

Model:

$$\hat{L}(k+1) = e^{-R_{1L}\Delta t} \hat{L}(k) - k_{PL} \frac{e^{-(R_{1P}+k_{PL})\Delta t} - e^{-R_{1L}\Delta t}}{R_{1P} - R_{1L} + k_{PL}} P(k)$$

Loss:

$$L(\theta_i|Y_i) = \|L_i - \hat{L}(P_i, \theta_i)\|_2$$

Regularization:

$$r(\theta) = \lambda_1 \|\nabla \theta\|_1 + \lambda_2 \|\theta\|_2^2$$