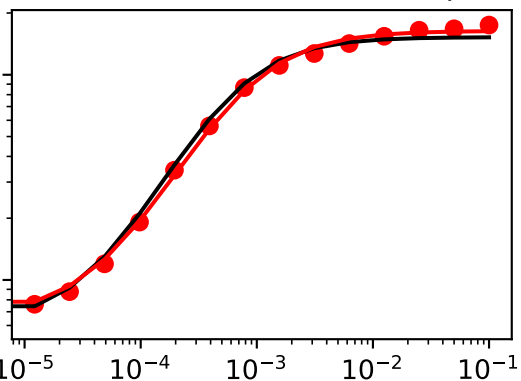
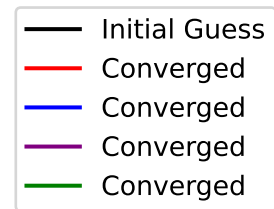
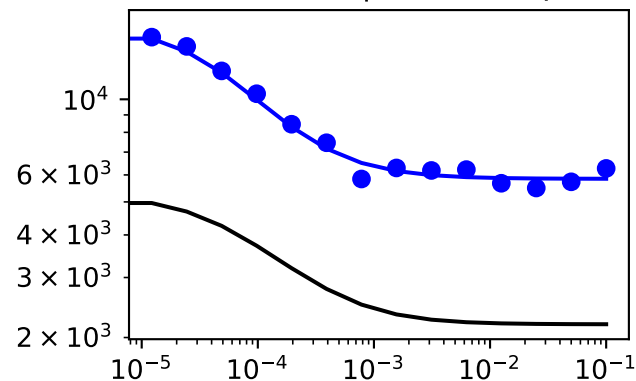


# ['SM data type data plots for mutation', 'Regulator9']

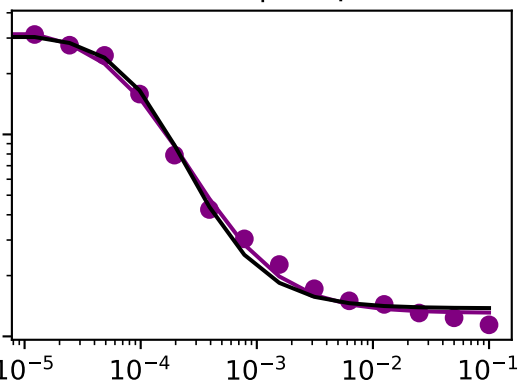
inducer -> sensor (GFP output)



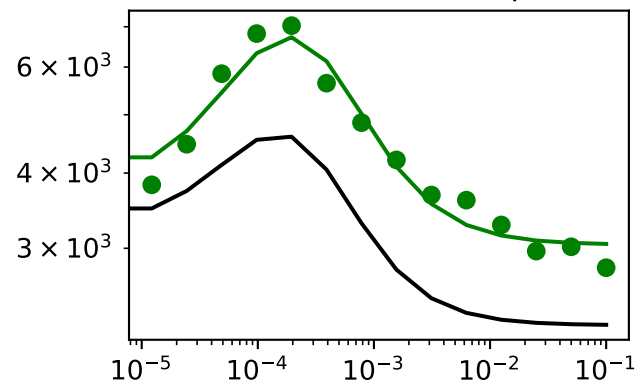
inducer -> S -| R (GFP output)



inducer -> S -| Output (GFP)



Full circuit with stripe



Across all four plots:

RSS (converged)=0.043

RSS (initial)=3.233

RSS (% reduction)=0.987

	epsilon	Initial_guesses	Converged
A_s	48.661442	608.397103	657.058545
B_s	1111.980258	15250.457700	16362.437958
C_s	-419.012218	1668.059050	1249.046832
N_s	-0.047208	1.198934	1.151726
A_r	4185.400326	687.964693	4873.365019
B_r	283894.062001	23497.611400	307391.673401
C_r	0.031862	0.062367	0.094230
N_r	0.392305	0.391731	0.784036
A_h	-371.275575	590.606548	219.330973
B_h	20464.644313	35287.125700	55751.770013
C_h	0.000547	0.000530	0.001076
A_o	-0.688468	0.829830	0.141362
B_o	0.086868	4.288170	4.375038
C_o	-1.997610	3.133222	1.135612
N_o	-0.443318	1.809018	1.365700

message: Optimization terminated successfully.

success: True

status: 0

fun: 0.04344376701879156

x: [ 6.571e+02 1.636e+04 ... 1.136e+00 1.366e+00]

nit: 13558

nfev: 17901

final\_simplex: (array([[ 6.571e+02, 1.636e+04, ..., 1.136e+00,  
1.366e+00],  
[ 6.571e+02, 1.636e+04, ..., 1.136e+00,  
1.366e+00],  
...,  
[ 6.571e+02, 1.636e+04, ..., 1.136e+00,  
1.366e+00],  
[ 6.571e+02, 1.636e+04, ..., 1.136e+00,  
1.366e+00]]), array([ 4.344e-02, 4.344e-02, ..., 4.344e-02, 4.344e-02]))