

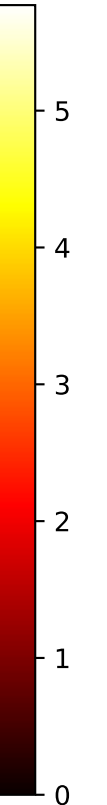
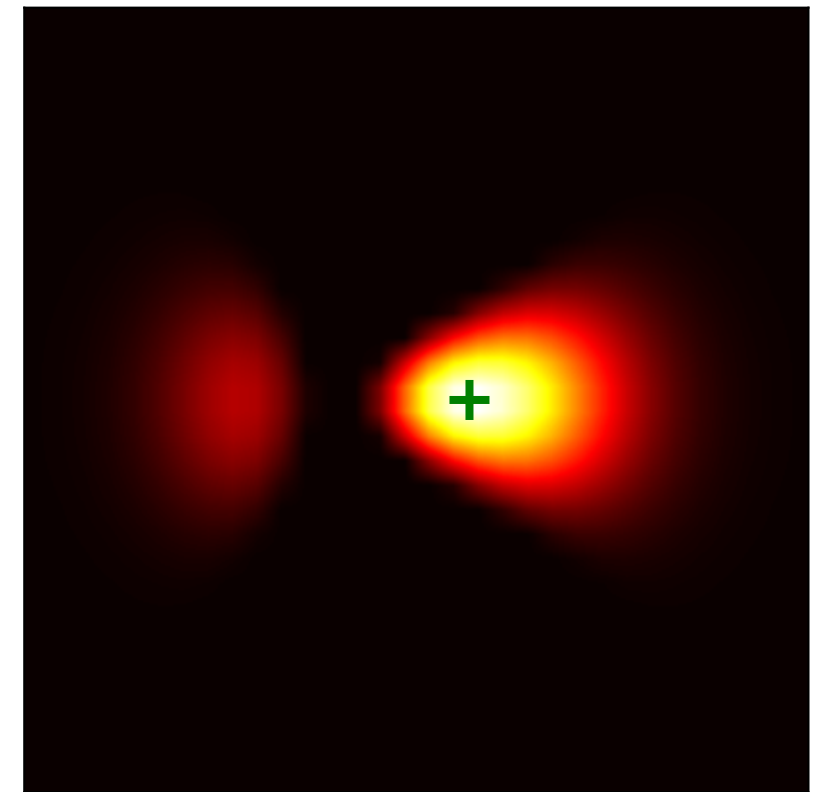
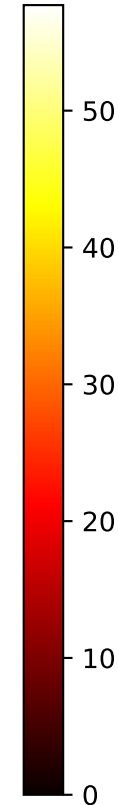
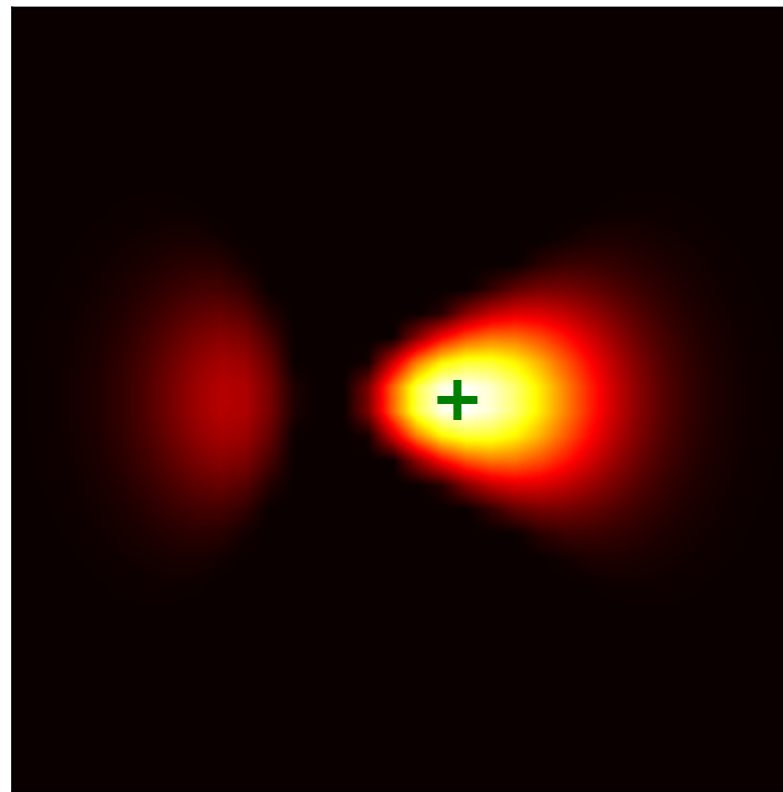
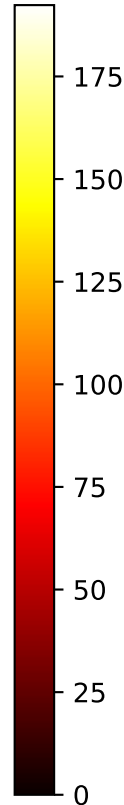
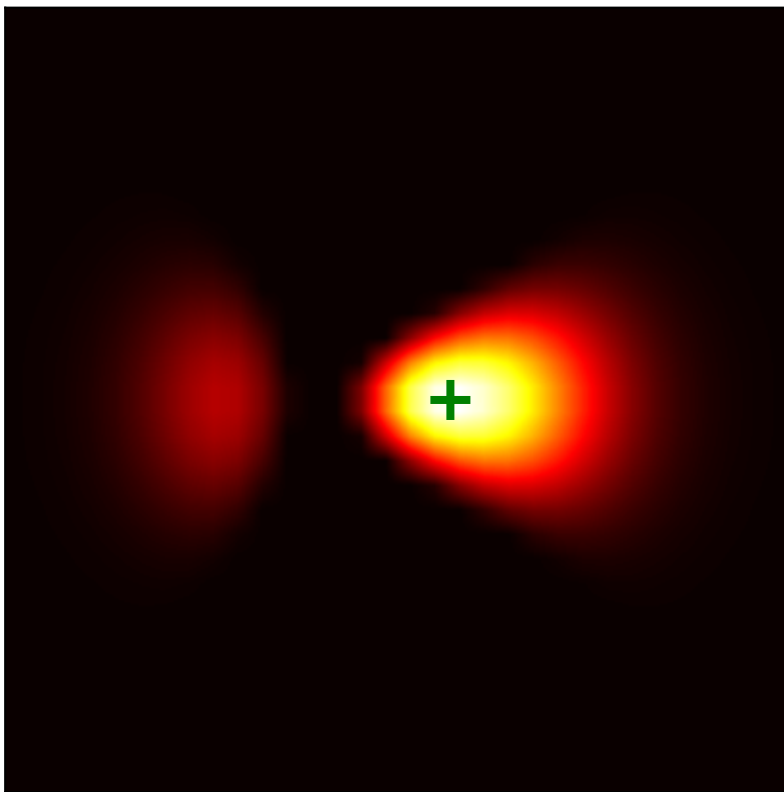
# Detector Response: Photon Noise Impact on Centroiding

## CMV4000 Sensor Model with Realistic Noise

**Magnitude 3**  
Clean (10000 photons)

**Magnitude 4**  
Clean (3000 photons)

**Magnitude 6**  
Clean (300 photons)



**With Poisson + Read Noise**  
( $\sigma_{\text{read}} = 13e^-$ )

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( $\sigma_{\text{read}} = 13e^-$ )

