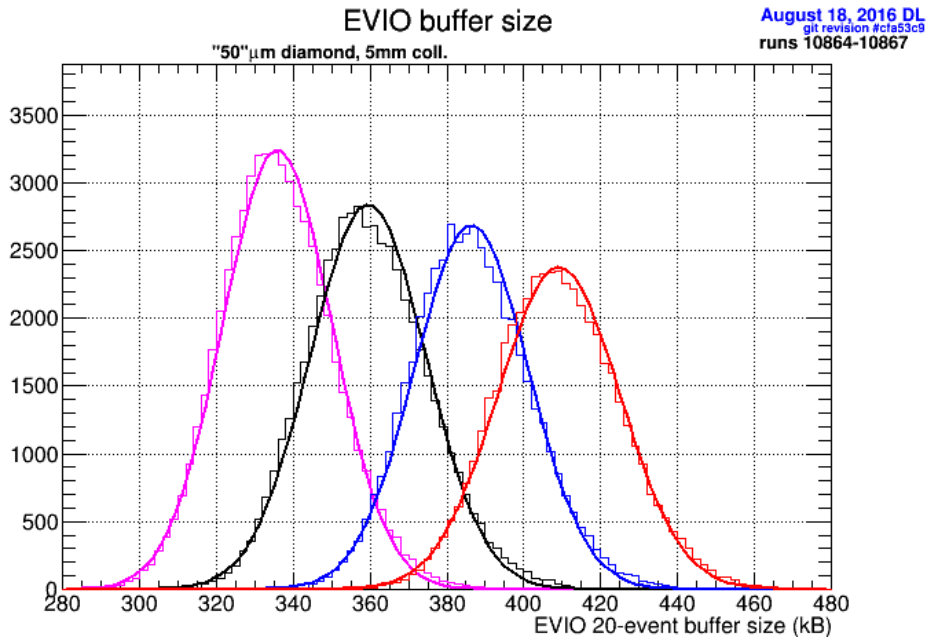
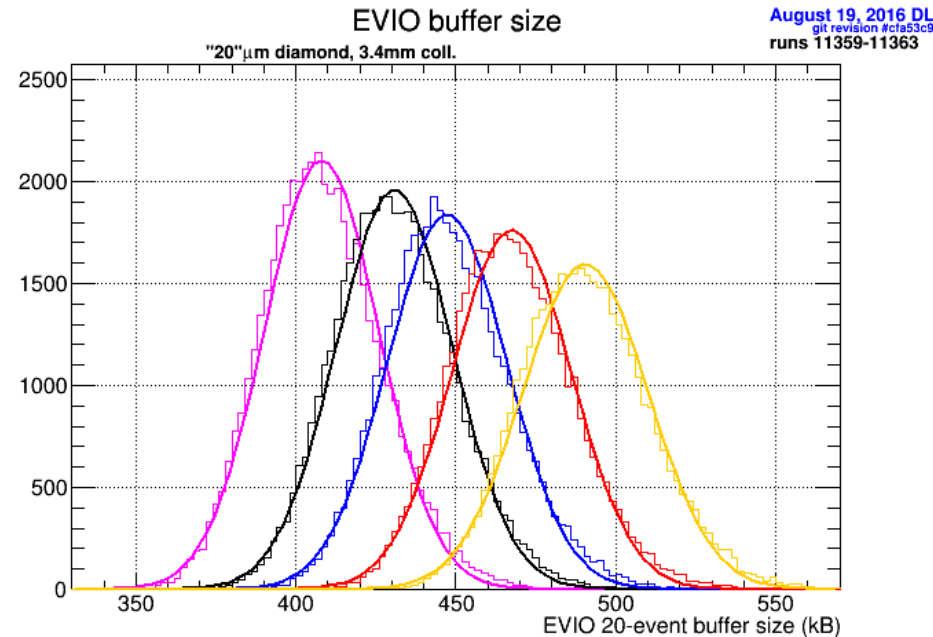


- Plot on left for runs 10864-10867 has been shown previously
- Plot on right for runs 11359-11363 is new
 - These overlap a lot in beam intensity as shown on next slide

50 μ m, 5mm collimator

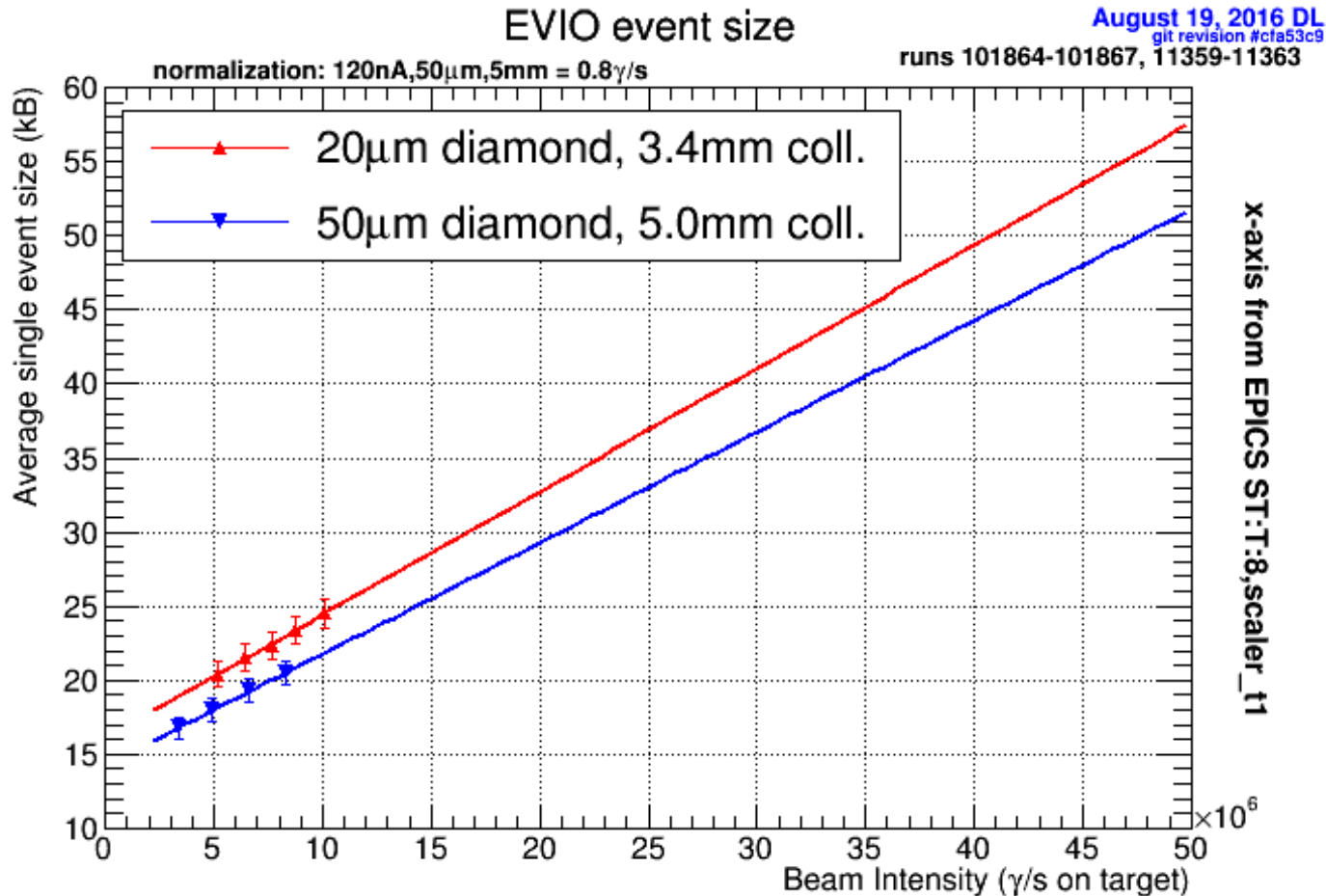


20 μ m, 3.4mm collimator



Extrapolating total event size (from fits on previous slide) to high luminosity

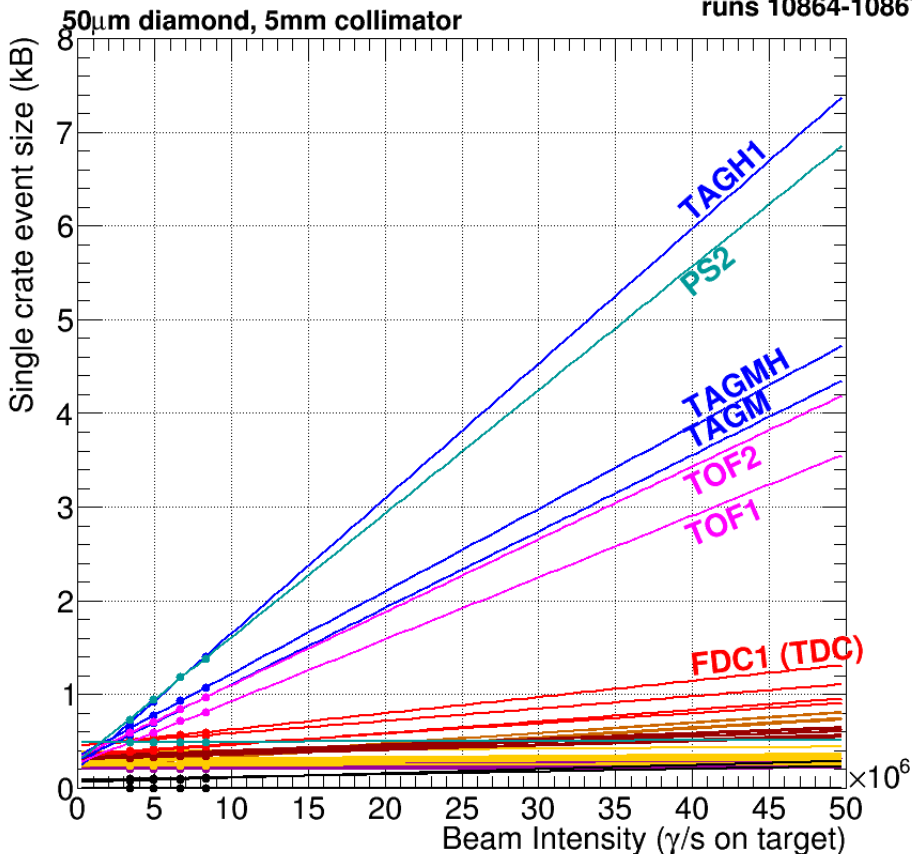
- For each run, a Start Counter scaler value from EPICS was used to calculate beam intensity.
- The normalization point was taken from run 10864 (125nA, 50 μ m, 5mm)
 - Assumed 120nA, 50 μ m, 5mm corresponds to 0.8×10^7 γ /s
- If we assume 100kHz L1 trigger rate at high intensity, then this would indicate 5-6 GB/s (*more details next slide*)



- These plots extrapolate the single crate, single event size to high luminosity
- Same technique described on previous slide for calculating beam intensity
- Assuming 100kHz L1 trigger for high intensity, 20 μ m data suggests \sim 150MB/s for FDC F1TDC crate

n.b. L3 review presentation assumed L1 event rate would scale from 30kHz and thus, high intensity would correspond to \sim 190kHz. If we are able to tighten L1 trigger so that high intensity is only 100kHz then the FDC crates will be just inside of the VME hardware limit.

Single Crate Projection August 19, 2016 DL
git revision #cfa53c9
runs 10864-10867



Single Crate Projection August 19, 2016 DL
git revision #cfa53c9
runs 11359-11363

