

Update on Lifetime Measurement

ERLANGEN CENTRE
FOR ASTROPARTICLE
PHYSICS

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Outline

- Results of latest measurements

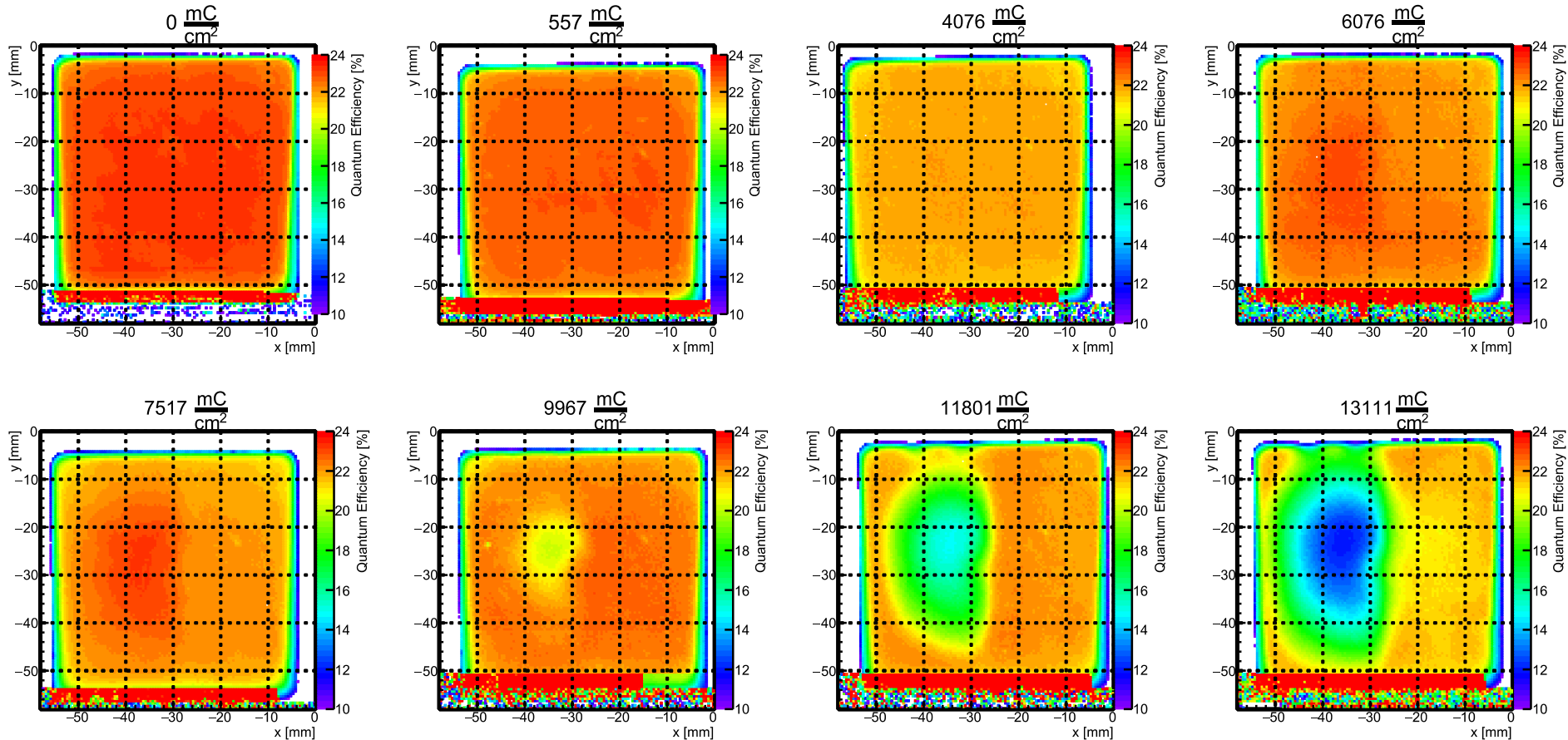
Results of latest measurements

Illumination Overview QE (all sensors with ALD)

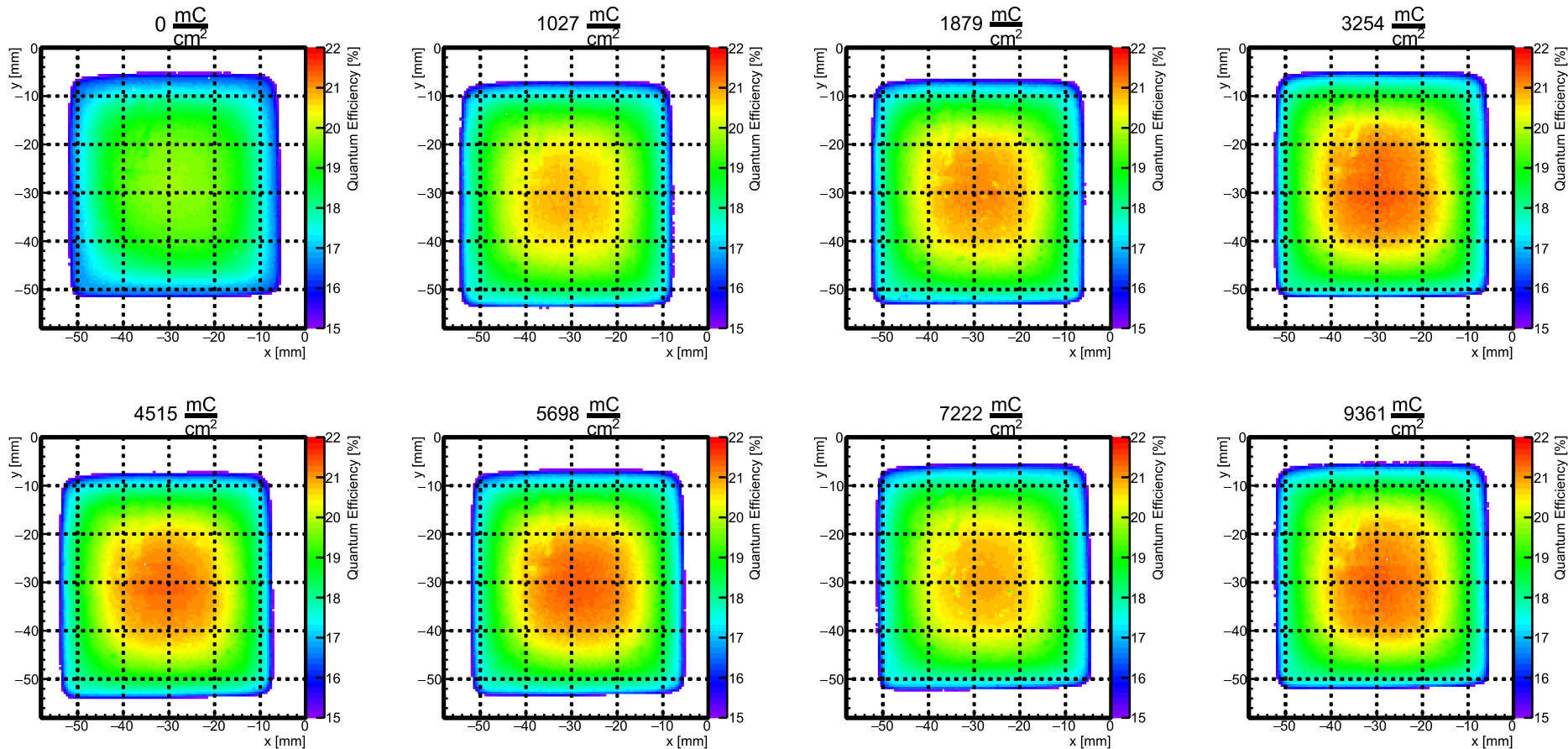
Film between MCP Two ALD layers

| Manufacturer | | Sensor ID | Integral Charge [mC/cm ²] | QE start [%] | QE latest [%] | QE latest/QE start [%] |
|--------------|-------------------------|-------------------|---------------------------------------|--------------|---------------|------------------------|
| 2 inch | Photonis XP85112 | 9001223 | 9234 | 22.1 | 5.3 | 24 |
| | | 9001332 | 13111 | 23.0 | 14.5 | 63 |
| | | 9001393 | 9360 | 19.1 | 19.5 | 102 |
| 1 inch | Hamamatsu R10754X | KT0001 (M16M) | 13766 | 21.7 | 11.3 | 52 |
| | | KT0002 (M16M) | 9856 | 21.1 | 12.3 | 58 |
| 2 inch | Hamamatsu R13266-07-M64 | JS0022 (64 pix.) | 1297 | 17.4 | 14.5 | 83 |
| | | JS0035 (64 pix.) | 0 | 25.5 | 25.5 | 100 |
| | | JS0018 (768 pix.) | 0 | 18.0 | 18.0 | 100 |
| | | JS0027 (768 pix.) | 0 | 21.4 | 21.4 | 100 |

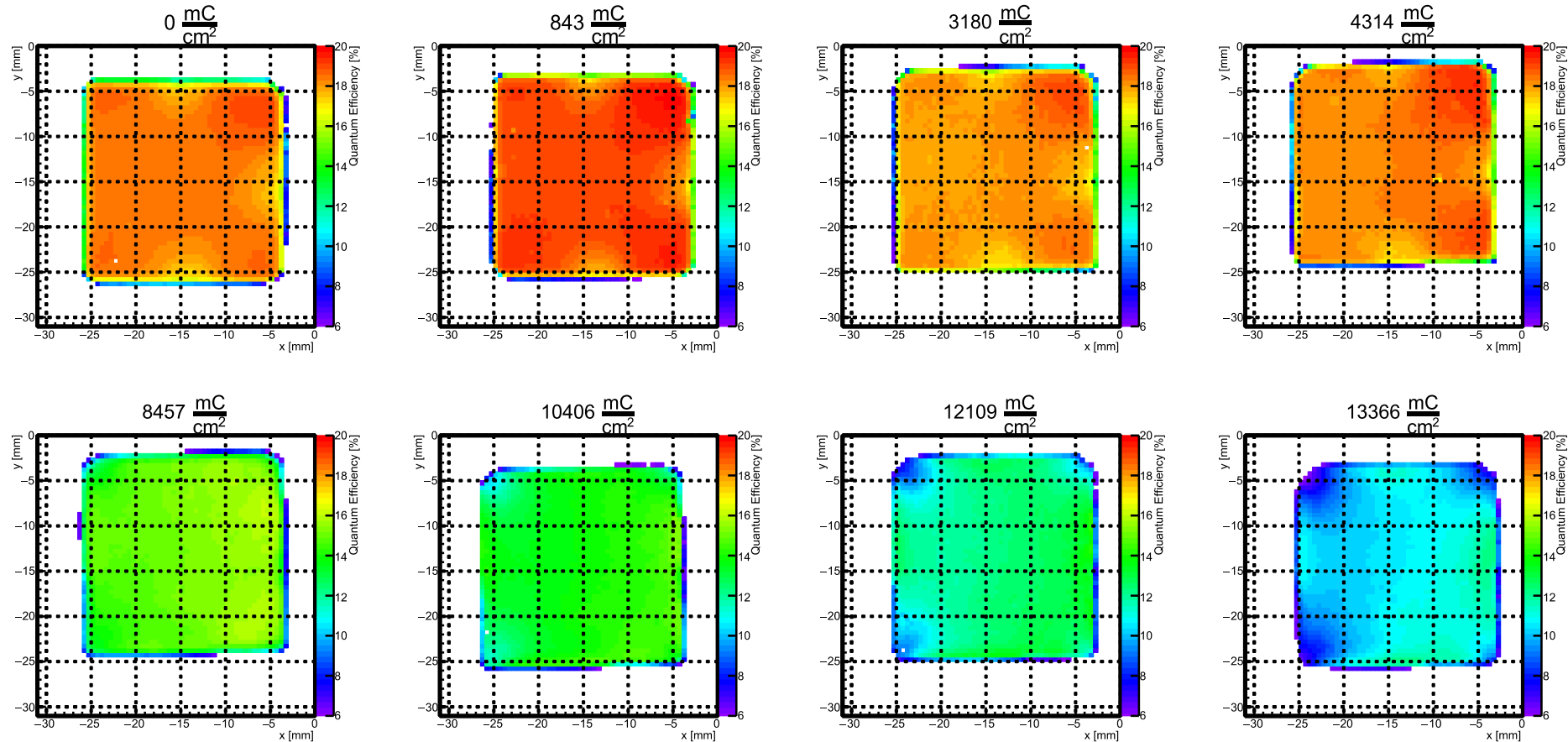
QE scan of Photonis 9001332 (ALD)



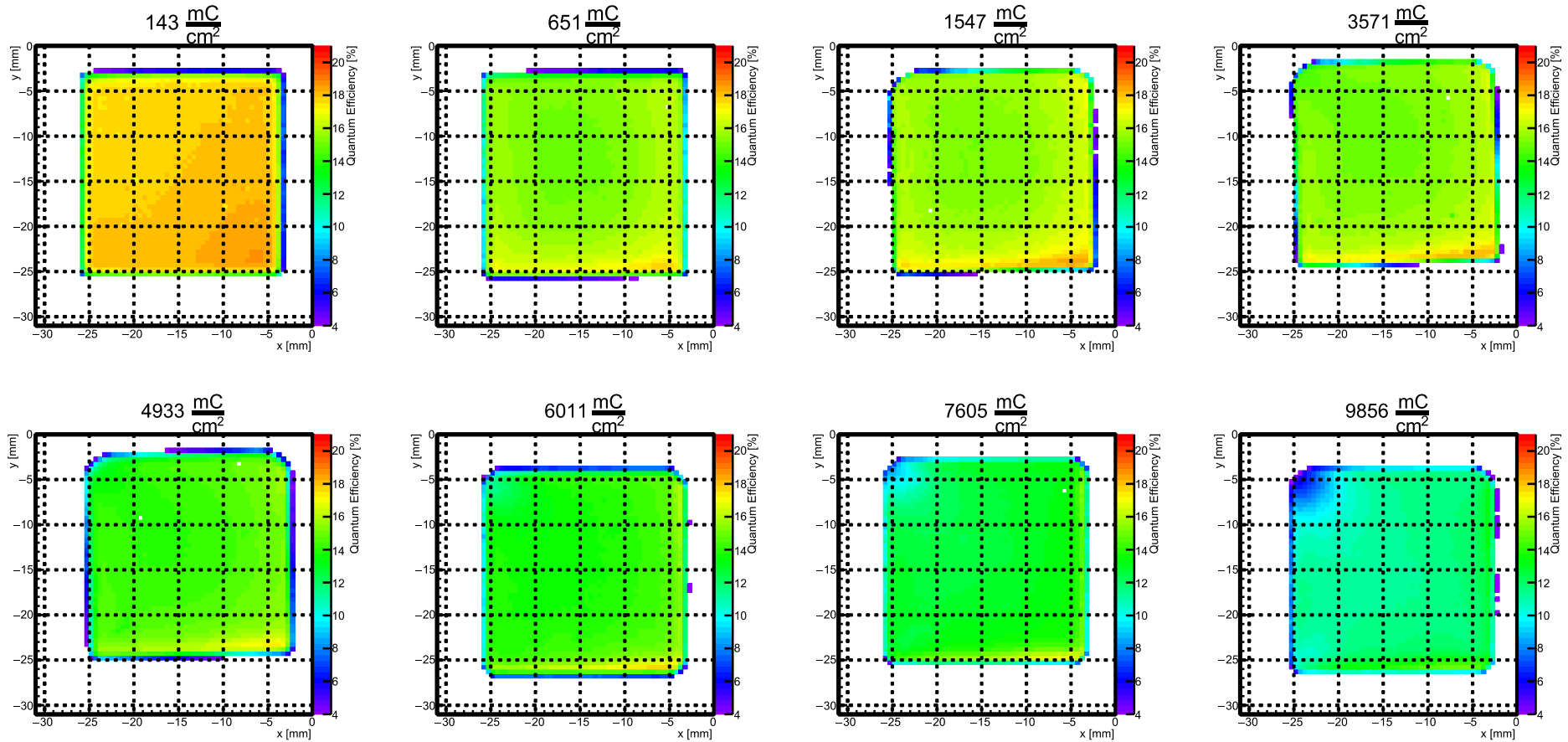
QE scan of Photonis 9001393-URD (ALD)



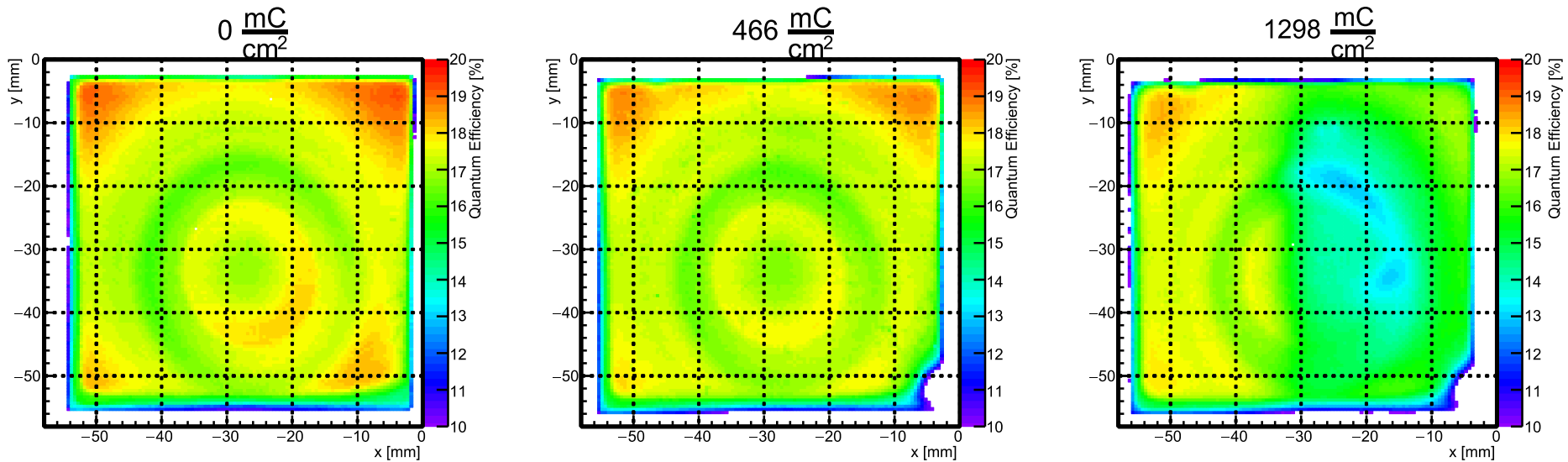
QE scan of Hamamatsu KT0001 (ALD)



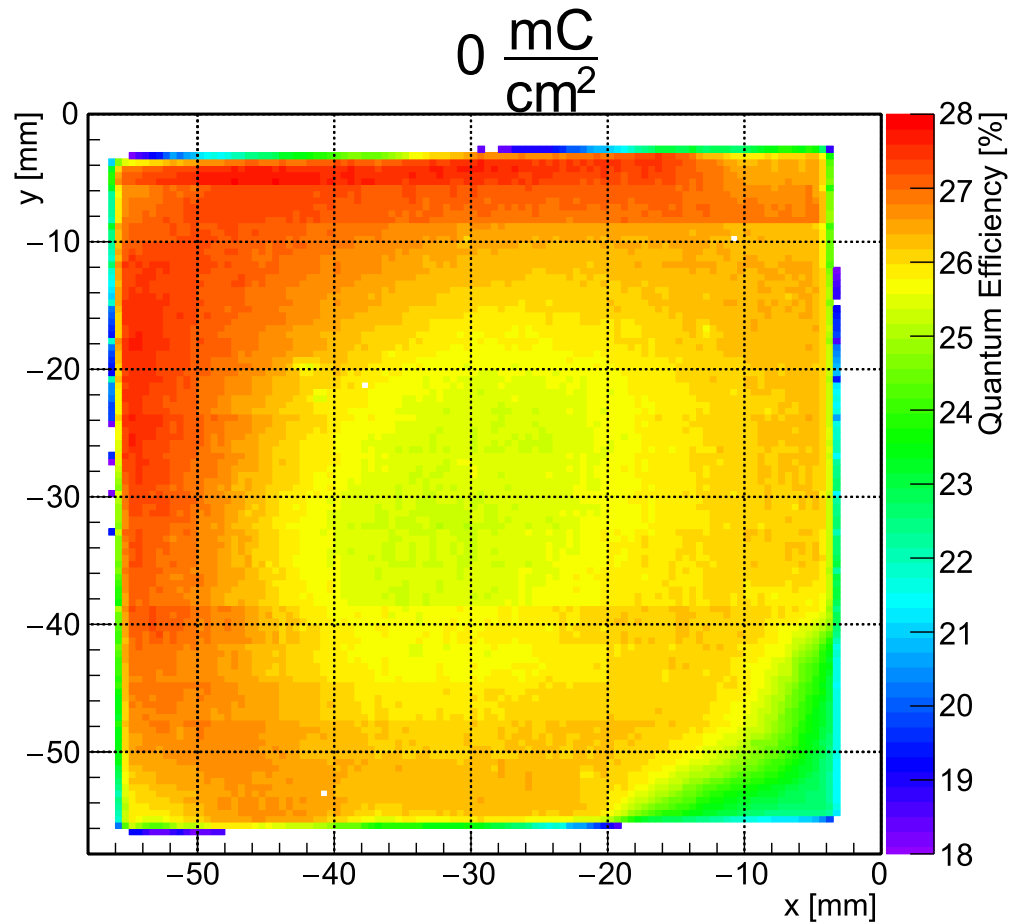
QE scan of Hamamatsu KT0002 (ALD)



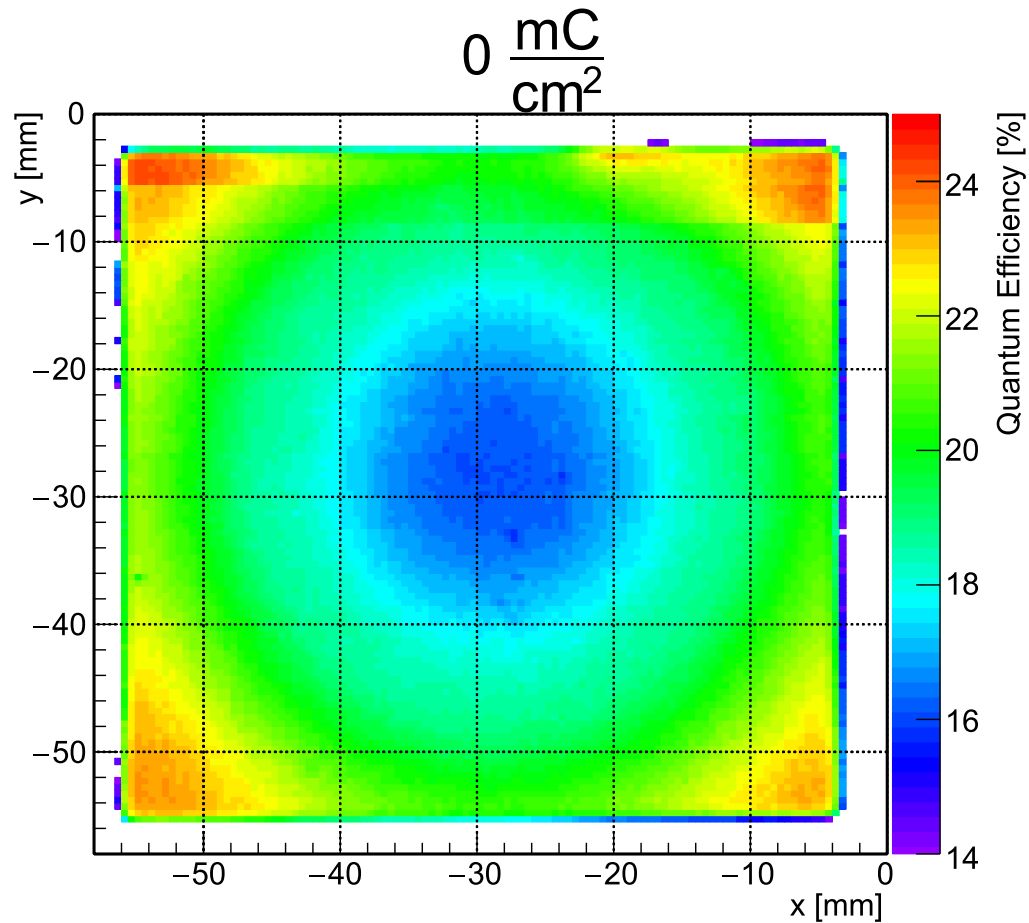
QE scan of Hamamatsu JS0022 (8x8, ALD)



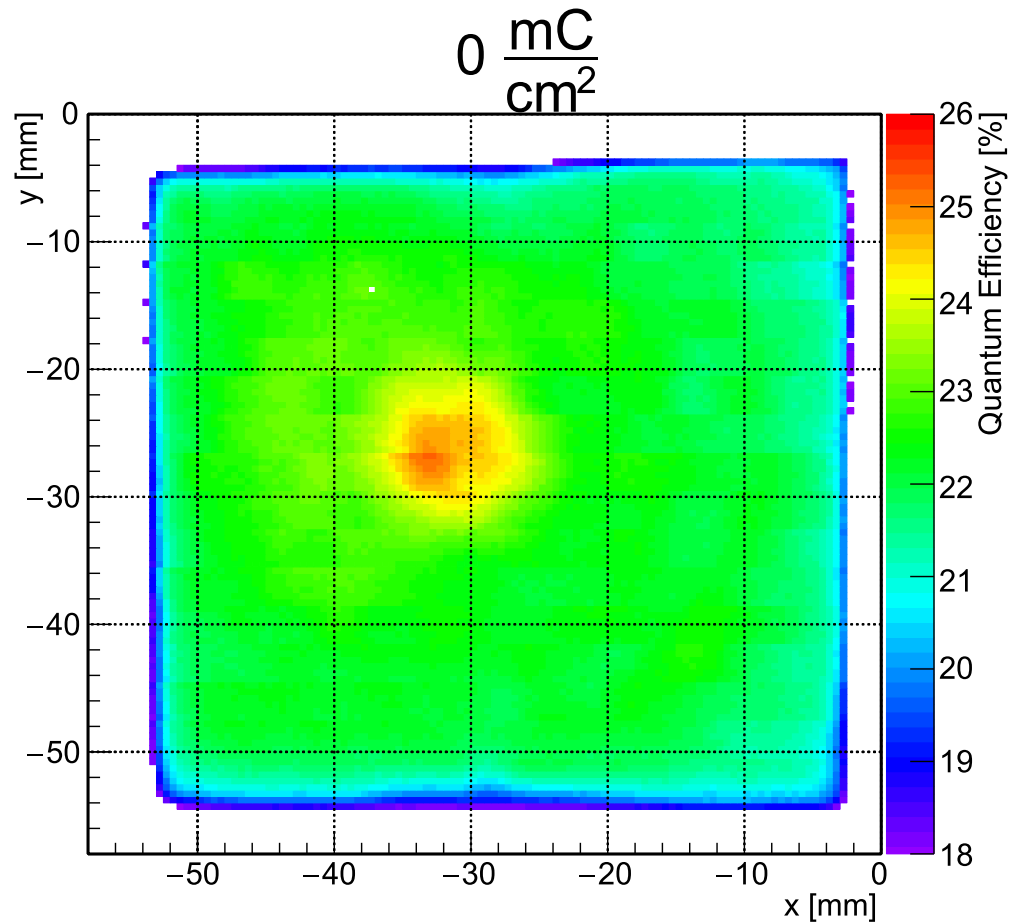
QE scan of Hamamatsu JS0035 (8x8, ALD)

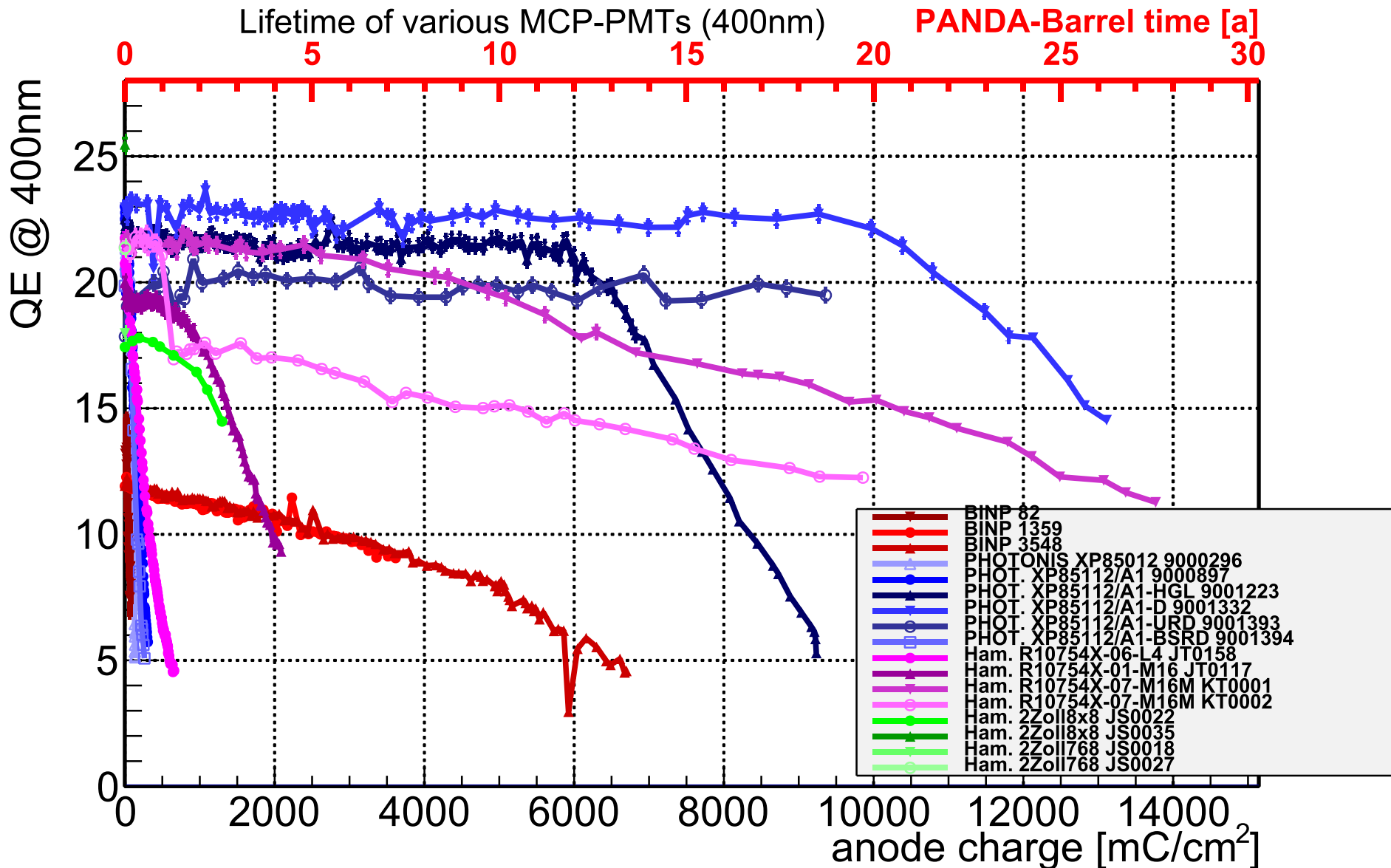


QE scan of Hamamatsu JS0018 (6x128, ALD)



QE scan of Hamamatsu JS0027 (6x128, ALD)





Summary and outlook

- All sensor integrated in setup
- QE of JS0022 decreasing early

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Thank you for your attention!

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