| Parameter | Value | Units | Description |
|---|---|---|---|
| $K$ | 280 | - | Number of units in reservoir |
| $g$ | 1.5 | - | Gain parameter |
| $M$ | 1120 | - | Number of units in sparse pattern net |
| $\theta_m$ | 7.5 | Hz | Threshold for columnar to reservoir excitation |
| $\theta_o$ | 0.1 | - | Threshold for reservoir to sparse net excitation |
| $Q_{max}$ | 15 | nS | Max feedback weight |
| $\tau_{net}$ | 100 | ms | Time constant for units in reservoir |
| $\tau_u, \tau_{ui}$ | 40,10 | ms | Excitatory and inhibitory time constants, rate-based network |
| $u_c$ | 2 | - | Upper threshold, rate-based transfer function |
| $\theta$ | 0 | - | Lower threshold, rate-based transfer function |
| $\nu$ | 2 | - | Scaling parameter, rate-based transfer function |

**Supplementary File 2. Table of Reservoir, Sparse Net, and Rate-Based Model Parameters.** For full code and full list of non-Markovian parameters, please refer to http://modeldb.yale.edu/266774