

Across all four plots:

RSS (converged)=0.164

RSS (initial)=1.645

RSS (% reduction)=0.909

message: Optimization terminated successfully.
success: True
status: 0

	epsilon	Initial_guesses	Converged
P_b	1.913987e-01	6.710423e-02	2.585029e-01
P_u	1.558443e-06	2.189588e-06	3.748031e-06
K_12	4.223370e-02	1.065381e+03	1.065423e+03
C_pa	3.026038e+08	1.634913e+09	1.937517e+09
A_s	-8.856535e+03	1.452100e+04	5.664463e+03
P_r	0.000000e+00	1.285766e+00	1.285766e+00
C_pt	0.000000e+00	1.101671e-02	1.101671e-02
K_t	0.000000e+00	7.228939e-05	7.228939e-05
A_r	0.000000e+00	1.633549e+05	1.633549e+05
P_o	0.000000e+00	1.229728e+00	1.229728e+00
C_pl	0.000000e+00	1.247659e-02	1.247659e-02
K_l	0.000000e+00	2.018275e-06	2.018275e-06
A_o	0.000000e+00	9.109492e+04	9.109492e+04
F_o	0.000000e+00	1.482604e+00	1.482604e+00

fun: 0.16366544681897047
x: [2.585e-01 3.748e-06 ... 9.109e+04 1.483e+00]
nit: 730
nfev: 1429
final_simplex: (array([[2.585e-01, 3.748e-06, ..., 9.109e+04,
1.483e+00],
[2.585e-01, 3.748e-06, ..., 9.109e+04,
1.483e+00],
...,
[2.585e-01, 3.748e-06, ..., 9.109e+04,
1.483e+00]], array([1.637e-01, 1.637e-01, ..., 1.637e-01, 1.637e-01])))