

T-577 Testbeam Run Progress Report

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Accelerator 8am Meeting: 12/10/2018

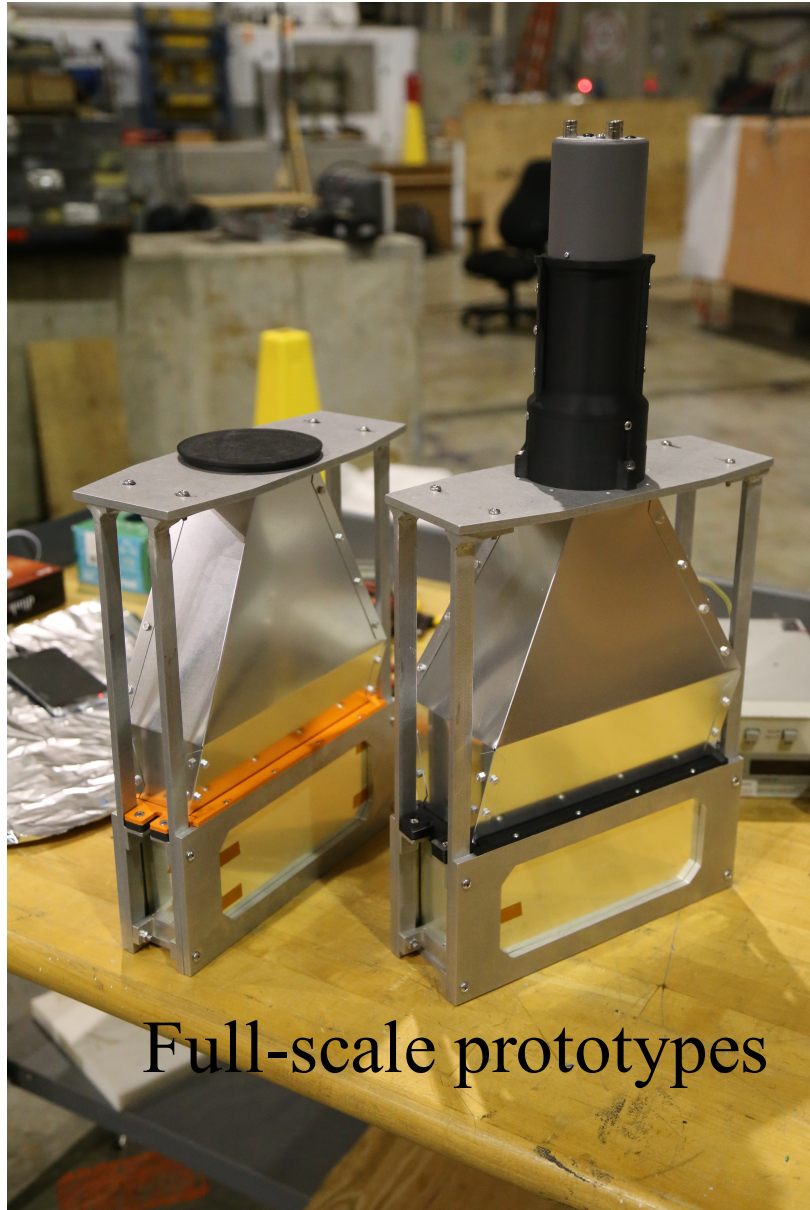
T-577 Schedule and Testbeam Delivery

- Wednesday, Dec 5: Installation of apparatus in ESA (at end of tunnel)
- Thursday, Dec 6: Work on setup all day and get beam from 9pm – 9am
 - First beam delivery around 11pm (5.5 GeV), but had a long access and then beam delivery problem due to cold outside temperatures...
- Friday, Dec 7: Testbeam delivery from 9pm – 9am
 - Very productive shift with 5.5 GeV, single electron rate beam
 - Tested 1B full-scale ShowerMax detector -- scanned beam over detector face
- Saturday, Dec 8: 24hr Testbeam delivery starting at 9pm
 - Tested 1A full-scale ShowerMax (position scans)
- Sunday, Dec 9: 24hr Testbeam delivery; 5.5 GeV, single electron rates
 - Tested 1B and 1A benchmarking ShowerMax prototypes (angle and position)

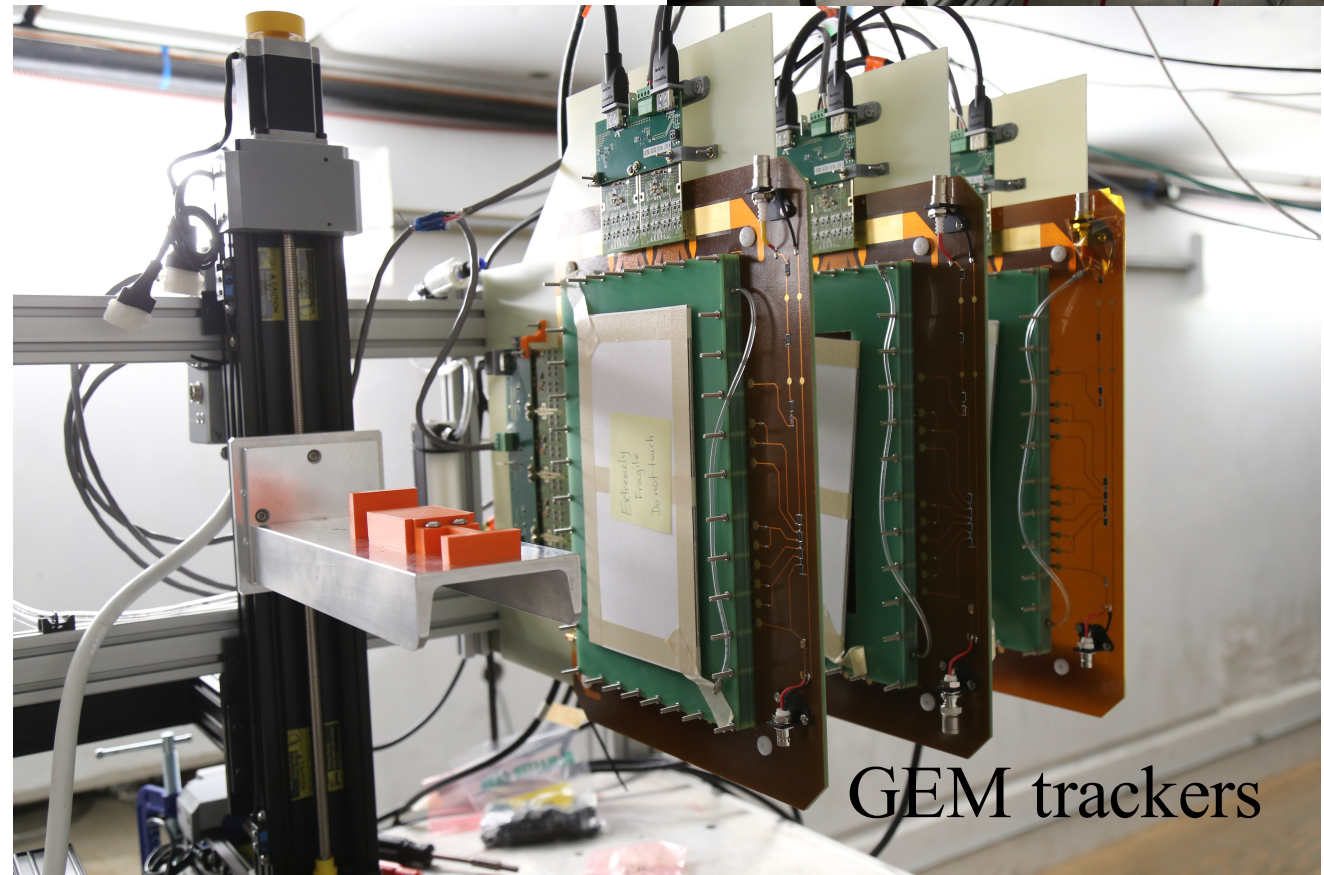
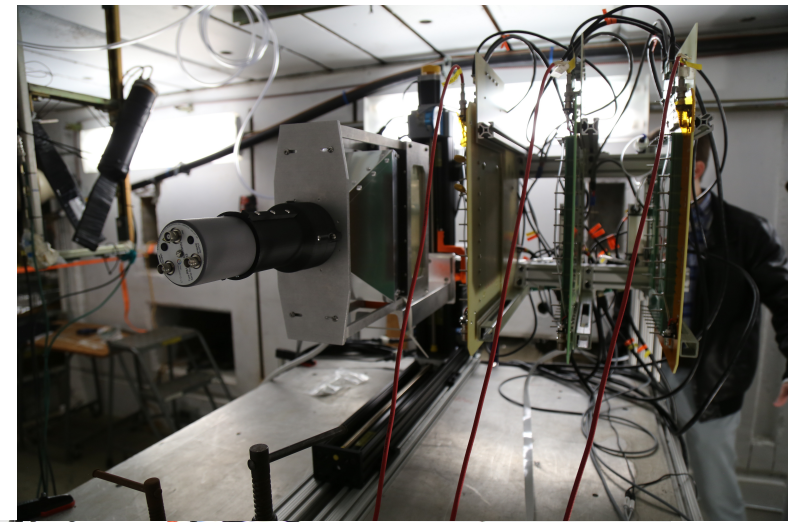
T-577 Schedule and Future plans

- Monday, Dec 10: 24hr testbeam delivery. Change to 3 GeV in morning (~11am) and then change to 8 GeV in evening (9pm)
 - Finish benchmarking tests for 5.5 GeV beam energy during owl shift
 - Test full-stack benchmarking and full-scale prototypes at 3GeV during day shift
 - Switch to 8 GeV and give Su Dong overnight shift of beam
- Tuesday, Dec 11: 24 hr testbeam delivery; 8 GeV, single electron rates
 - Test full-stack benchmarking and full-scale prototypes at 8GeV during day shift
 - Begin tests of thin quartz detectors for MOLLER and PREX/CREX: Tandem, ring5, and SAM detectors
 - Give Su Dong the beam for overnight shift
- Wednesday, Dec 12: 24 hr Testbeam delivery; 8 GeV, single electron rates
 - Finish tests of this quartz detectors by 4 pm
 - De-install apparatus and pack-up (we're done. Thanks a lot!)
 - Give Su Dong the beam for overnight shift

T-577 Setup

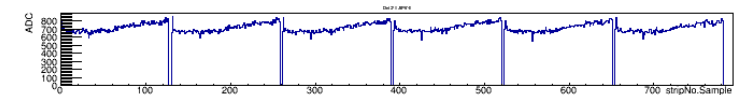
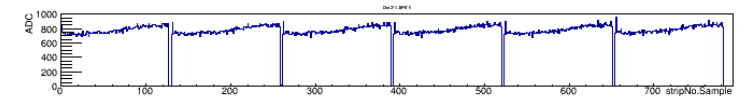
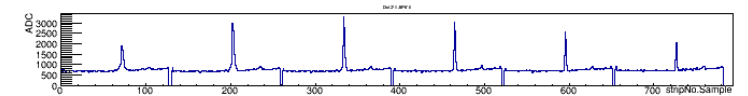
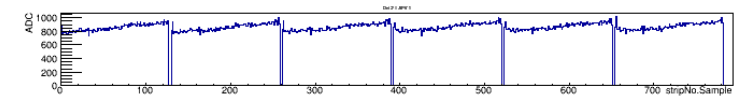
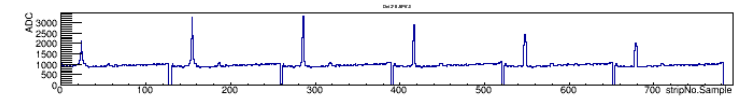
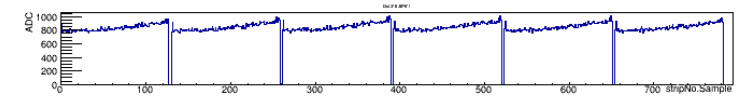
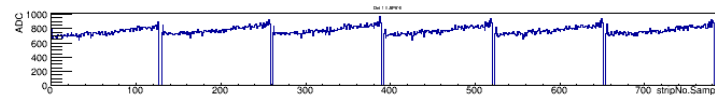
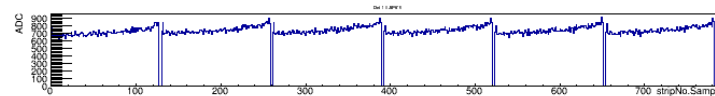
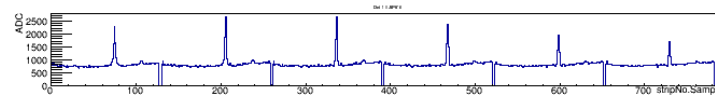
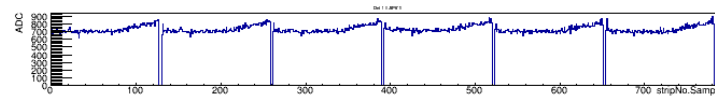
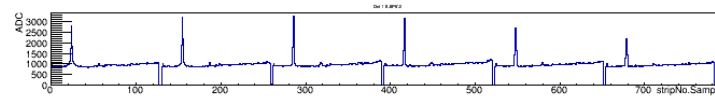
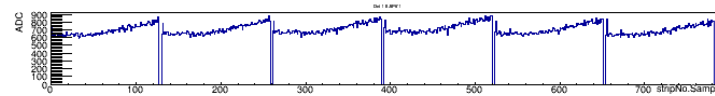
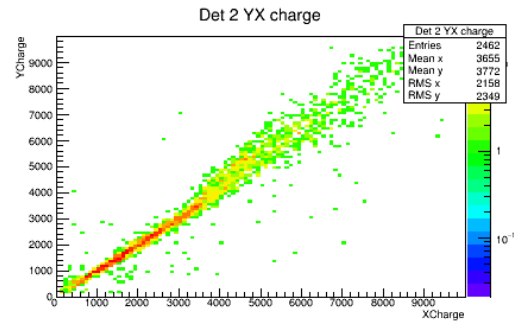
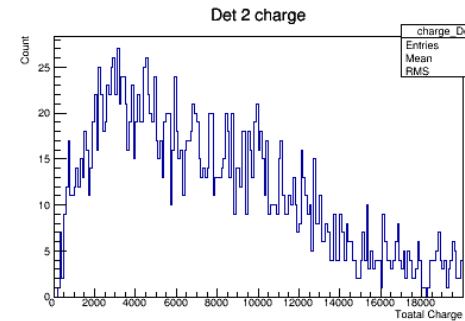
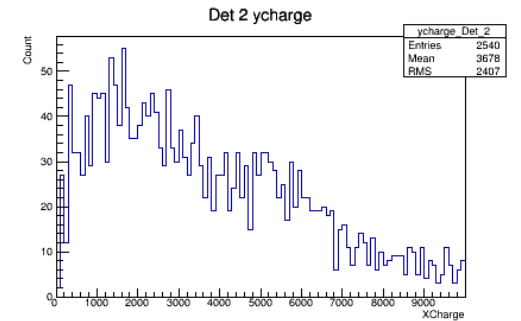
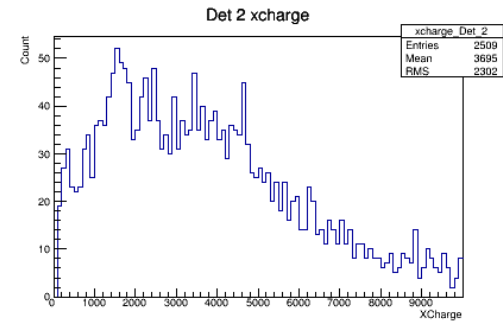
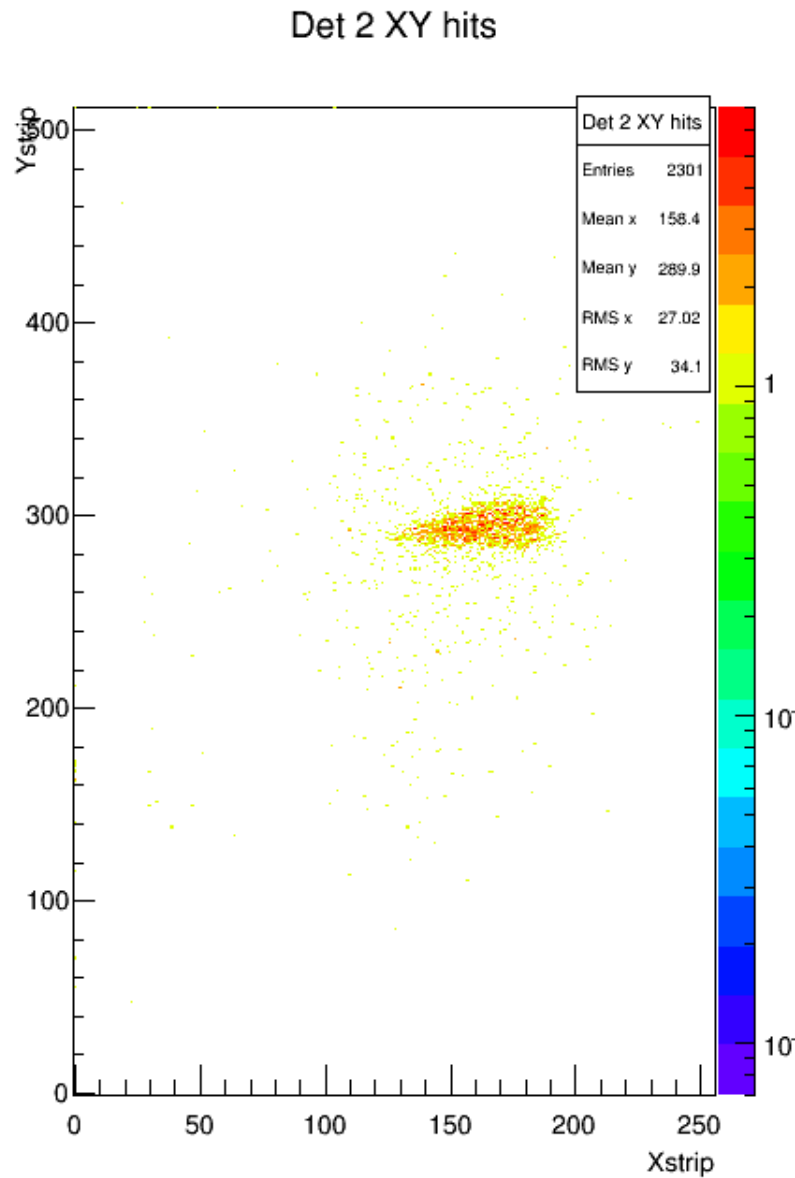


Full-scale prototypes



GEM trackers

Beam Spot (5.5 GeV): ~ 1 cm by 2 cm



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