

Ref Deperrois 2020
(no STD)

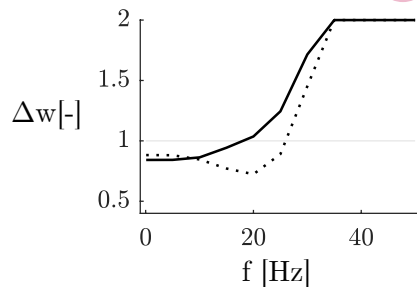
Region Cortex

Bounds Hard

Fit

Equation

$$\tau_w([Ca])dw/dt = \Omega([Ca])$$

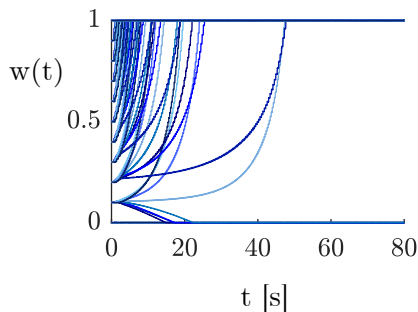


Parameters

$$\begin{aligned}\tau_{Ca} &= 32.1900754 & \theta_p &= 1.63069609 \\ C_{pre} &= 1.60681037 & \theta_d &= 1 \\ C_{post} &= 1.1243642 & \gamma_p &= 161.987985 \\ D &= 5.75272377 & \gamma_d &= 31.9759883 \\ \tau_w &= 79975.6573\end{aligned}$$

$$\begin{aligned}m_1 &= 0.25 & p_1 &= 4e3 \\ a_1 &= 1.1 & p_2 &= p_1 1e-6 \\ a_2 &= 1.7 & p_3 &= 2.4 \\ b_1 &= 40 & p_4 &= 1 \\ b_2 &= 10 \\ m_2 &= 0.5\end{aligned}$$

Reset



Supplementary information

$$\Omega([Ca]) = m_2 \exp(b_2([Ca] - a_2)) / (1 + \exp(b_2([Ca] - a_2))) - m_1 \exp(b_1([Ca] - a_1)) / (1 + \exp(b_1([Ca] - a_1)))$$

$$\tau_w([Ca]) = P_4 + \frac{P_1}{P_2 + [Ca]^{P_3}}$$

$$\frac{dc_{pre}}{dt} = -\frac{c_{pre}}{\tau_{Ca}} + wC_{pre} \sum_{pre,i} \delta(t - t_{pre,i} - D)$$