X-ray Mirror Assembly (XMA)

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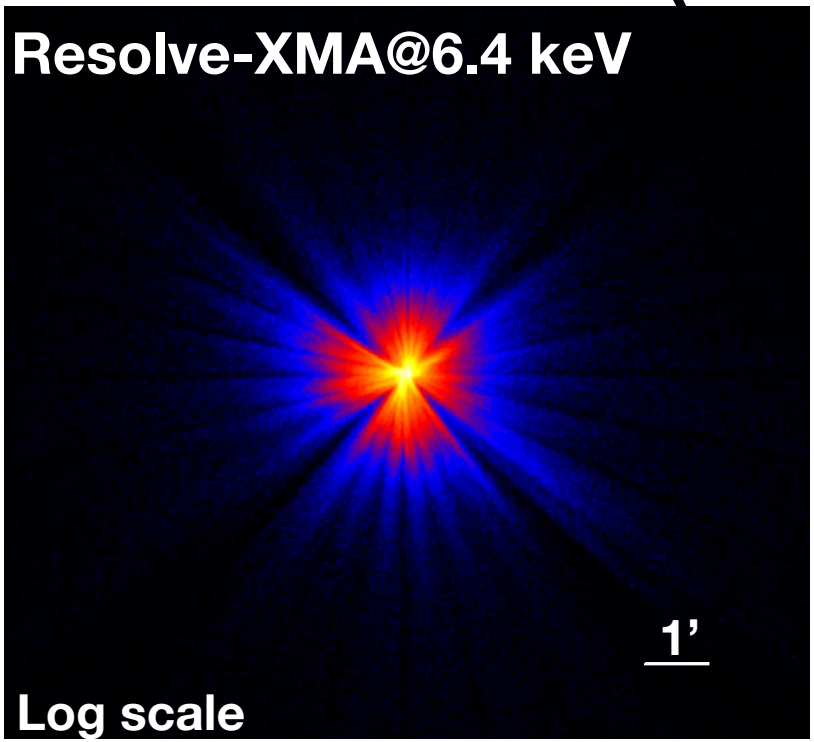
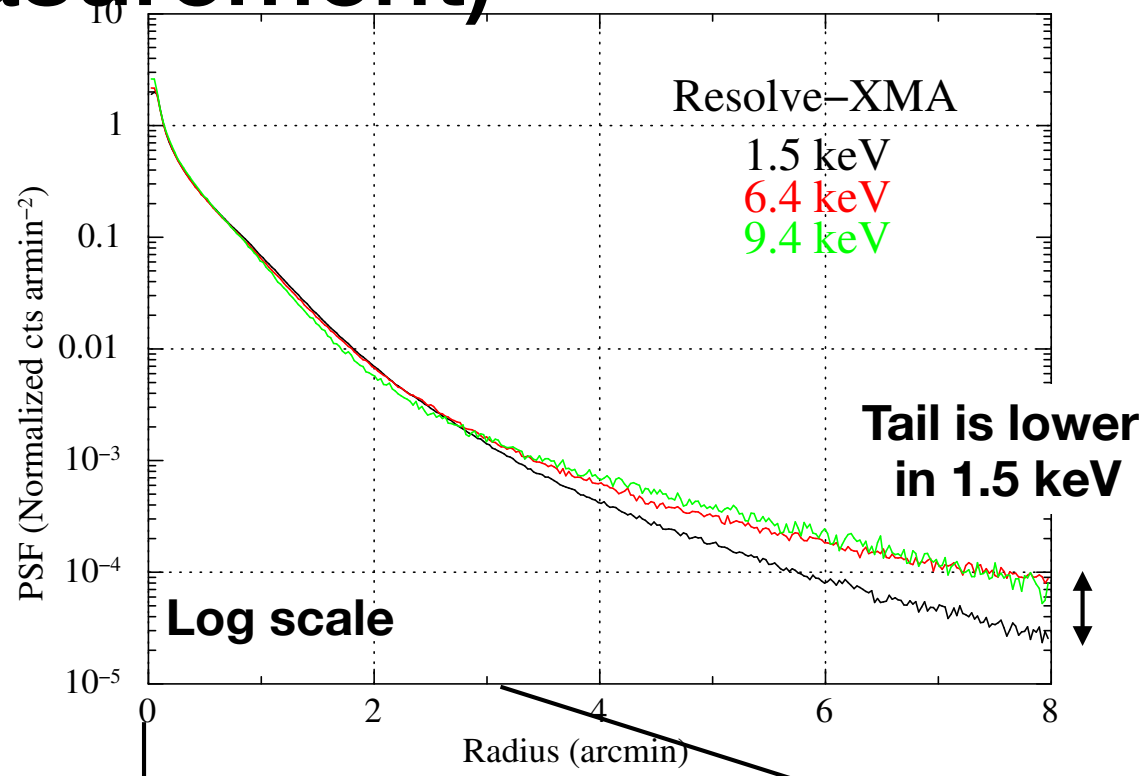
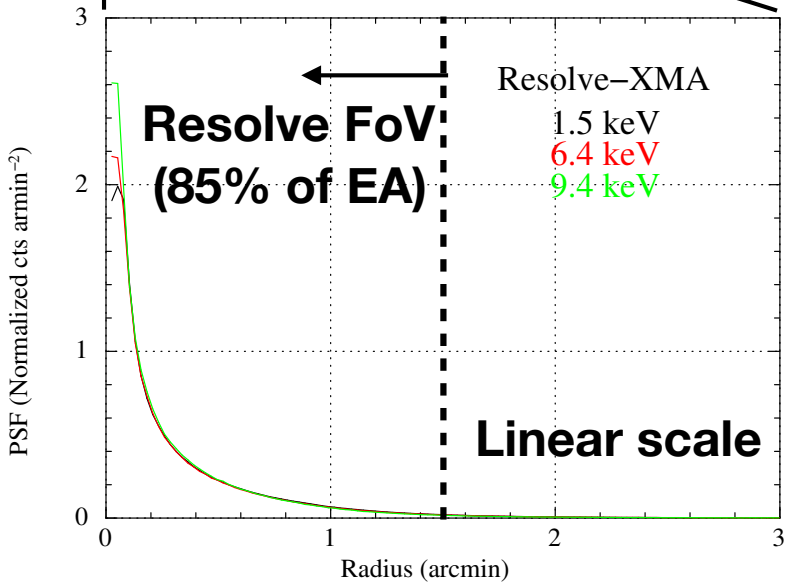
On-axis XMA PSF
(Measurement)



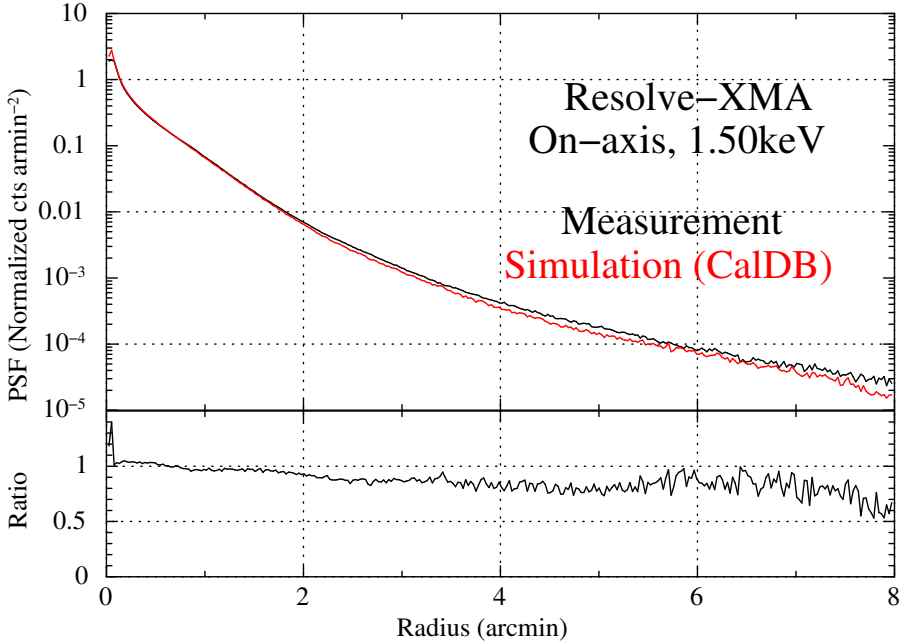


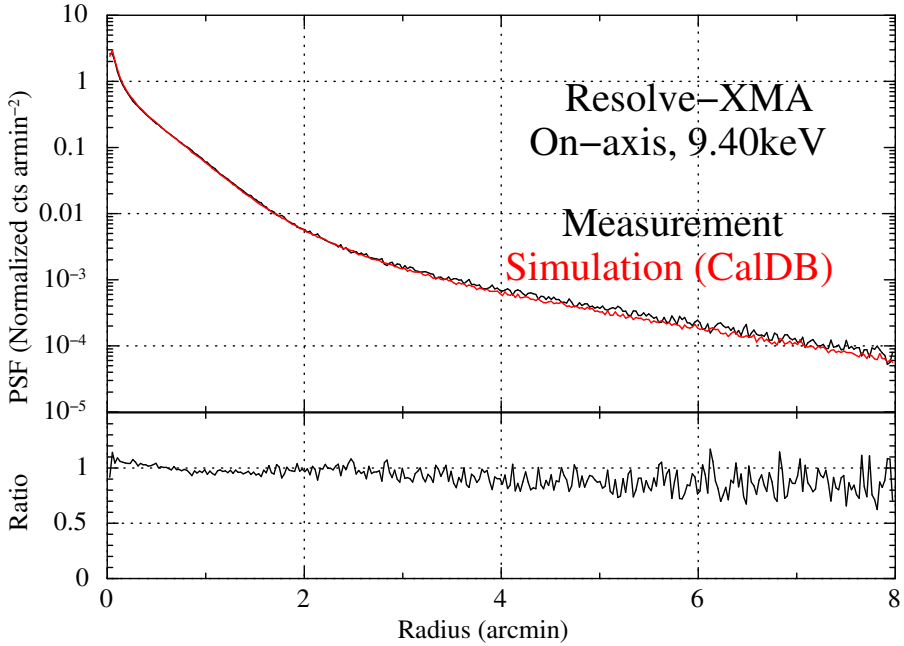


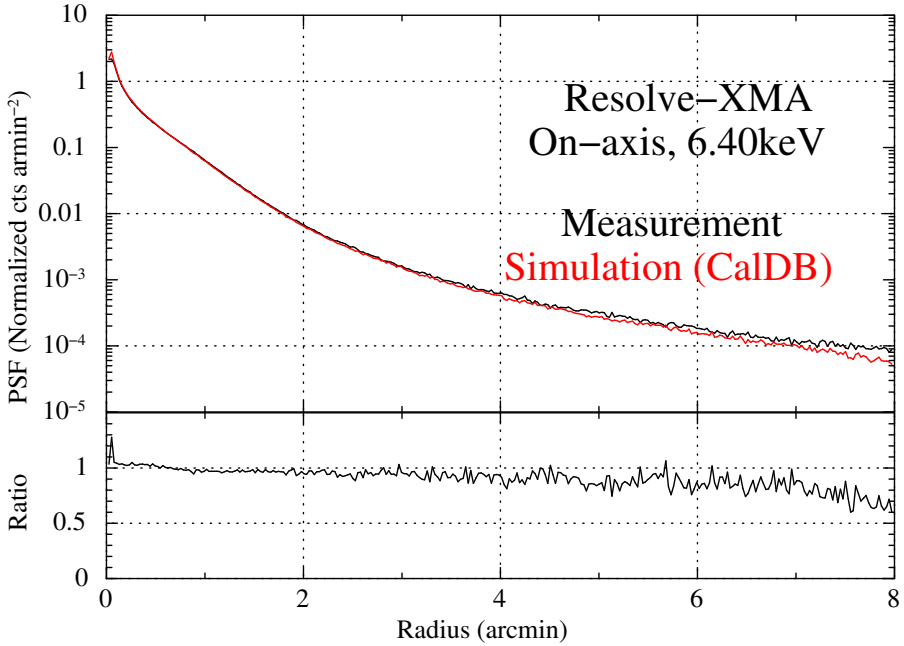
- HPD@6.4 keV
Resolve-XMA: 1.30'
Xtend-XMA: 1.47'

- FWHM@6.4 keV
Resolve-XMA: 7.9"
Xtend-XMA: 7.2"
→Sharp core!

On-axis PSF (Measurement vs simulation)

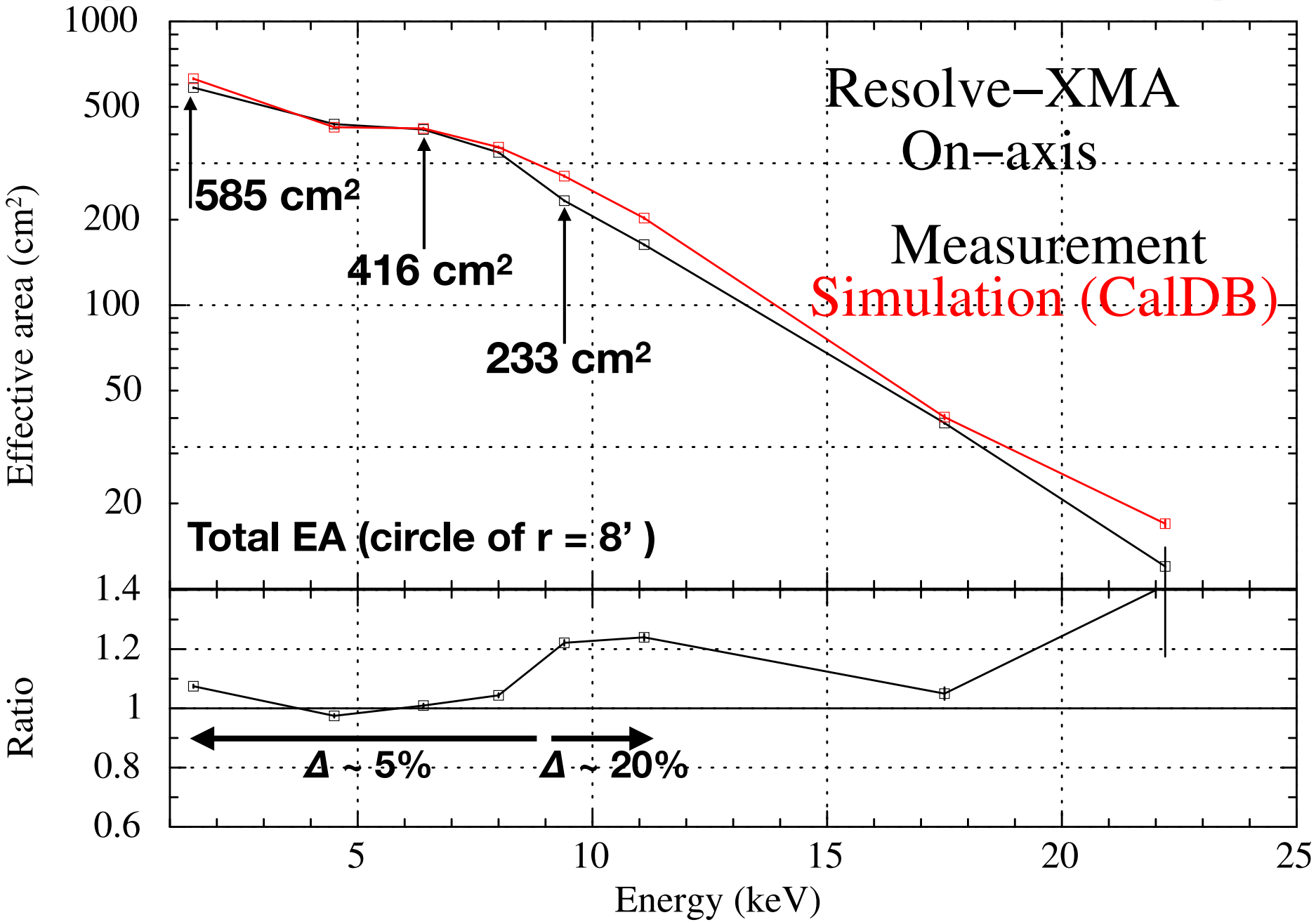




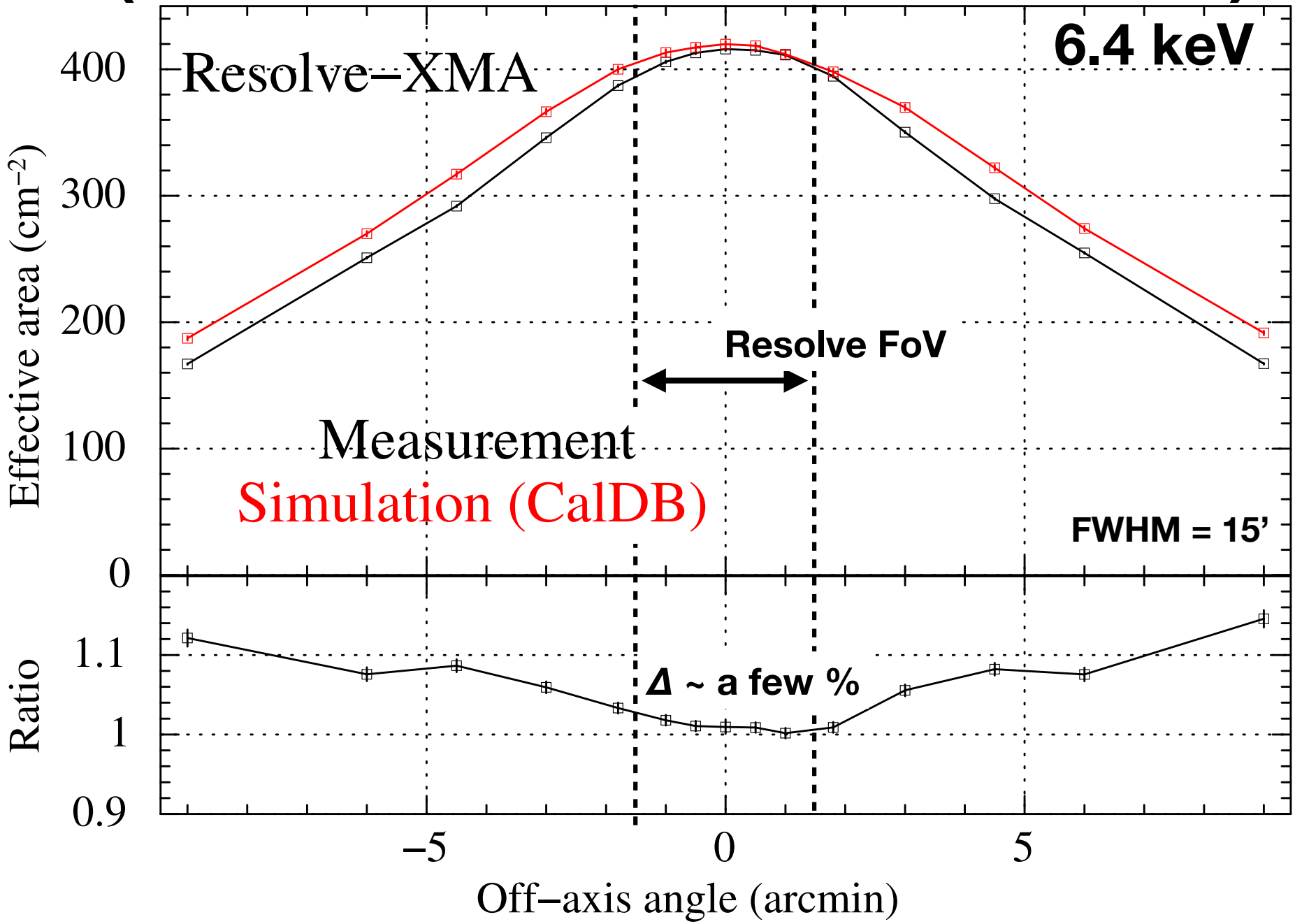


PSF is well modeled
including the energy dependence in the tail

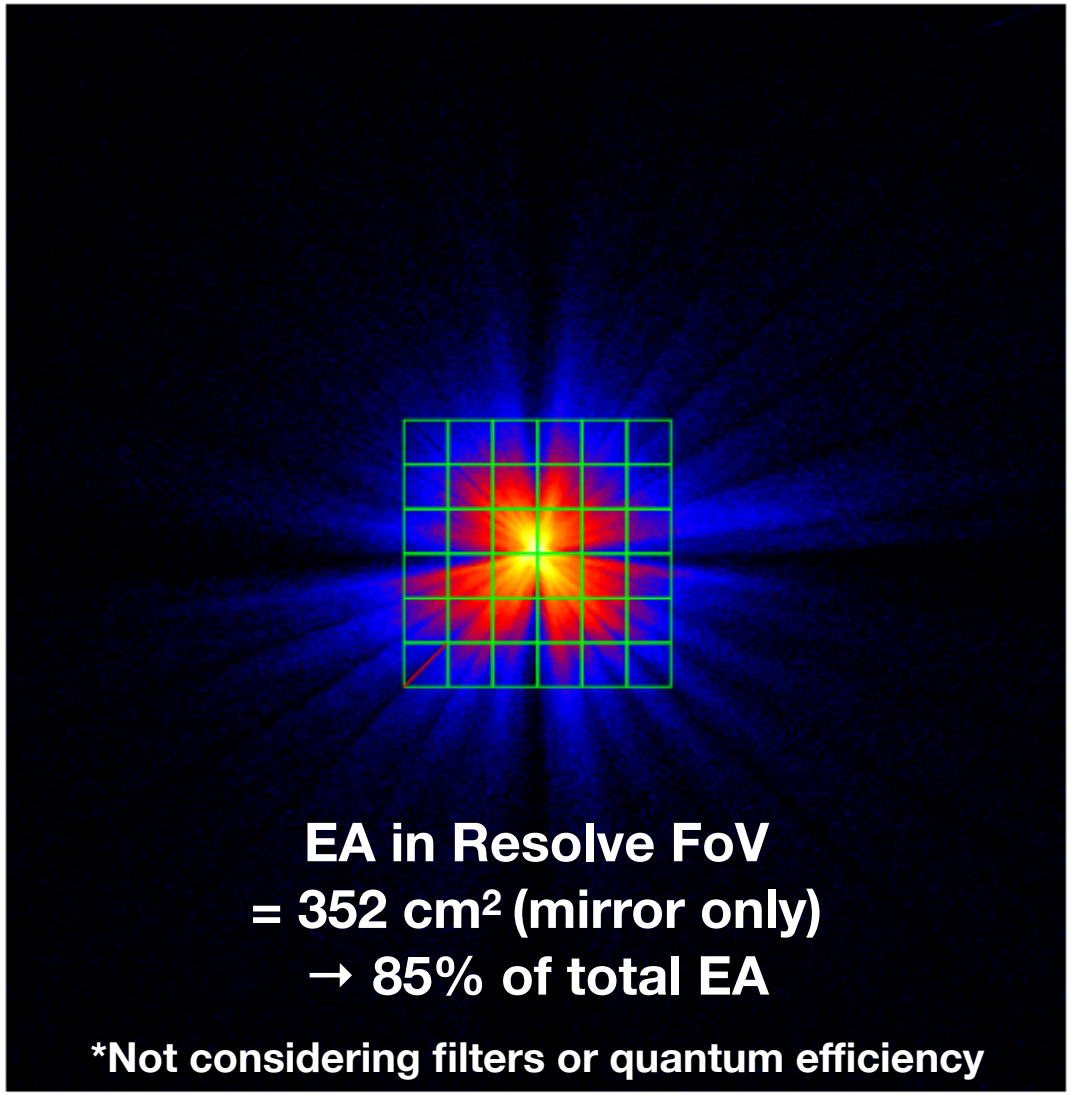
On-axis effective area (EA) (Measurement vs simulation)

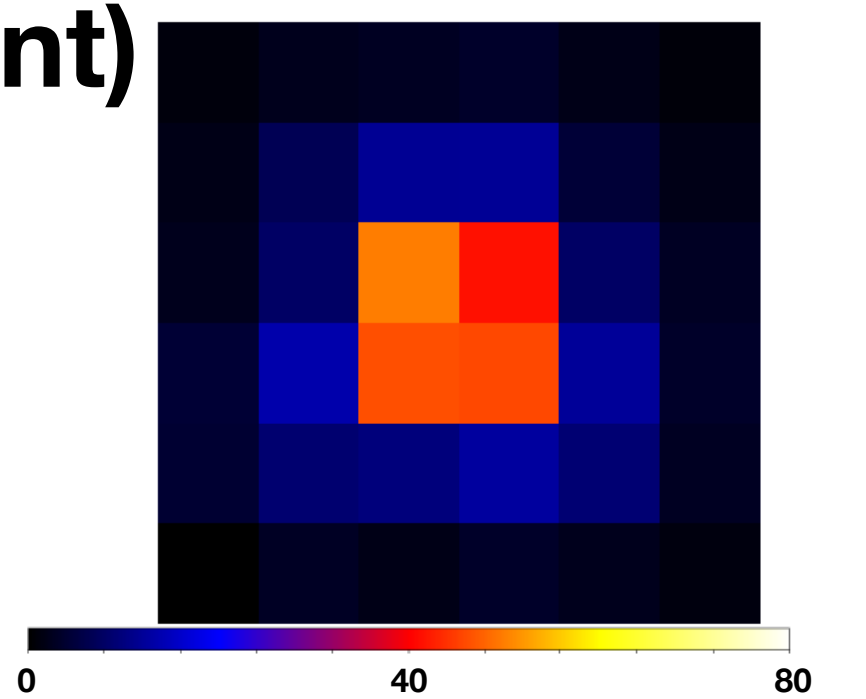


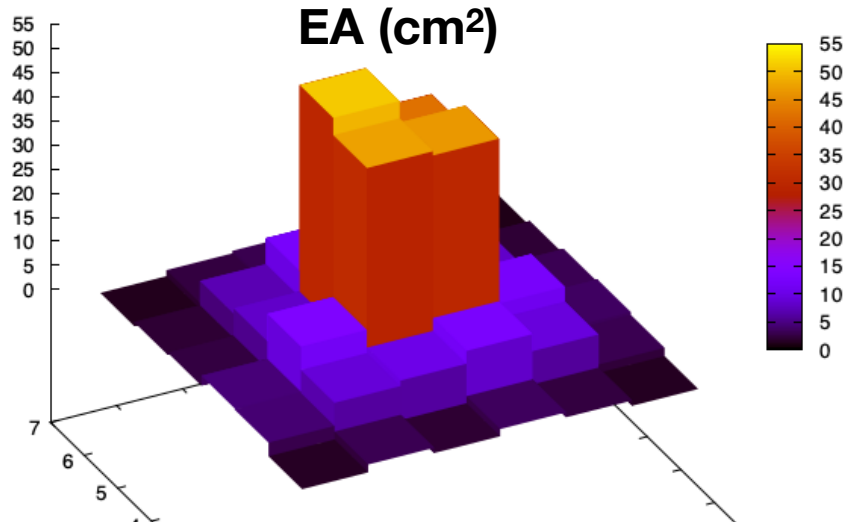
Vignetting curve (Measurement vs simulation)



Resolve on-axis PSF (Measurement)



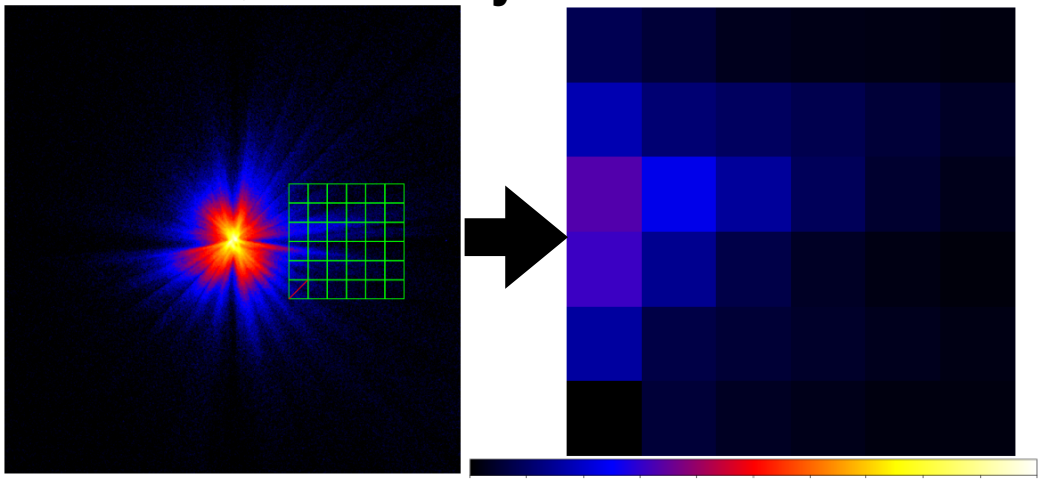




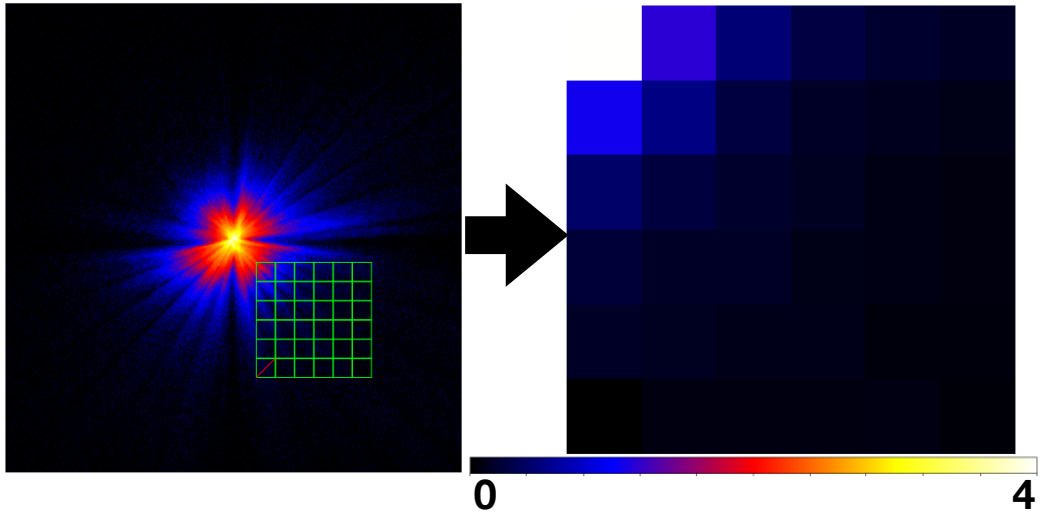
Central 4 pixel have 53% of 352 cm²

Resolve off-axis PSF (3'&4.5')
(Measurement)

3'-off in QT boundary direction



3'-off in QT center direction

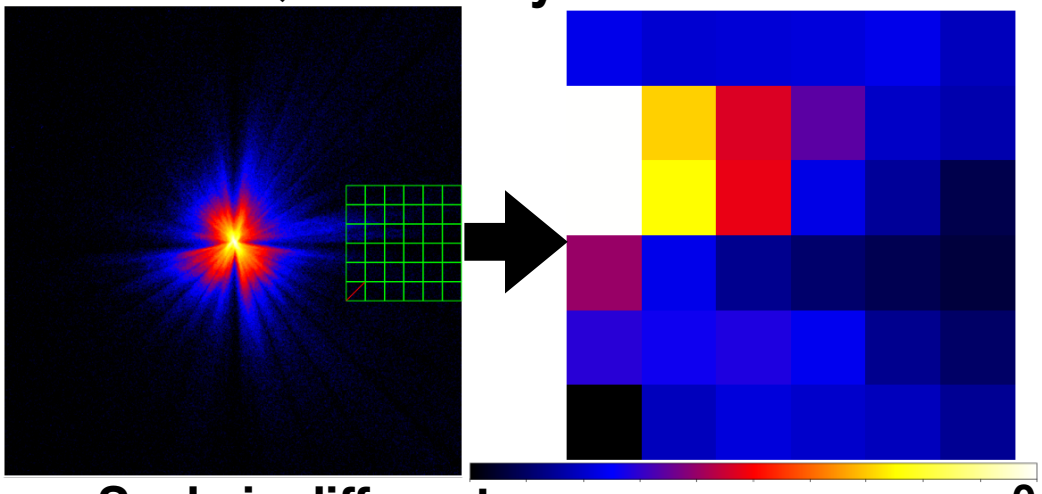


% of flux contamination from nearby source to on-axis source when nearby source is as bright as on-axis source

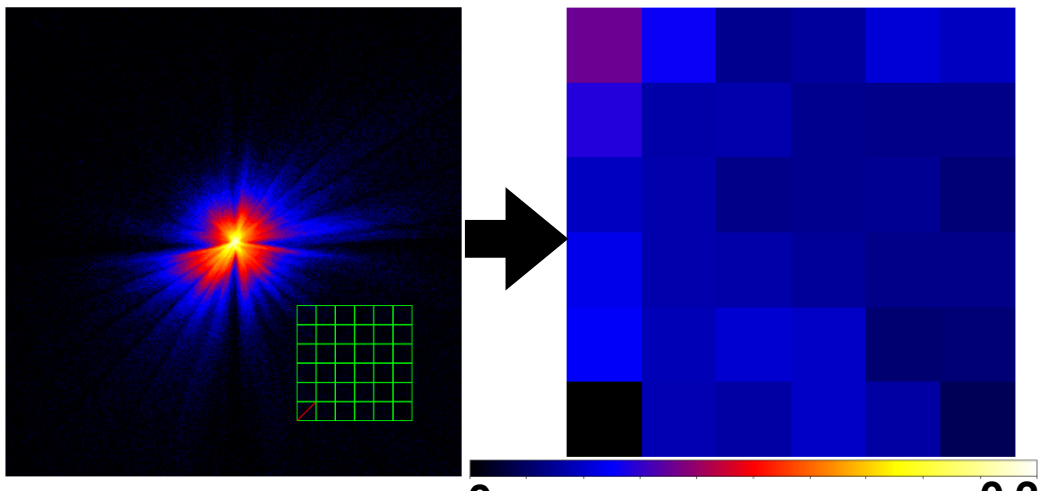
~ 3%

~ 3%

4.5'-off in QT boundary direction



4.5'-off in QT center direction



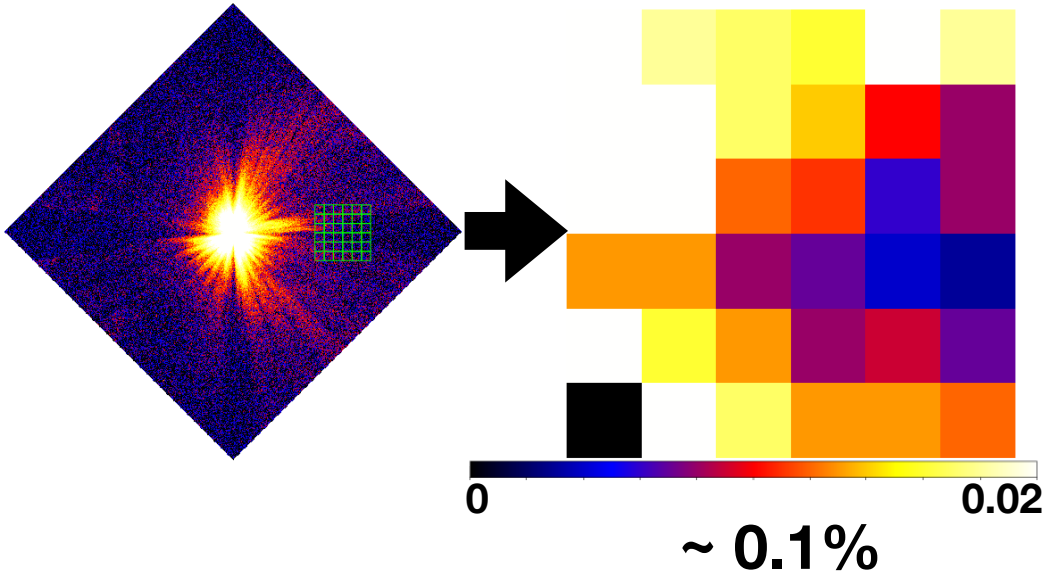
Scale is different in different off-axis angle

~ 0.5%

~ 0.3%

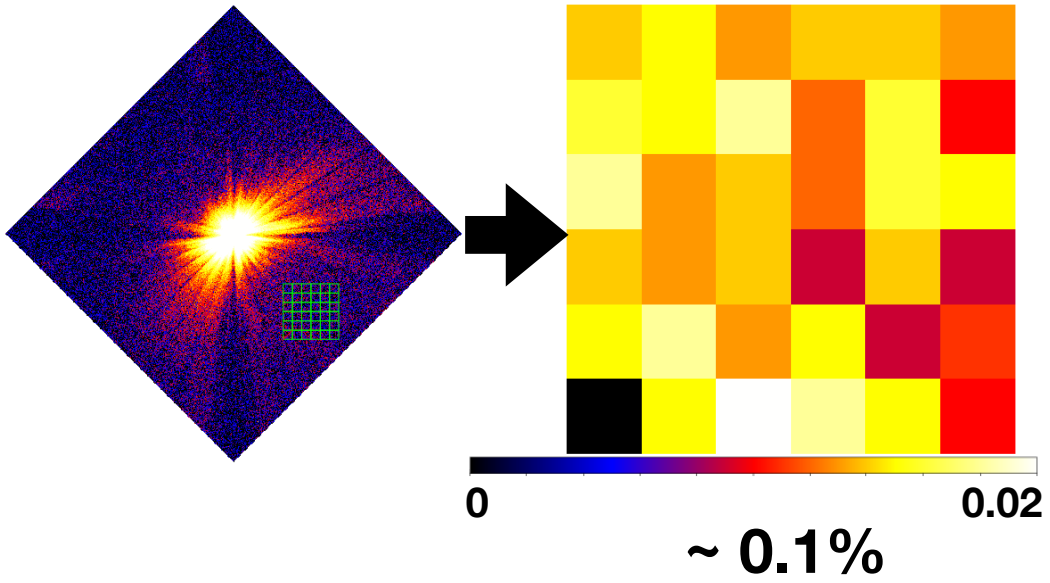
Resolve off-axis PSF (6'&9')
(Measurement)

6'-off in QT boundary direction



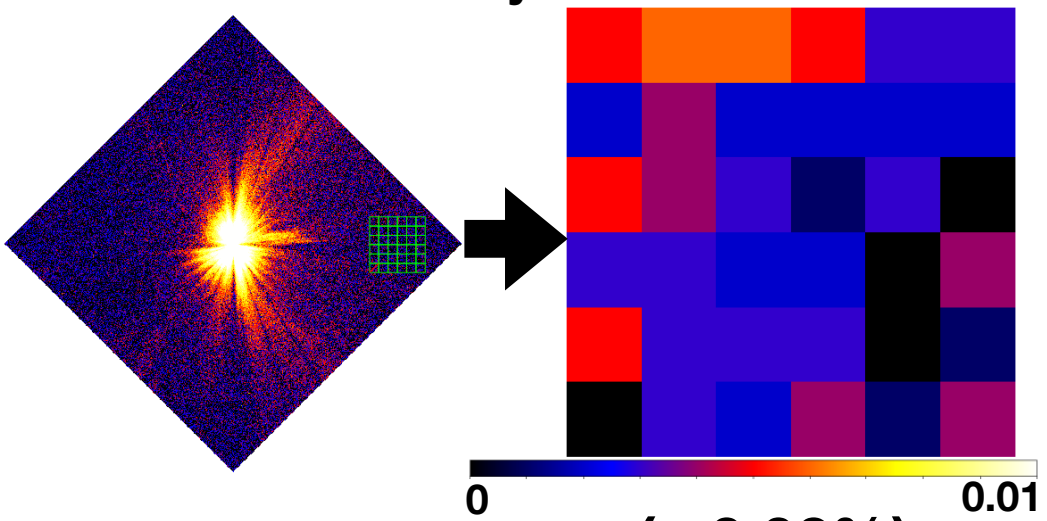
~ 0.1%

6'-off in QT center direction



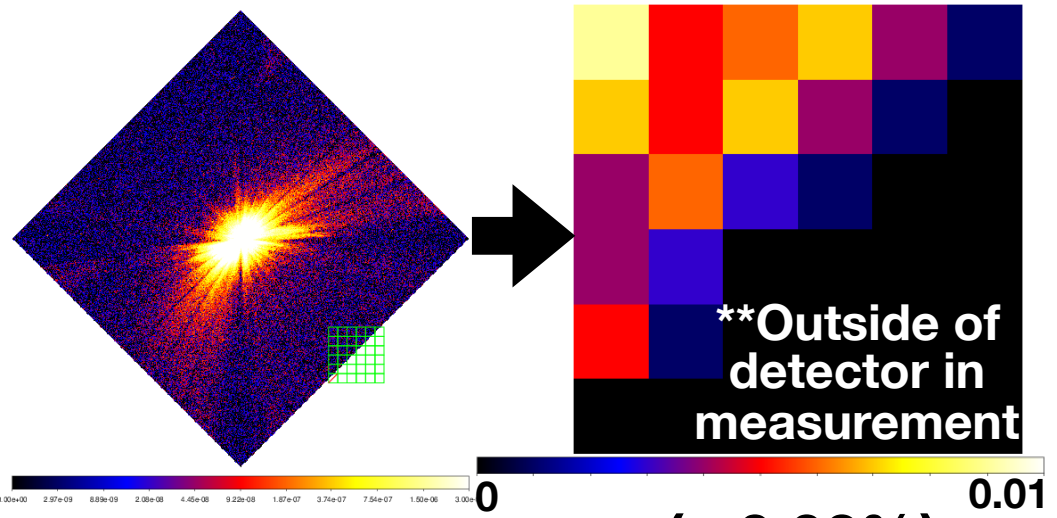
~ 0.1%

9'-off in QT boundary direction



(~ 0.02%)

9'-off in QT center direction



(~ 0.02%)