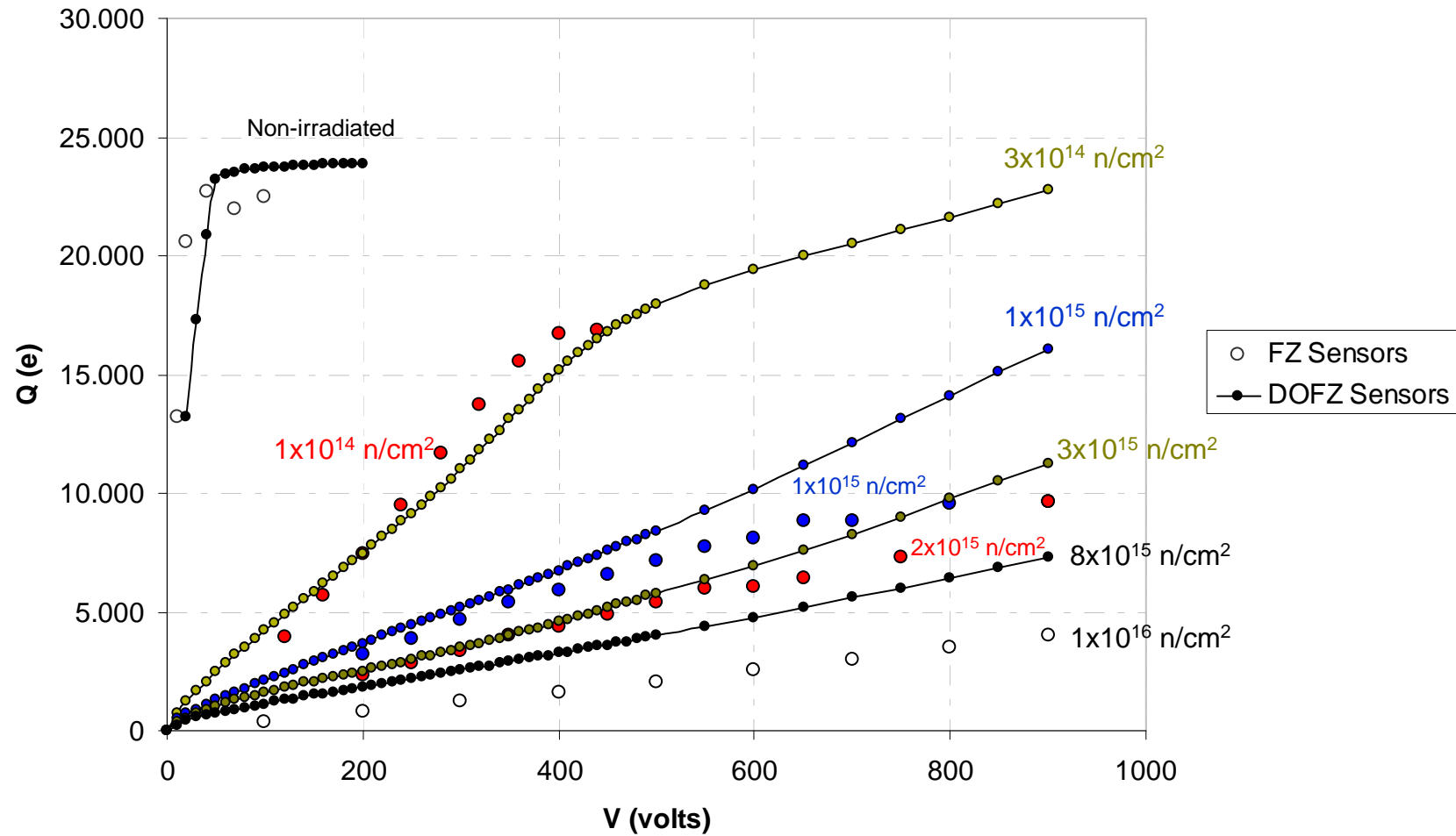


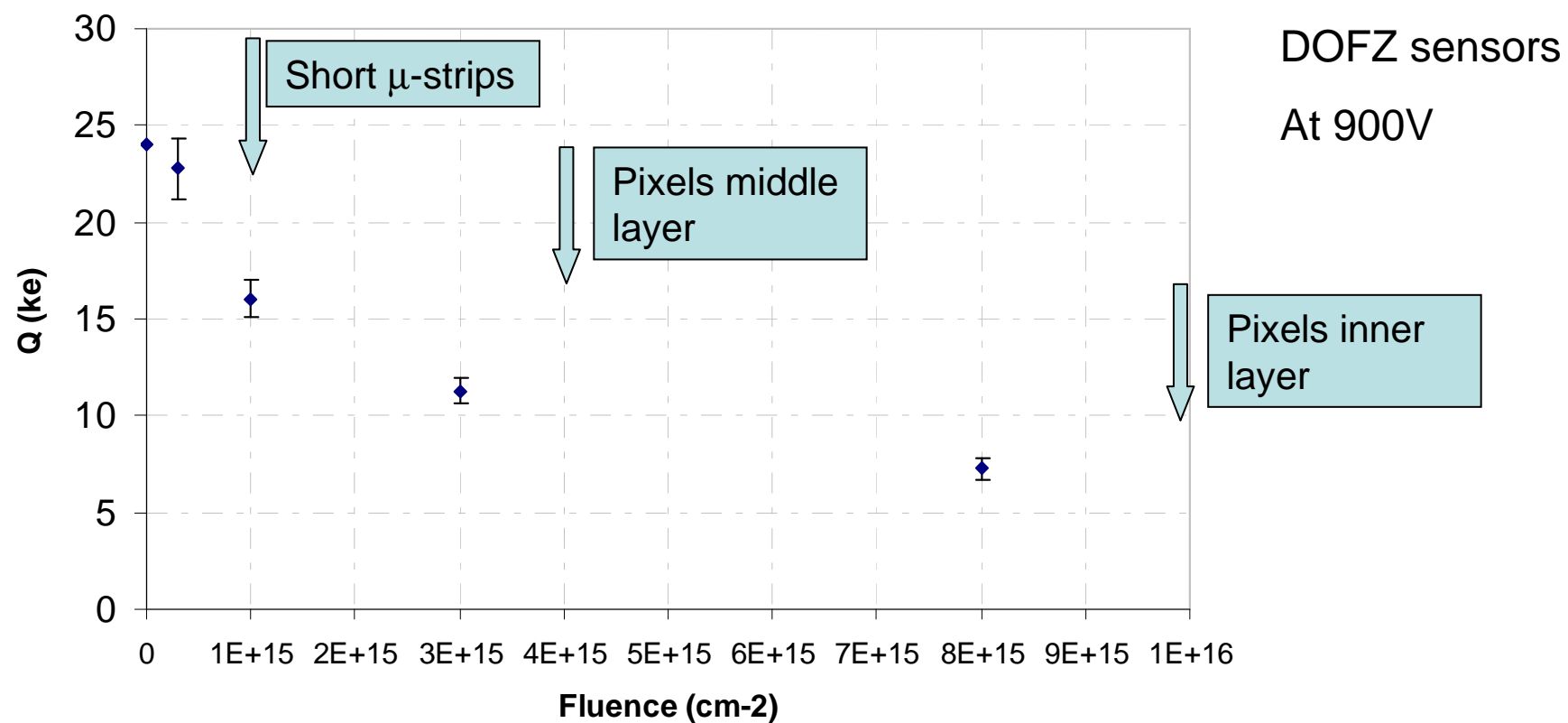
Detectores Irrradiados

- Medidas detectores
- Medidas de ruido
- Simulación

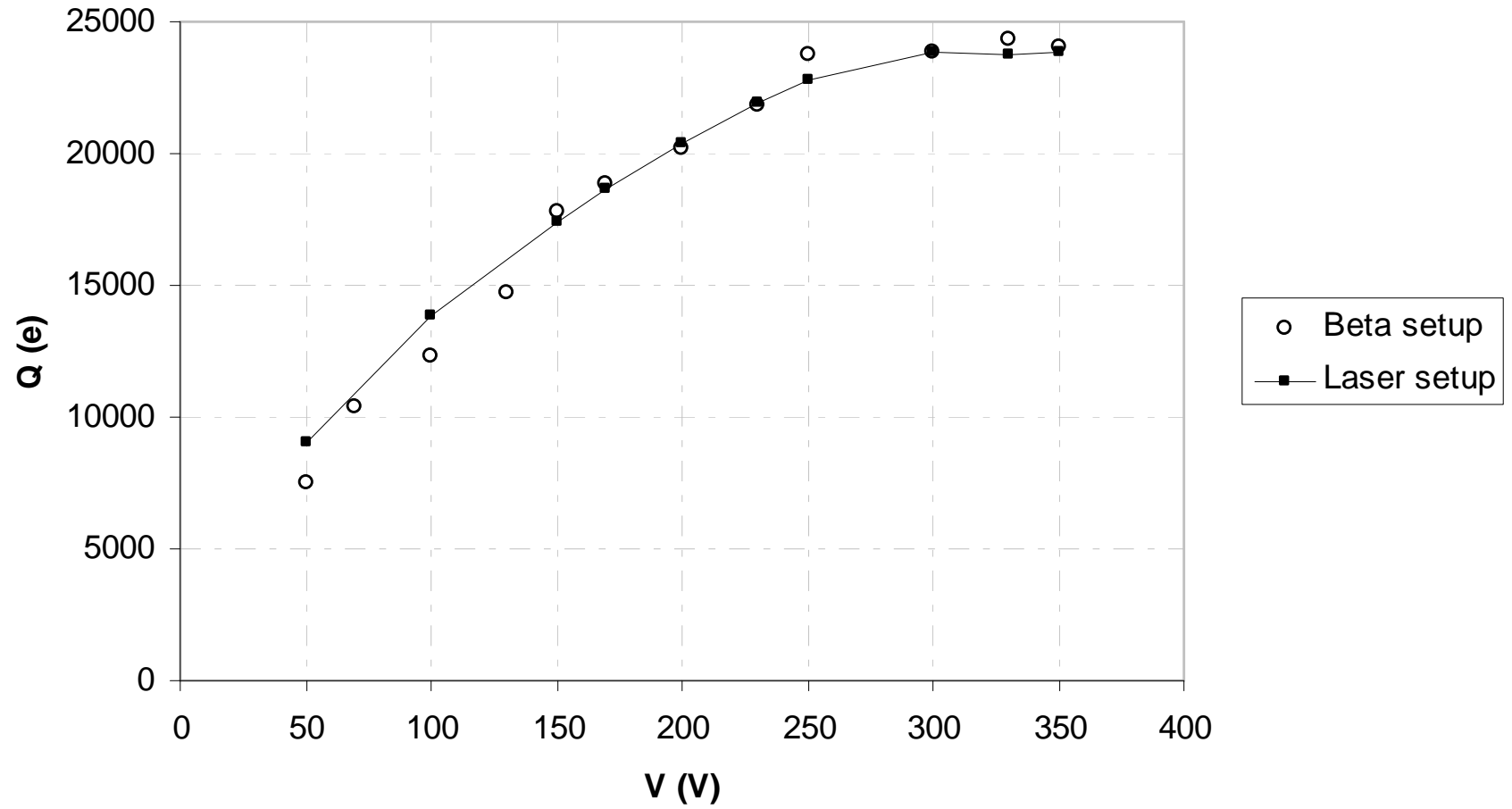
Neutron Irradiation: Comparison FZ vs DOFZ substrates



Degradation after neutron irradiation

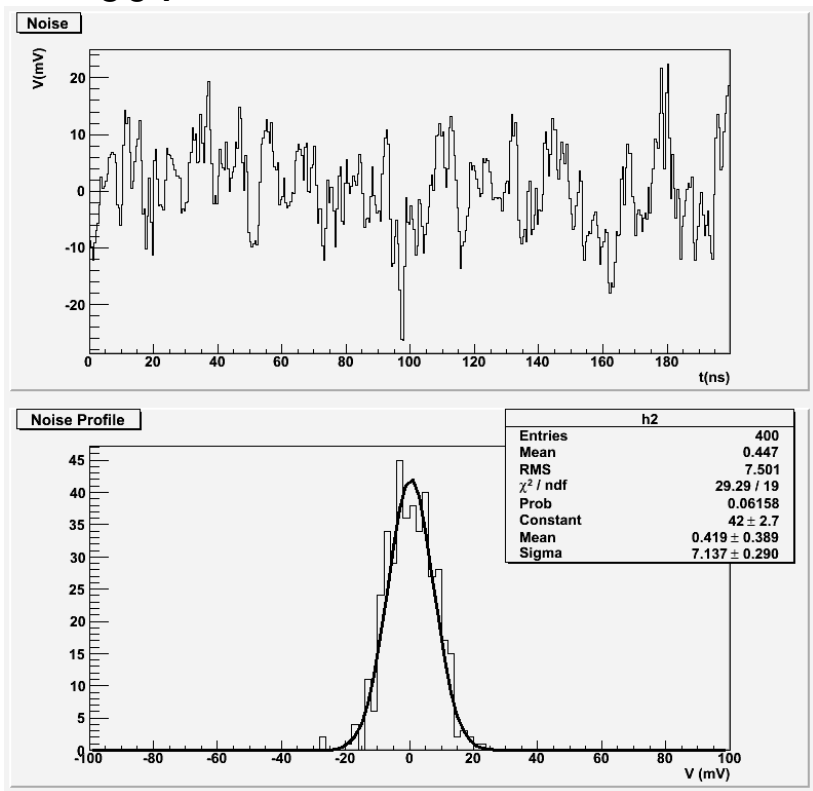


Non-irradiated MCz Detector

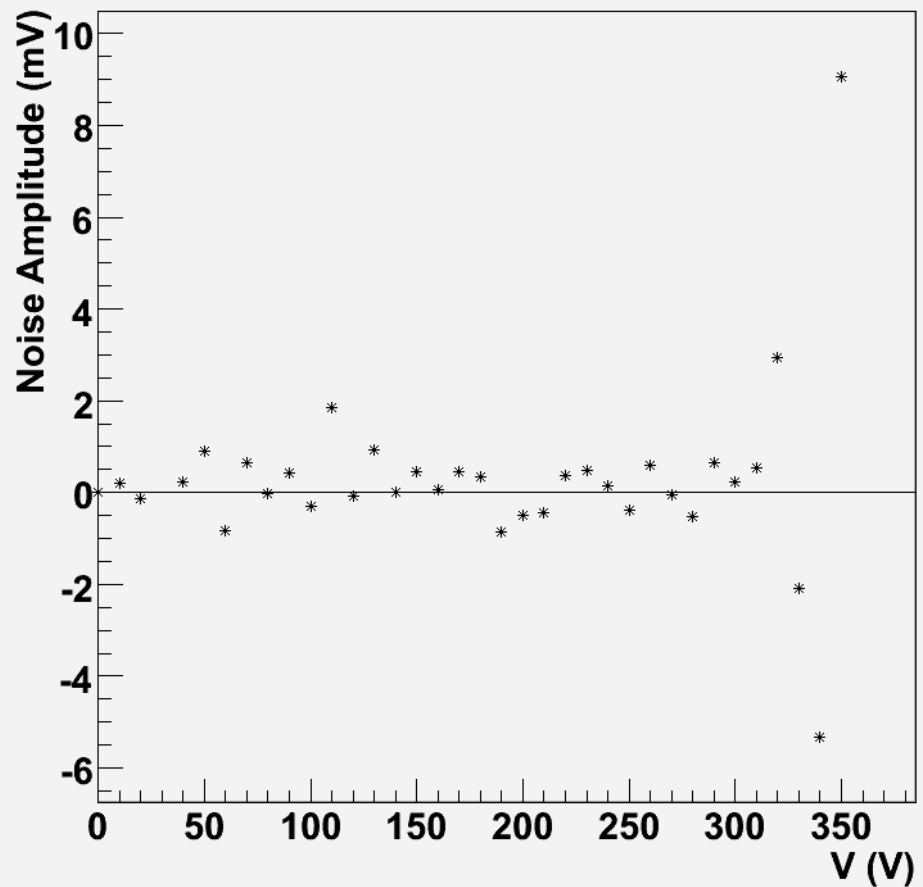


Análisis del Ruido

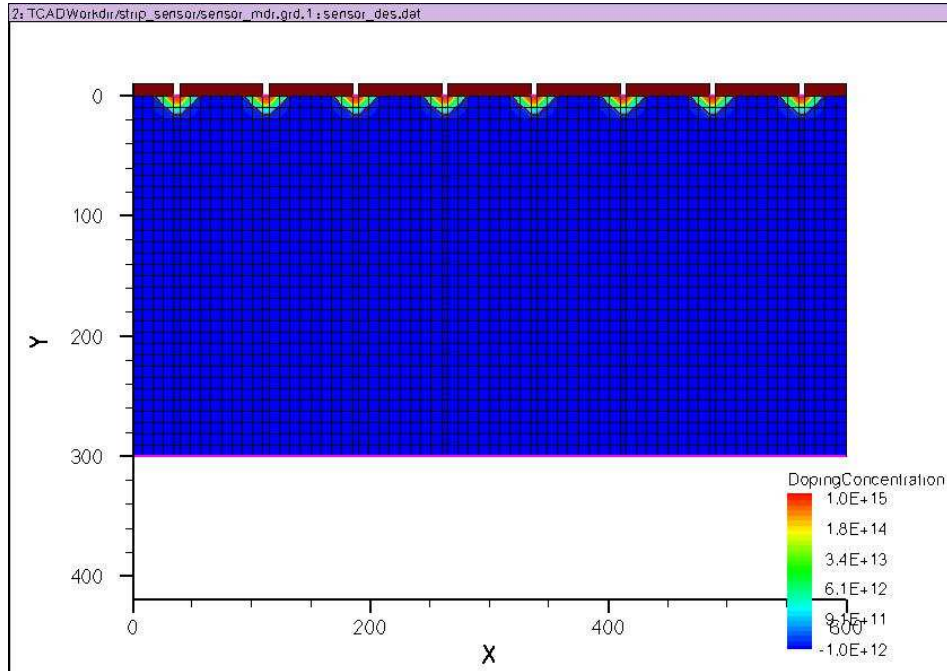
90V



Noise Distribution



Simulaciones TCAD



300 x 600 μm

Sustrato tipo P:

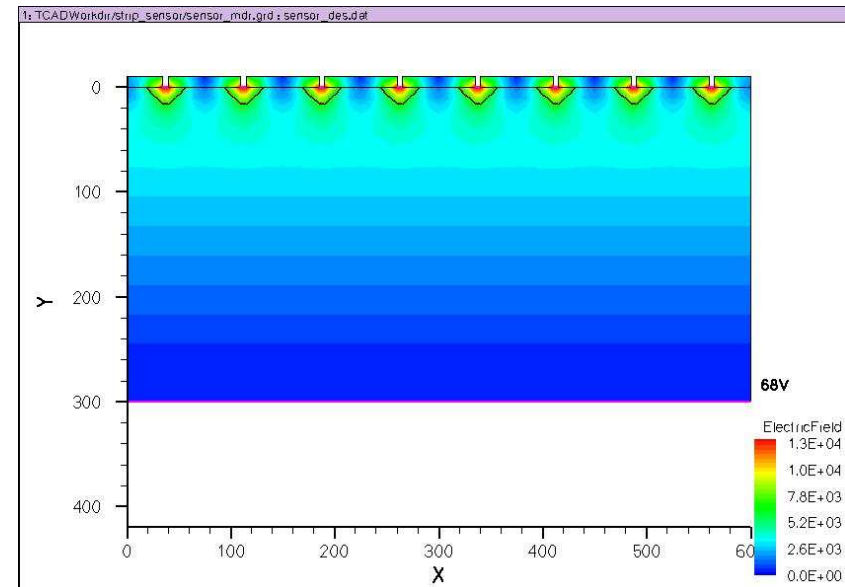
- $N_A \sim 10^{12} \text{ cm}^{-3}$

Implantes tipo N:

- $N_D \sim 10^{15} \text{ cm}^{-3}$

$$N_{\text{eff}} = N_A * N_D / N_A + N_D \sim 10^{15} \text{ cm}^{-3}$$

$$V_{fd} = \frac{qd^2}{2\epsilon_{Si}} N_{\text{eff}} \approx 68V$$



30 Noviembre 2007

