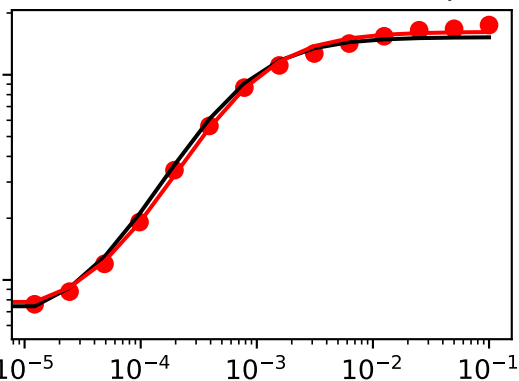# ['SM data type data plots for mutation', 'Output2']
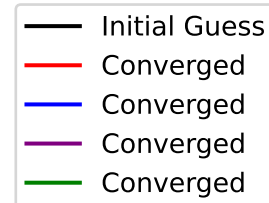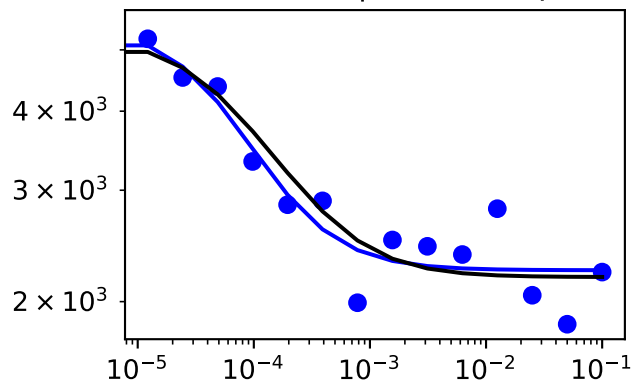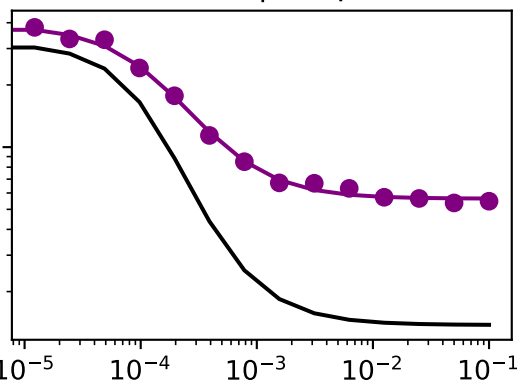

inducer -> sensor (GFP output)

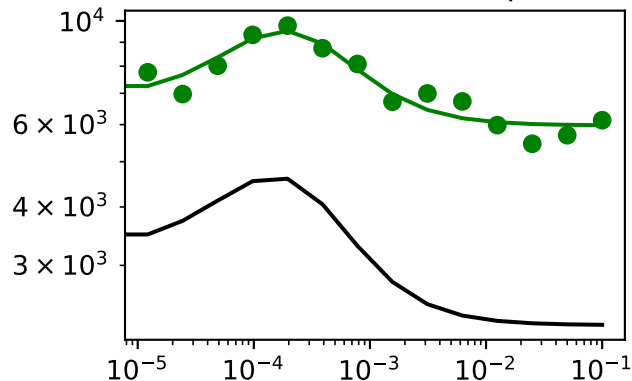**inducer ->S -|R (GFP output)**

inducer -> S -| Output (GFP)

Full circuit with stripe

Legend: Initial Guess, Converged, Converged, Converged, Converged

Across all four plots:

RSS (converged)=0.051

RSS (initial)=5.32

RSS (% reduction)=0.99

	epsilon	Initial_guesses	Converged
A_s	63.580568	608.397103	671.977671
B_s	940.959694	15250.457700	16191.417394
C_s	-344.883371	1668.059050	1323.175679
N_s	0.000163	1.198934	1.199097
A_r	1329.675376	687.964693	2017.640069
B_r	2160.134974	23497.611400	25657.746374
C_r	-0.050636	0.062367	0.011731
N_r	0.509978	0.391731	0.901709
A_h	2094.704687	590.606548	2685.311235
B_h	13656.952705	35287.125700	48944.078405
C_h	0.000096	0.000530	0.000626
A_o	-0.102558	0.829830	0.727272
B_o	-2.136646	4.288170	2.151525
C_o	0.448727	3.133222	3.581949
N_o	-0.622466	1.809018	1.186552

message: Optimization terminated successfully.
success: True
 status: 0
    fun: 0.051022420256299696
      x: [6.720e+02 1.619e+04 ... 3.582e+00 1.187e+00]
    nit: 20536
   nfev: 27038
final_simplex: (array([[6.720e+02, 1.619e+04, ..., 3.582e+00,
          1.187e+00],
        [6.720e+02, 1.619e+04, ..., 3.582e+00,
          1.187e+00],
        ...,
        [6.720e+02, 1.619e+04, ..., 3.582e+00,
          1.187e+00],
        [6.720e+02, 1.619e+04, ..., 3.582e+00,
          1.187e+00]]), array([5.102e-02, 5.102e-02, ..., 5.102e-02, 5.102e-02]))