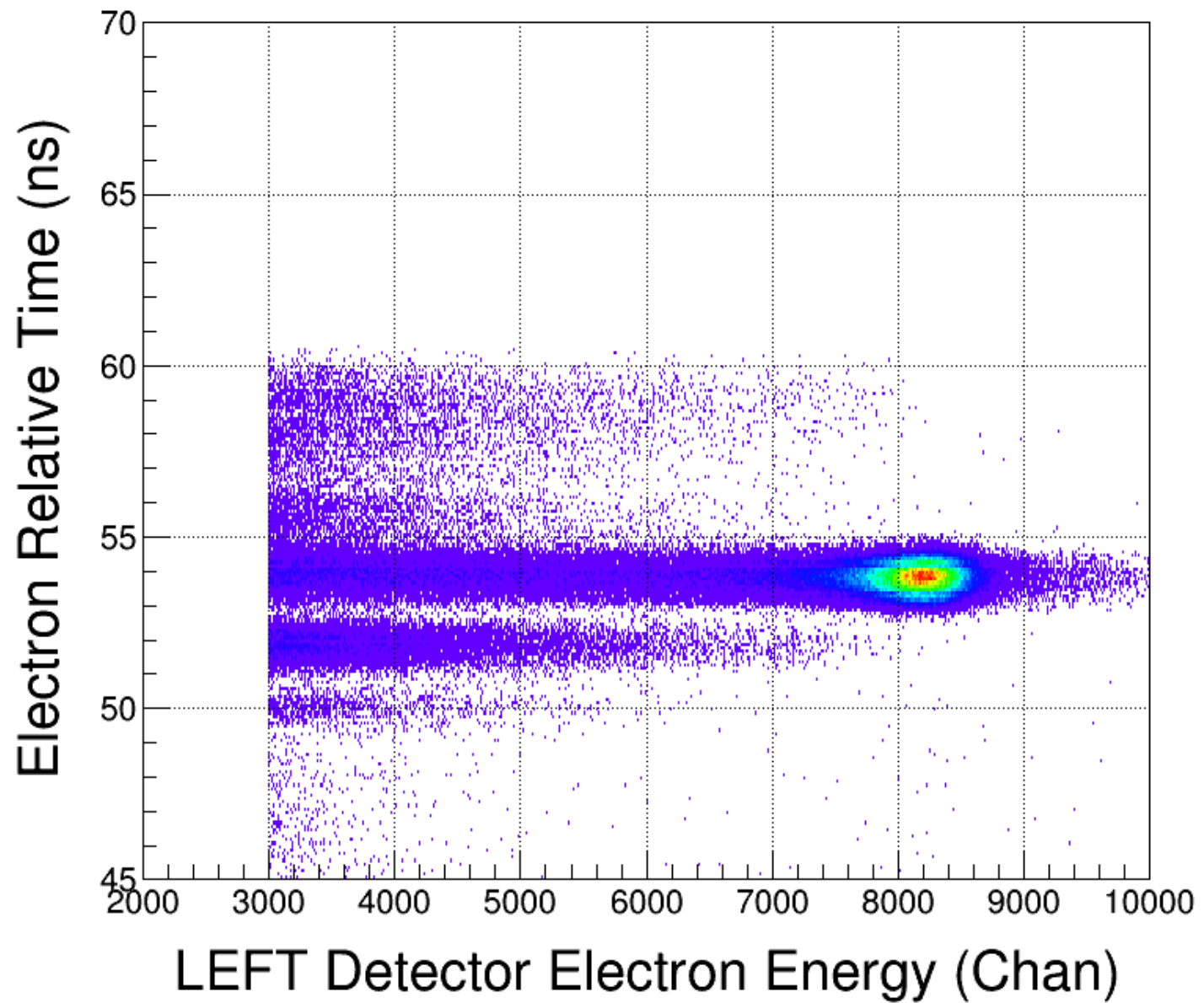
Energy vs Time-of-flight

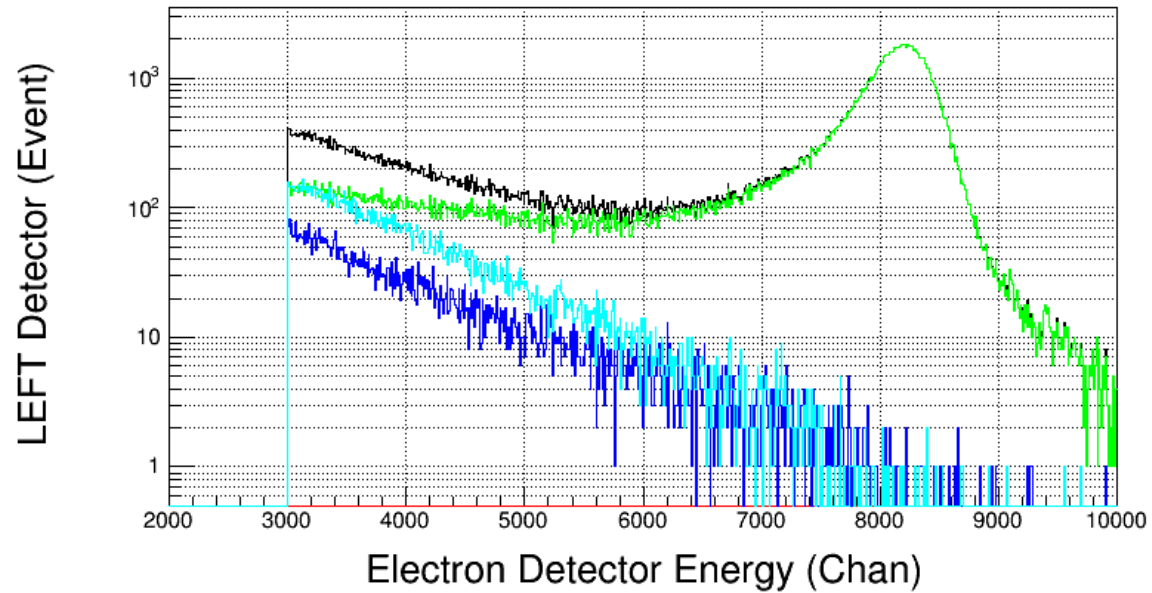
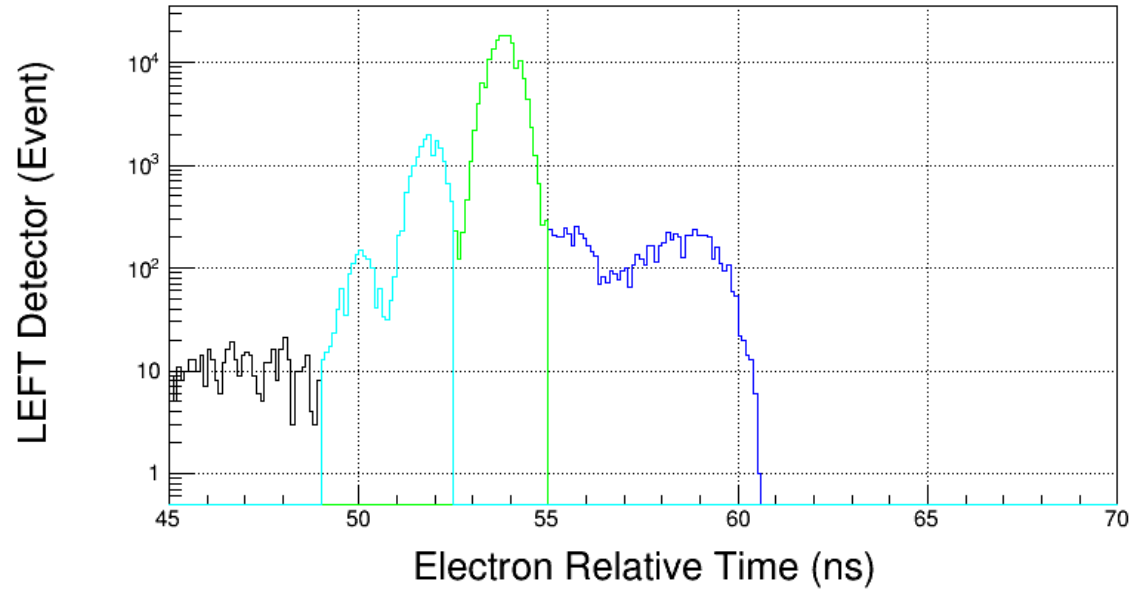
8545



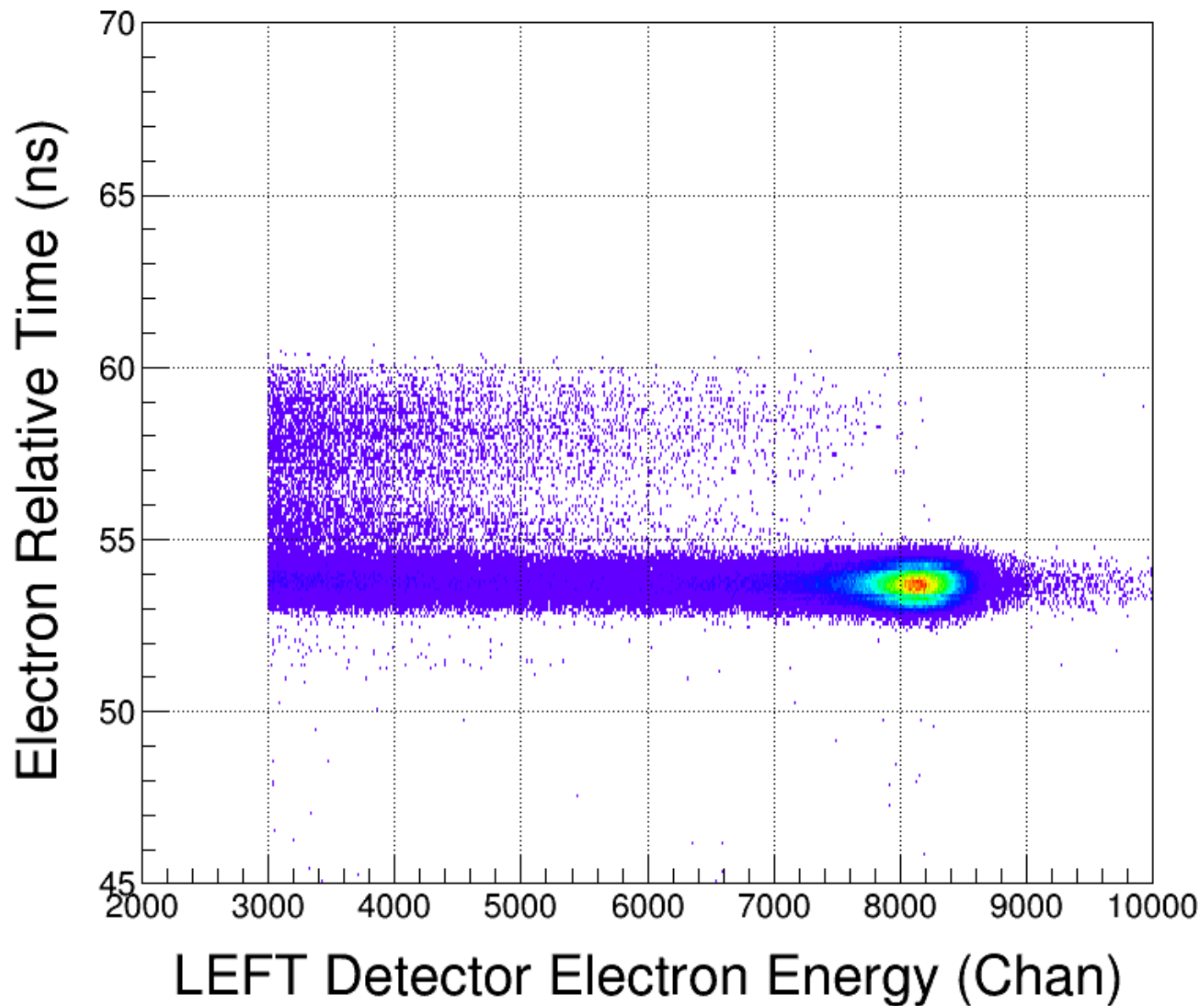


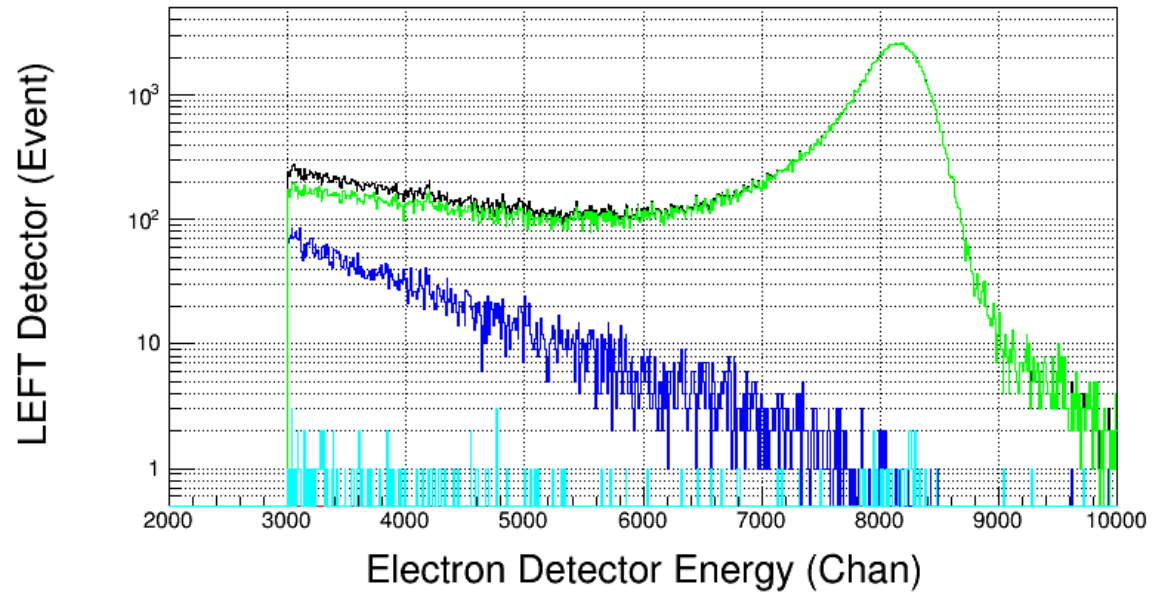
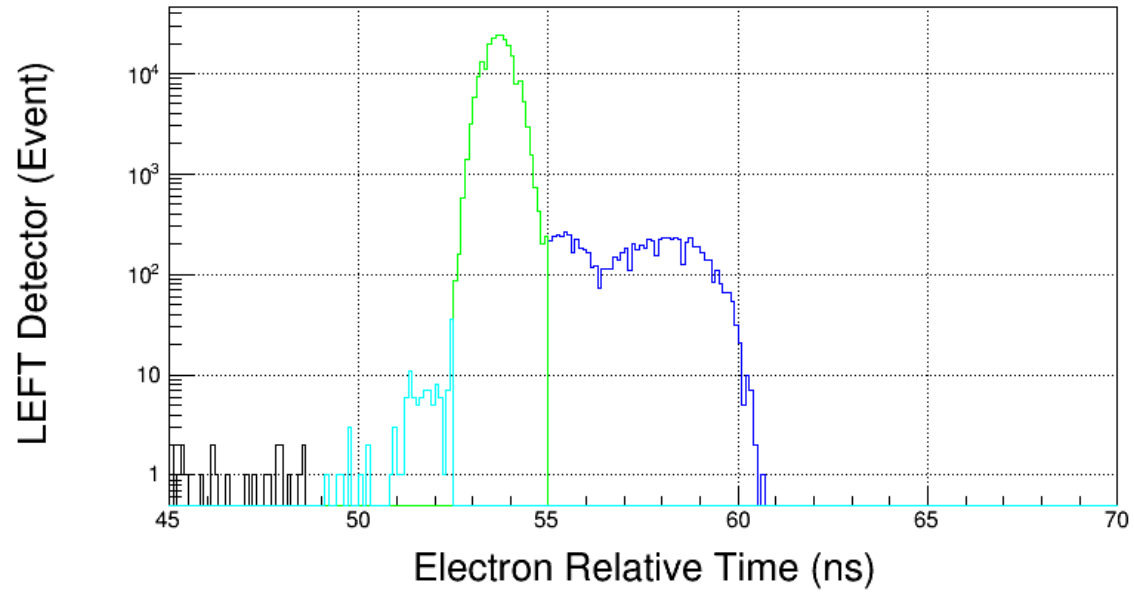
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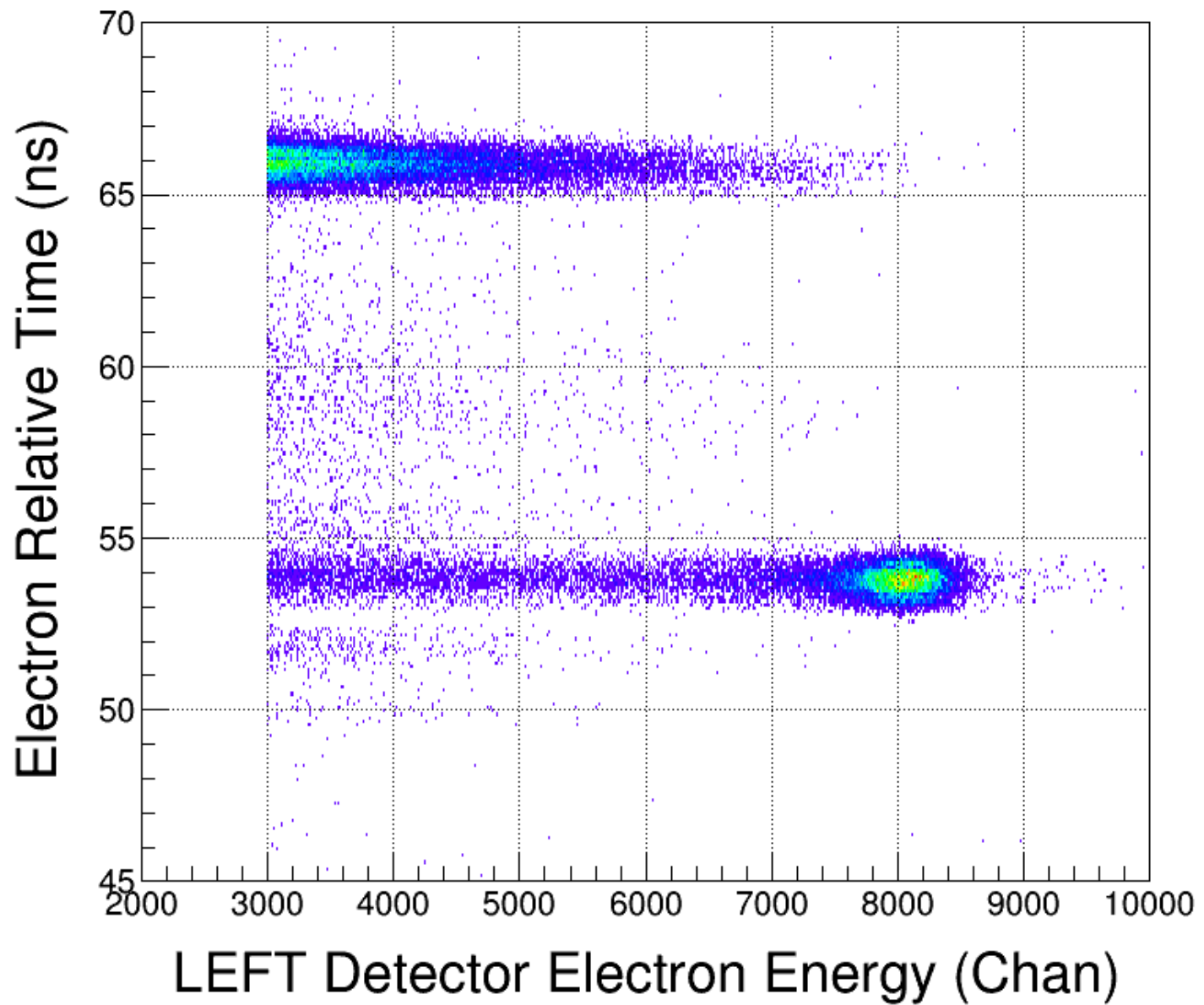


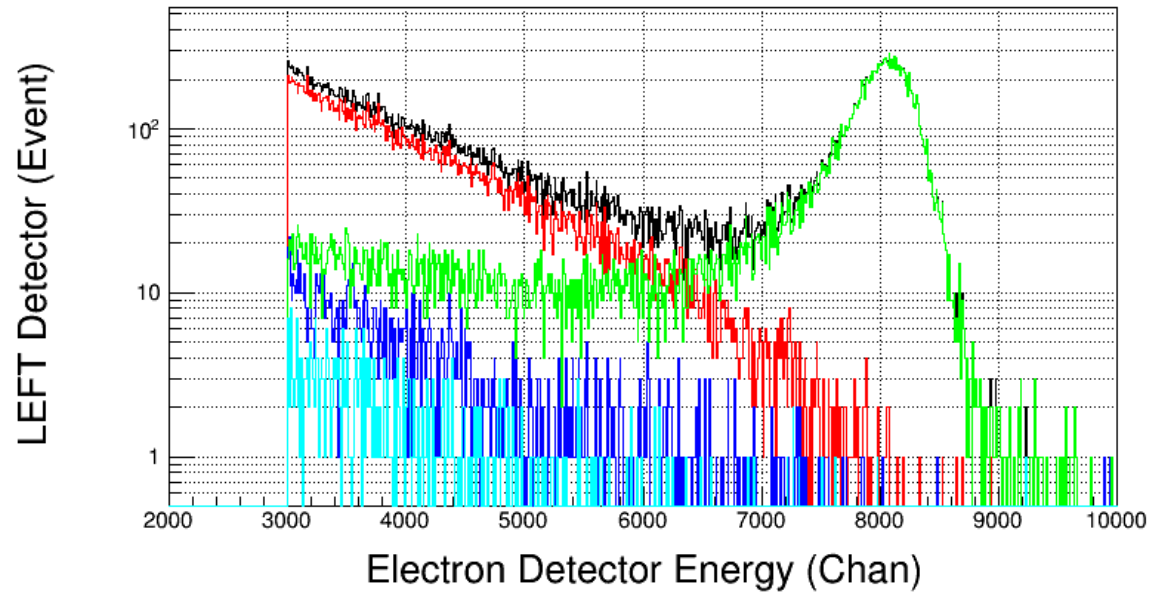
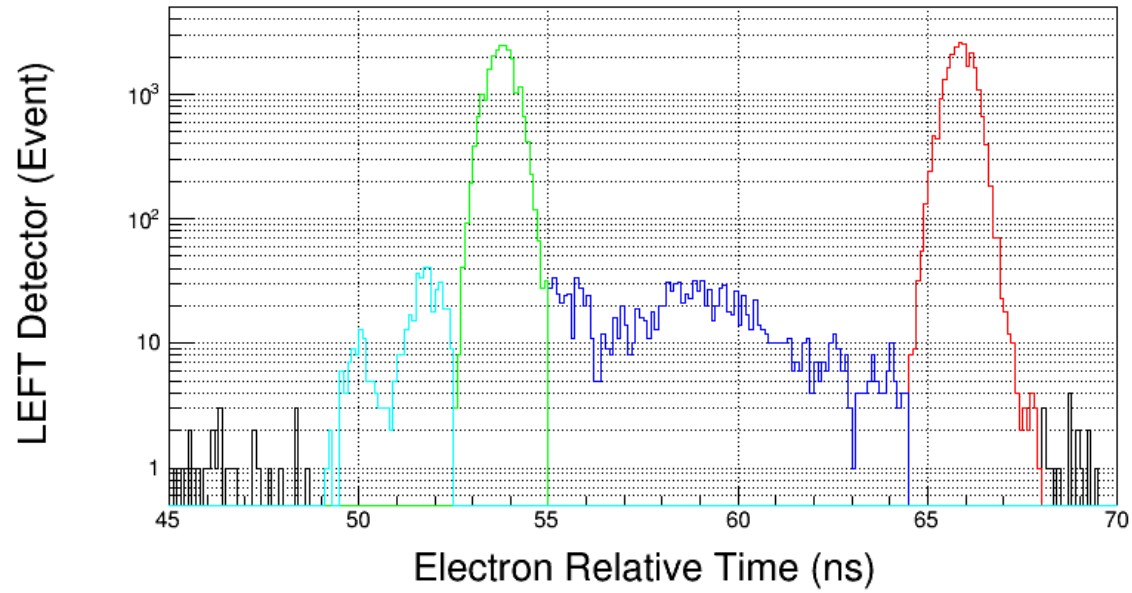
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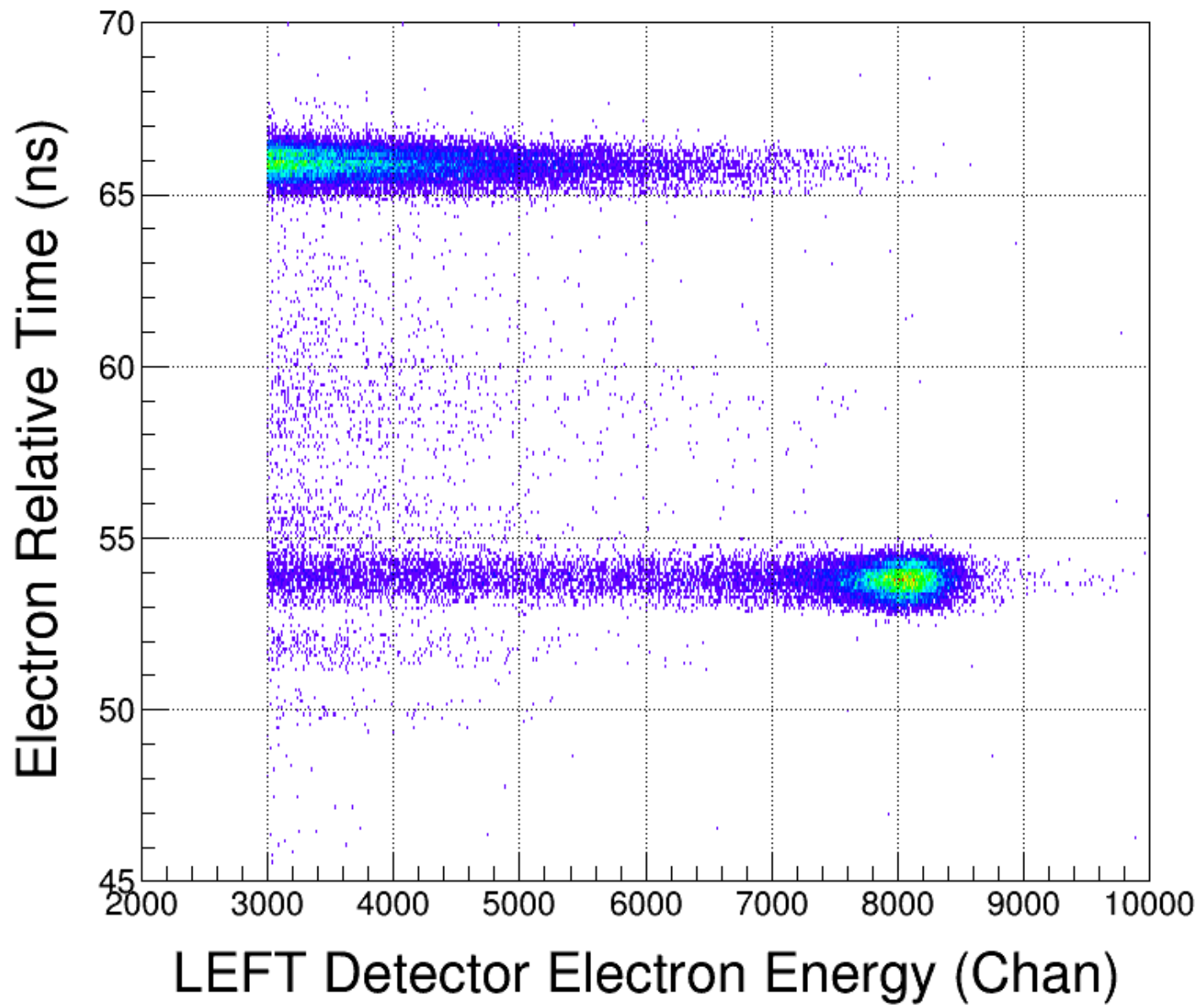


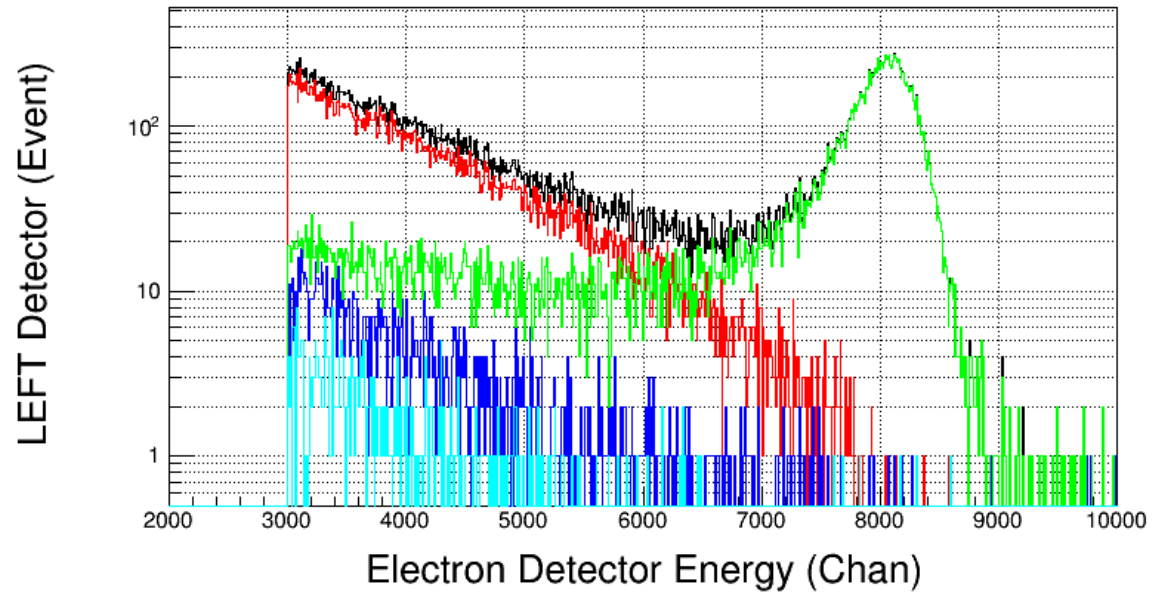
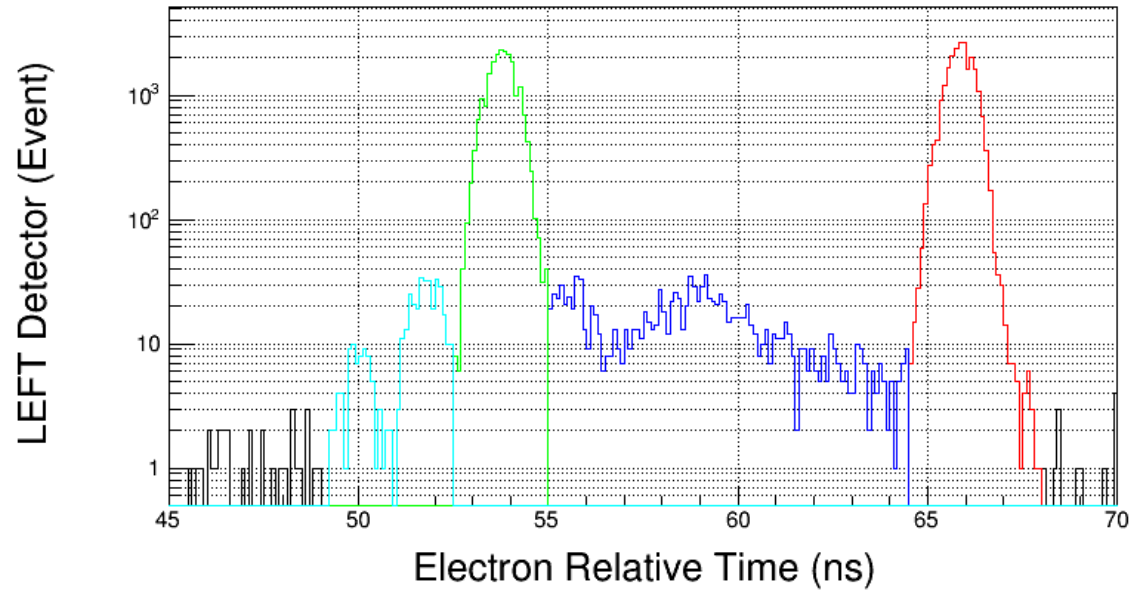
8551





8552





8560

