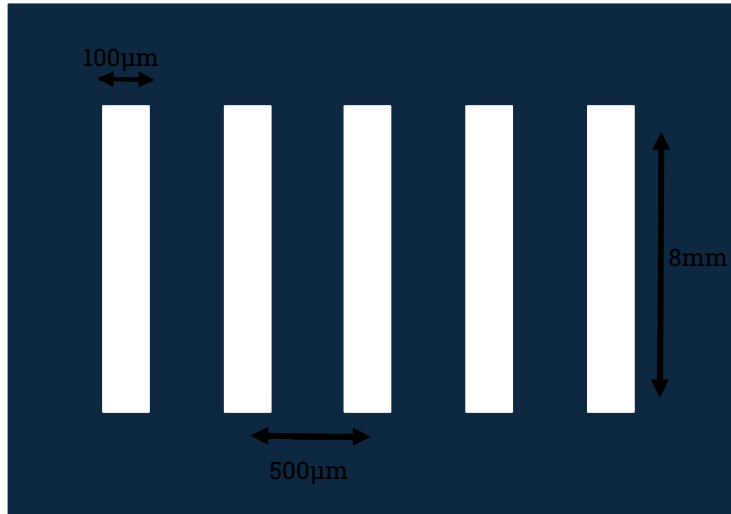


MC40 bystander effect experiment (2nd run)



Beam set up



	Dose	4Gy	10Gy
Time post MRT	1 hour	x2	x2
	4 hours	x2	x2
	8 hours	x2	x2
	24 hours	x2	x2

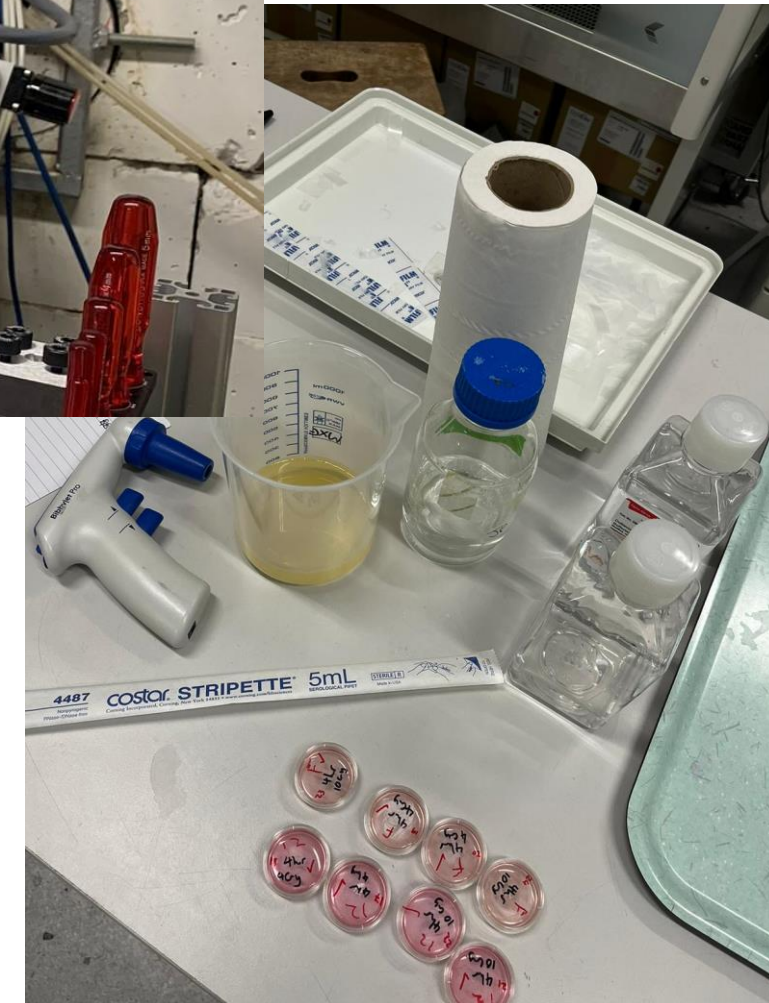


Image processing

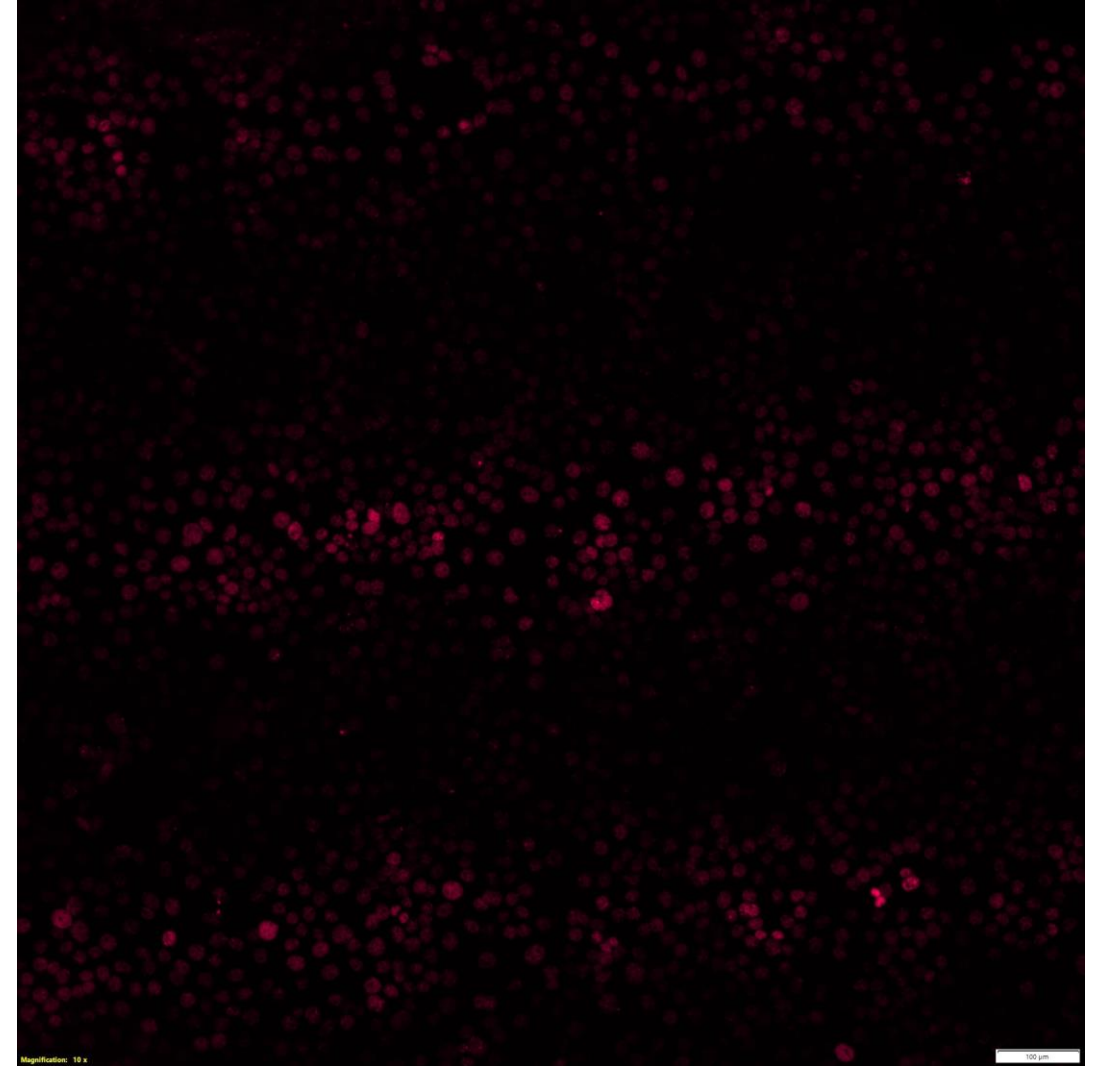
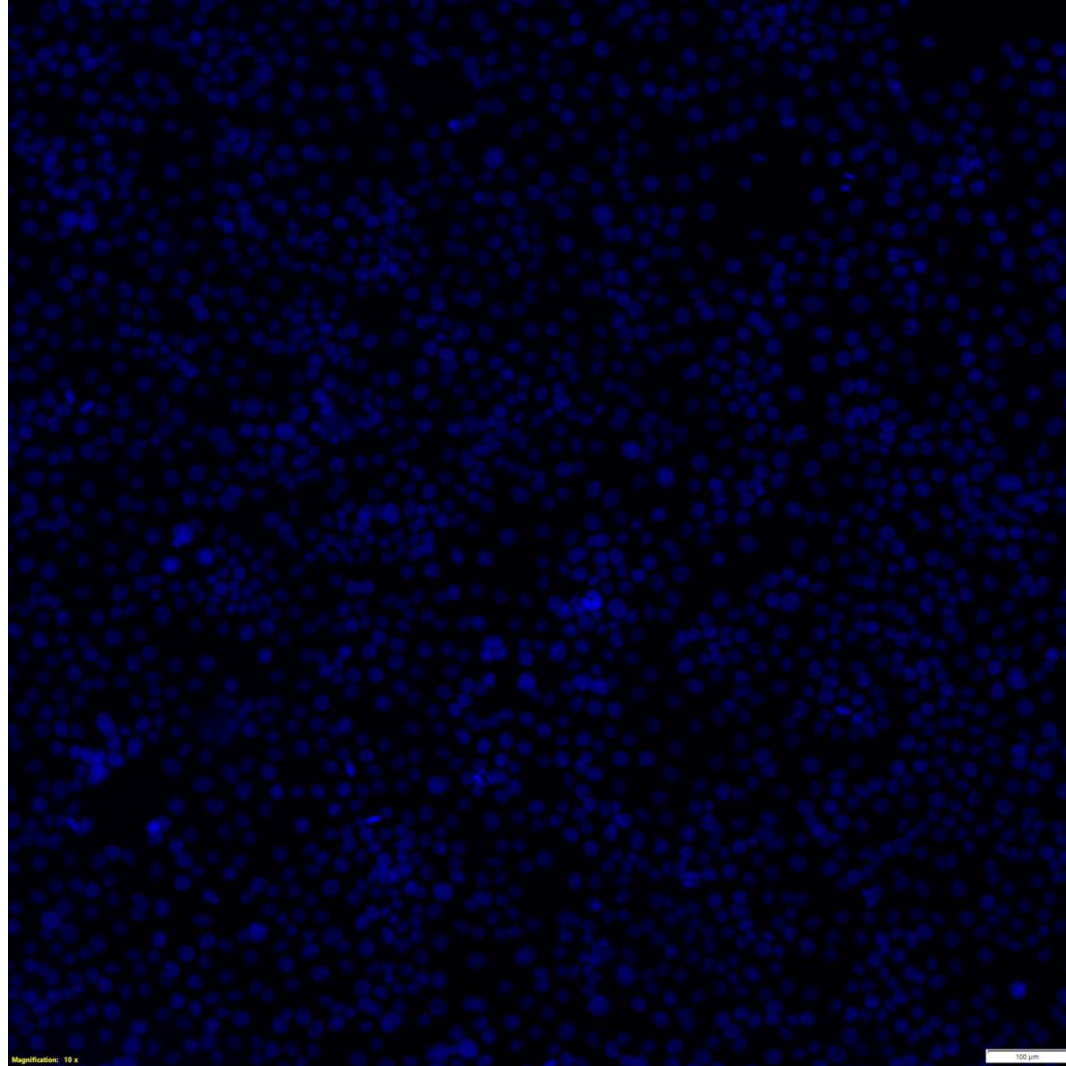
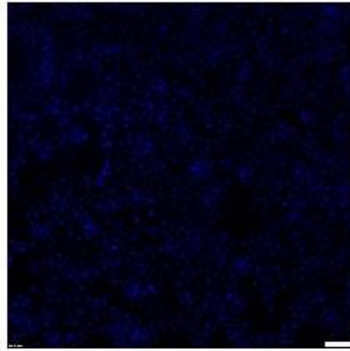


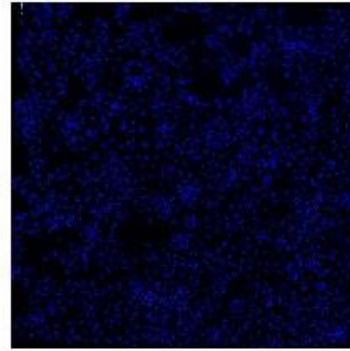
Image processing

Image Processing

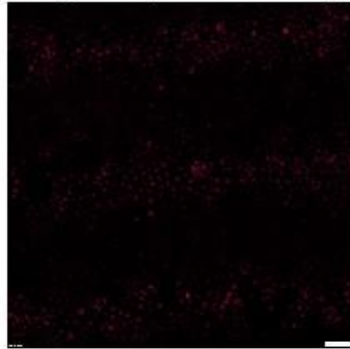
Original Dapi Image



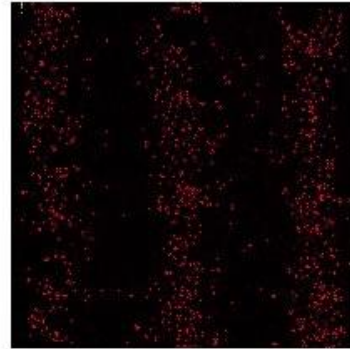
Rotated/Detected Dapi Image



Original γ h2AX Image



Rotated/Detected γ h2AX Image



Cell Detection Analysis

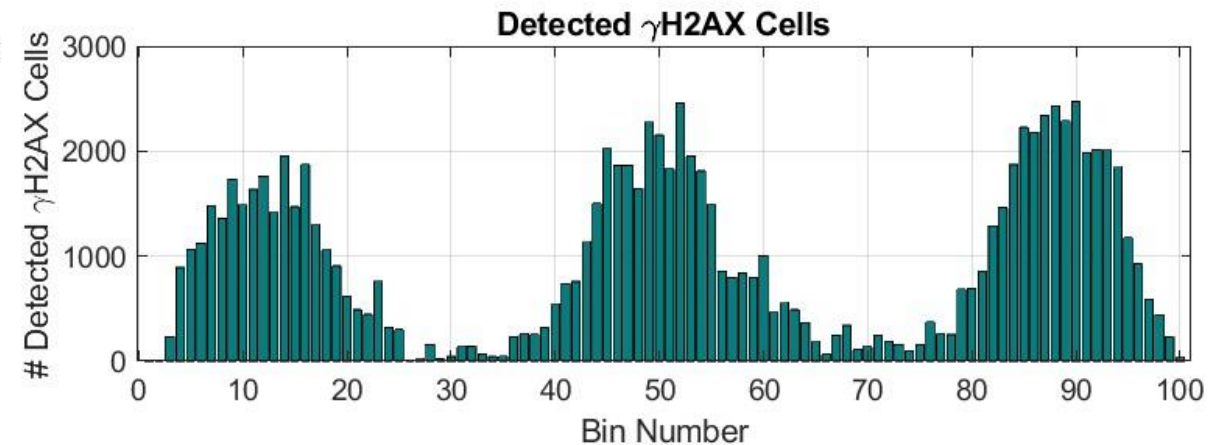
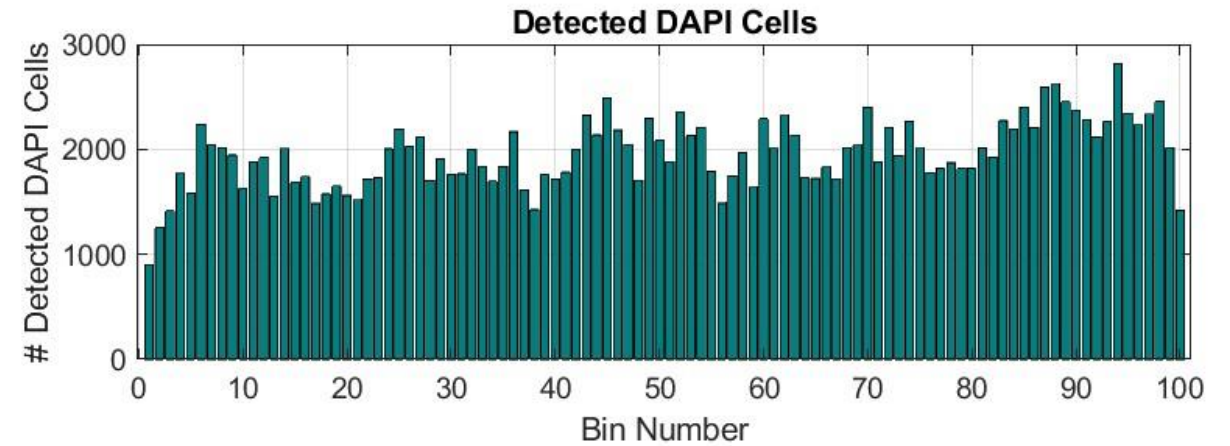


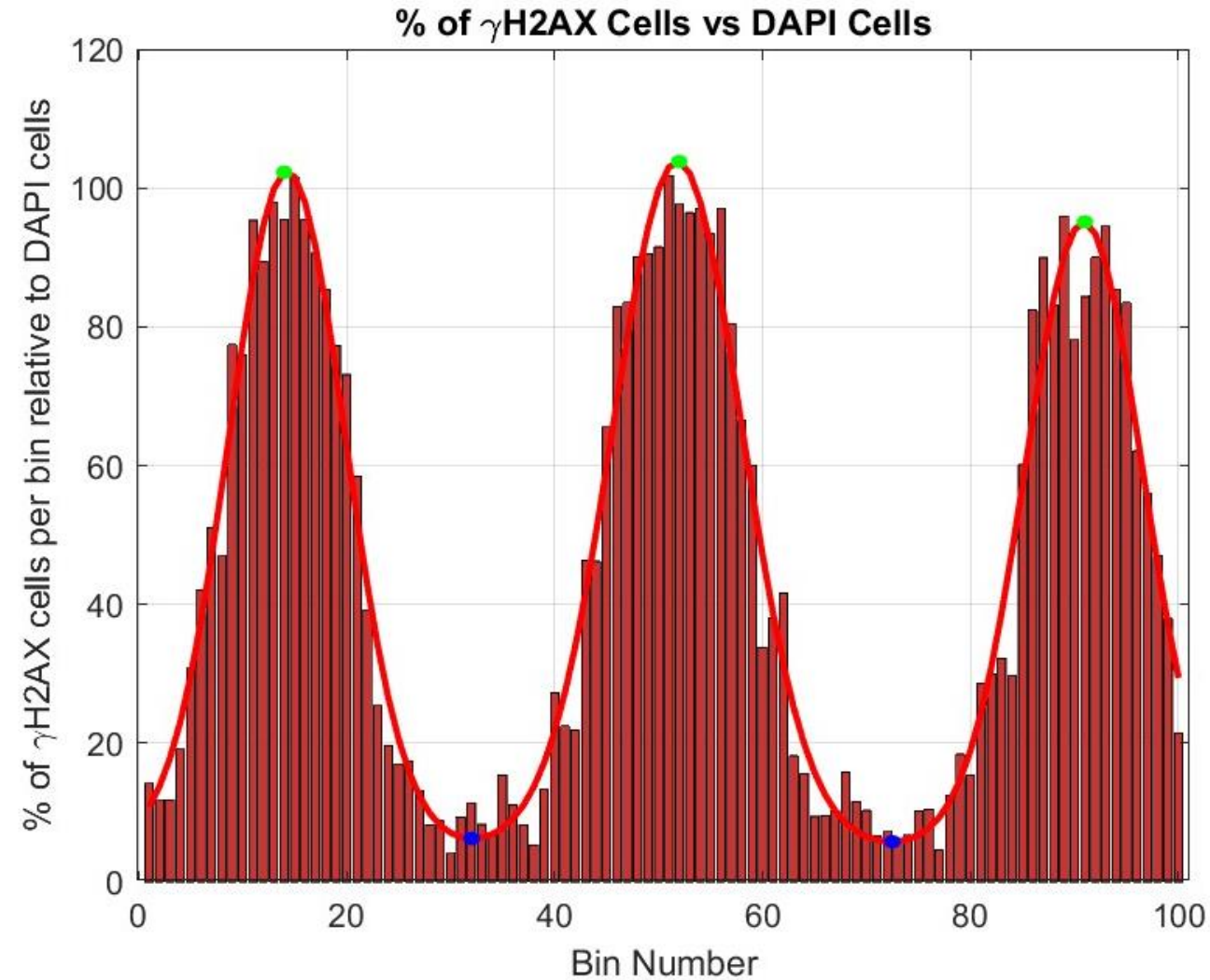
Image processing

Theorem

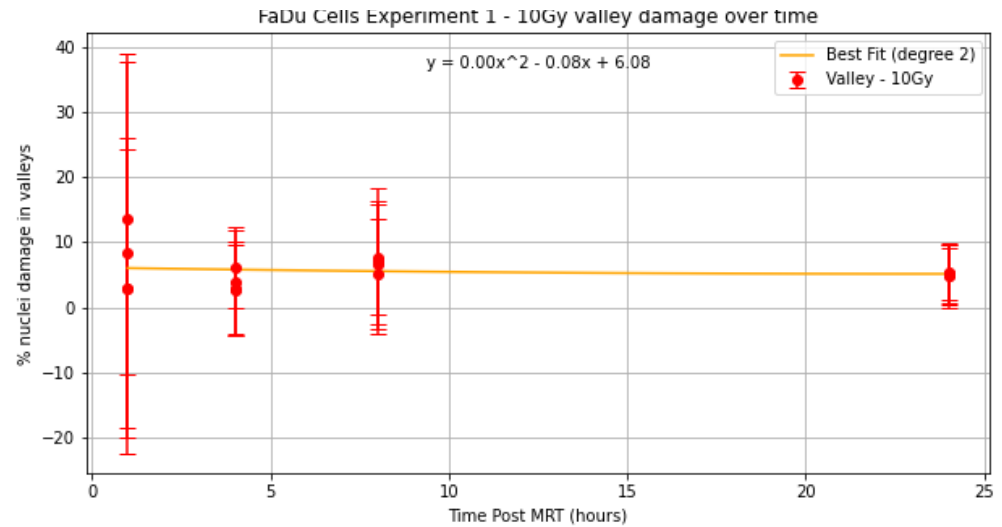
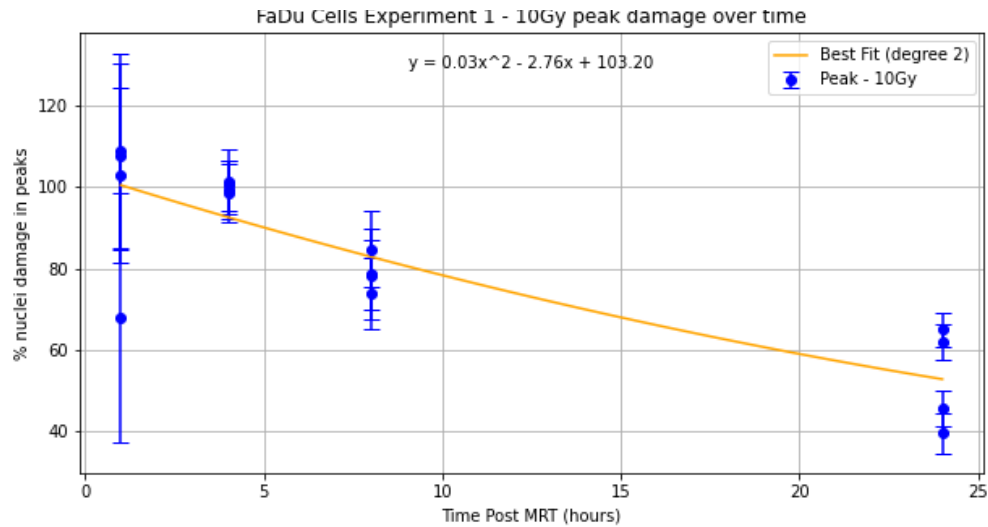
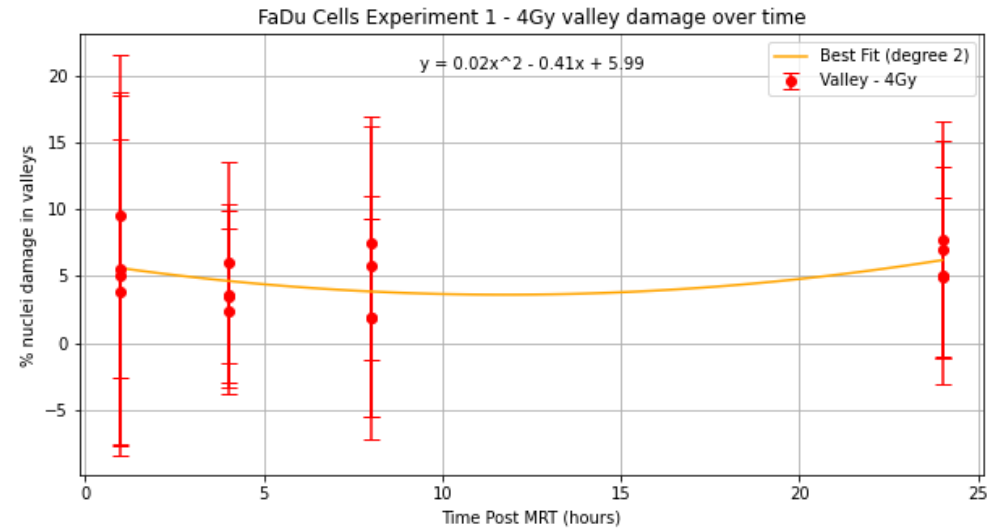
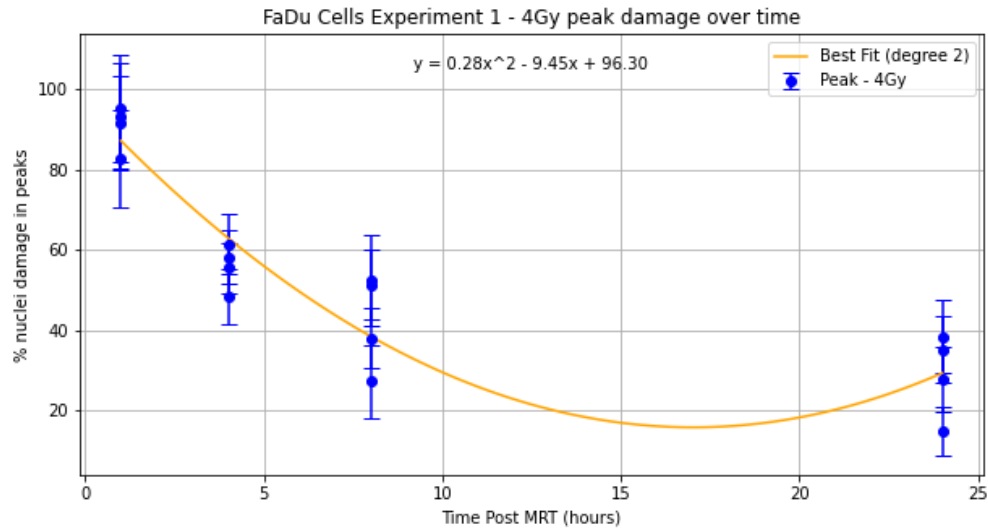
$$f(x) = A_1 e^{-\frac{(x - \mu_1)^2}{2\sigma_1^2}} + A_2 e^{-\frac{(x - \mu_2)^2}{2\sigma_2^2}} + A_3 e^{-\frac{(x - \mu_3)^2}{2\sigma_3^2}} + B \quad (6.9)$$

where:

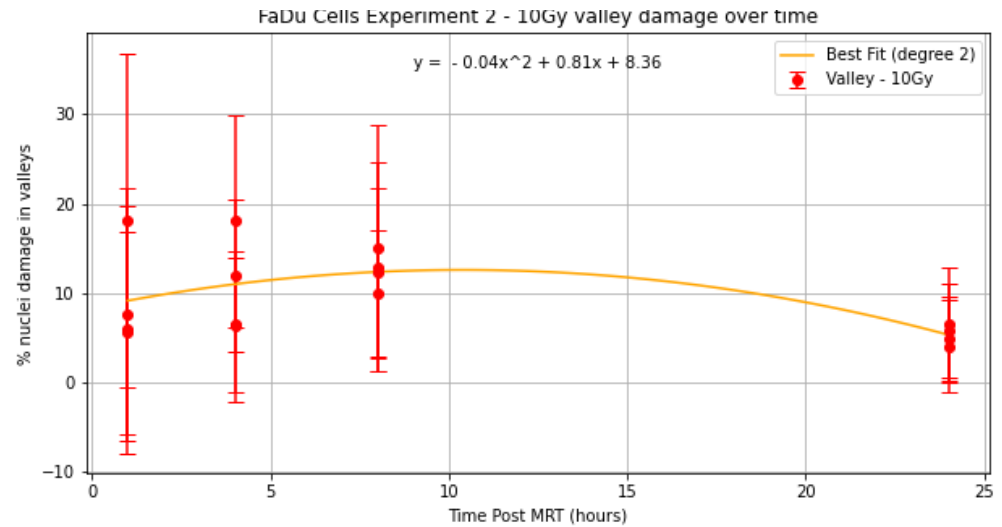
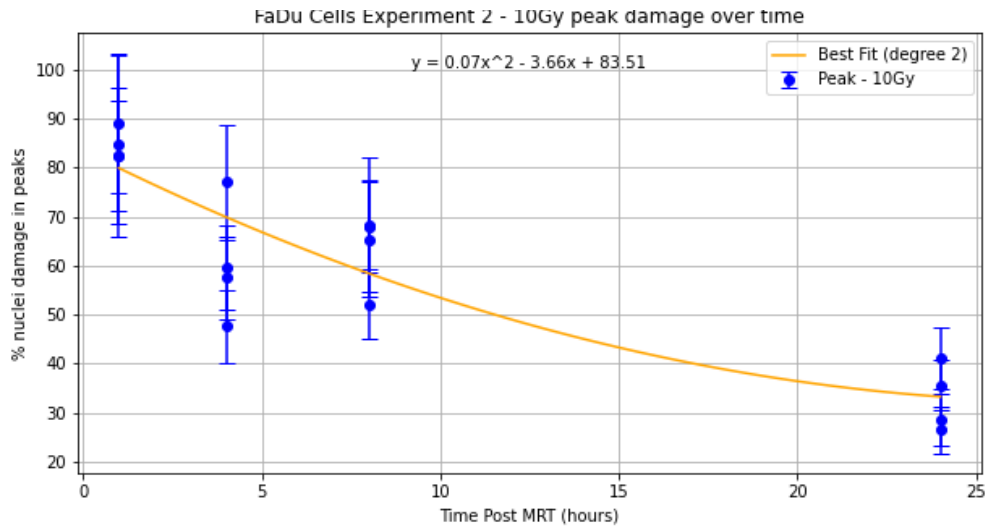
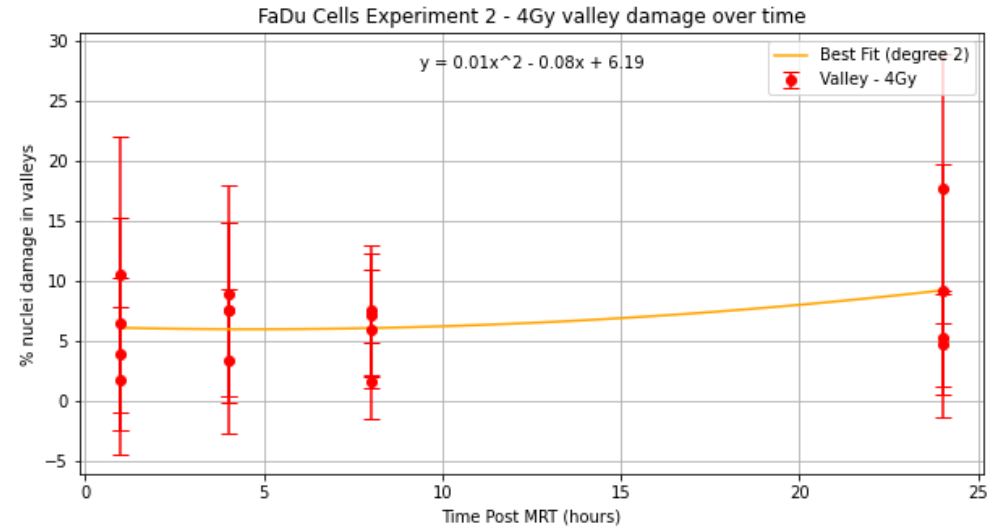
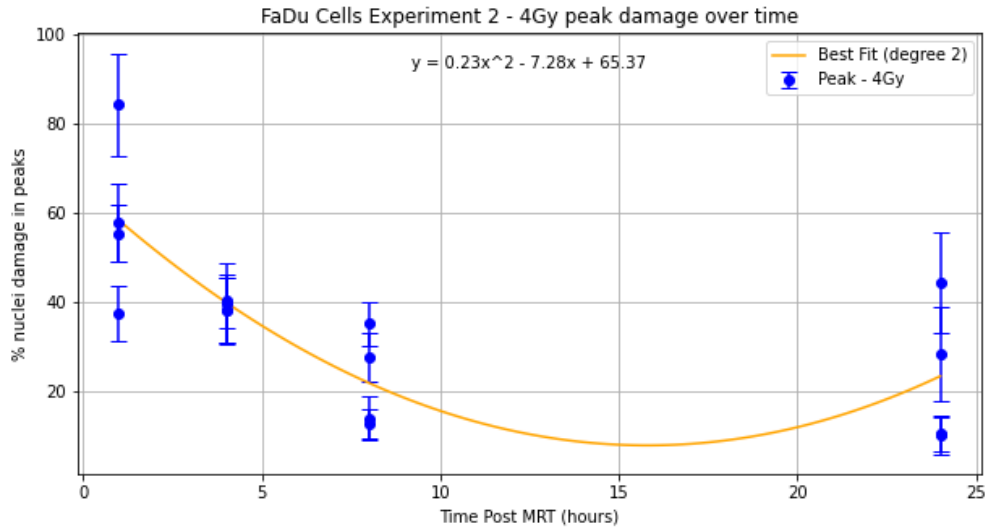
- $f(x)$ is the Gaussian function value at position x ,
- A_1, A_2 , and A_3 are the amplitudes of the three Gaussian peaks,
- μ_1, μ_2 , and μ_3 are the means (the positions of the centers of each peak),
- σ_1, σ_2 , and σ_3 are the standard deviations, which indicate the widths of the respective curves,
- B is the baseline offset that accounts for any constant background noise in the data.



FaDu Cells- Experiment 1



FaDu Cells- Experiment 2



UMS112 Cells- Experiment

