



Across all four plots:

RSS (converged)=0.131

RSS (initial)=2.034

RSS (% reduction)=0.94

| | epsilon | Initial_guesses | Converged |
|------|---------------|-----------------|--------------|
| P_b | 7.800708e-02 | 6.681702e-02 | 1.448241e-01 |
| P_u | 1.683088e-07 | 5.466972e-07 | 7.150060e-07 |
| K_12 | -1.960350e+03 | 1.814527e+04 | 1.618492e+04 |
| C_pa | 1.452903e+08 | 3.819882e+08 | 5.272785e+08 |
| A_s | -9.085071e+03 | 1.458909e+04 | 5.504017e+03 |
| P_r | 0.000000e+00 | 4.006687e-01 | 4.006687e-01 |
| C_pt | 0.000000e+00 | 9.732437e-03 | 9.732437e-03 |
| K_t | 0.000000e+00 | 8.404184e-05 | 8.404184e-05 |
| A_r | 0.000000e+00 | 5.876297e+05 | 5.876297e+05 |
| P_o | 0.000000e+00 | 2.011834e+12 | 2.011834e+12 |
| C_pl | 0.000000e+00 | 1.968035e-02 | 1.968035e-02 |
| K_l | 0.000000e+00 | 1.281986e-06 | 1.281986e-06 |
| A_o | 0.000000e+00 | 1.760143e+05 | 1.760143e+05 |
| F_o | 0.000000e+00 | 1.482633e+00 | 1.482633e+00 |

message: Optimization terminated successfully.
success: True
status: 0
fun: 0.13097157211244007
x: [1.448e-01 7.150e-07 ... 1.760e+05 1.483e+00]
nit: 722
nfev: 1383
final_simplex: (array([[1.448e-01, 7.150e-07, ..., 1.760e+05, 1.483e+00],
[1.448e-01, 7.150e-07, ..., 1.760e+05, 1.483e+00],
[1.448e-01, 7.150e-07, ..., 1.760e+05, 1.483e+00],
[1.448e-01, 7.150e-07, ..., 1.760e+05, 1.483e+00]]), array([1.310e-01, 1.310e-01, ..., 1.310e-01, 1.310e-01]))