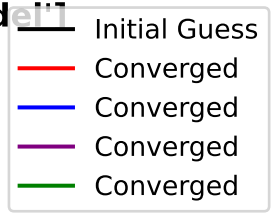
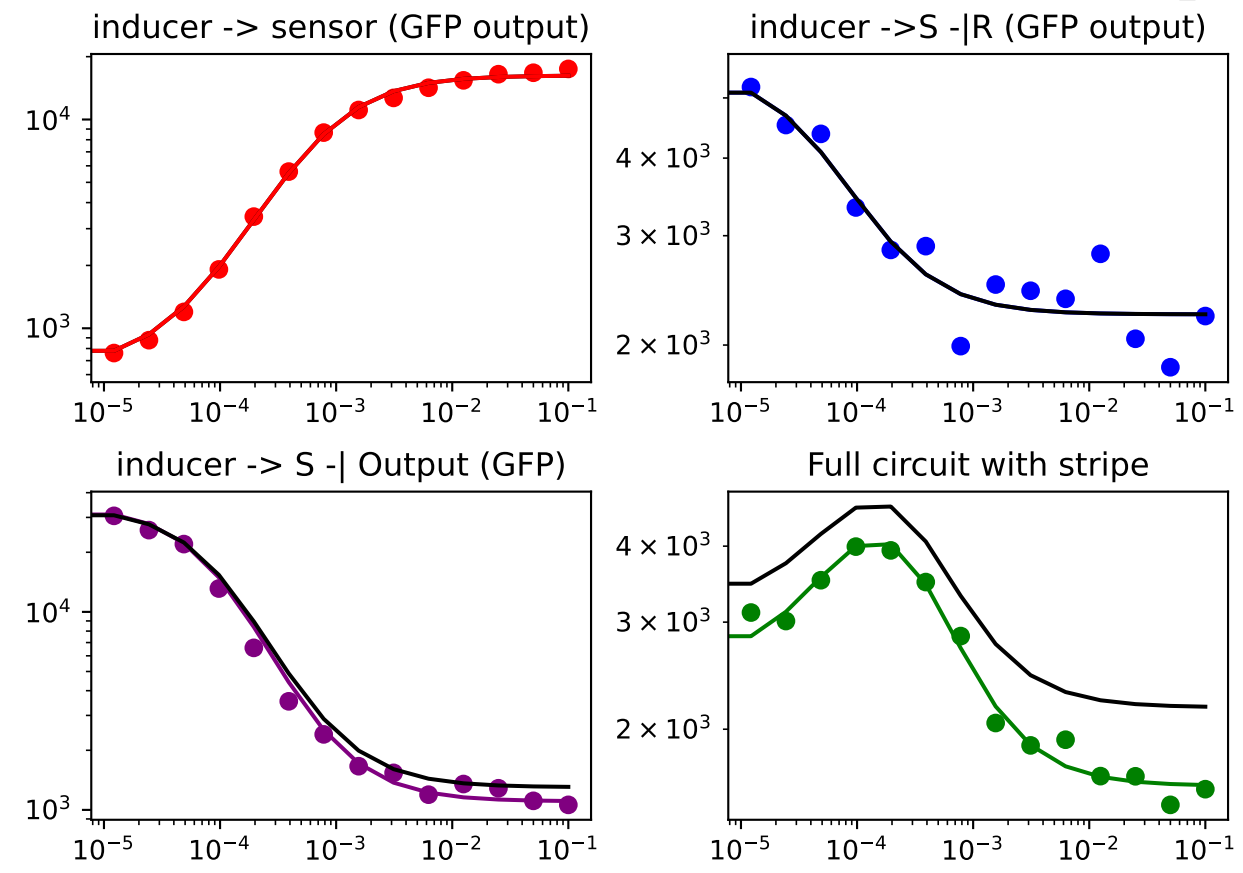


['SM data type data plots for mutation', 'Output6', 'using model:', 'model\_hill.mod



time elapsed for this fit  
--- 1.984891653060913 seconds ---

Across all four plots:

RSS (converged)=0.081

RSS (initial)=0.273

RSS (% reduction)=0.77

|     | 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 | 0.000000  | 2020.019216     | 2020.019216  |
| B_r | 0.000000  | 23688.809187    | 23688.809187 |
| C_r | 0.000000  | 0.010358        | 0.010358     |
| N_r | 0.000000  | 0.910072        | 0.910072     |
| 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 | -1.041782 | 1.673894        | 0.632112     |
| B_o | 0.519584  | 0.895342        | 1.414926     |
| C_o | 0.038903  | 2.657699        | 2.696601     |
| N_o | 0.070346  | 1.379953        | 1.450299     |
| F_o | -0.673726 | 2.361284        | 1.687558     |

message: Optimization terminated successfully.  
success: True  
status: 0  
fun: 0.08136500286662311  
x: [ 6.507e+02 1.626e+04 ... 1.450e+00 1.688e+00]  
nit: 581  
nfev: 891  
final\_simplex: (array([[ 6.507e+02, 1.626e+04, ..., 1.450e+00, 1.688e+00],  
[ 6.507e+02, 1.626e+04, ..., 1.450e+00, 1.688e+00],  
...,  
[ 6.507e+02, 1.626e+04, ..., 1.450e+00, 1.688e+00],  
[ 6.507e+02, 1.626e+04, ..., 1.450e+00, 1.688e+00]]), array([ 8.137e-02, 8.137e-02, ..., 8.137e-02, 8.137e-02]))