['SM data type data plots for mutation', 'Regulator1', 'using model:', 'model_hill.model']

inducer -> sensor (GFP output)

inducer ->S -|R (GFP output)

inducer -> S -| Output (GFP)

Full circuit with stripe

Initial Guess
Converged
Converged
Converged
Converged
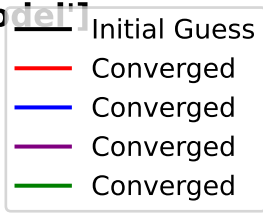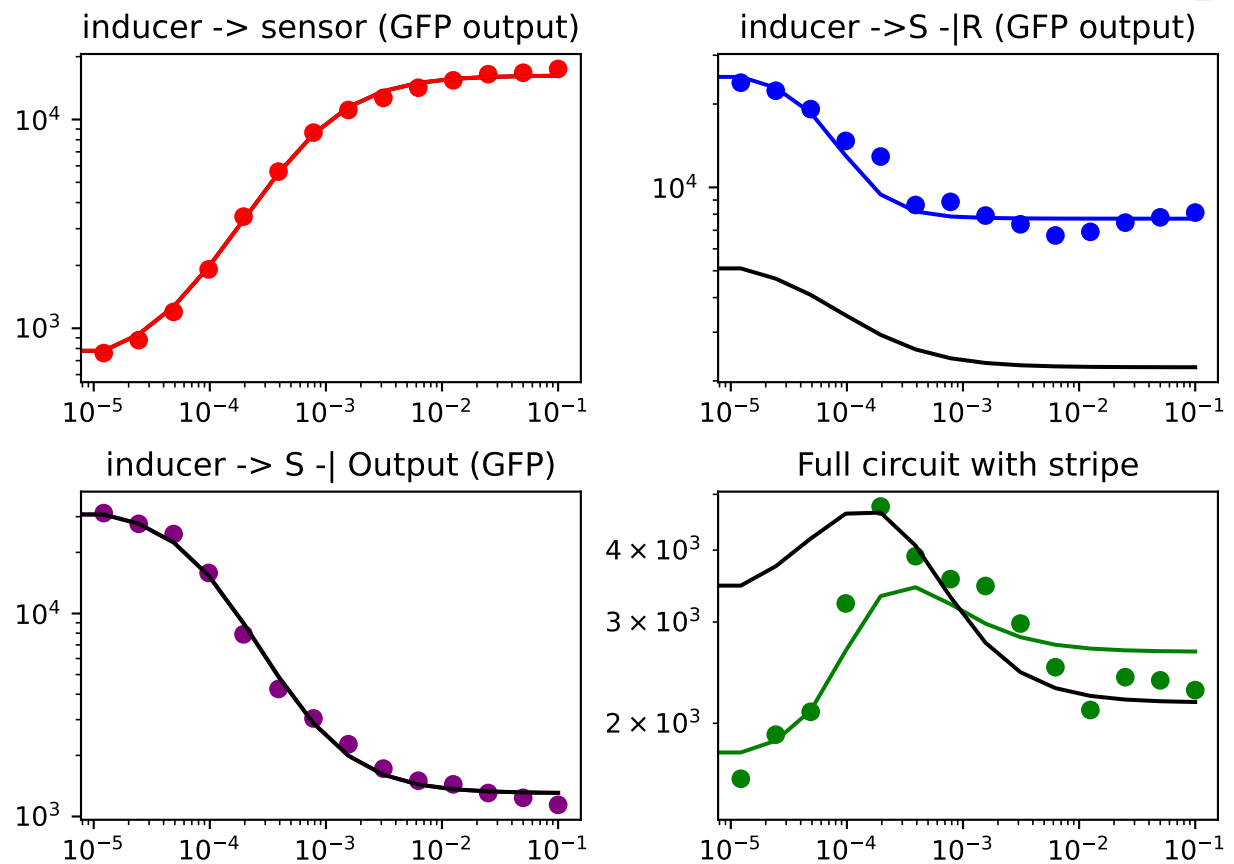
time elapsed for this fit
--- 5.162982225418091 seconds ---

Across all four plots:

RSS (converged)=0.13

RSS (initial)=5.544

RSS (% reduction)=0.977

	epsilon	Initial_guesses	Converged
A_s	0.000000	650.714912	650.714912
B_s	0.000000	16259.979950	16259.979950
C_s	0.000000	1296.448889	1296.448889
N_s	0.000000	1.154067	1.154067
A_r	5654.249528	2020.019216	7674.268744
B_r	-607.592451	23688.809187	23081.216736
C_r	-0.009536	0.010358	0.000821
N_r	1.594141	0.910072	2.504213
A_h	0.000000	143.802212	143.802212
B_h	0.000000	50238.271408	50238.271408
C_h	0.000000	0.000929	0.000929
A_o	0.000000	1.673894	1.673894
B_o	0.000000	0.895342	0.895342
C_o	0.000000	2.657699	2.657699
N_o	0.000000	1.379953	1.379953
F_o	2.208802	2.361284	4.570085

message: Optimization terminated successfully.
success: True
status: 0
fun: 0.13037748308160518
x: [6.507e+02 1.626e+04 ... 1.380e+00 4.570e+00]
nit: 1651
nfev: 2456
final_simplex: (array([[6.507e+02, 1.626e+04, ..., 1.380e+00,
        4.570e+00],
       [6.507e+02, 1.626e+04, ..., 1.380e+00,
        4.570e+00],
       ...,
       [6.507e+02, 1.626e+04, ..., 1.380e+00,
        4.570e+00],
       [6.507e+02, 1.626e+04, ..., 1.380e+00,
        4.570e+00]]), array([1.304e-01, 1.304e-01, ..., 1.304e-01, 1.304e-01]))