|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | Value | Units | Description |
| K | 280 | - | Number of units in reservoir |
| g | 1.5 | μS | Gain parameter |
| M | 1120 | - | Number of units in sparse pattern net |
| $$θ\_{m}$$ | 7.5 | Hz | Threshold for columnar to reservoir excitation |
| $$θ\_{o}$$ | 0.1 | - | Threshold for reservoir to sparse net excitation |
| $$Q\_{max}$$ | .15 | μS | Rate of Poisson stimulus pulse |
| $$τ\_{net}$$ | 100 | ms | Time constant for units in reservoir |
| $$τ\_{u}, τ\_{ui}$$ | 40,10 | ms | Excitatory and inhibitory time constants, rate-based network |
| $$u\_{c}$$ | 2 | - | Upper threshold, rate-based transfer function |
| $$θ$$ | 0 | - | Lower threshold, rate-based transfer function |
| $$ν$$ | 2 | - | Scaling parameter, rate-based transfer function |

**Supplementary File 2. Table of Reservoir, Sparse Net, and Rate-Based Model Parameters.**