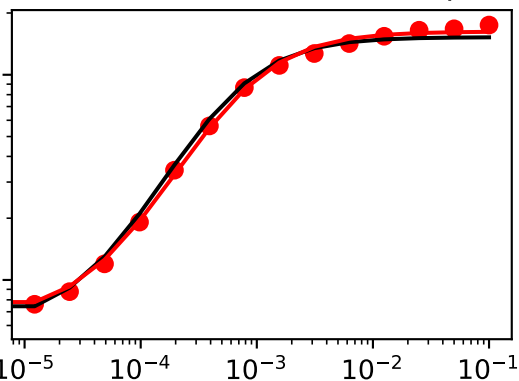
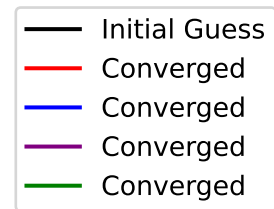
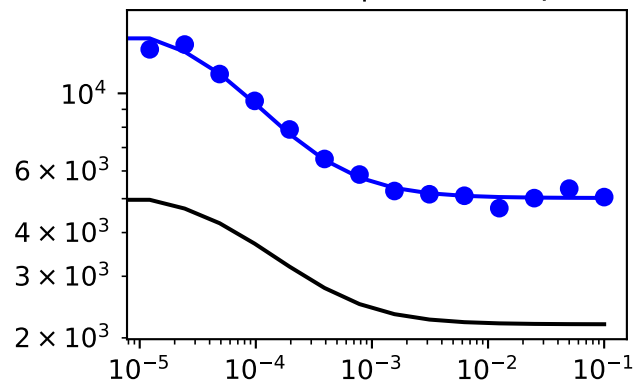


# ['SM data type data plots for mutation', 'Regulator3']

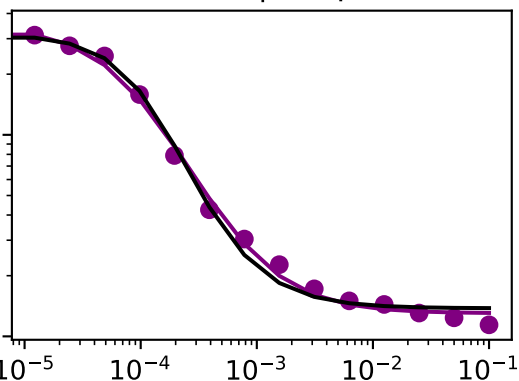
inducer -> sensor (GFP output)



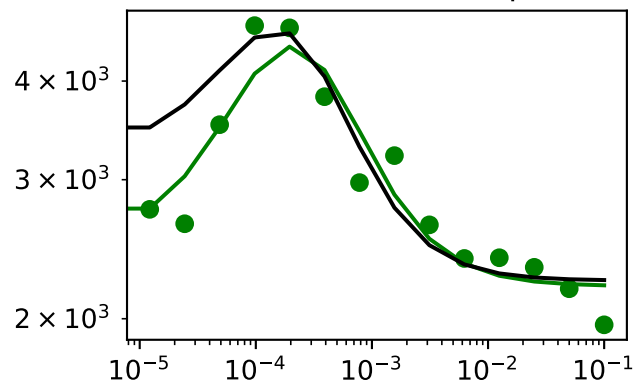
inducer -> S -| R (GFP output)



inducer -> S -| Output (GFP)



Full circuit with stripe



Across all four plots:

RSS (converged)=0.047

RSS (initial)=2.415

RSS (% reduction)=0.981

	epsilon	Initial_guesses	Converged
A_s	49.914936	608.397103	658.312039
B_s	990.928094	15250.457700	16241.385794
C_s	-376.617172	1668.059050	1291.441878
N_s	-0.032188	1.198934	1.166746
A_r	3132.666288	687.964693	3820.630981
B_r	195727.667939	23497.611400	219225.279339
C_r	0.014205	0.062367	0.076572
N_r	0.338259	0.391731	0.729989
A_h	-579.028019	590.606548	11.578529
B_h	27895.940958	35287.125700	63183.066658
C_h	0.000763	0.000530	0.001293
A_o	-0.815025	0.829830	0.014805
B_o	-1.720434	4.288170	2.567737
C_o	-1.877271	3.133222	1.255951
N_o	-0.537762	1.809018	1.271256

message: Optimization terminated successfully.

success: True

status: 0

fun: 0.04744040665408673

x: [ 6.583e+02 1.624e+04 ... 1.256e+00 1.271e+00]

nit: 25712

nfev: 33659

final\_simplex: (array([[ 6.583e+02, 1.624e+04, ..., 1.256e+00, 1.271e+00],  
[ 6.583e+02, 1.624e+04, ..., 1.256e+00, 1.271e+00],  
...,  
[ 6.583e+02, 1.624e+04, ..., 1.256e+00, 1.271e+00],  
[ 6.583e+02, 1.624e+04, ..., 1.256e+00, 1.271e+00]]), array([ 4.744e-02, 4.744e-02, ..., 4.744e-02, 4.744e-02]))