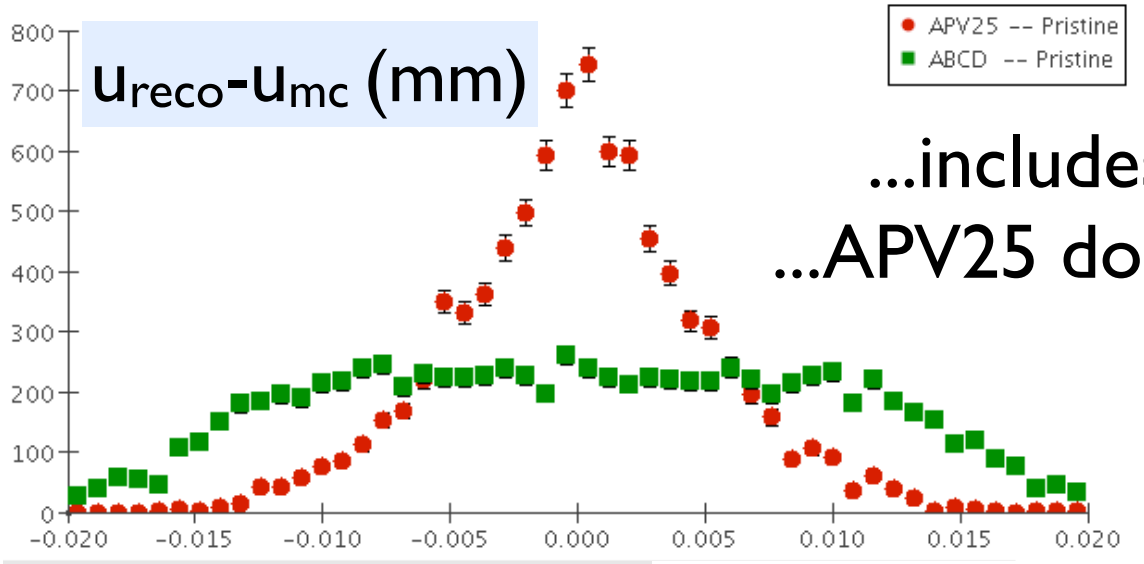
Chip Parameters

	ABCD Pristine	APV25 Pristine	ABCD Irradiated	APV25 Irradiated
Capacitance Intercept	0	0	0	0
Capacitance Slope	0.12	0.12	0.16	0.16
nBits	1	10	1	10
Dynamic Range	10	40	10	40
Noise Intercept	600	270	600	270
Noise Slope	65	36	65	36
Trapping Constant	0	0	0.2	0.2

pF/mm

Thresholds set to 4-sigma above noise

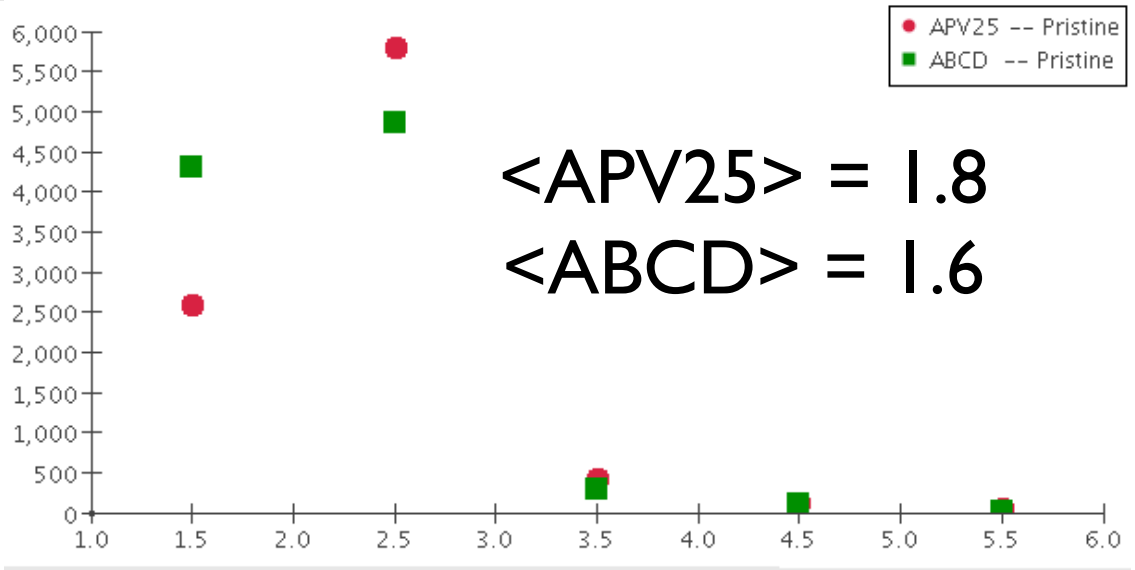
Pristine chips...resolution and cluster size



...includes all clusters

...APV25 does much better

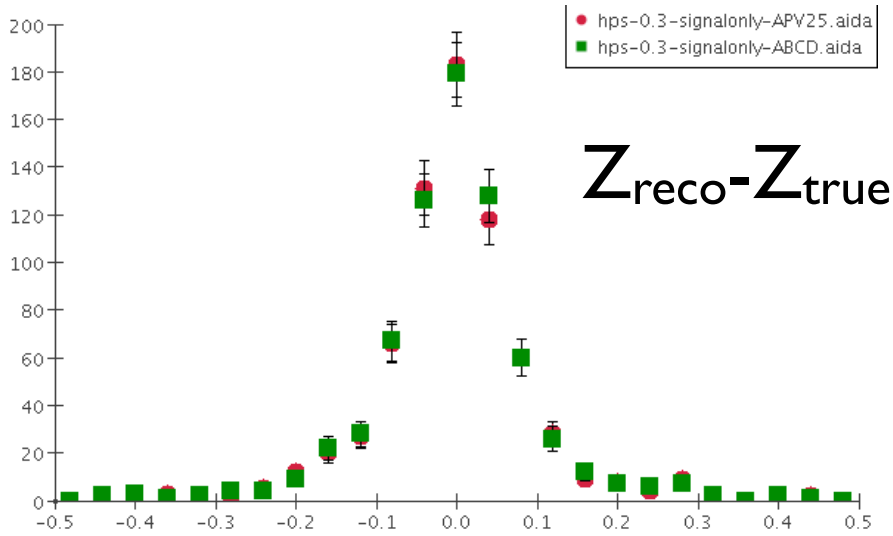
...APV25 has slightly higher average cluster size



<APV25> = 1.8

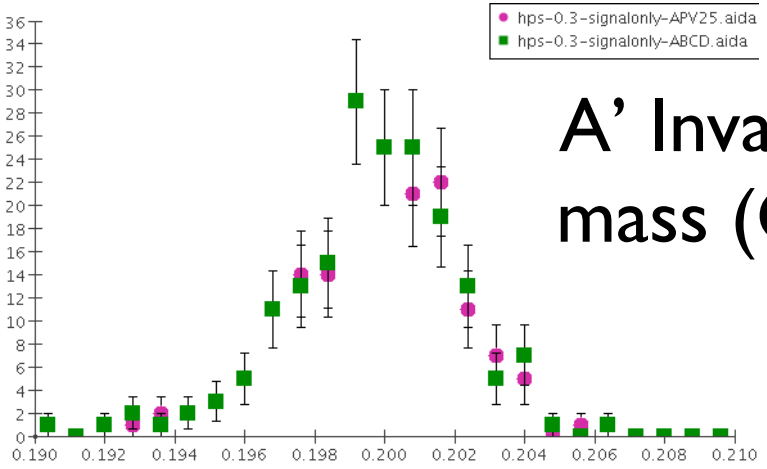
<ABCD> = 1.6

Tracking resolutions...



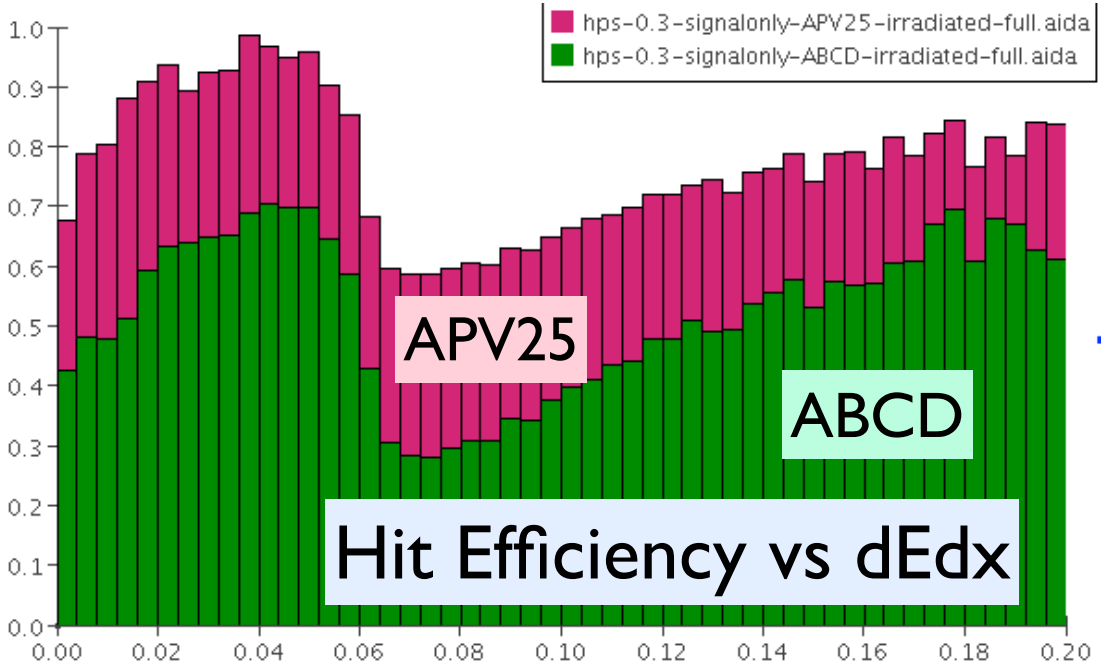
Z_{reco}-Z_{true} (mm)

...but, choice of chip doesn't seem to effect track resolutions.



A' Invariant mass (GeV)

Radiation effects...



- w/o radiation damage, hit efficiency is >>99%...including it (but not adjusting thresholds) efficiency drops significantly
- average cluster sizes drop to ~1.3 and 1.1 (APV25 and ABCD)
- tracking efficiency drops to ~10% (from ~98%)
- it's the trapping that kills hits...is 0.2 too conservative? Where does this number come from?