# Macro-Level Soleus Simulation

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## 1 Experimental Frame

- Start / End: 2012-05-09 15:14:42 / 2012-05-09 15:34:18
- Duration: 19 minutes 36 seconds / 000097200000.0ticks

### 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: 621
- Number of Removed Neuron Agents: 0
- Number of Existing Synapses: 1013
- Number of Removed Synapses: 225

### 2 Results

#### Reference PSF

• Peristimulus mean: 7.701737775375868

• ErrorBox LowerB: -23.737677024926487

• ErrorBox UpperB: 42.59999985390896

#### Simulated PSF

• Peristimulus mean: 7.872851079579523

• ErrorBox LowerB: -36.36153534290538

• ErrorBox UpperB: 63.0112594858961

#### Simulated Results vs. Reference Data

• Peristimulus mean diff: 0.17111330420365523

• Pearson correlation [39.5, 200.0]: 0.953616488954741

• r2: 0.9093844080063678

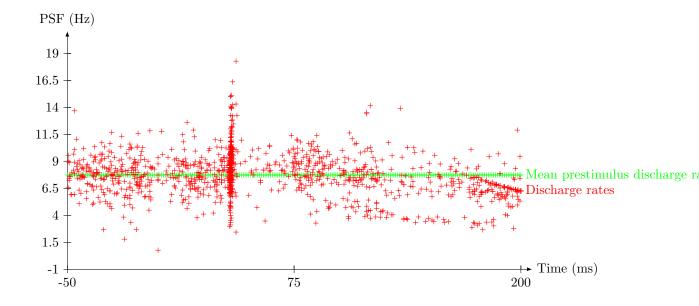


Figure 1: Raw Reference PSF

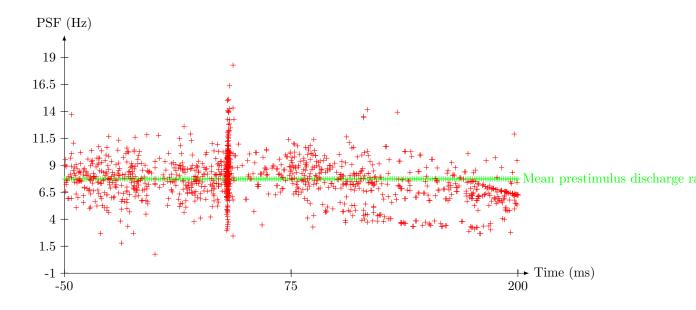


Figure 2: Filtered Reference PSF

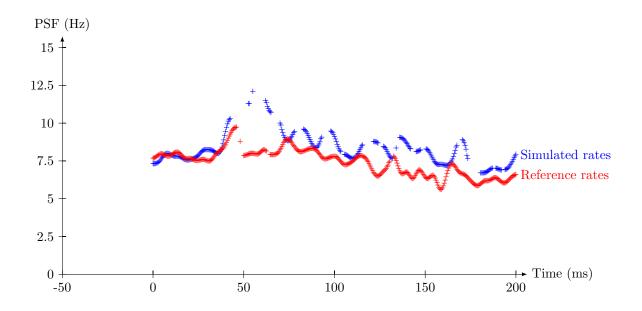


Figure 3: PSF - Average Discharge Rates

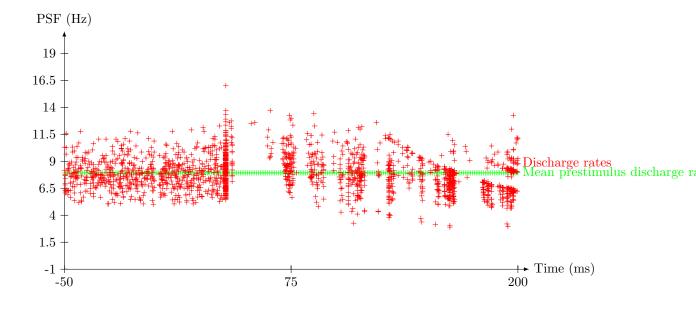


Figure 4: Simulated PSF

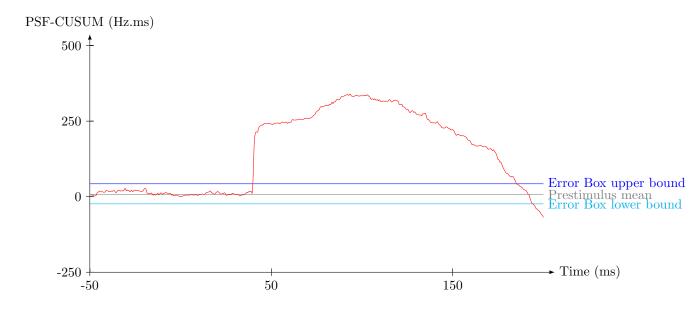


Figure 5: Reference PSF-CUSUM

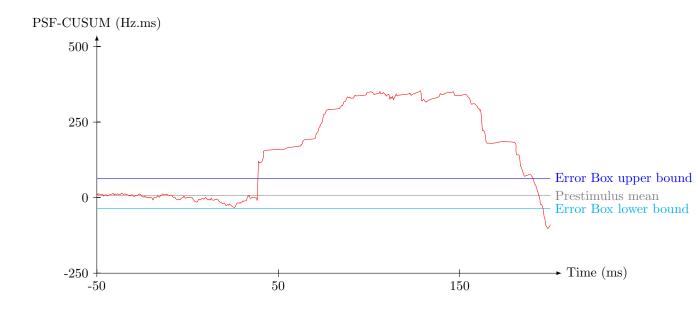


Figure 6: Simulated PSF-CUSUM

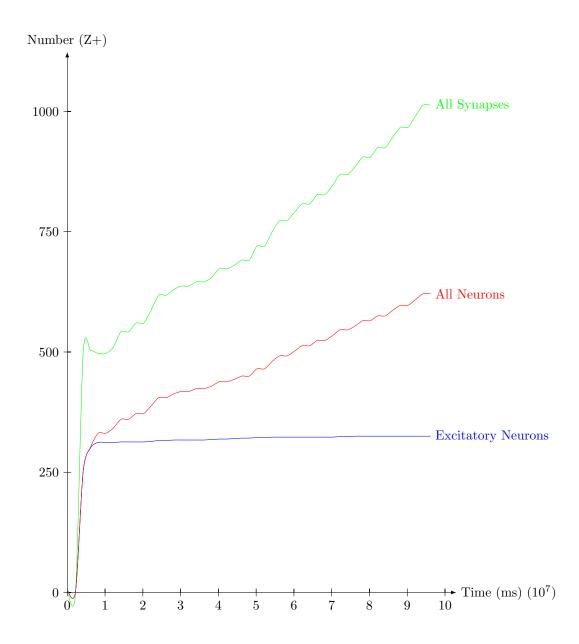


Figure 7: Number of Entities by time