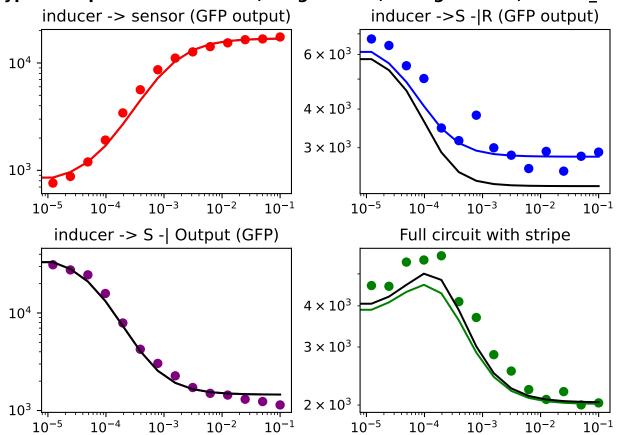
['SM data type data plots for mutation', 'Regulator8', 'using model:', 'model_hill.model_2']



time elapsed for this fit --- 272.6839907169342 seconds ---

Converged Converged

Converged

Converged

Across all four plots:

RSS (converged)=0.178

RSS (initial)=0.278

RSS (% reduction)=0.61

```
epsilon Initial guesses
                               Converged
A s 0.000000e+00
                   7.671584e+02 7.671584e+02
B s 0.000000e+00
                   1.694202e+04 1.694202e+04
C s 0.000000e+00
                   8.969736e+02 8.969736e+02
N s 0.000000e+00
                   2.229804e+03 2.745669e+03
A r 5.158649e+02
B r 9.988869e+10
                   8.961652e+03 9.988870e+10
C r 4.005903e+02
                  1.461384e-03 4.005917e+02
N r -4.914605e-01
                  1.841235e+00 1.349775e+00
A o 0.000000e+00
                   9.859837e+02 9.859837e+02
B o 0.000000e+00
                   1.801530e+07 1.801530e+07
C o 0.000000e+00
                   1.010522e-01 1.010522e-01
N o 0.000000e+00
                   1.417996e+00 1.417996e+00
F_o 0.000000e+00
                   1.477611e+00 1.477611e+00
```

```
message: Maximum number of iterations has been exceeded.
                                 success: False
                                  status: 2
                                    fun: 0.17809920023171708
                                    x: [7.672e+02 1.694e+04 ... 1.418e+00 1.478e+00]
                                   nit: 100000
                                   nfev: 135259
1.151182e+00 1.151182e+00 final simplex: (array([[ 7.672e+02, 1.694e+04, ..., 1.418e+00,
                                            1.478e+00],
                                          [7.672e+02, 1.694e+04, ..., 1.418e+00,
                                            1.478e+00],
                                          [7.672e+02, 1.694e+04, ..., 1.418e+00,
                                            1.478e + 00],
                                          [7.672e+02, 1.694e+04, ..., 1.418e+00,
                                            1.478e+00]]), array([ 1.781e-01, 1.781e-01, ..., 1.781e-01, 1.781e-01]))
```