

Figure 1 displays four plots showing GFP output (Y-axis, logarithmic scale) versus inducer concentration (X-axis, logarithmic scale) for different genetic constructs. The plots are titled: 'inducer -> sensor (GFP output)', 'inducer -> S -| R (GFP output)', 'inducer -> S -| Output (GFP)', and 'Full circuit with stripe'. Each plot shows experimental data points (colored dots) and a fitted model curve (black line). A legend indicates the status of the fit: 'Initial Guess' (red line) and 'Converged' (blue, purple, and green lines). A text box indicates the time elapsed for the fit: 2597.797854423523 seconds.

Across all four plots:

RSS (converged)=0.337

RSS (initial)=0.46

RSS (% reduction)=0.577

	epsilon	Initial_guesses	Converged	success: False
P_b	0.000000e+00	6.681702e-02	6.681702e-02	status: 2
P_u	0.000000e+00	5.466972e-07	5.466972e-07	fun: 0.3365005289051945
K_12	0.000000e+00	1.814527e+04	1.814527e+04	x: [6.682e-02 5.467e-07 ... 1.063e+05 1.483e+00]
C_pa	0.000000e+00	3.819882e+08	3.819882e+08	nit: 100000
A_s	0.000000e+00	1.458909e+04	1.458909e+04	nfev: 895019
P_r	0.000000e+00	4.006687e-01	4.006687e-01	final_simplex: (array([[6.682e-02, 5.467e-07, ..., 1.063e+05, 1.483e+00],
C_pt	0.000000e+00	9.732437e-03	9.732437e-03	[6.682e-02, 5.467e-07, ..., 1.063e+05, 1.483e+00],
K_t	0.000000e+00	8.404184e-05	8.404184e-05	...,
A_r	0.000000e+00	5.876297e+05	5.876297e+05	...,
P_o	3.571222e+11	2.011834e+12	2.368956e+12	[6.682e-02, 5.467e-07, ..., 1.063e+05, 1.483e+00],
C_pl	6.012485e-03	1.968035e-02	2.569284e-02	[6.682e-02, 5.467e-07, ..., 1.063e+05, 1.483e+00],
K_l	-6.545504e-07	1.281986e-06	6.274360e-07	[6.682e-02, 5.467e-07, ..., 1.063e+05, 1.483e+00]]), array([3.365e-01, 3.365e-01, ..., 3.365e-01, 3.365e-01]))
A_o	-6.976217e+04	1.760143e+05	1.062522e+05	
F_o	0.000000e+00	1.482633e+00	1.482633e+00	