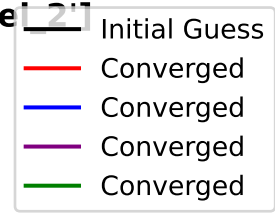
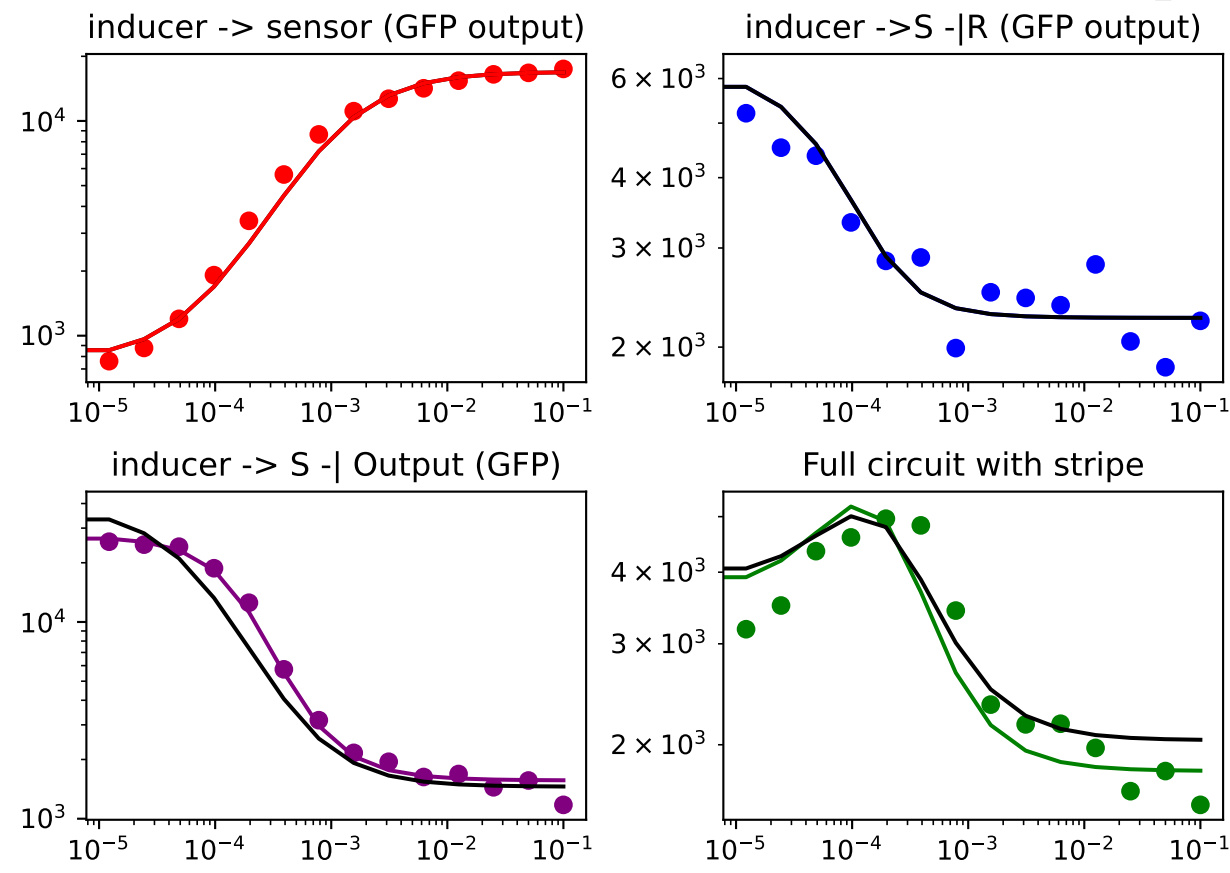


['SM data type data plots for mutation', 'Output5', 'using model:', 'model\_hill.model\_2']



time elapsed for this fit  
--- 12.112810850143433 seconds ---

Across all four plots:

RSS (converged)=0.165  
RSS (initial)=0.317  
RSS (% reduction)=0.657

	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	2.975415e+02	9.859837e+02	1283.525201
B_o	-1.798582e+07	1.801530e+07	29481.648071
C_o	-1.005425e-01	1.010522e-01	0.000510
N_o	7.353647e-01	1.417996e+00	2.153360
F_o	-2.771446e-01	1.477611e+00	1.200466

message: Optimization terminated successfully.  
success: True  
status: 0  
fun: 0.16523804143094548  
x: [ 7.672e+02 1.694e+04 ... 2.153e+00 1.200e+00]  
nit: 2603  
nfev: 3773  
final\_simplex: (array([[ 7.672e+02, 1.694e+04, ..., 2.153e+00,  
1.200e+00],  
[ 7.672e+02, 1.694e+04, ..., 2.153e+00,  
1.200e+00],  
...,  
[ 7.672e+02, 1.694e+04, ..., 2.153e+00,  
1.200e+00],  
[ 7.672e+02, 1.694e+04, ..., 2.153e+00,  
1.200e+00]]), array([ 1.652e-01, 1.652e-01, ..., 1.652e-01, 1.652e-01]))