Macro-Level Soleus Simulation

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1 Experimental Frame

- Start / End: 2012-05-09 00:03:39 / 2012-05-09 00:31:16
- Duration: 27 minutes 36 seconds / 000123200000.0ticks

1.1 Simulation Parameters

- Annoyance levels (reorganization/evolution): 20 40
- Resting AHP Level (mV): 0.1
- Pathway beginning/end (ms): 39.5 200.0
- Smoothing count: 8
- Average frequency fault tolerance (Hz): 0.6

1.2 Agents

- Number of Existing Neuron Agents: 680
- Number of Removed Neuron Agents: 0
- Number of Existing Synapses: 1121
- Number of Removed Synapses: 235

2 Results

Reference PSF

• Peristimulus mean: 7.701737775375868

• ErrorBox LowerB: -23.737677024926487

• ErrorBox UpperB: 42.59999985390896

Simulated PSF

• Peristimulus mean: 7.854149316499698

• ErrorBox LowerB: -42.29434283221122

• ErrorBox UpperB: 16.51634459752654

Simulated Results vs. Reference Data

• Peristimulus mean diff: 0.15241154112383004

 \bullet Pearson correlation [39.5, 200.0]: 0.9584753298417349

• r2: 0.9186749579152225

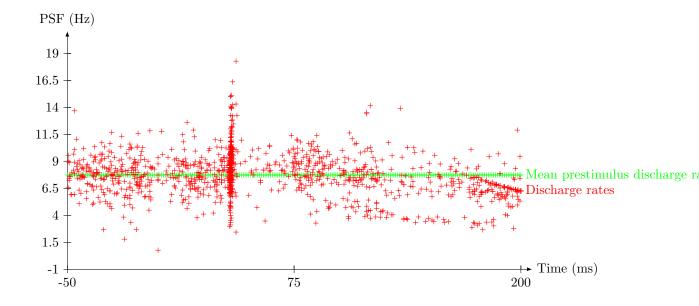


Figure 1: Raw Reference PSF

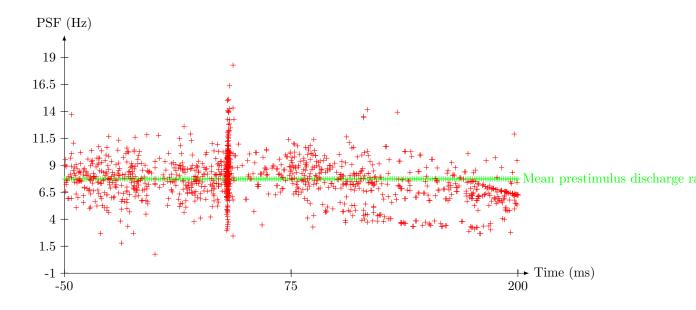


Figure 2: Filtered Reference PSF

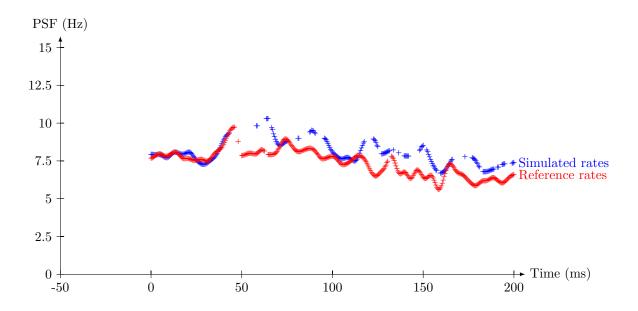


Figure 3: PSF - Average Discharge Rates

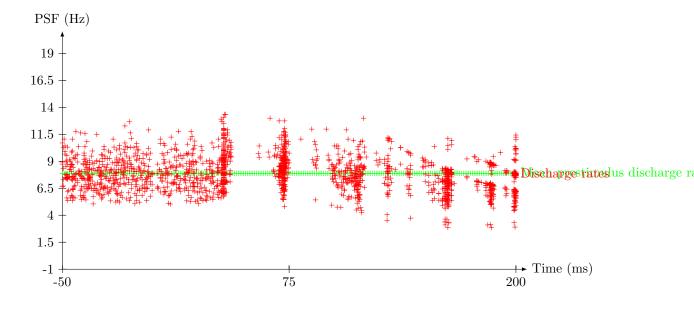


Figure 4: Simulated PSF

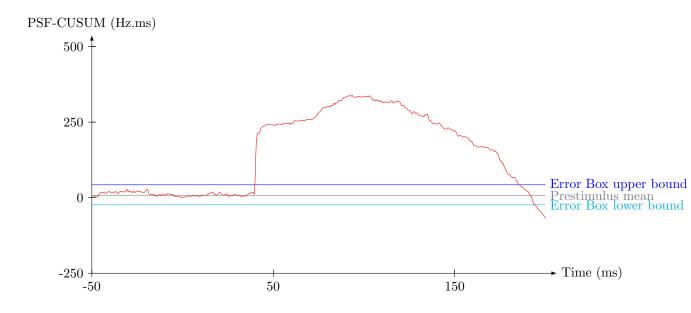


Figure 5: Reference PSF-CUSUM

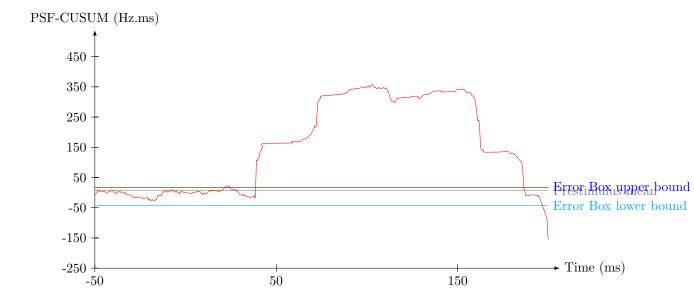


Figure 6: Simulated PSF-CUSUM

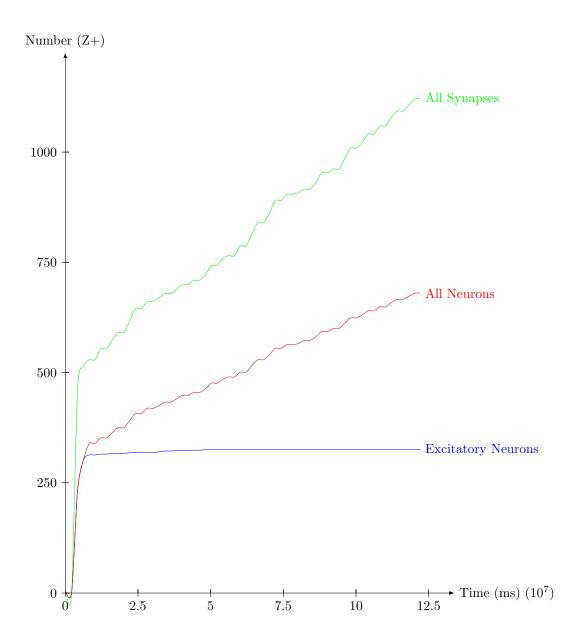


Figure 7: Number of Entities by time $\frac{1}{2}$