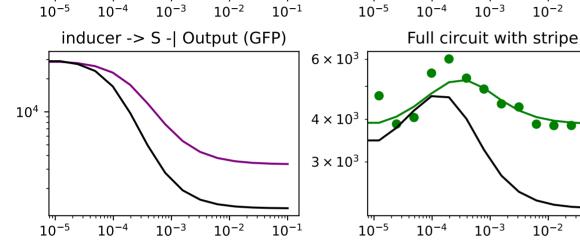
['SM data type data plots for mutation', 'Sensor6', 'using model:', 'model hill'] **Initial Guess** inducer -> sensor (GFP output) inducer -> S -IR (GFP output) Converged Converged 10^{4} Converged Converged 4×10^3

 3×10^{3}

Converged



Across all four plots:

 10^{3}

RSS (converged)=0.117

RSS (initial)=1.659

RSS (% reduction)=0.934

```
message: Maximum number of iterations has been exceeded.
       epsilon Initial guesses
As 120.466367
                  618.047086 738.513453
                                                     success: False
Bs -8795.715868
                                                     status: 2
                  16278.856600 7483.140732
                 1300.653790 1297.943696
    -2.710094
                                                       fun: 0.11662820377299307
                   1.096541
                                                        x: [7.385e+02 7.483e+03 ... 2.640e+00 1.919e+00]
Ns
    -0.041869
                               1.054672
                                                       nit: 100
    0.000000
                 1916.175610 1916.175610
Ar
                18874.240800 18874.240800
                                                       nfev: 142
    0.000000
                  0.009030
                                                 final simplex: (array([[ 7.385e+02, 7.483e+03, ..., 2.640e+00,
    0.000000
Cr
                              0.009030
     0.000000
                  0.820433
Nr
                              0.820433
                                                               1.919e + 00],
                                                              [7.479e+02, 7.085e+03, ..., 2.640e+00,
Αh
     0.000000
                  683.835638
                               683.835638
     0.000000
                 32464.380200 32464.380200
Bh
                                                               1.919e+00],
                   0.000473
     0.000000
                               0.000473
Ch
                                                              [7.211e+02, 7.245e+03, ..., 2.640e+00,
Fo
     0.291867
                  2.821352
                               3.113219
                  0.632148
                              0.632148
Αo
     0.000000
                                                               1.919e+00],
                   0.972768
     0.000000
                               0.972768
                                                              [7.172e+02, 7.143e+03, ..., 2.640e+00,
Во
     0.000000
                   2.640174
                               2.640174
                                                               1.919e+00]]), array([ 1.166e-01, 1.240e-01, ..., 1.570e-01, 1.573e-01]))
Co
     0.000000
                   1.919339
                               1.919339
No
```

 10^{-1}

 10^{-1}