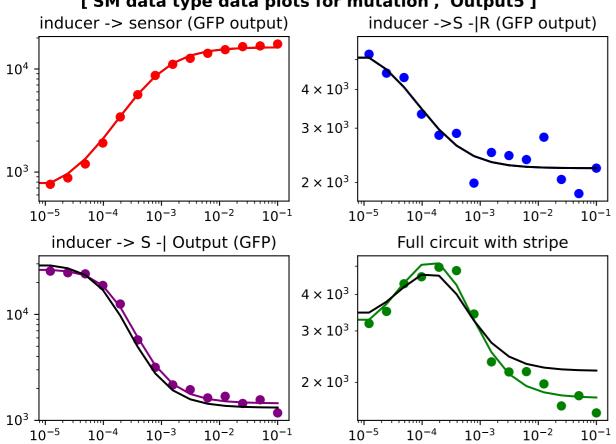
## ['SM data type data plots for mutation', 'Output5']



RSS (converged)=0.078

RSS (initial) = 0.17

Across all four plots:

RSS (% reduction)=0.686

```
epsilon Initial guesses
                               Converged
                                                     message: Optimization terminated successfully.
A_s
      0.000000
                  618.047086
                               618.047086
                                                     success: True
      0.000000
                 16278.856600 16278.856600
                                                     status: 0
C_s
      0.000000
                  1300.653790
                              1300.653790
                                                       fun: 0.07762093138095393
N_s
      0.000000
                    1.096541
                                1.096541
                                                        x: [6.180e+02 1.628e+04 ... 2.926e+00 2.082e+00]
Αr
     0.000000
                 1916.175610 1916.175610
                                                       nit: 1276
Βr
     0.000000
                 18874.240800 18874.240800
                                                       nfev: 1871
     0.000000
                   0.009030
                               0.009030
                                                 final simplex: (array([[ 6.180e+02, 1.628e+04, ..., 2.926e+00,
      0.000000
                   0.820433
                               0.820433
Νr
                                                               2.082e+001,
                               727.451732
Αh
     43.616094
                   683.835638
                                                              [6.180e+02, 1.628e+04, ..., 2.926e+00,
B h -5185.715407
                   32464.380200 27278.664793
                                                               2.082e+00],
Ch
     -0.000125
                    0.000473
                                0.000348
     0.052682
                   2.821352
                                2.874034
Fο
                                                              [6.180e+02, 1.628e+04, ..., 2.926e+00,
     -0.411559
                    0.632148
                                0.220589
                                                               2.082e+001,
                                                              [6.180e+02, 1.628e+04, ..., 2.926e+00,
      0.283076
                    0.972768
Во
                                1.255844
                    2.640174
                                2.925689
                                                               2.082e+00]]), array([7.762e-02, 7.762e-02, ..., 7.762e-02, 7.762e-02]))
Сo
      0.285515
                                2.081596
      0.162257
                    1.919339
```

**Initial Guess** 

Converged Converged

Converged Converged