

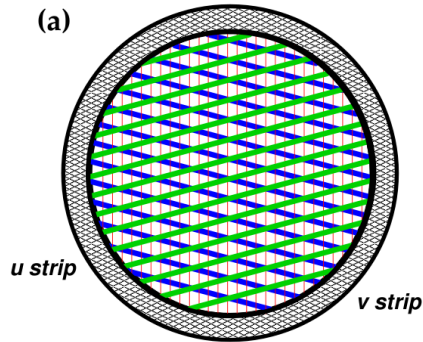


FDC Improvements

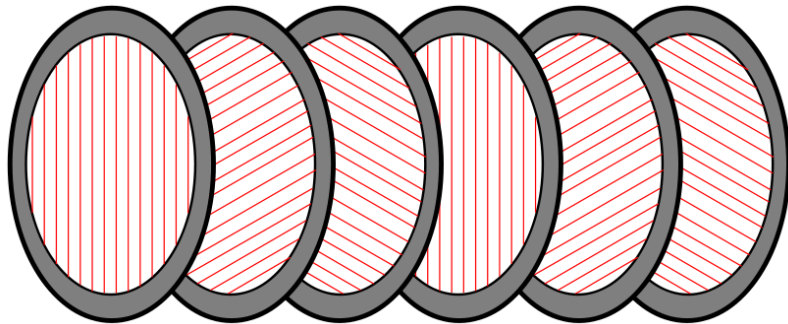
Alexander Austregesilo

08/09/2016

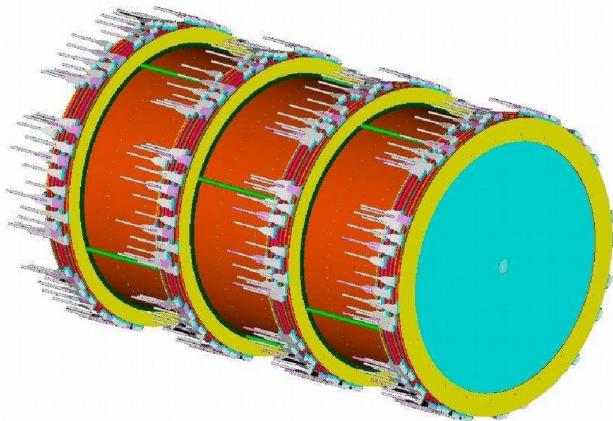
Detector Overview



Cell: Wires + 2 Cathode Layers



Package: 6 Cells



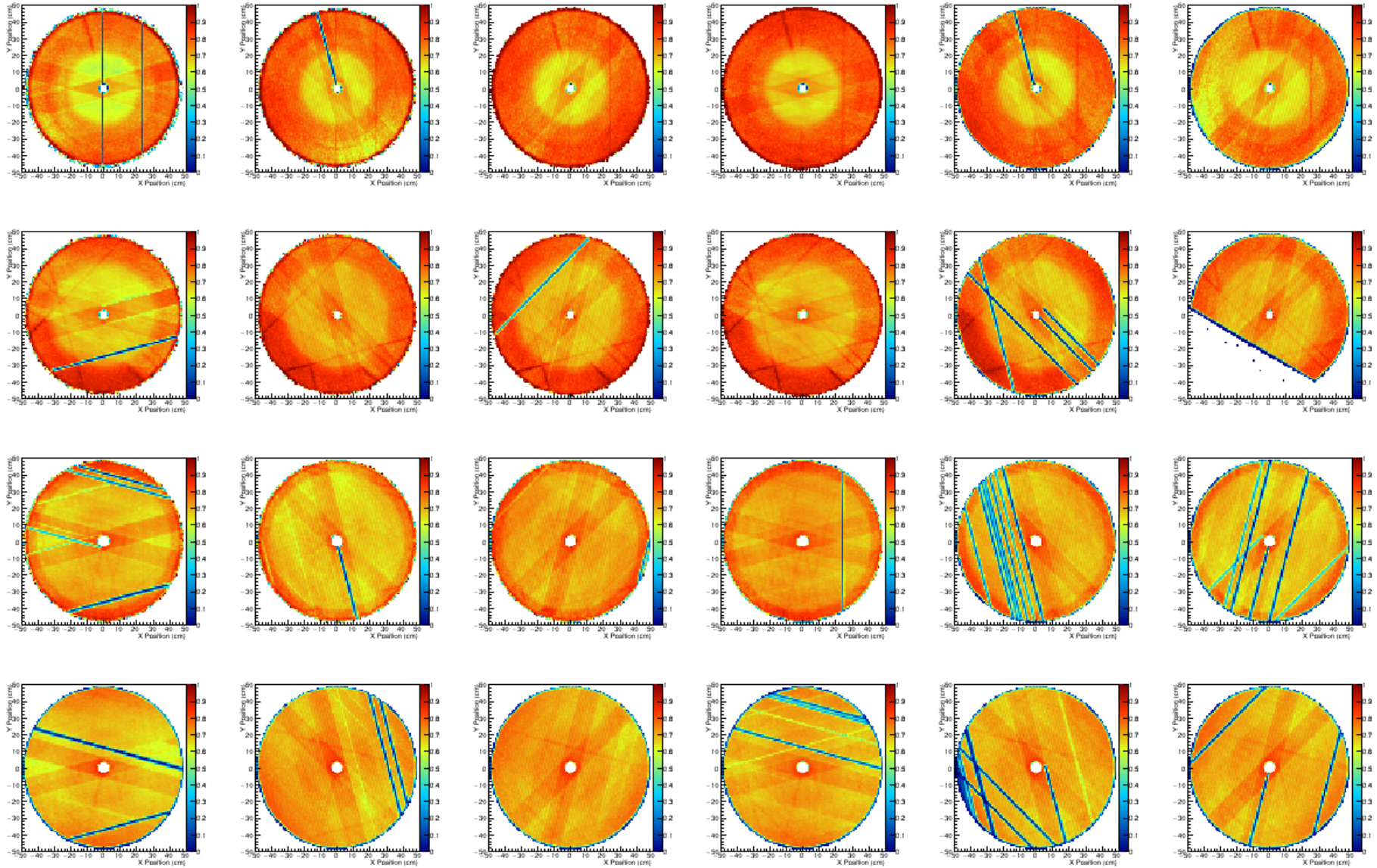
FDC: 4 Packages = 24 Cells

Reconstruction Performance

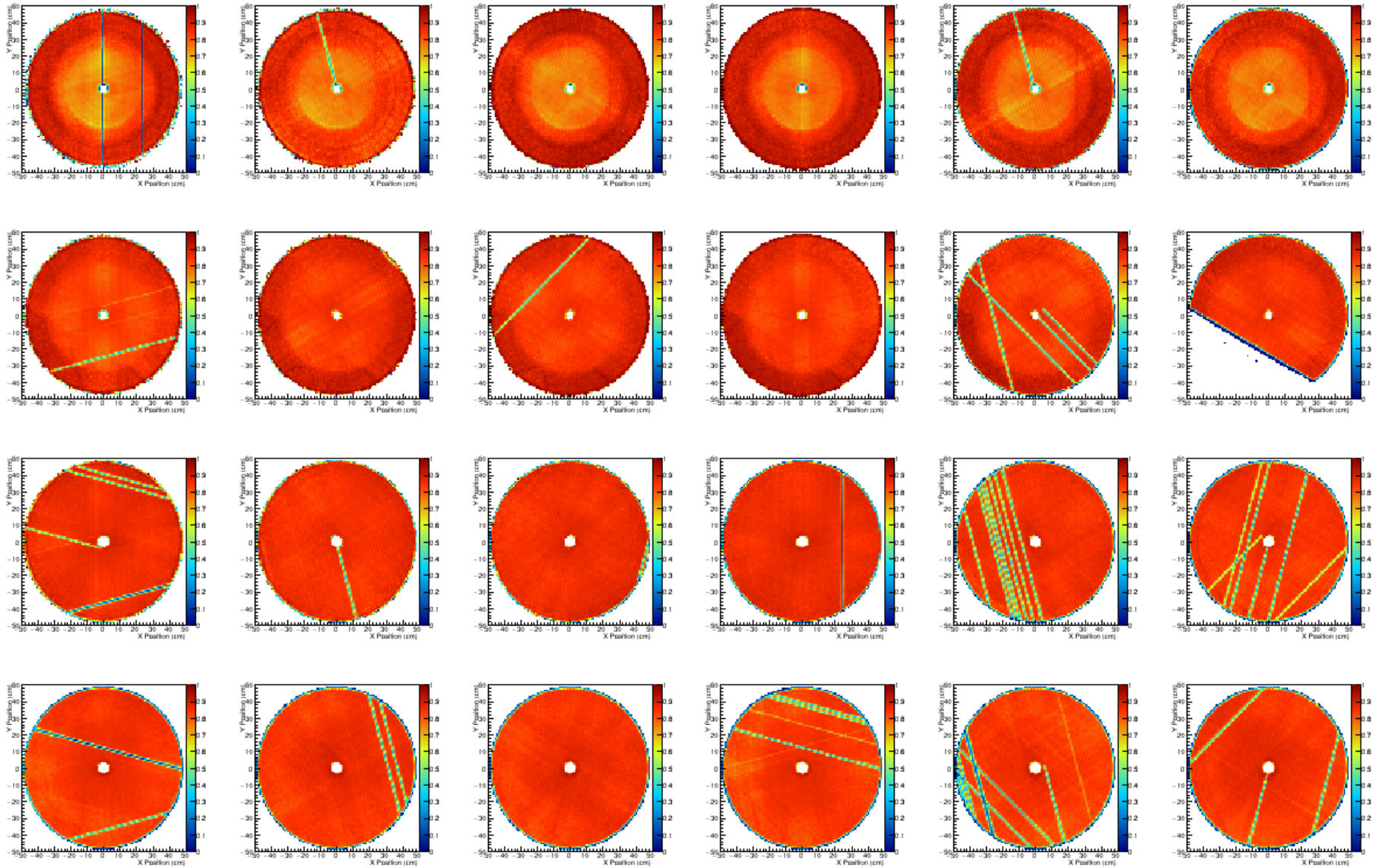
Comparison on full run #11553

- (1) REST production
- (2) Improvements on clustering and rough time calibration
- (3) Current sim-recon with Simon's changes to tracking code

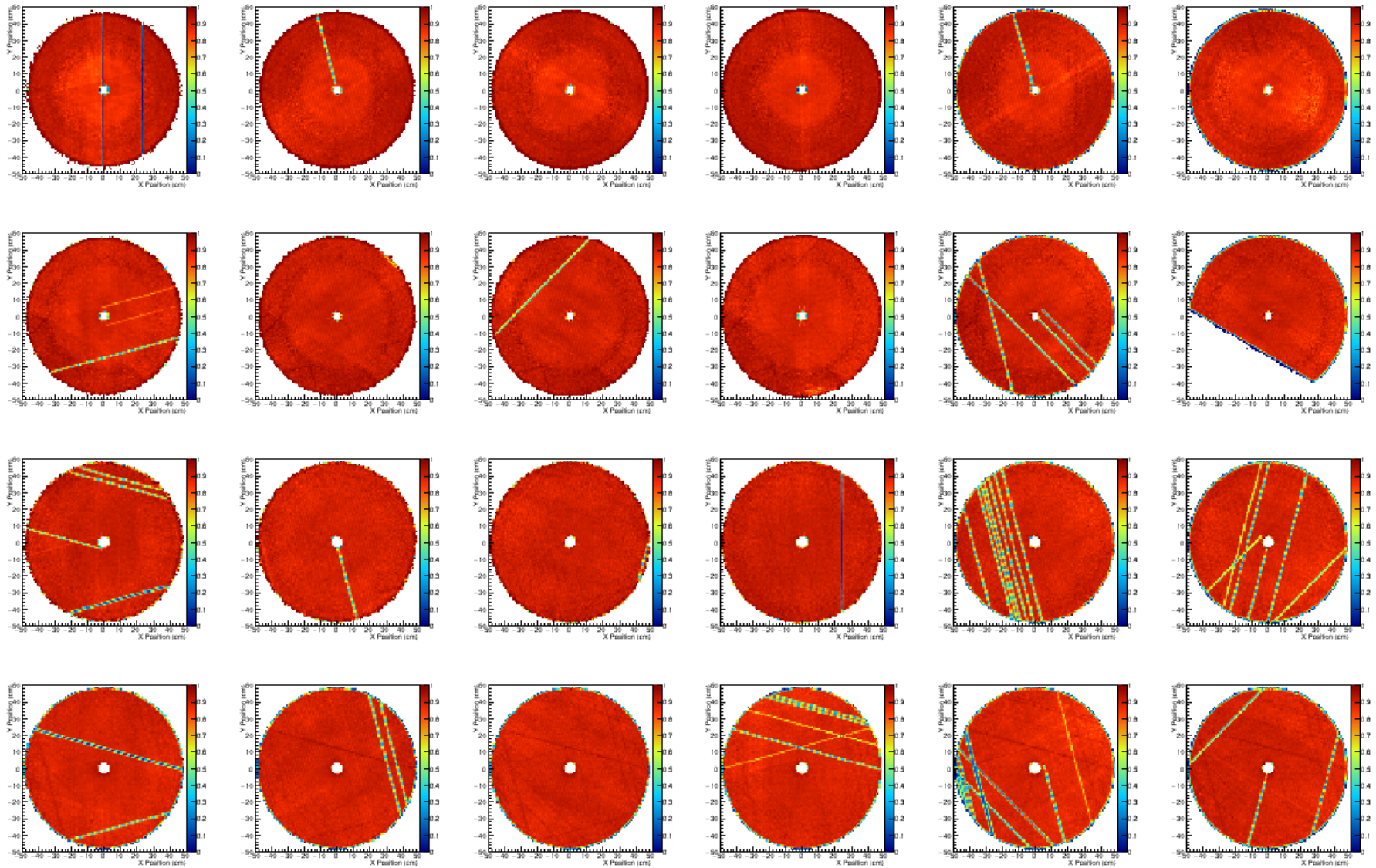
(DFDCPseudo) Efficiency (1)



(DFDCPseudo) Efficiency (2)



(DFDCPseudo) Efficiency (3)

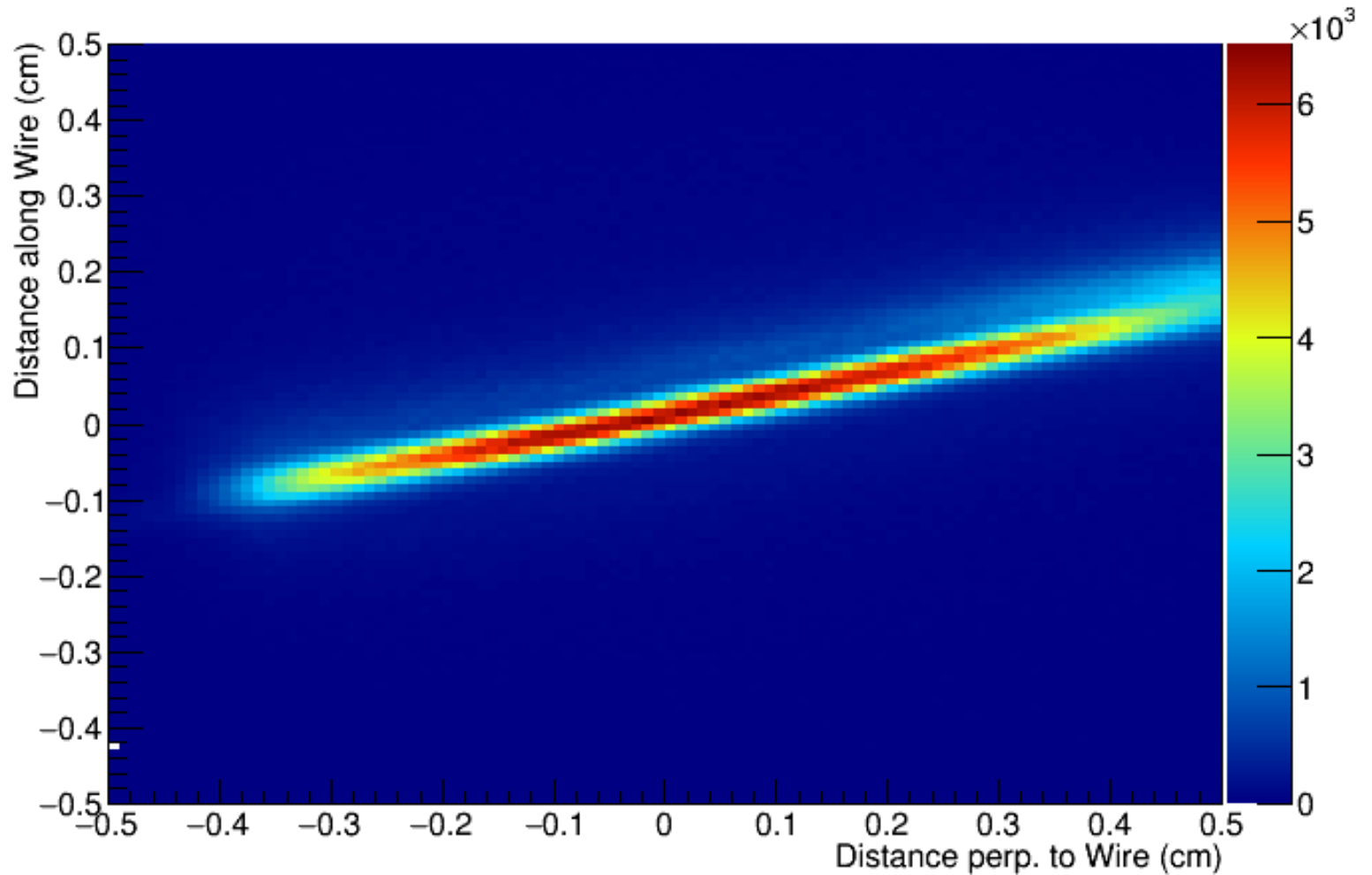


In Numbers

11553	FDC Efficiency	# Tracks / Ev.
(1)	68.8%	2.55
(2)	81.5%	2.75
(3)	88.3%	2.72

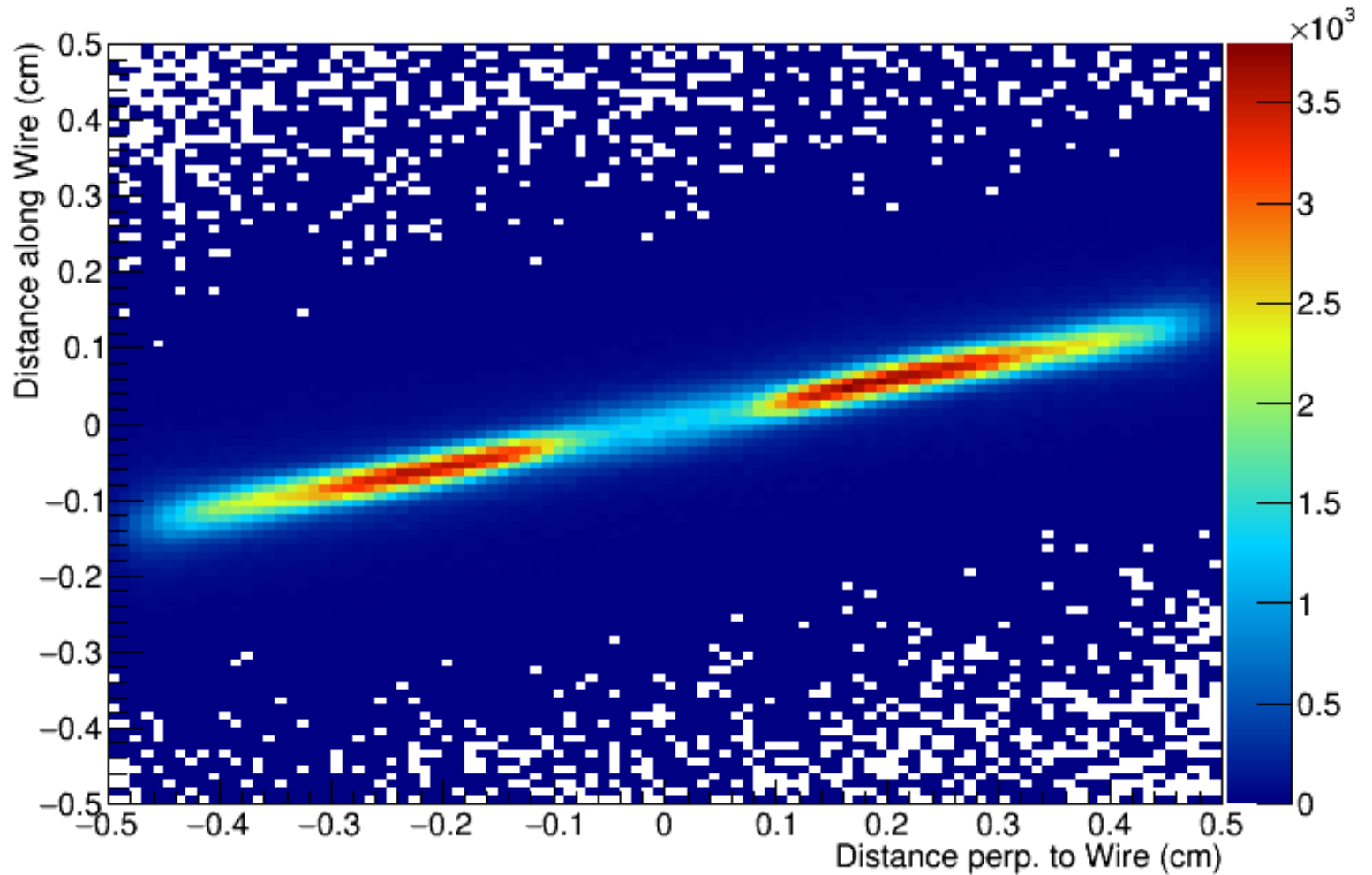
Remaining Issues

(2)



Remaining Issues

(3)



Summary

Conclusion:

- Much progress since REST production
=> Higher and more uniform Efficiency
- Room for improvement, but redundancy saves tracking efficiency

Other projects:

- Comparison with MC
- Run-dependent performance study