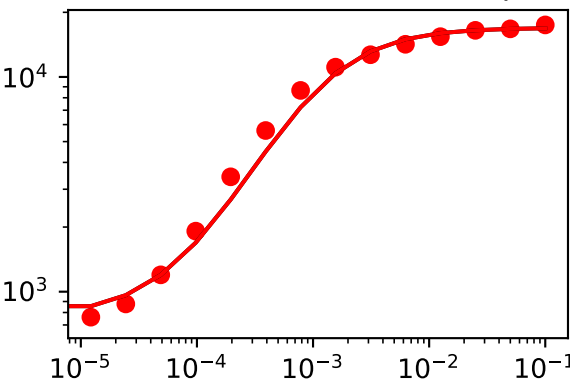
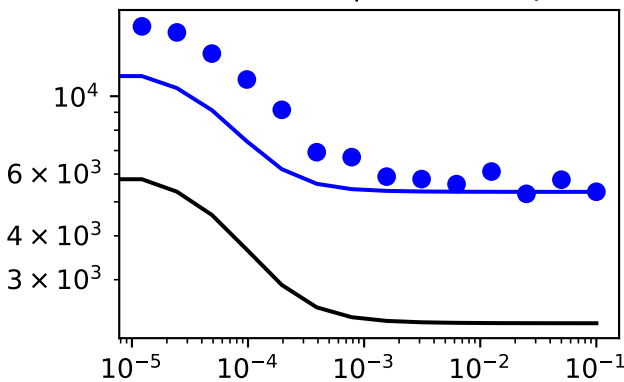


['SM data type data plots for mutation', 'Regulator6', 'using model:', 'model\_hill.model\_2']

inducer -> sensor (GFP output)



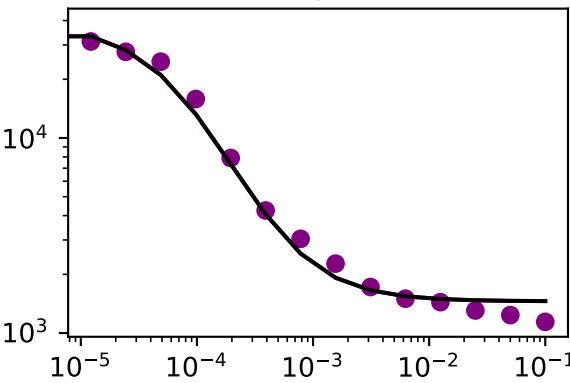
inducer -> S -| R (GFP output)



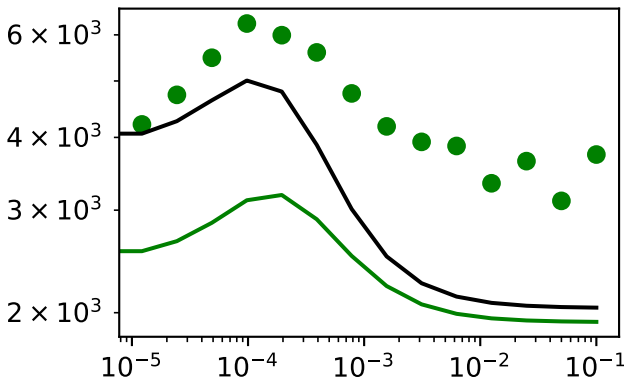
Initial Guess  
Converged  
Converged  
Converged  
Converged

time elapsed for this fit  
--- 3.404820203781128 seconds ---

inducer -> S -| Output (GFP)



Full circuit with stripe



Across all four plots:

RSS (converged)=1.321

RSS (initial)=3.343

RSS (% reduction)=0.717

	epsilon	Initial_guesses	Converged
A_s	0.000000	7.671584e+02	7.671584e+02
B_s	0.000000	1.694202e+04	1.694202e+04
C_s	0.000000	8.969736e+02	8.969736e+02
N_s	0.000000	1.151182e+00	1.151182e+00
A_r	3089.351494	2.229804e+03	5.319155e+03
B_r	5664.594019	8.961652e+03	1.462625e+04
C_r	-0.000091	1.461384e-03	1.370507e-03
N_r	0.270151	1.841235e+00	2.111386e+00
A_o	0.000000	9.859837e+02	9.859837e+02
B_o	0.000000	1.801530e+07	1.801530e+07
C_o	0.000000	1.010522e-01	1.010522e-01
N_o	0.000000	1.417996e+00	1.417996e+00
F_o	0.000000	1.477611e+00	1.477611e+00

message: Optimization terminated successfully.

success: True

status: 0

fun: 1.3206644976486281

x: [ 7.672e+02 1.694e+04 ... 1.418e+00 1.478e+00]

nit: 731

nfev: 1208

final\_simplex: (array([[ 7.672e+02, 1.694e+04, ..., 1.418e+00, 1.478e+00],  
[ 7.672e+02, 1.694e+04, ..., 1.418e+00, 1.478e+00],  
...,  
[ 7.672e+02, 1.694e+04, ..., 1.418e+00, 1.478e+00],  
[ 7.672e+02, 1.694e+04, ..., 1.418e+00, 1.478e+00]]), array([ 1.321e+00, 1.321e+00, ..., 1.321e+00, 1.321e+00]))