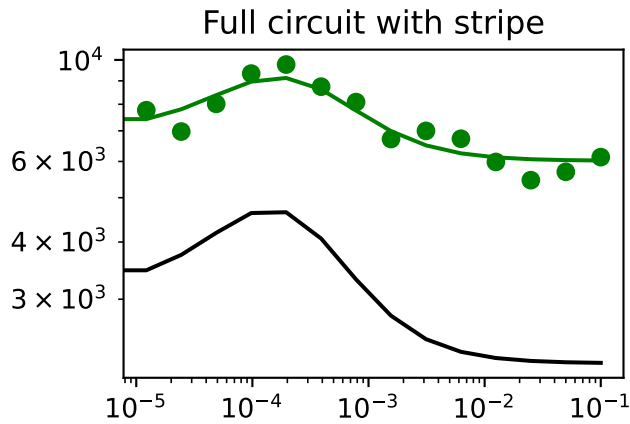
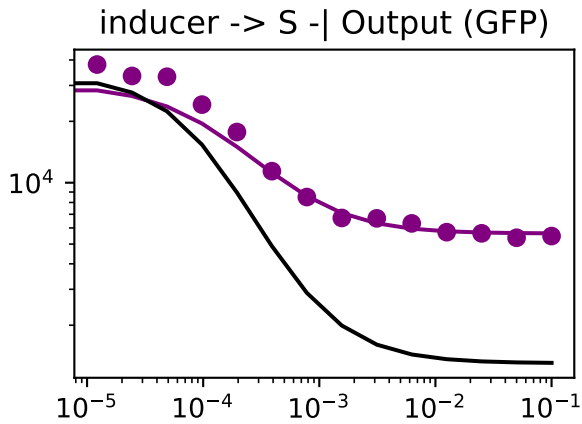
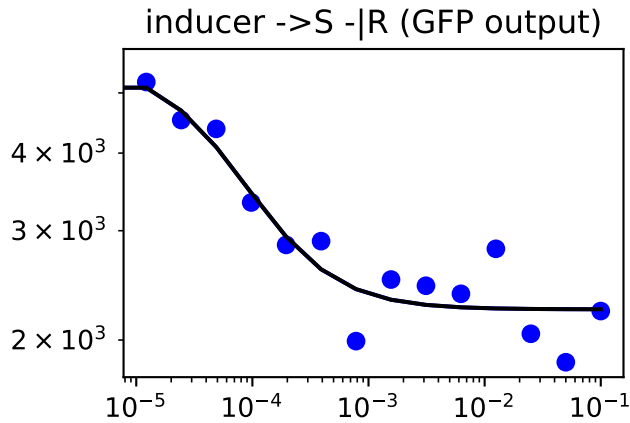
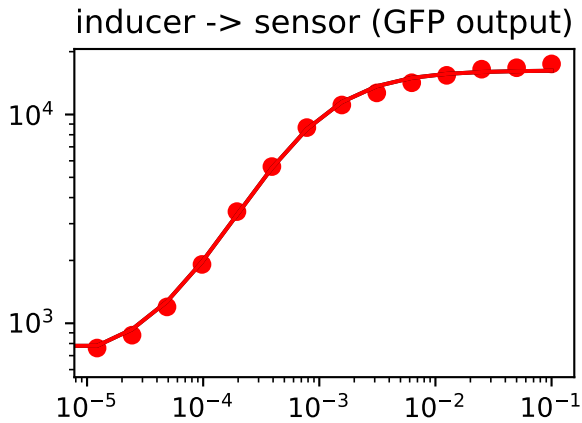


['SM data type data plots for mutation', 'Output2', 'using model:', 'model_hill.model']



Initial Guess
Converged
Converged
Converged
Converged

time elapsed for this fit
--- 4.669893980026245 seconds ---

Across all four plots:

RSS (converged)=0.122

RSS (initial)=5.327

RSS (% reduction)=0.978

| | epsilon | Initial_guesses | Converged |
|-----|-----------|-----------------|--------------|
| A_s | 0.000000 | 650.714912 | 6.507149e+02 |
| B_s | 0.000000 | 16259.979950 | 1.625998e+04 |
| C_s | 0.000000 | 1296.448889 | 1.296449e+03 |
| N_s | 0.000000 | 1.154067 | 1.154067e+00 |
| A_r | 0.000000 | 2020.019216 | 2.020019e+03 |
| B_r | 0.000000 | 23688.809187 | 2.368881e+04 |
| C_r | 0.000000 | 0.010358 | 1.035760e-02 |
| N_r | 0.000000 | 0.910072 | 9.100723e-01 |
| A_h | 0.000000 | 143.802212 | 1.438022e+02 |
| B_h | 0.000000 | 50238.271408 | 5.023827e+04 |
| C_h | 0.000000 | 0.000929 | 9.291293e-04 |
| A_o | -1.673894 | 1.673894 | 4.043776e-11 |
| B_o | 0.994370 | 0.895342 | 1.889712e+00 |
| C_o | 0.620345 | 2.657699 | 3.278043e+00 |
| N_o | -0.607097 | 1.379953 | 7.728556e-01 |
| F_o | -1.608378 | 2.361284 | 7.529057e-01 |

message: Optimization terminated successfully.
success: True
status: 0
fun: 0.12155727052073735
x: [6.507e+02 1.626e+04 ... 7.729e-01 7.529e-01]
nit: 1596
nfev: 2230
final_simplex: (array([[6.507e+02, 1.626e+04, ..., 7.729e-01,
7.529e-01],
[6.507e+02, 1.626e+04, ..., 7.729e-01,
7.529e-01],
...,
[6.507e+02, 1.626e+04, ..., 7.729e-01,
7.529e-01],
[6.507e+02, 1.626e+04, ..., 7.729e-01,
7.529e-01]]), array([1.216e-01, 1.216e-01, ..., 1.216e-01, 1.216e-01]))