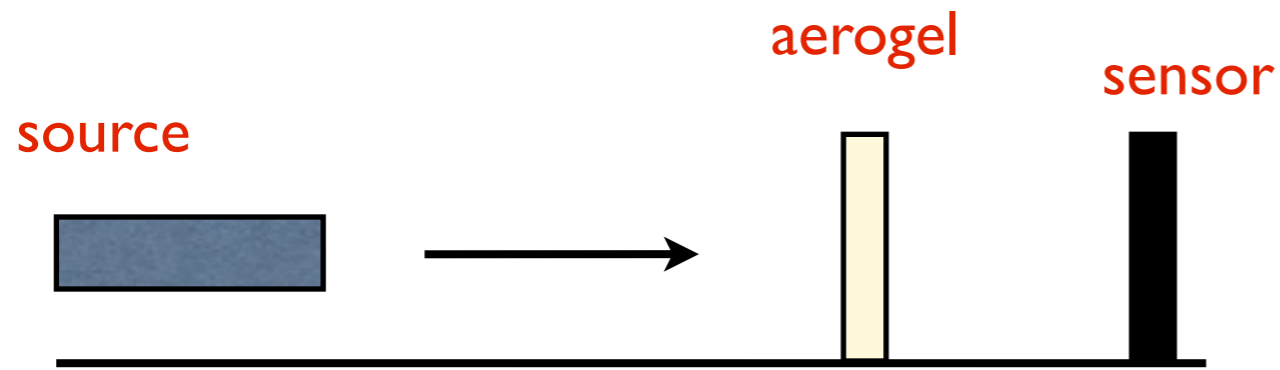


X-Ray Camera Scan of Aerogel Preliminary tests

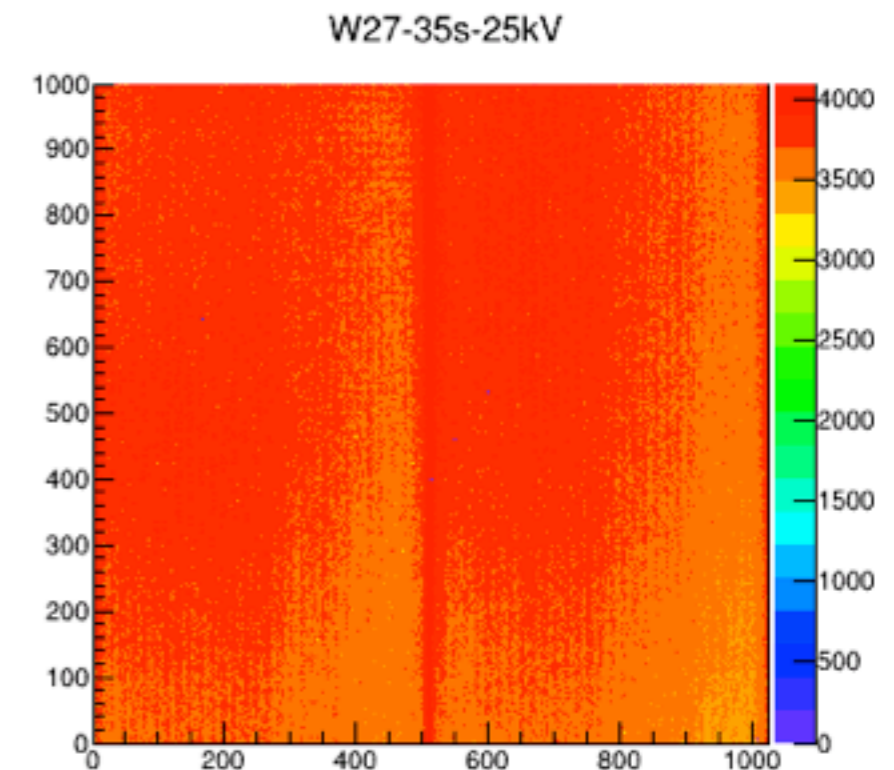
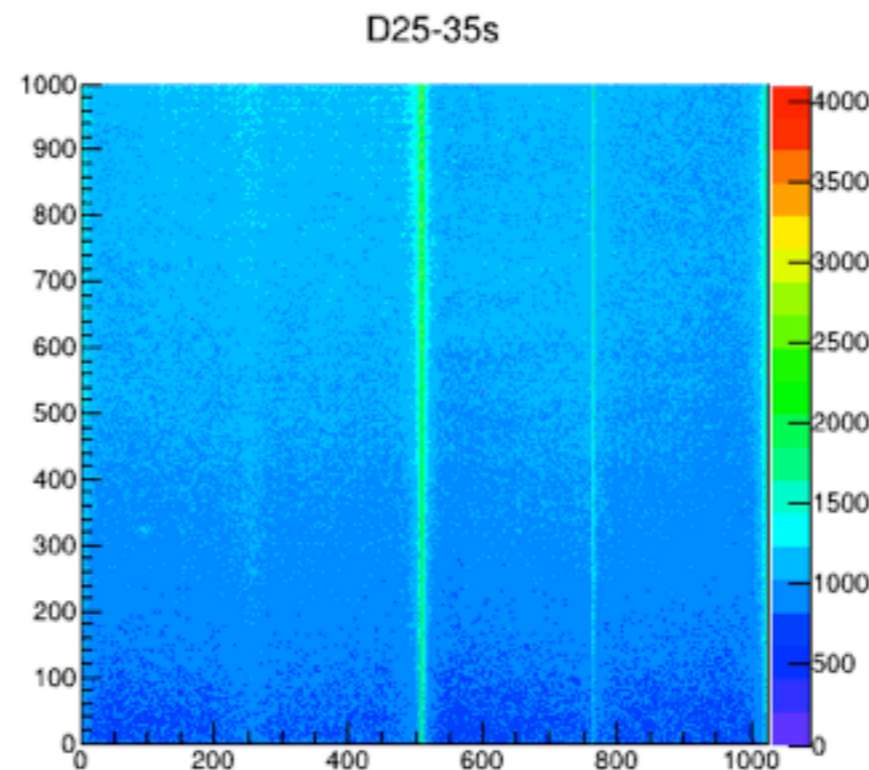
L. Barion, G. Battaglia, M. Contalbrigo, P. Lenisa,
A. Movsisyan, L. Pappalardo
INFN Ferrara

RICH Meeting
26.09.2014



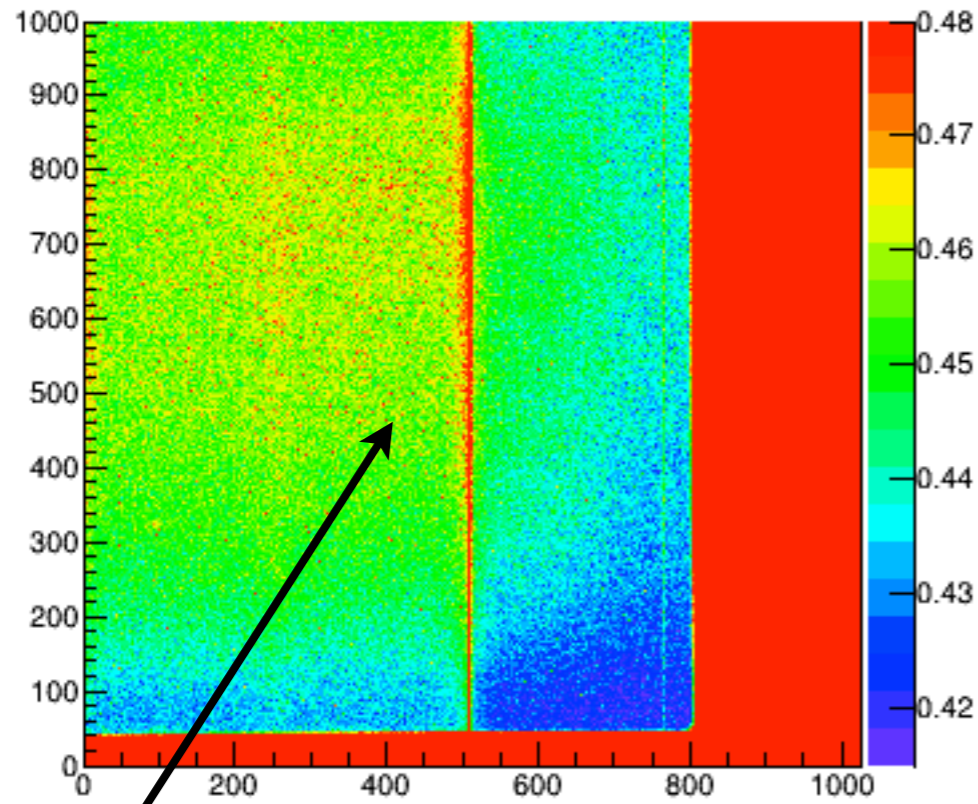
1. **D**ark image : Source switched off
2. **W**hite image : Source switched on but w/o aerogel
3. **A**erogel image : Source switched on, aerogel in front of the sensor

$$R = (A - D) / (W - D)$$



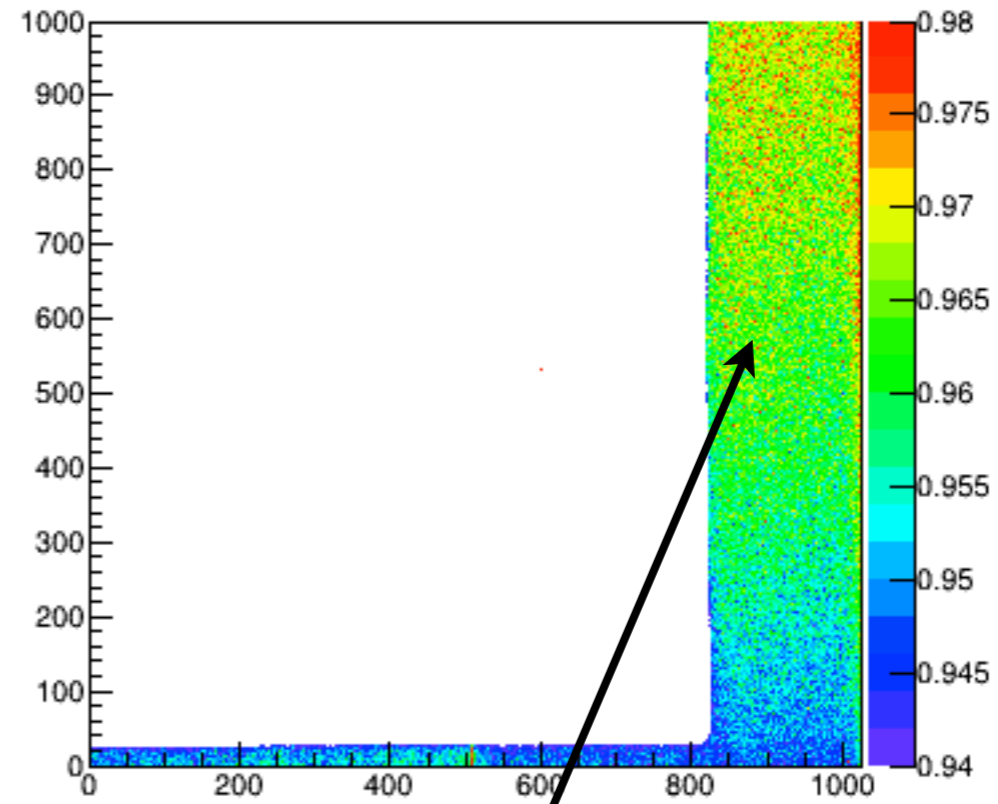
$$R = (A - D) / (W - D)$$

[A32-D25]/[W27-D25]



Aerogel

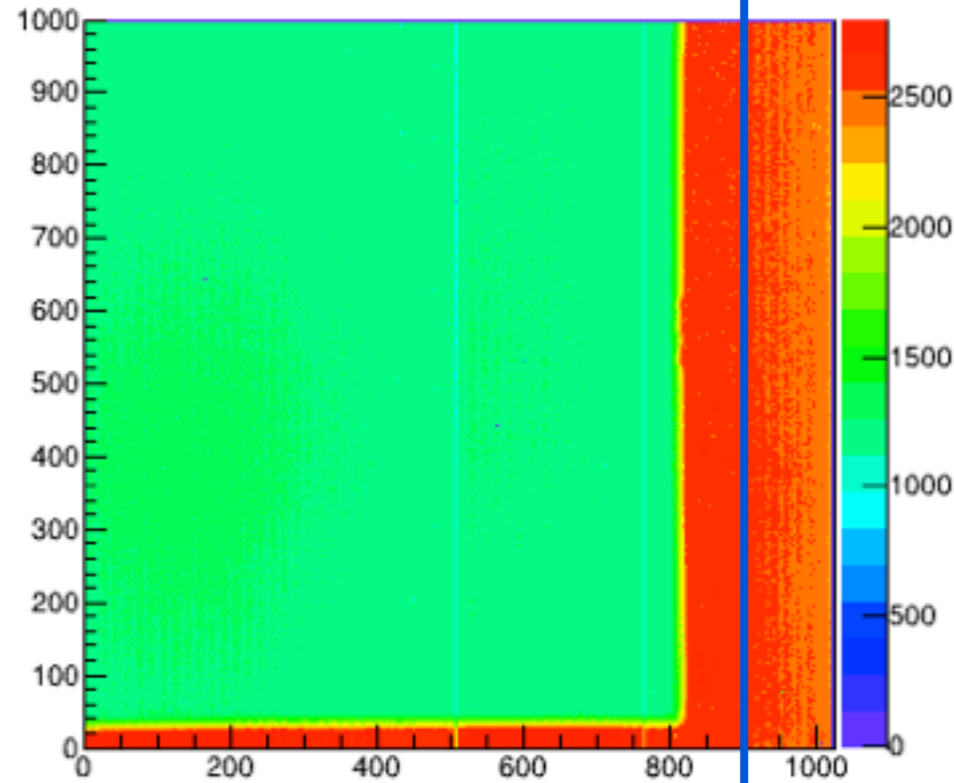
[A32-D25]/[W27-D25]



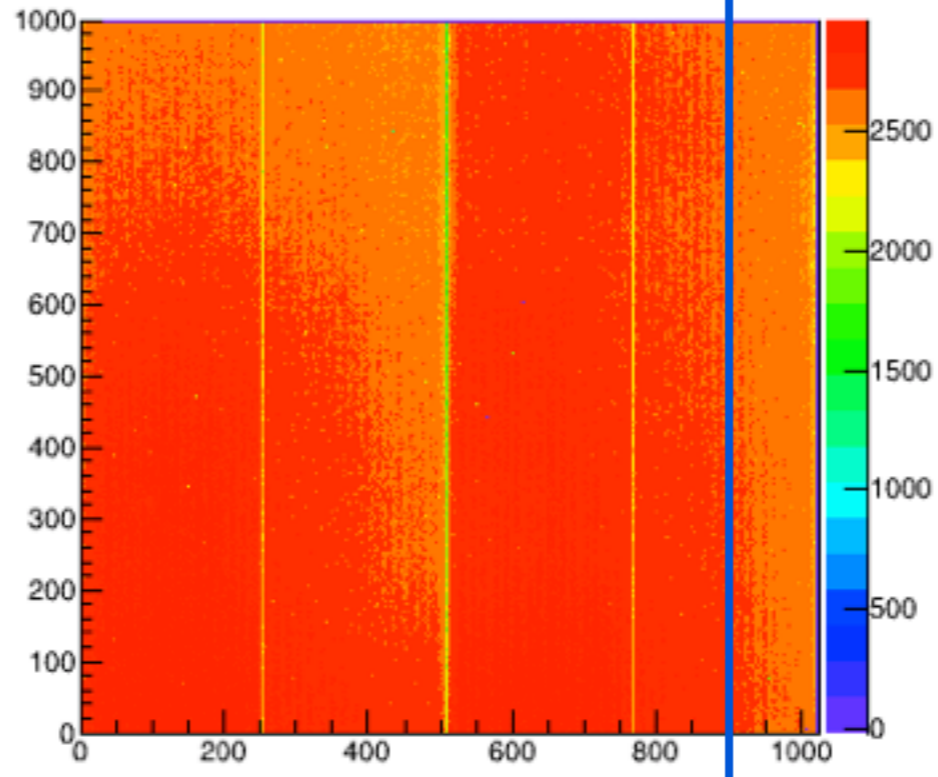
Gradient ~ 5%

$$R = (A - D) / (W - D)$$

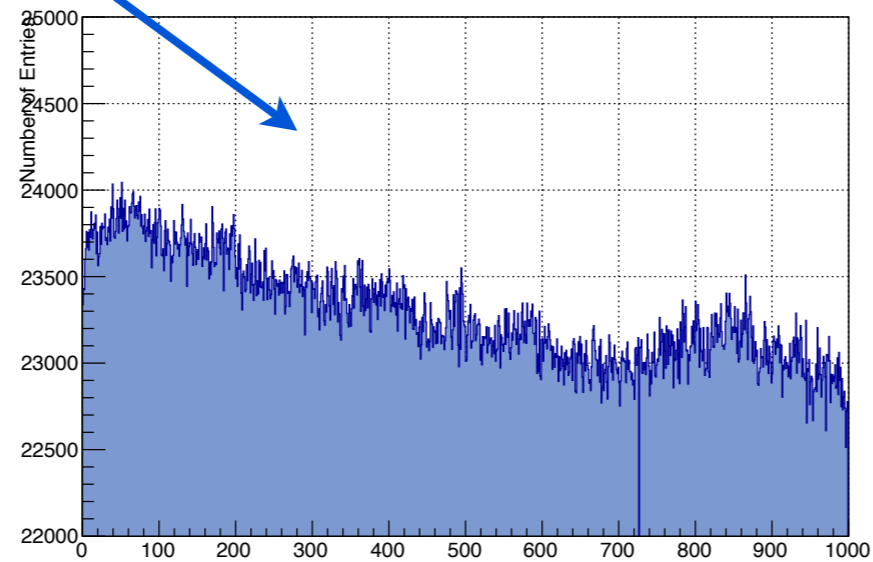
[A32-D25] (A32-27s-25kV)



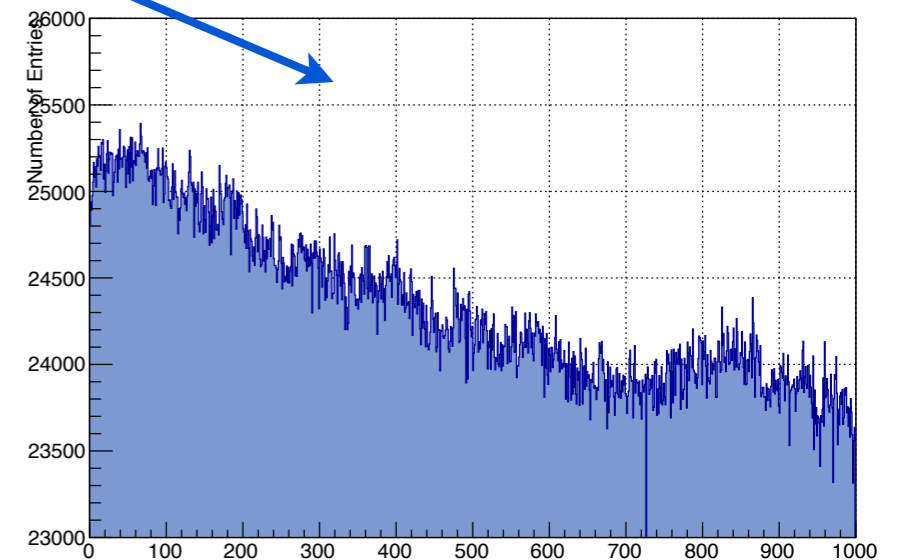
W27-D25



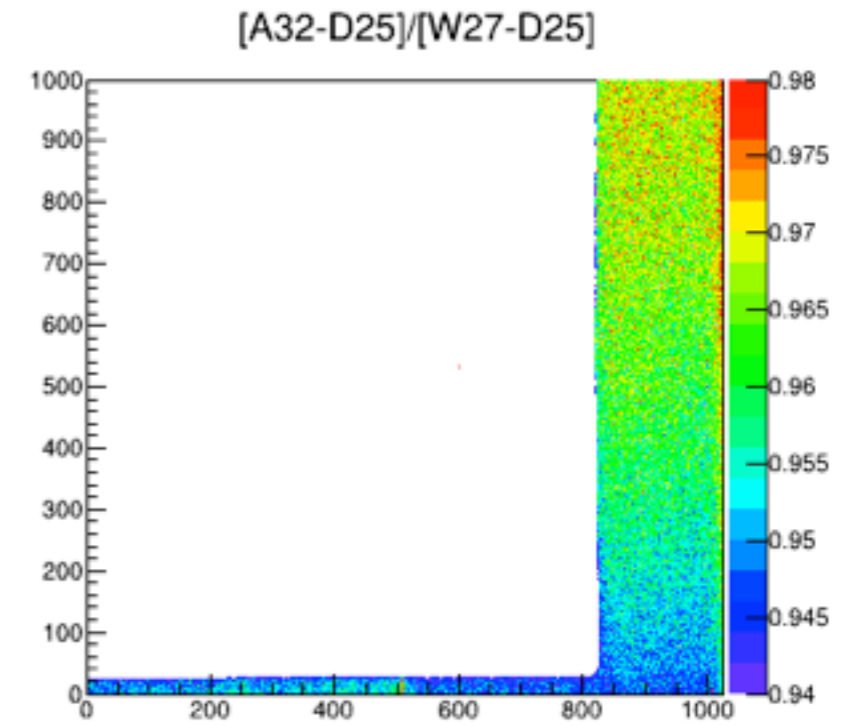
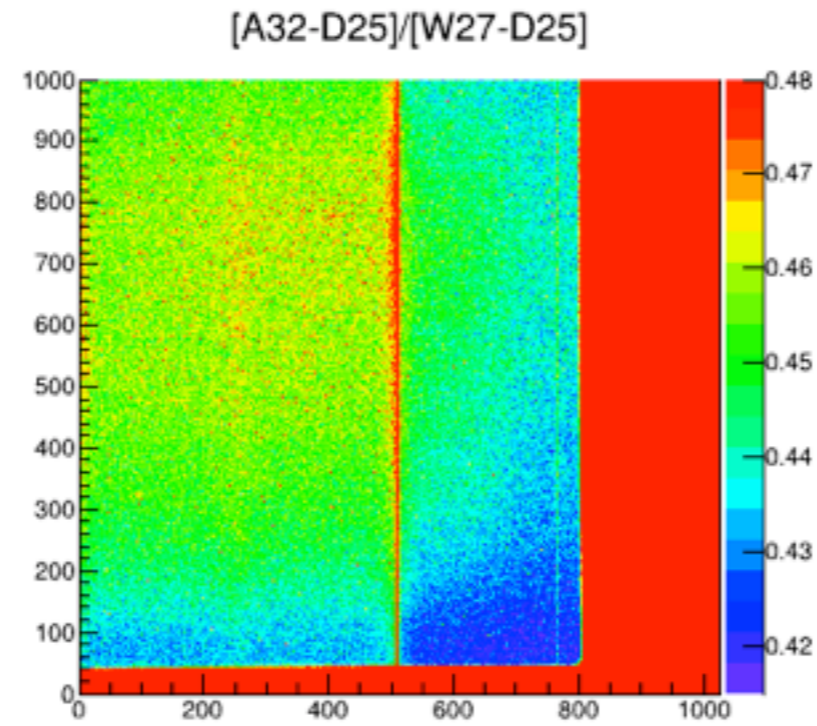
ProjectionY of binx=[900,909]



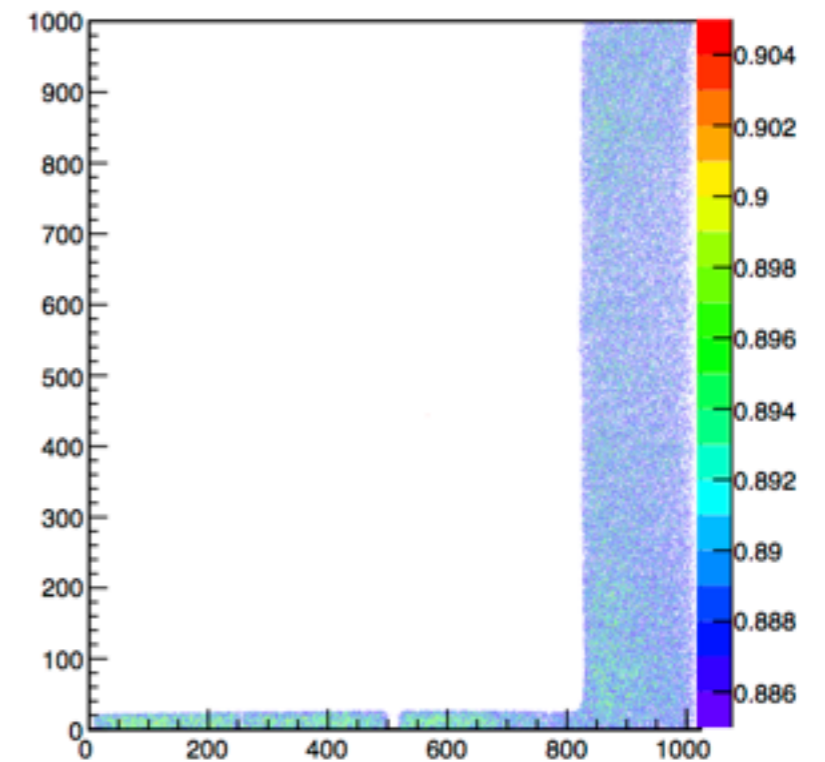
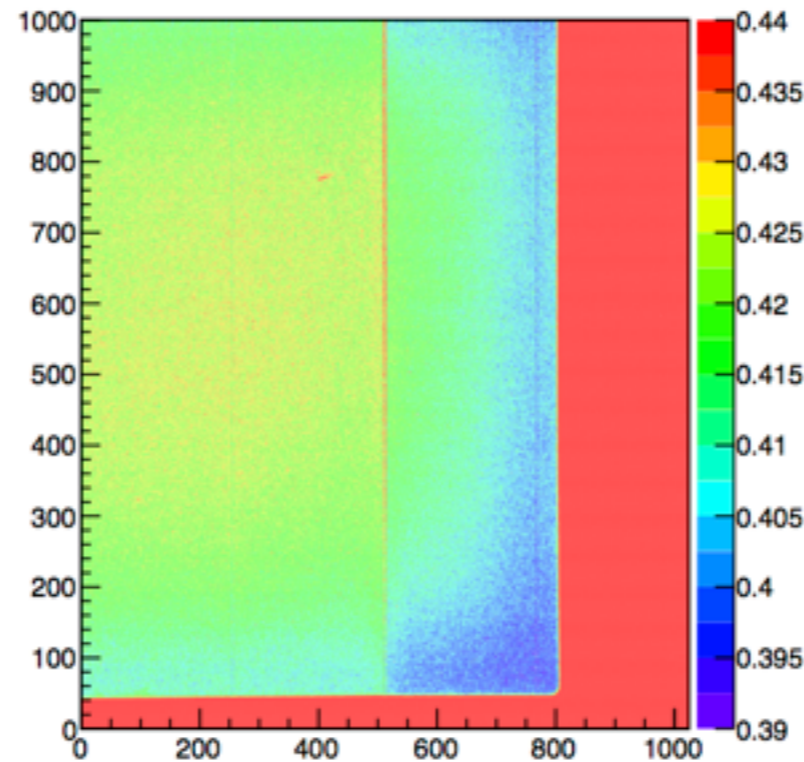
ProjectionY of binx=[901,910]



Before
Correction

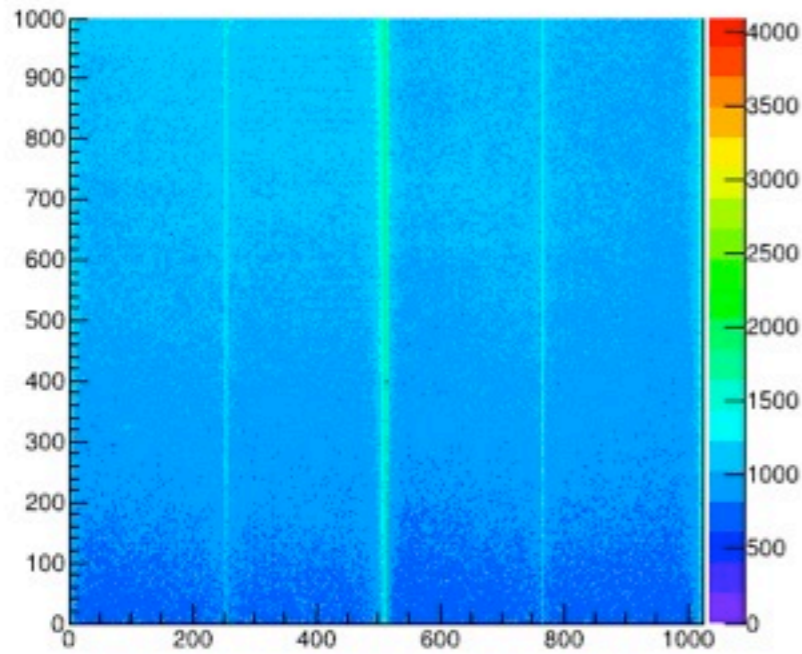


After
Correction:
 $R=(A-Dc1)/(W-Dc2)$

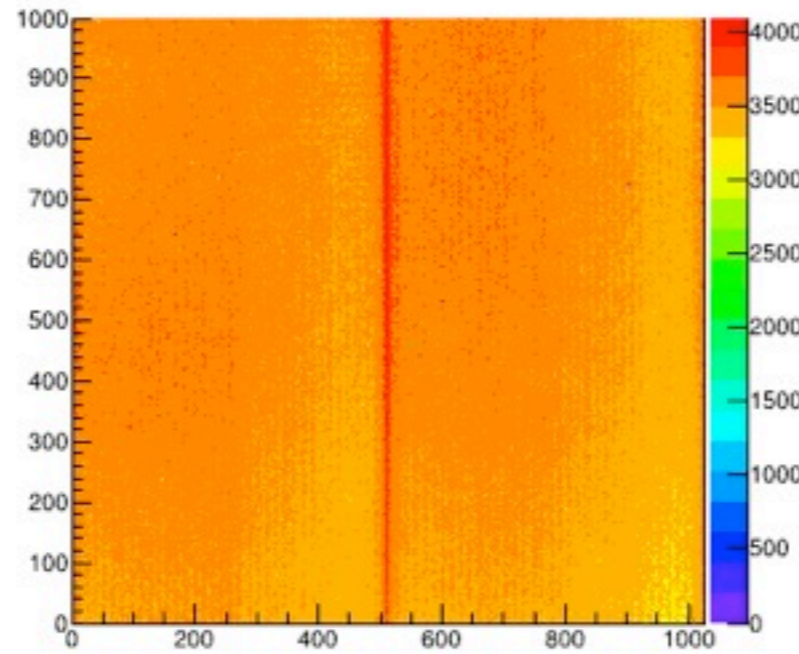


X-Ray measurement 10-frame 25 kV

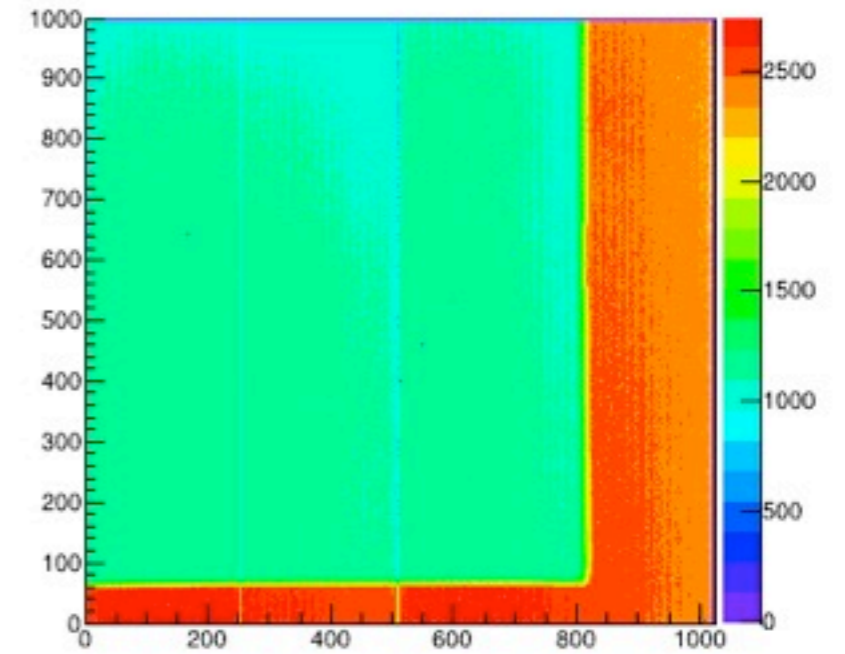
D66-30s-10f



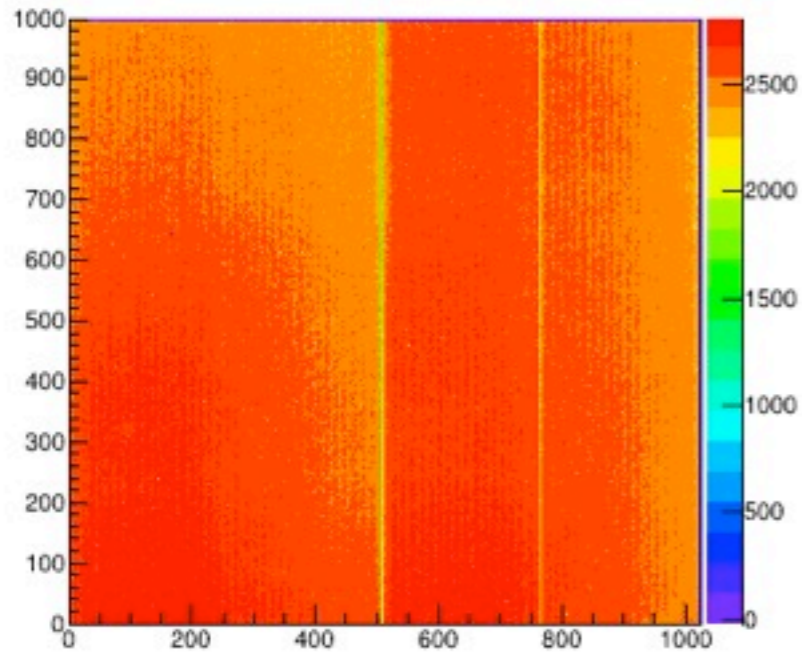
W68-30s-10f-25kV



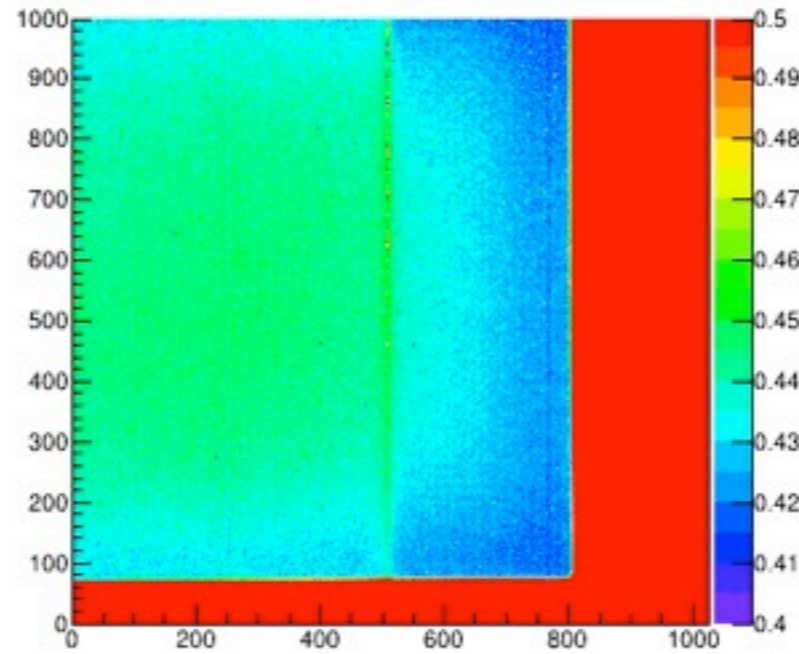
A67-D66 (A67-30s-10f-25kV)



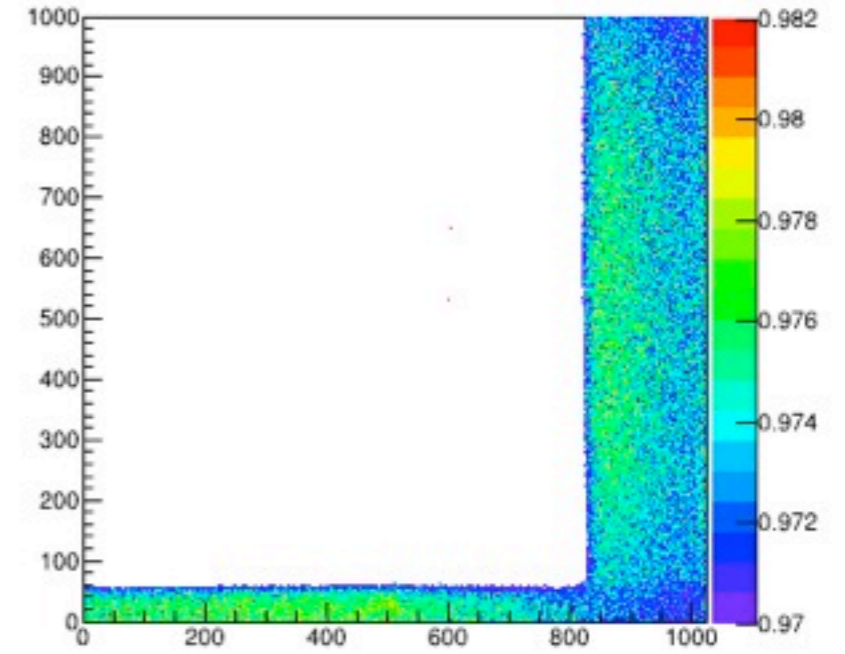
W68-D66



[A67-D66]/[W68-D66]

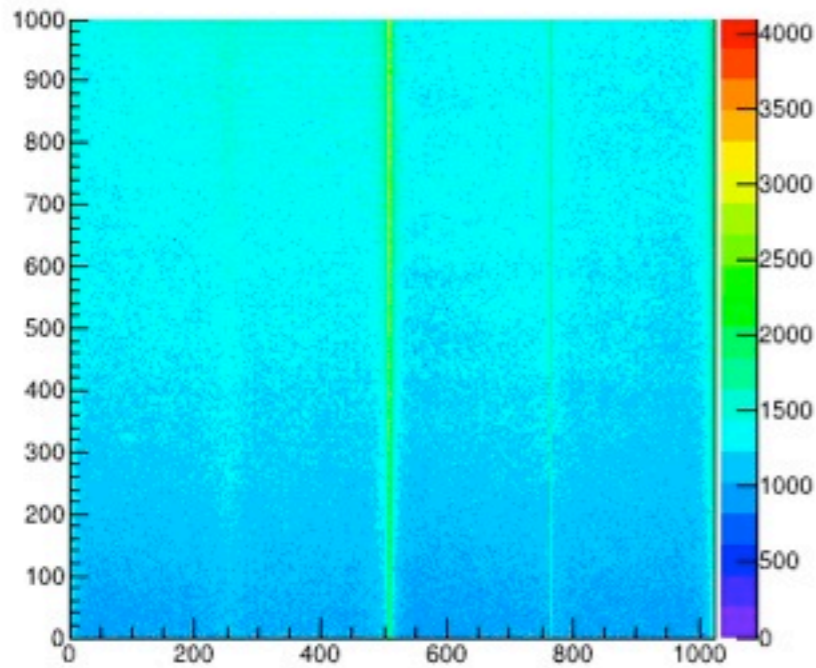


[A67-D66]/[W68-D66]

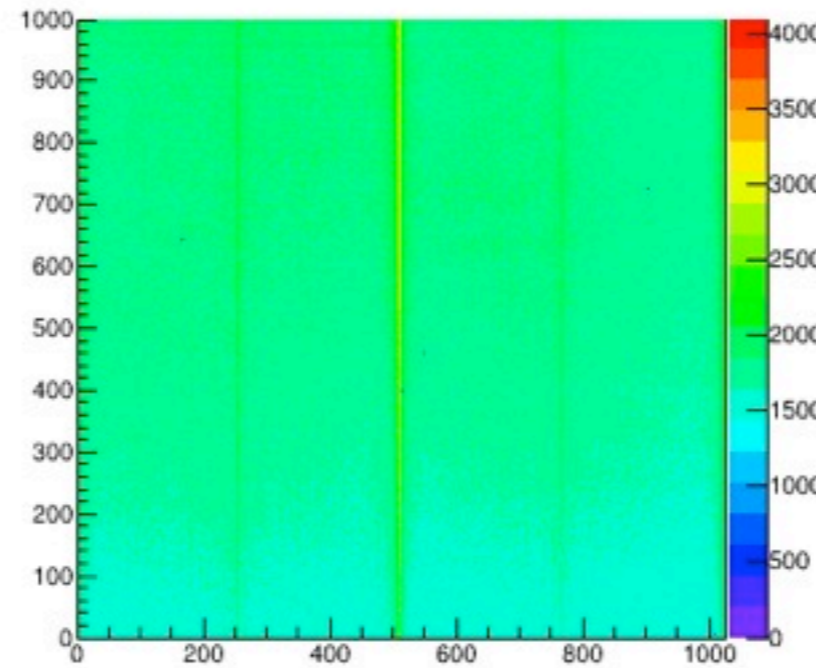


X-Ray measurement 10-frame 16 kV

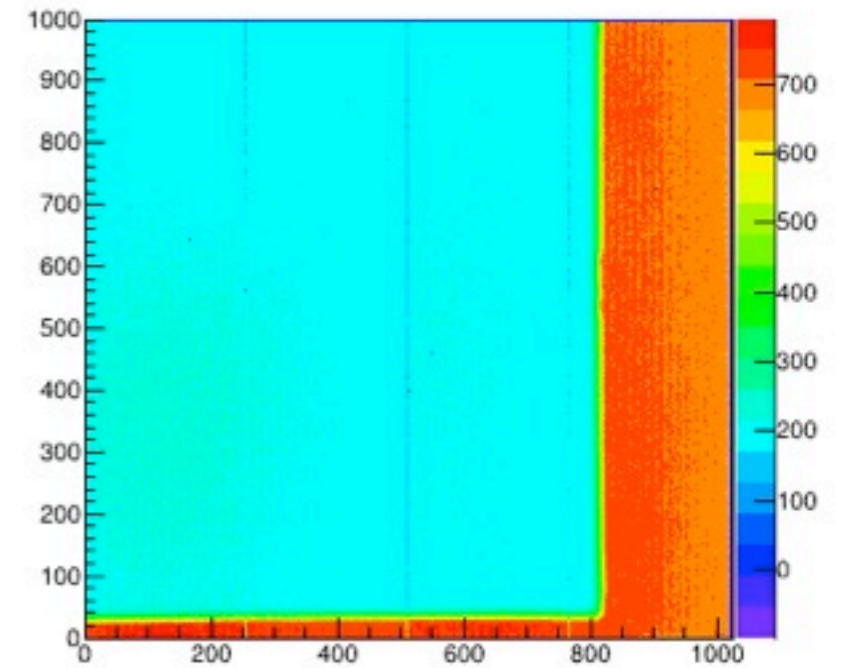
D48-35s



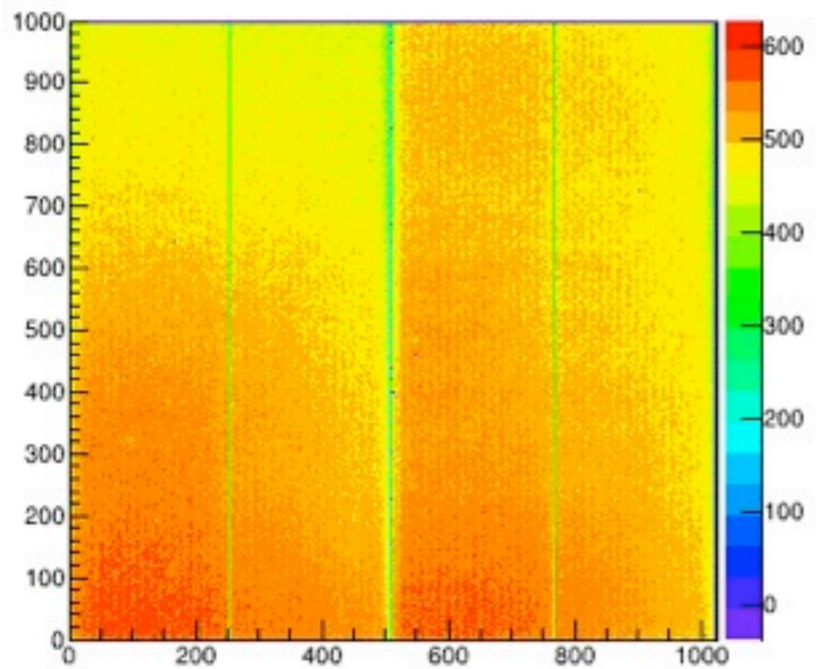
W69-35s-10f-25kV



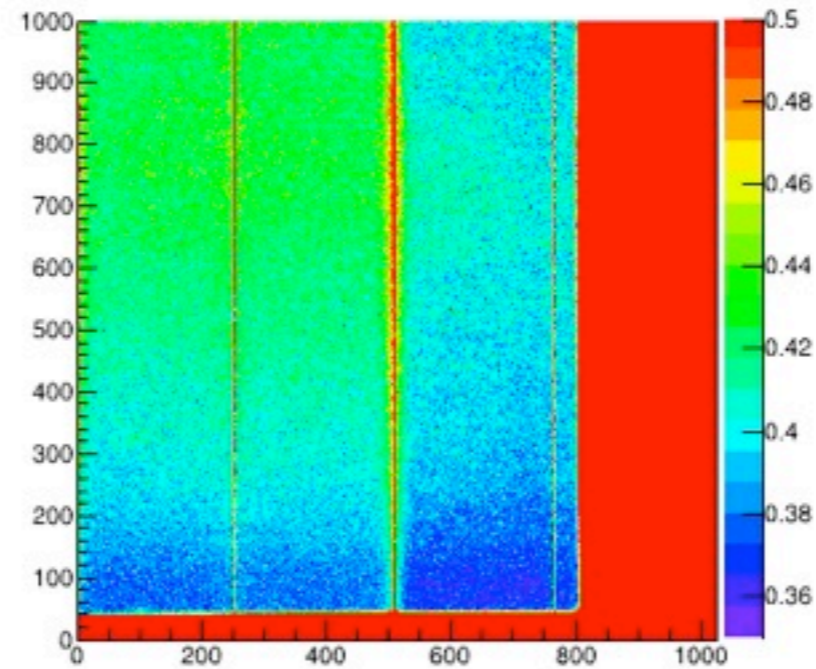
[A40-D48] (A40-35s-20kV)



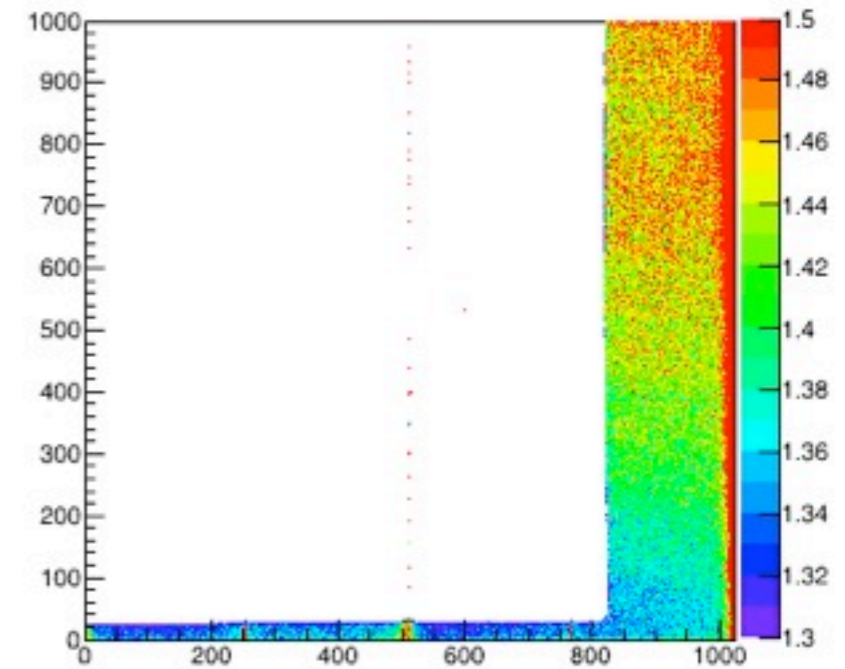
W69-D48



[A40-D48]/[W69-D48]



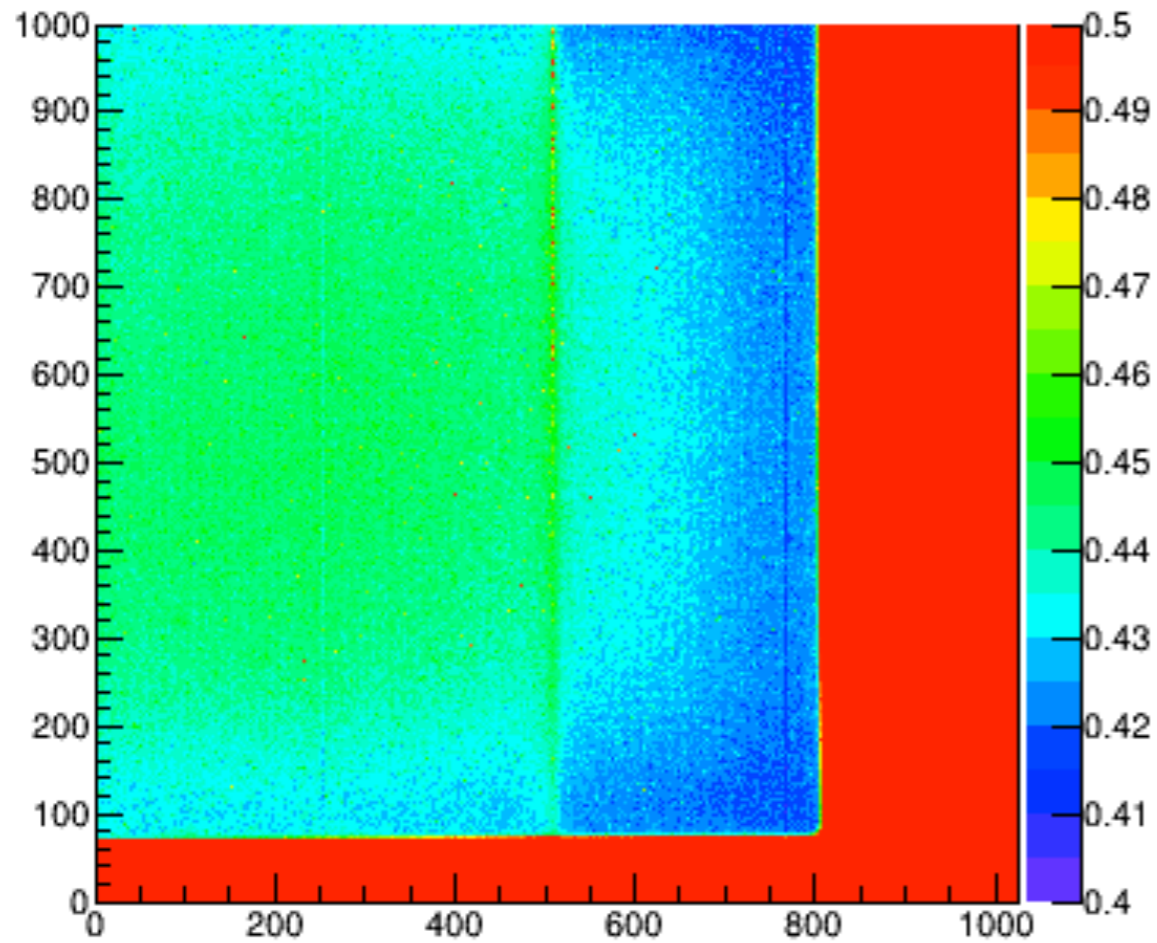
[A40-D48]/[W69-D48]



Comparison with laser measurement

X-Ray scan

[A67-D66]/[W68-D66]



Laser scan

n

