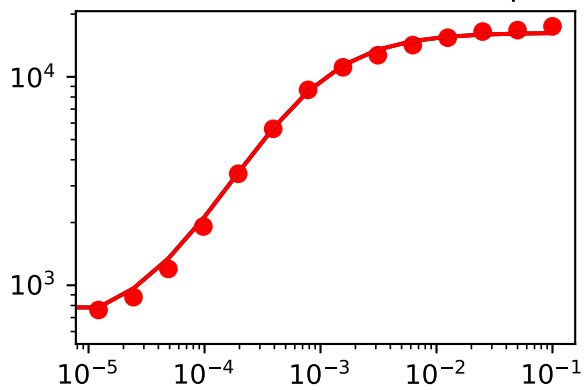
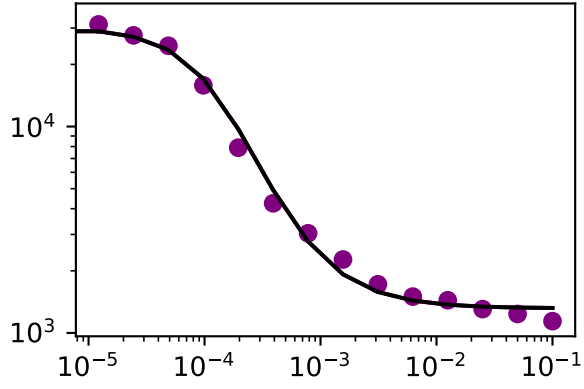


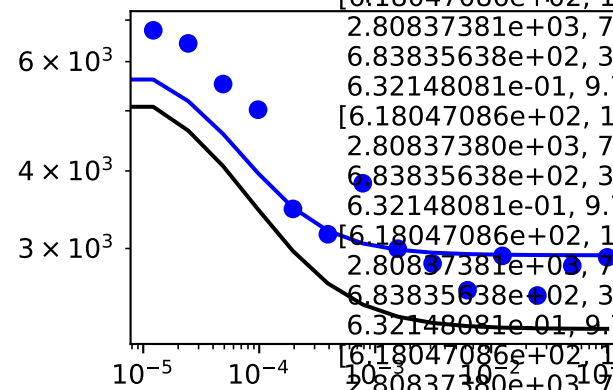
['SM data type data plots for mutation', 'Regulator']
inducer -> sensor (GFP output)



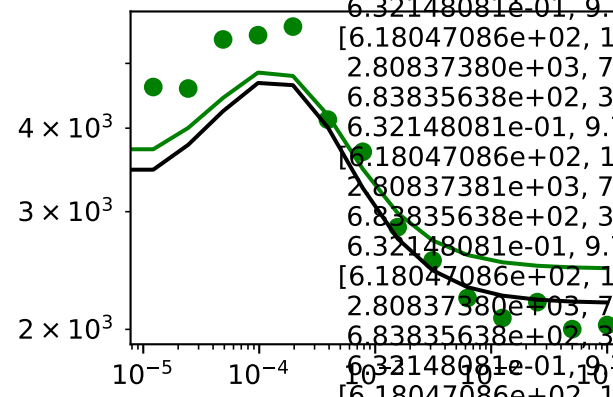
inducer -> S -| Output (GFP)



inducer -> S (R (GFP output))



Full circuit with S-R



Across all four plots:

RSS (converged)=0.157

RSS (initial)=0.303

RSS (% reduction)=0.659

	epsilon	Initial_guesses	Converged
A_s	0.000000	618.047086	618.047086
B_s	0.000000	16278.856600	16278.856600
C_s	0.000000	1300.653790	1300.653790
N_s	0.000000	1.096541	1.096541
A_r	892.198197	1916.175610	2808.373807
B_r	-11112.008159	18874.240800	7762.232641
C_r	-0.006970	0.009030	0.002060
N_r	0.369793	0.820433	1.190227
A_h	0.000000	683.835638	683.835638
B_h	0.000000	32464.380200	32464.380200
C_h	0.000000	0.000473	0.000473
F_o	0.566653	2.821352	3.388005
A_o	0.000000	0.632148	0.632148
B_o	0.000000	0.972768	0.972768
C_o	0.000000	2.640174	2.640174
N_o	0.000000	1.919339	1.919339

```
final simplex: (array([[6.18047086e+02, 1.62788566e+04, 1.30065379e+03, 1.09654125e+00,
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6.83835638e+02, 3.24643802e+04, 4.73376905e-04, 3.38800490e+00,
6.32148081e-01, 9.72768210e-01, 2.64017386e+00, 1.91933916e+00],
[6.18047086e+02, 1.62788566e+04, 1.30065379e+03, 1.09654125e+00,
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```