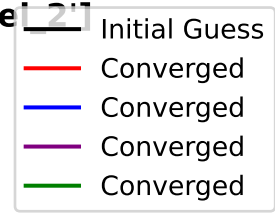
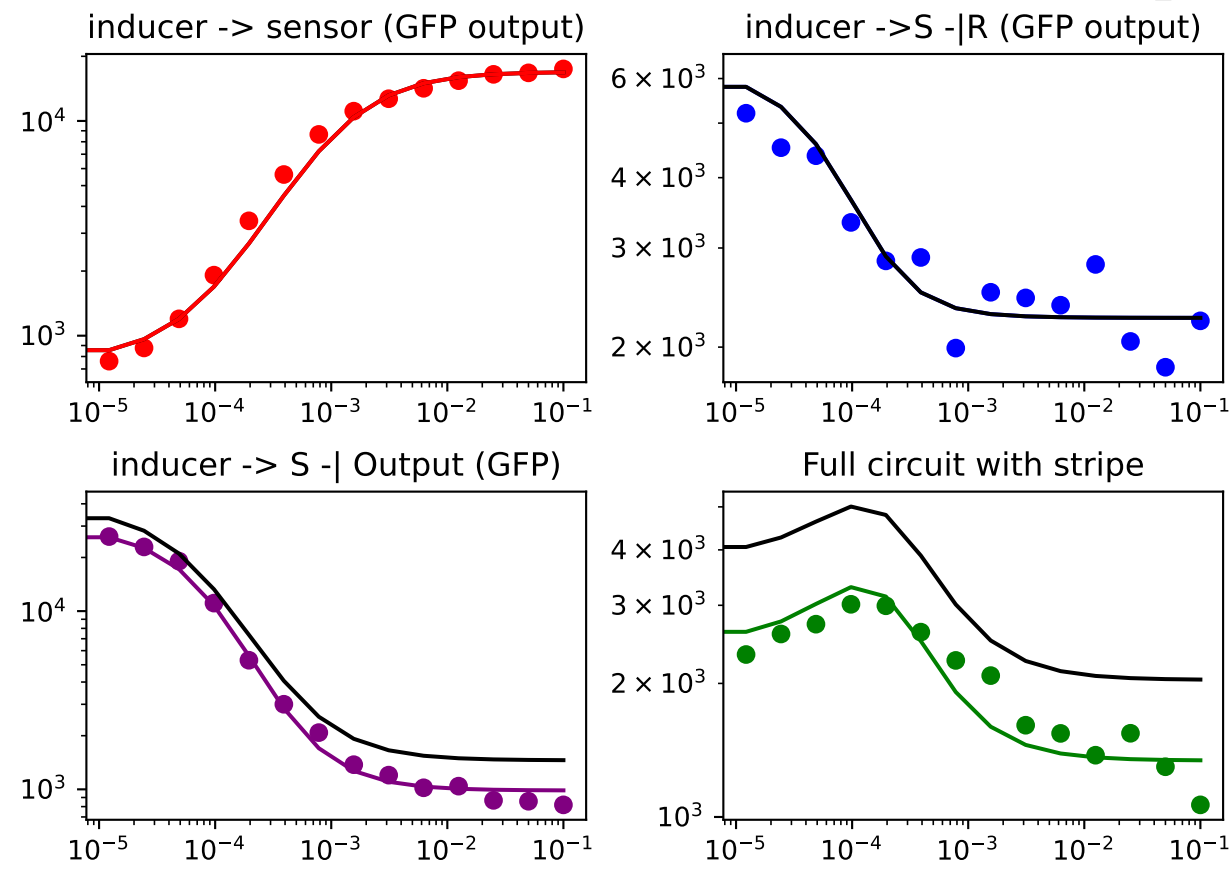


['SM data type data plots for mutation', 'Output3', 'using model:', 'model\_hill.model\_2']



time elapsed for this fit  
--- 13.711310863494873 seconds ---

Across all four plots:

RSS (converged)=0.157  
RSS (initial)=1.015  
RSS (% reduction)=0.866

	epsilon	Initial_guesses	Converged
A_s	0.000000e+00	7.671584e+02	767.158409
B_s	0.000000e+00	1.694202e+04	16942.019302
C_s	0.000000e+00	8.969736e+02	896.973585
N_s	0.000000e+00	1.151182e+00	1.151182
A_r	0.000000e+00	2.229804e+03	2229.803862
B_r	0.000000e+00	8.961652e+03	8961.651645
C_r	0.000000e+00	1.461384e-03	0.001461
N_r	0.000000e+00	1.841235e+00	1.841235
A_o	-2.194429e+02	9.859837e+02	766.540715
B_o	-1.793478e+07	1.801530e+07	80520.894505
C_o	-9.920462e-02	1.010522e-01	0.001848
N_o	2.975902e-01	1.417996e+00	1.715586
F_o	-5.637990e-02	1.477611e+00	1.421231

message: Optimization terminated successfully.  
success: True  
status: 0  
fun: 0.15695557275595837  
x: [ 7.672e+02 1.694e+04 ... 1.716e+00 1.421e+00]  
nit: 3344  
nfev: 4779  
final\_simplex: (array([[ 7.672e+02, 1.694e+04, ..., 1.716e+00, 1.421e+00],  
[ 7.672e+02, 1.694e+04, ..., 1.716e+00, 1.421e+00],  
...,  
[ 7.672e+02, 1.694e+04, ..., 1.716e+00, 1.421e+00],  
[ 7.672e+02, 1.694e+04, ..., 1.716e+00, 1.421e+00]]), array([ 1.570e-01, 1.570e-01, ..., 1.570e-01, 1.570e-01]))