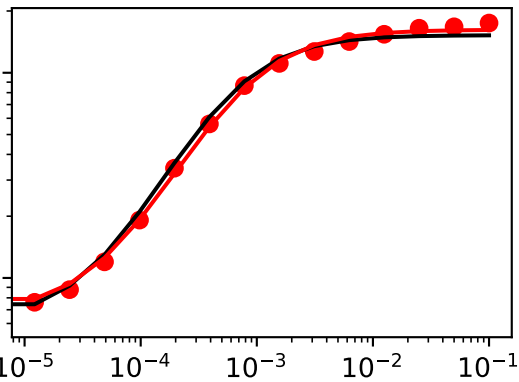
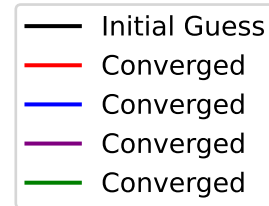
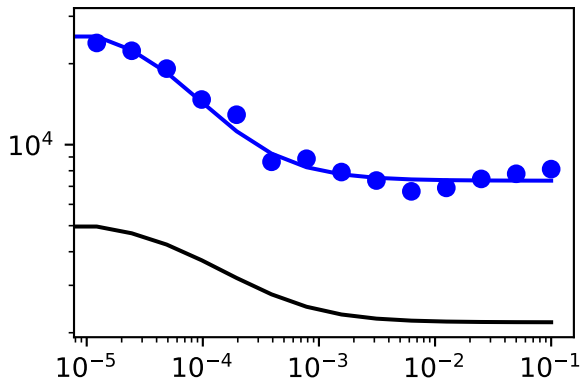


# ['SM data type data plots for mutation', 'Regulator1']

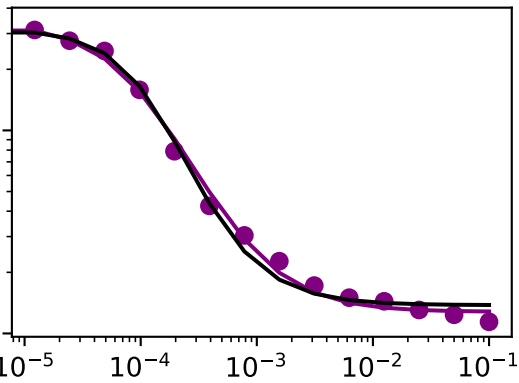
inducer -> sensor (GFP output)



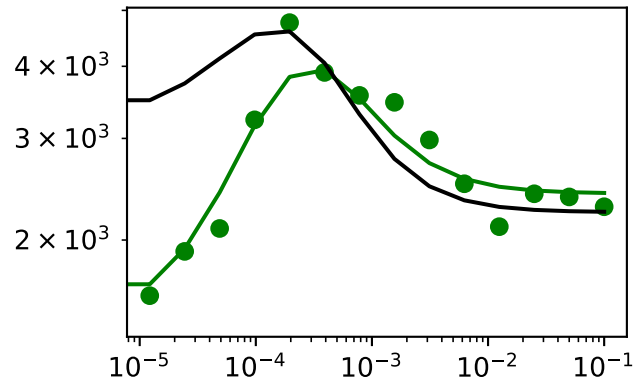
inducer -> S -| R (GFP output)



inducer -> S -| Output (GFP)



Full circuit with stripe



Across all four plots:

RSS (converged)=0.065

RSS (initial)=5.514

RSS (% reduction)=0.988

	epsilon	Initial_guesses	Converged
A_s	63.301515	608.397103	671.698618
B_s	964.389117	15250.457700	16214.846817
C_s	-390.153183	1668.059050	1277.905867
N_s	-0.028353	1.198934	1.170580
A_r	5670.371299	687.964693	6358.335992
B_r	306933.826816	23497.611400	330431.438216
C_r	-0.041173	0.062367	0.021194
N_r	0.603247	0.391731	0.994978
A_h	-571.091656	590.606548	19.514892
B_h	20633.934534	35287.125700	55921.060234
C_h	0.000542	0.000530	0.001072
A_o	-0.256272	0.829830	0.573558
B_o	-0.775794	4.288170	3.512376
C_o	-1.804703	3.133222	1.328519
N_o	-0.488197	1.809018	1.320821

message: Optimization terminated successfully.

success: True

status: 0

fun: 0.06499120143682907

x: [ 6.717e+02 1.621e+04 ... 1.329e+00 1.321e+00]

nit: 13075

nfev: 17367

final\_simplex: (array([[ 6.717e+02, 1.621e+04, ..., 1.329e+00,

1.321e+00],

[ 6.717e+02, 1.621e+04, ..., 1.329e+00,

1.321e+00],

...,

[ 6.717e+02, 1.621e+04, ..., 1.329e+00,

1.321e+00],

[ 6.717e+02, 1.621e+04, ..., 1.329e+00,

1.321e+00]]), array([ 6.499e-02, 6.499e-02, ..., 6.499e-02, 6.499e-02]))