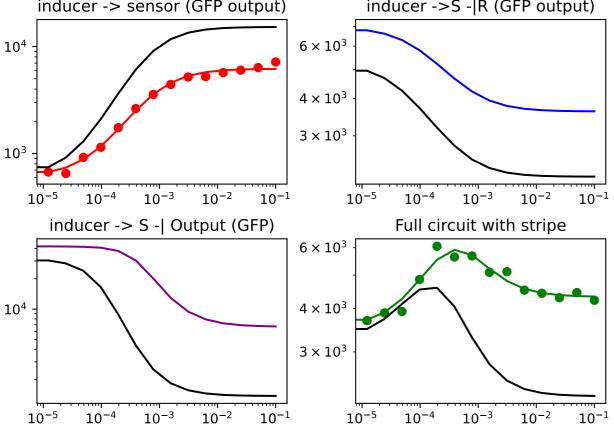
['SM data type data plots for mutation', 'Sensor9'] **Initial Guess** inducer -> sensor (GFP output) inducer -> S - IR (GFP output) Converged Converged 6×10^{3} Converged Converged



Across all four plots:

RSS (converged)=0.017

RSS (initial) = 2.318

RSS (% reduction)=0.993

```
epsilon Initial guesses
                              Converged
A s 5.170337
                 608.397103 613.567440
B s -9049.925105
                  15250.457700 6200.532595
C s -242.422845
                  1668.059050 1425.636205
Ns
    -0.075481
                  1.198934
                              1.123452
   80.590339
                  687.964693
                             768.555032
Br 7644.494741
                  23497.611400 31142.106141
    -0.003626
                  0.062367
                              0.058741
    -0.002731
                  0.391731
                              0.389000
    64.317328
                  590.606548 654.923876
B h 6184.088941
                  35287.125700 41471.214641
     -0.000238
                   0.000530
                              0.000291
Сh
     0.194597
                   0.829830
                              1.024427
Αо
     1.152582
                   4.288170
Во
                              5.440752
     -1.111884
                   3.133222
                              2.021338
Сo
     1.186104
                   1.809018
                              2.995123
Νo
```

```
message: Optimization terminated successfully.
   success: True
    status: 0
      fun: 0.016670191983899553
       x: [6.136e+02 6.201e+03 ... 2.021e+00 2.995e+00]
     nit: 7354
     nfev: 9933
final simplex: (array([[ 6.136e+02, 6.201e+03, ..., 2.021e+00,
              2.995e+001,
            [6.136e+02, 6.201e+03, ..., 2.021e+00,
              2.995e+001,
            [6.136e+02, 6.201e+03, ..., 2.021e+00,
              2.995e+00],
            [6.136e+02, 6.201e+03, ..., 2.021e+00,
              2.995e+00]]), array([ 1.667e-02, 1.667e-02, ..., 1.667e-02, 1.667e-02]))
```