



Weekly meeting

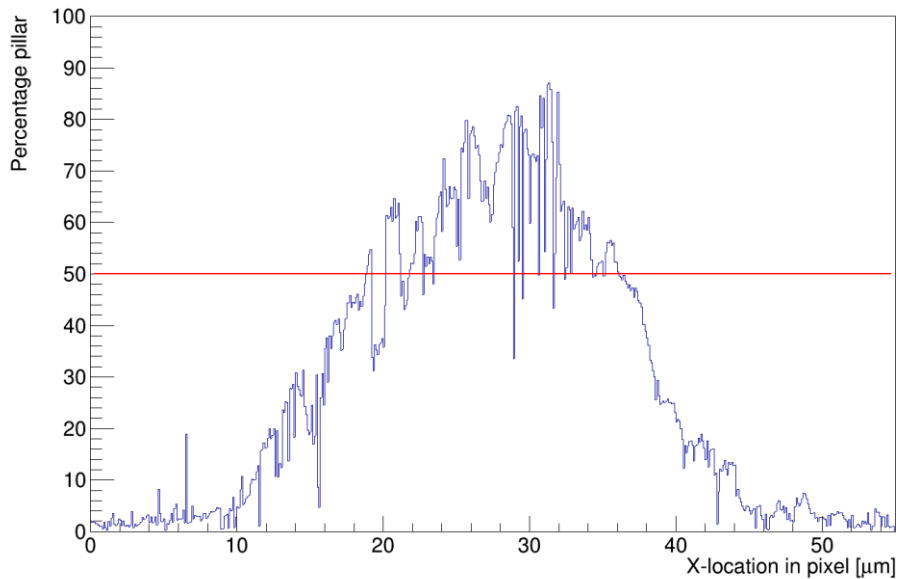
28 March 2019

Peter Bosch

Moving fit

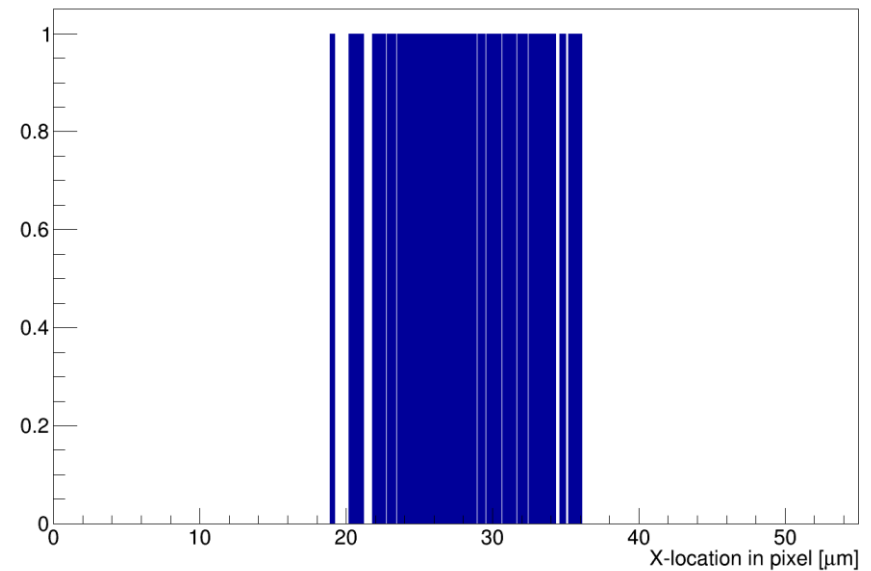
Run 31618
3D sensor
 $V_{\text{bias}} = 40\text{V}$
Angle = 0°
5 spills

Percentage pillar (Run 31618, 285 μm 3D)



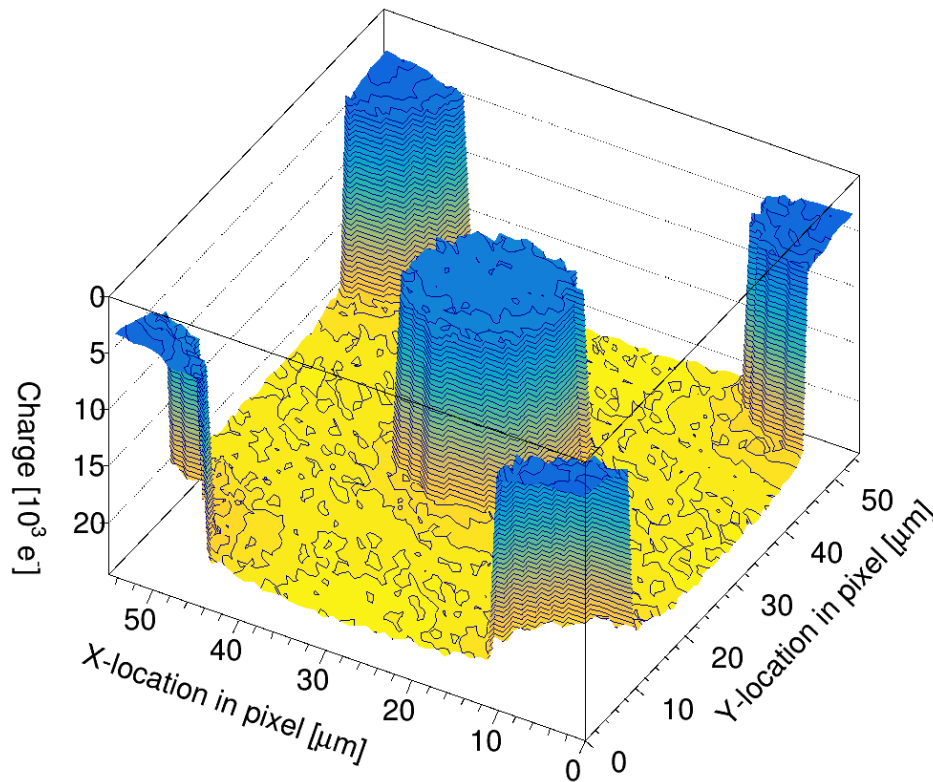
Bin of size $1\mu\text{m}$ moving $.1\mu\text{m}$ over
centre row.
Pillar size $\approx 17\mu\text{m}$

Pillar or non-pillar (Run 31618, 285 μm 3D)



Charge map: pillar size

Run 31618
 3D sensor
 $V_{\text{bias}} = 40\text{V}$
 Angle = 0°
 5 spills



Diameter pillar $\approx 17\mu\text{m}$

Etched $\approx 10\mu\text{m}$

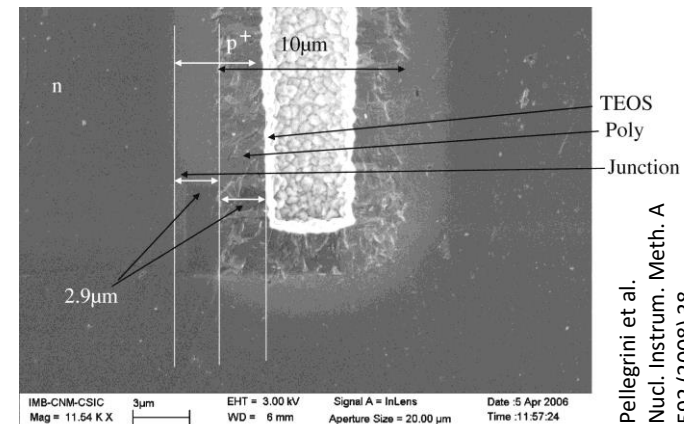
Extra dead area $\approx 6\mu\text{m}$

Error real zero² $\approx 1\mu\text{m}^2$

Error telescope² $\approx 2 \cdot 1.5^2$
 $\approx 4.5\mu\text{m}^2$

Total error $\approx \text{sqrt}(1+4.5)$
 $\approx 2.3\mu\text{m}$

Expected pillar $\approx 16 \pm 2.3\mu\text{m}$



First look into timing

Run 31618
3D sensor
 $V_{\text{bias}} = 40\text{V}$
Angle = 0°
5 spills

