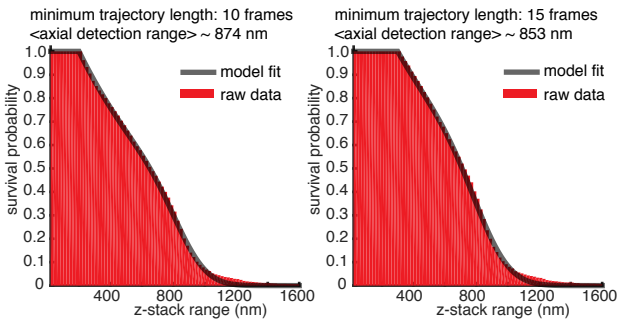
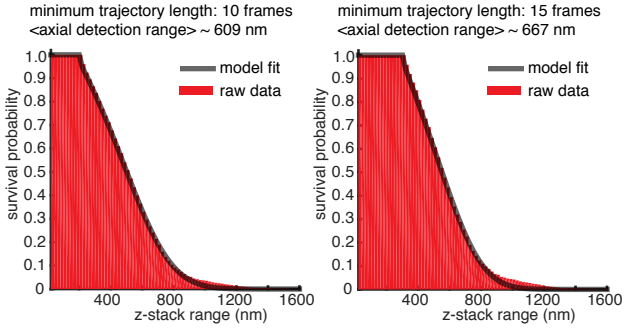
A mESC C59 Halo-mCTCF; PFA-fixed; JF_{646}; 20 nm z-stack



B U2OS C32 Halo-hCTCF; PFA-fixed; JF_{646}; 20 nm z-stack



C summary of model for axial detection range measurements

τ: time in frames
τ_{MIN}: minimal trajectory length (10 or 15 frames)
k_{BLEACH}: photobleaching rate constant
Δz: axial detection range (Gaussian CDF mean)
σ_z: Gaussian CDF sigma

major model assumptions:
1. photobleaching is a Poisson process
2. axial detection range can be modeled as a Gaussian CDF

fitted model:

$$\text{survival probability}(\tau) = \begin{cases} 1 & \text{if } \tau <= \tau_{MIN} \\ e^{-k_{BLEACH}(\tau-\tau_{MIN})} \frac{1}{2}\left[1-\text{erf}\left(\frac{(\tau-\tau_{MIN})-(\Delta z-\tau_{MIN})}{\sqrt{2}\,\sigma_z}\right)\right] & \text{if } \tau > \tau_{MIN} \end{cases}$$