Macro-Level Soleus Simulation

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1 Experimental Frame

- Start / End: 2012-05-09 11:33:27 / 2012-05-09 11:50:51
- Duration: 17 minutes 23 seconds / 000097000000.0ticks

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: 564
- $\bullet\,$ Number of Removed Neuron Agents: 0
- Number of Existing Synapses: 905
- Number of Removed Synapses: 219

2 Results

Reference PSF

• Peristimulus mean: 7.701737775375868

• ErrorBox LowerB: -23.737677024926487

• ErrorBox UpperB: 42.59999985390896

Simulated PSF

• Peristimulus mean: 7.872608238520667

• ErrorBox LowerB: -44.56535532820766

• ErrorBox UpperB: 33.54610644463065

Simulated Results vs. Reference Data

• Peristimulus mean diff: 0.1708704631447988

 \bullet Pearson correlation [39.5, 200.0]: 0.9599358535533228

• r2: 0.9214768429371464

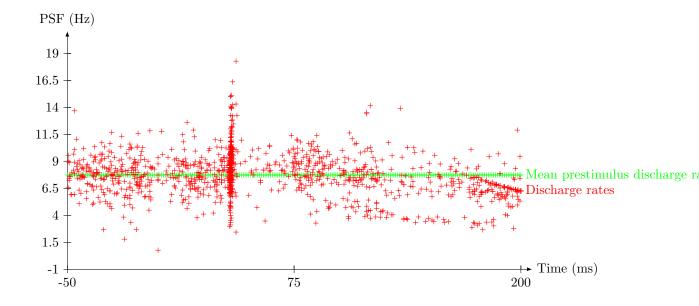


Figure 1: Raw Reference PSF

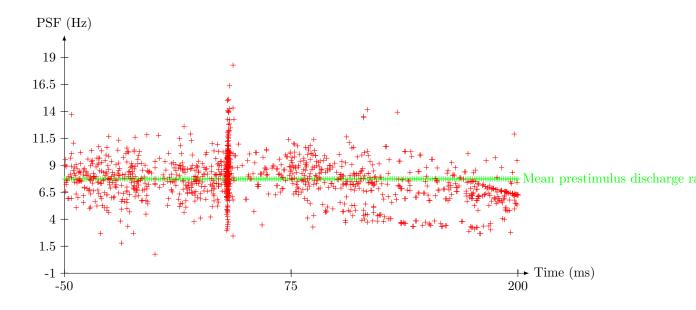


Figure 2: Filtered Reference PSF

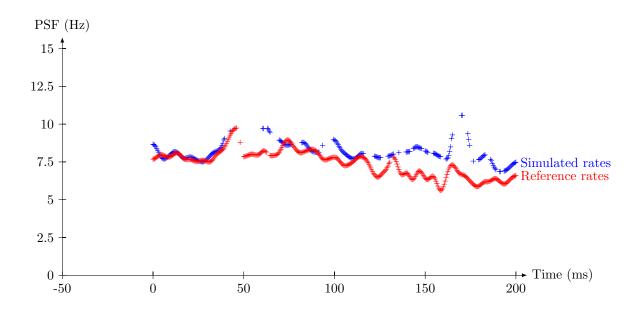


Figure 3: PSF - Average Discharge Rates

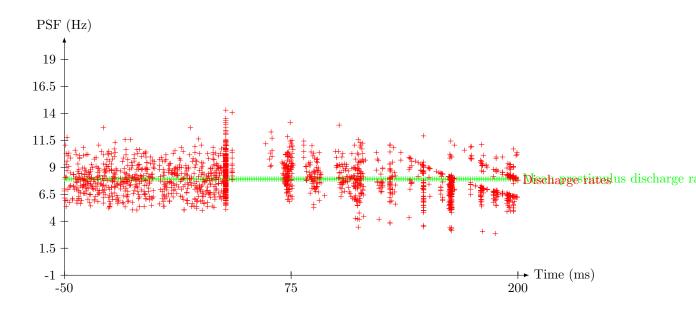


Figure 4: Simulated PSF

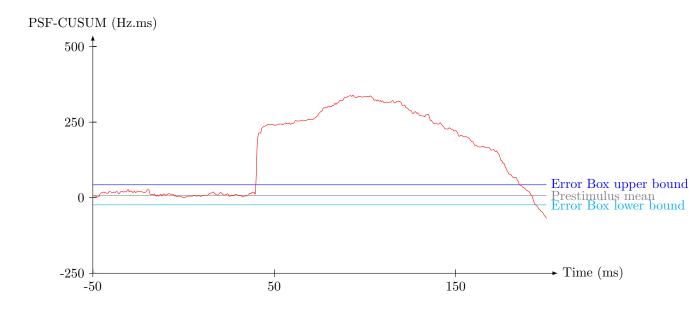


Figure 5: Reference PSF-CUSUM

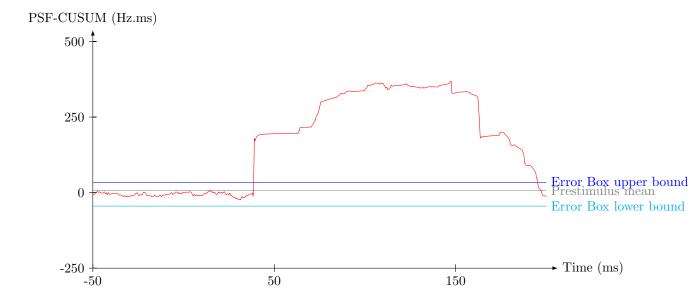


Figure 6: Simulated PSF-CUSUM

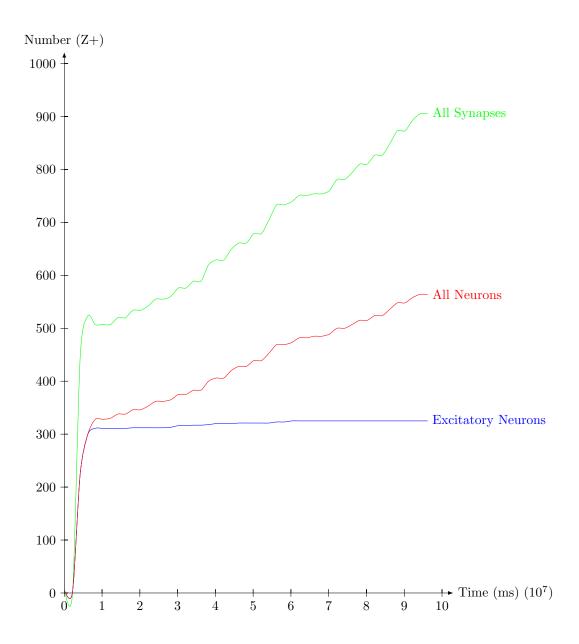


Figure 7: Number of Entities by time