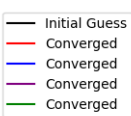
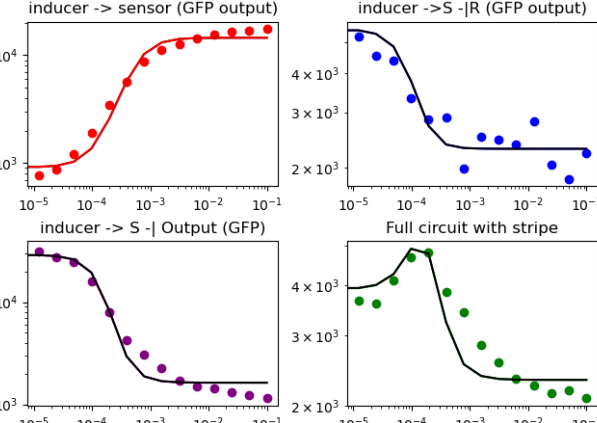


['WT data plots ', 'using model:', 'model_thermodynamic.model']



time elapsed for this fit
--- 32.390857458114624 seconds ---

((0, None), (0, None), (0, None), (1, None), (0, None), (0, None), (0, 1), (0, None), (0, None), (0, None), (0, 1), (0, None), (0, None), (0, None))

Across all four plots:

RSS (converged)=0.332

RSS (initial)=0.332

RSS (% reduction)=0.5

message: Optimization terminated successfully.

success: True

status: 0

fun: 0.3316106379030138

x: [6.710e-02 2.190e-06 ... 9.109e+04 1.483e+00]

nit: 7983

nfev: 10788

final_simplex: (array([[6.710e-02, 2.190e-06, ..., 9.109e+04,

1.483e+00],

[6.710e-02, 2.190e-06, ..., 9.109e+04,

1.483e+00],

...,

[6.710e-02, 2.190e-06, ..., 9.109e+04,

1.483e+00],

[6.710e-02, 2.190e-06, ..., 9.109e+04,

1.483e+00]]), array([3.316e-01, 3.316e-01, ..., 3.316e-01, 3.316e-01]))

	epsilon	Initial_guesses	Converged
P_b	9.789864e-05	6.700633e-02	6.710423e-02
P_u	1.262794e-06	9.267941e-07	2.189588e-06
K_l2	-1.164694e+03	2.230075e+03	1.065381e+03
C_pa	-2.134190e+08	1.848332e+09	1.634913e+09
A_s	-3.774406e+00	1.452477e+04	1.452100e+04
P_r	-3.917776e-01	1.677543e+00	1.285766e+00
C_pt	-1.649238e-03	1.266595e-02	1.101671e-02
K_t	1.061925e-05	6.167014e-05	7.228939e-05
A_r	5.372022e+04	1.096347e+05	1.633549e+05
P_o	-4.478154e-01	1.677543e+00	1.229728e+00
C_pl	2.013592e-03	1.046299e-02	1.247659e-02
K_l	-3.823240e-07	2.400599e-06	2.018275e-06
A_o	1.129375e+04	7.980117e+04	9.109492e+04
F_o	6.608543e-04	1.481943e+00	1.482604e+00