

# Macro-Level Soleus Simulation

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## 1 Experimental Frame

- Start / End: 2012-05-09 14:45:49 / 2012-05-09 15:00:41
- Duration: 14 minutes 51 seconds / 000081200000.0ticks

### 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: 553
- Number of Removed Neuron Agents: 0
- Number of Existing Synapses: 875
- Number of Removed Synapses: 227

## 2 Results

### Reference PSF

- Peristimulus mean: 7.701737775375868
- ErrorBox LowerB: -23.737677024926487
- ErrorBox UpperB: 42.59999985390896

### Simulated PSF

- Peristimulus mean: 7.924359735747878
- ErrorBox LowerB: -34.95184934461402
- ErrorBox UpperB: 40.009422370183145

### Simulated Results vs. Reference Data

- Peristimulus mean diff: 0.22262196037200965
- Pearson correlation [39.5, 200.0]: 0.9791302436331606
- r2: 0.9586960339971324

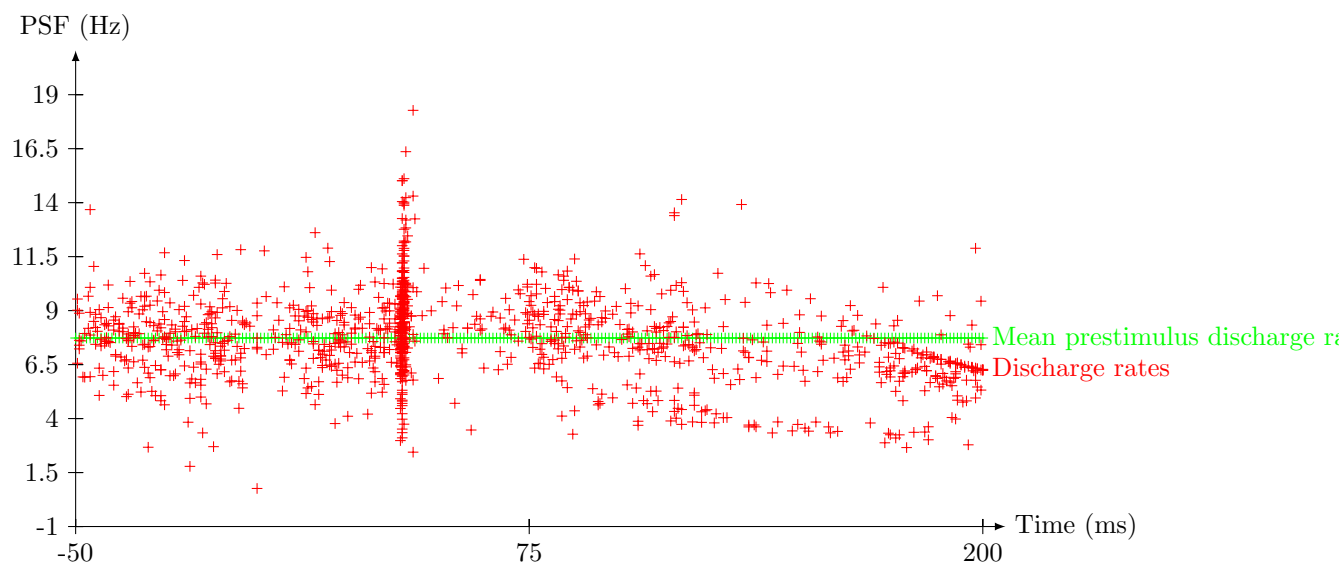


Figure 1: Raw Reference PSF

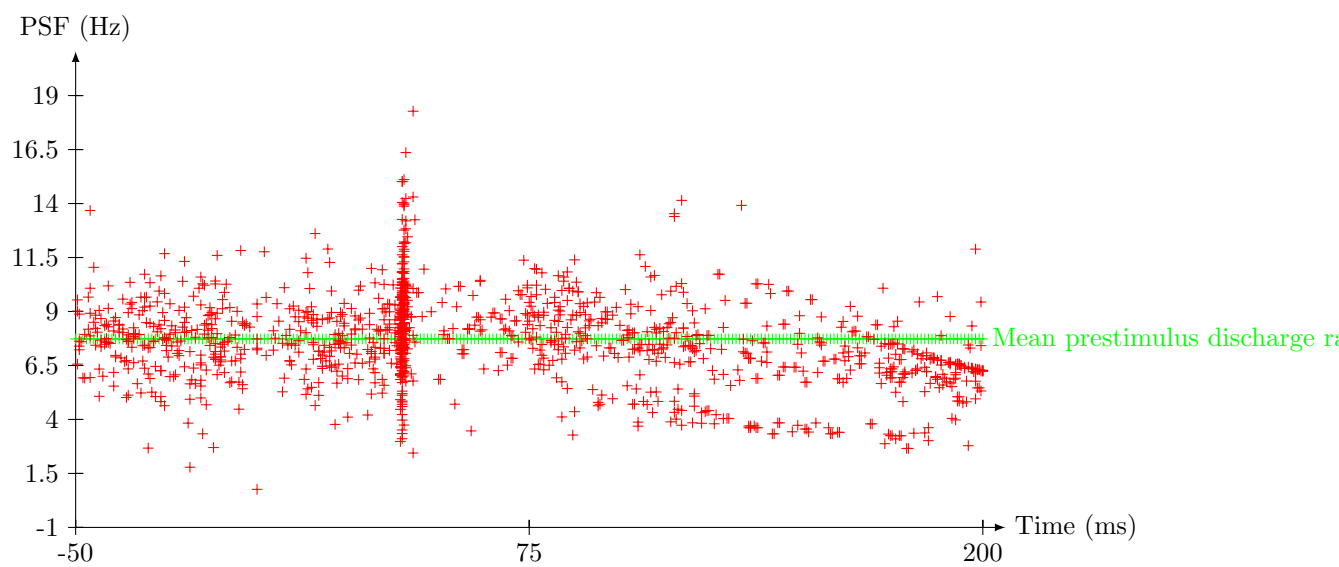


Figure 2: Filtered Reference PSF

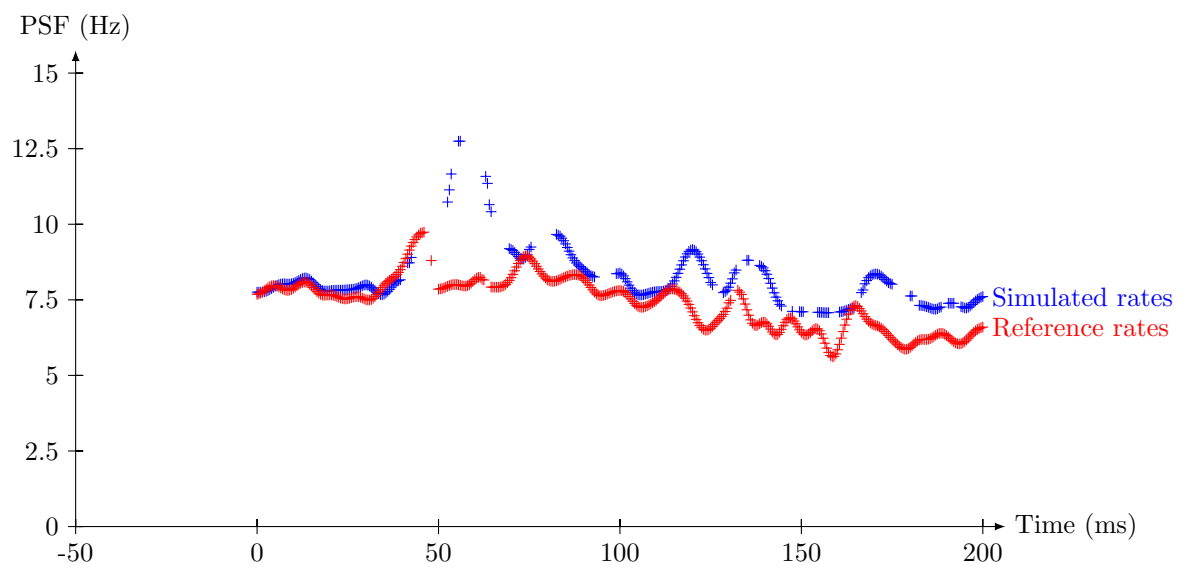


Figure 3: PSF - Average Discharge Rates

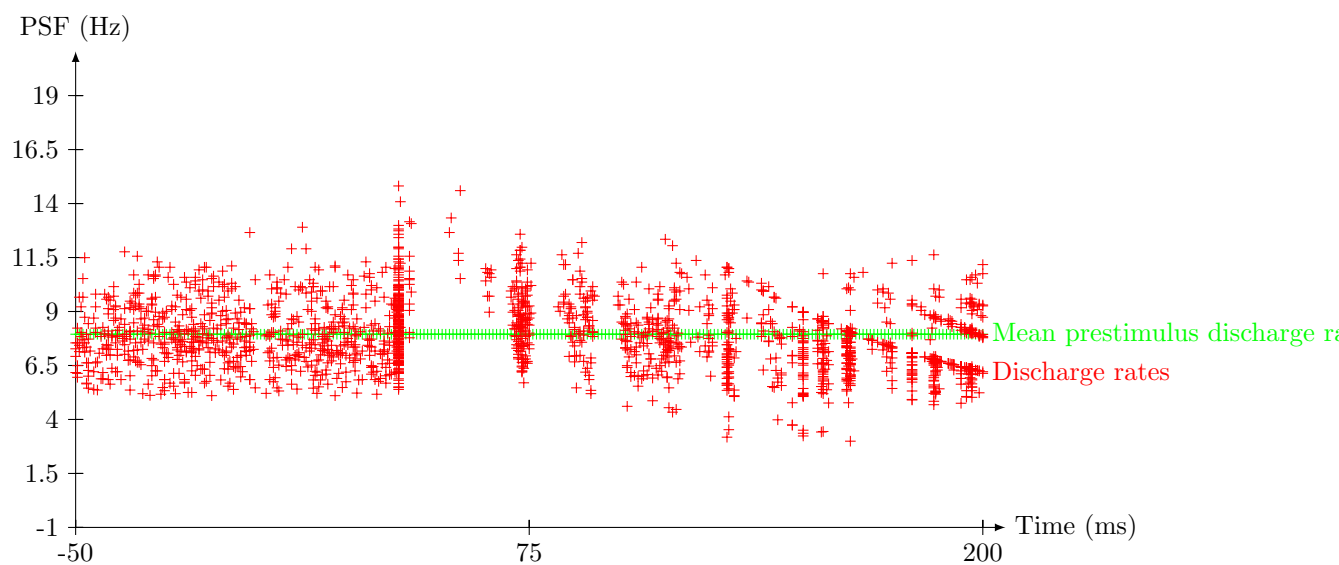


Figure 4: Simulated PSF

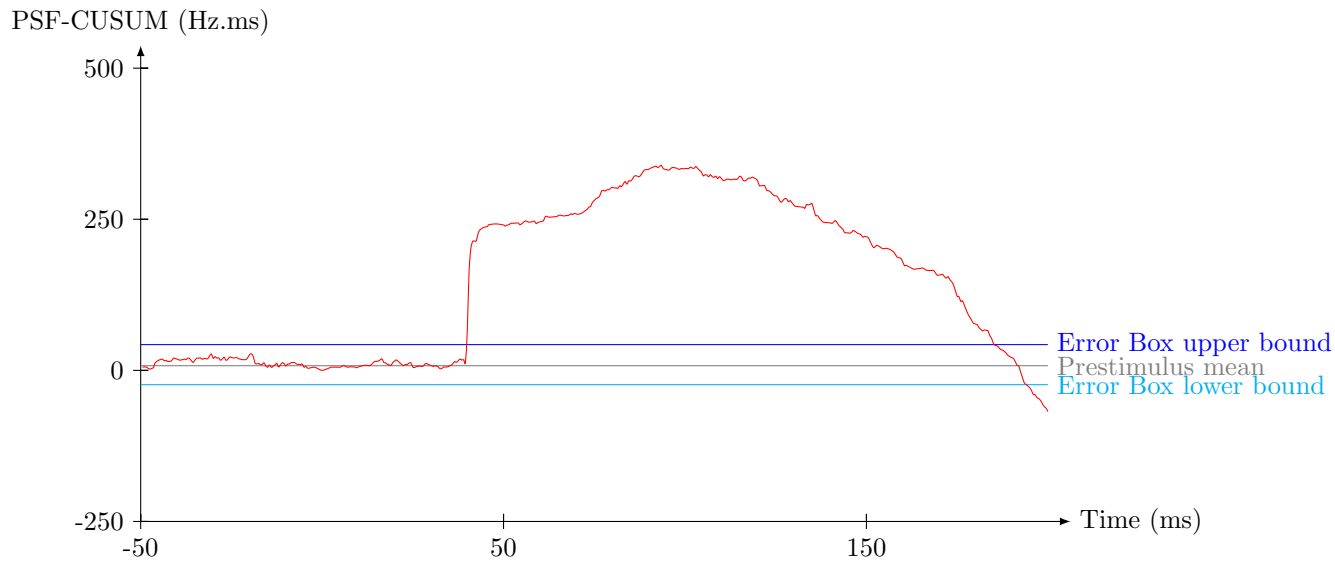


Figure 5: Reference PSF-CUSUM

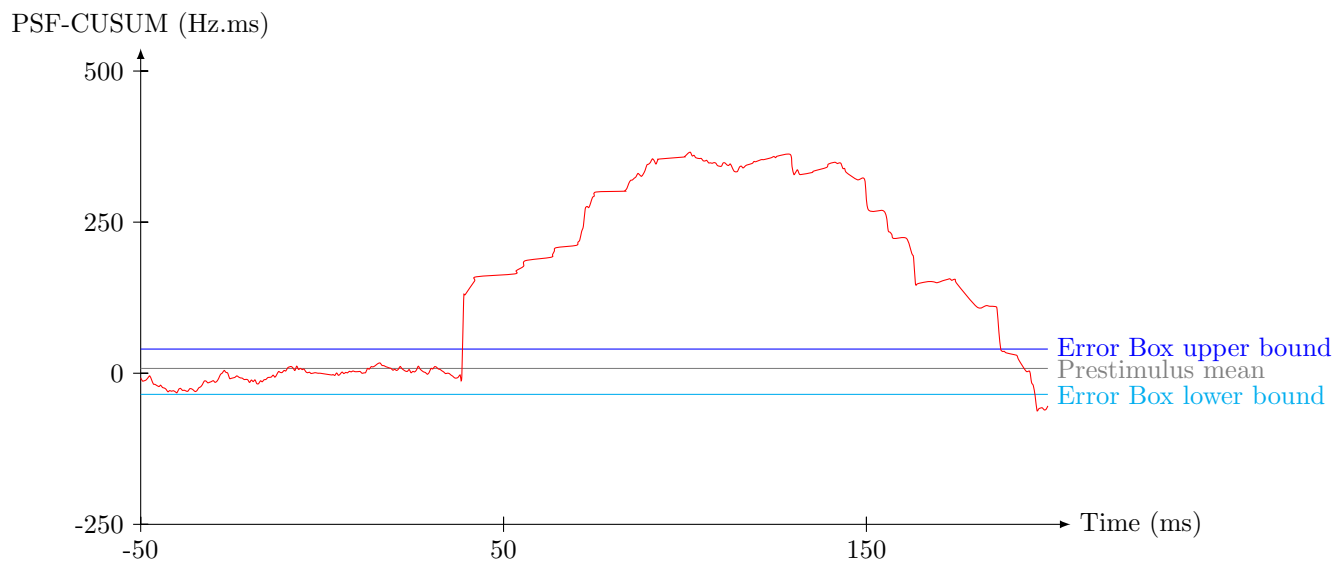


Figure 6: Simulated PSF-CUSUM

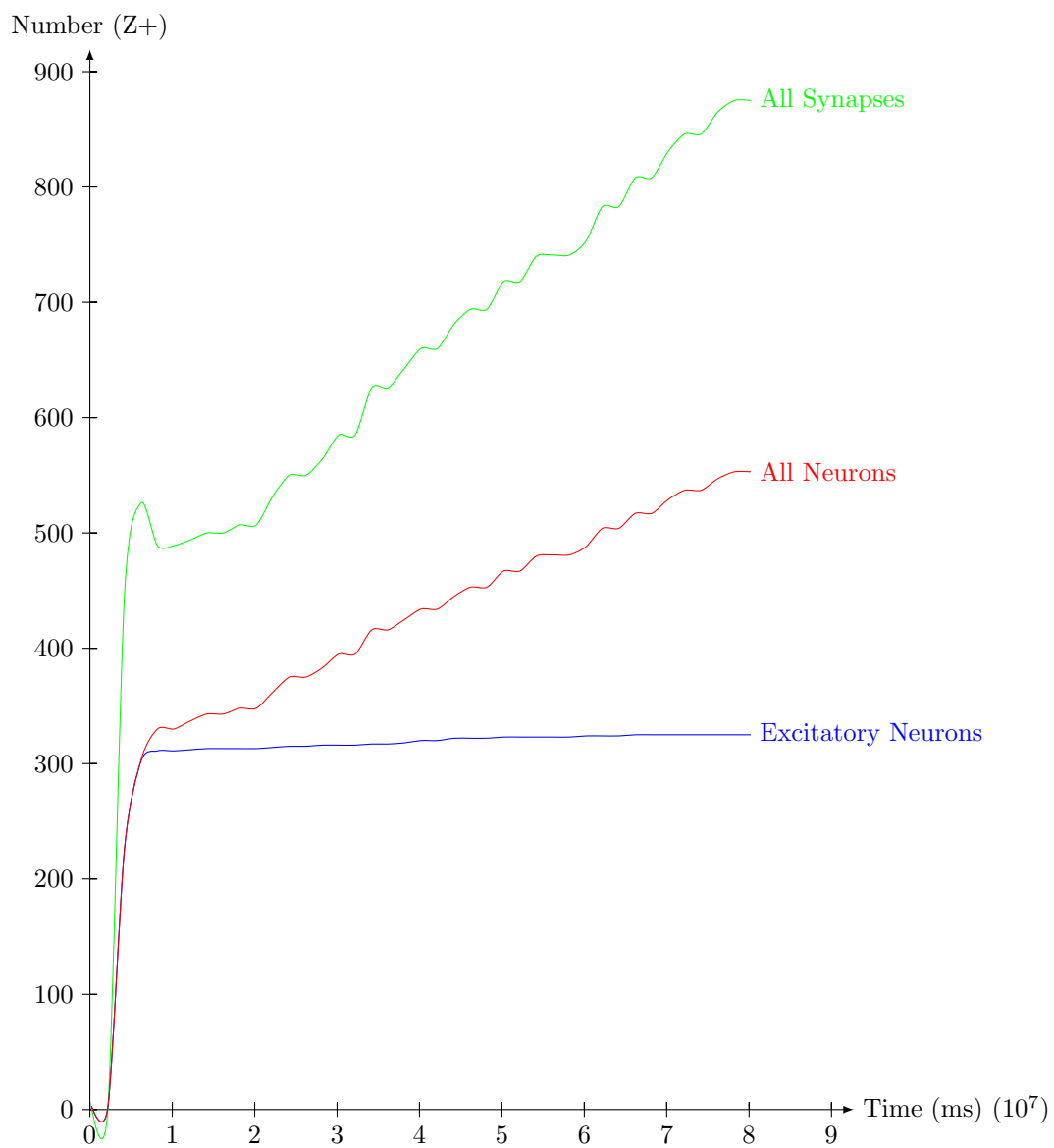


Figure 7: Number of Entities by time