0.1 kCSD for Ballstick Modell

Parameters:

Number of electrodes: 20

Number of base functions: 27

Type of base functions: step

Width of base functions: 20 um

sigma: 0.5

Shift of overlapping of base functions: 18.5185185185185 um

Cell to electrode distance: 60

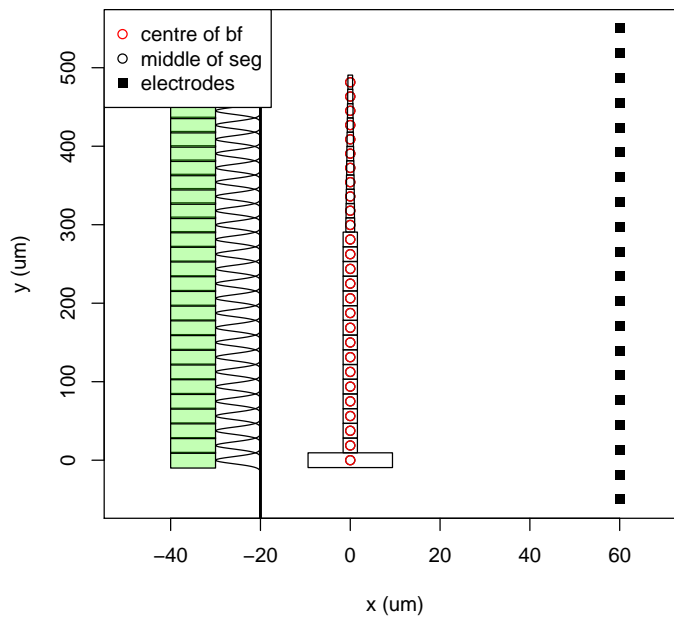Units:

Potential   [mV]
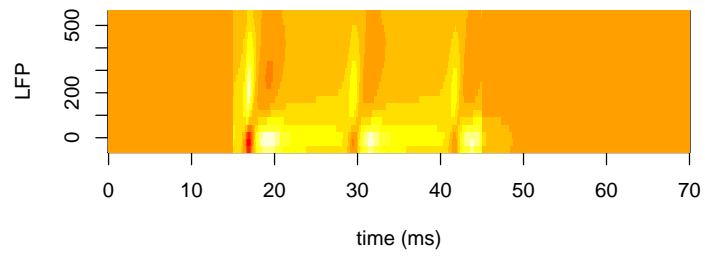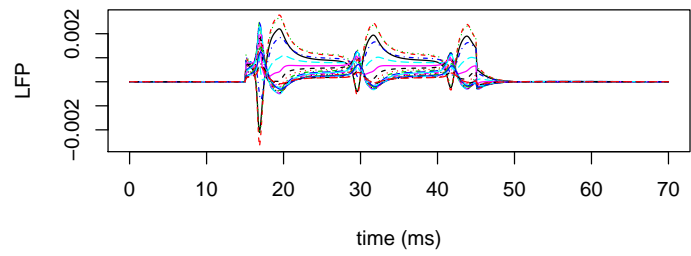
Current   [nA]
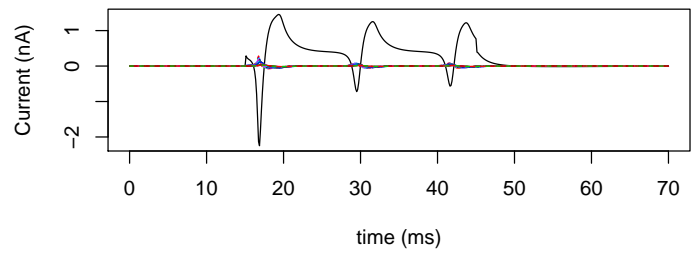
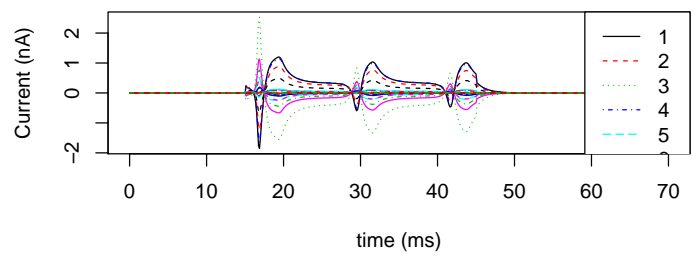Conductivity [S/m]

Dimension   [μm]
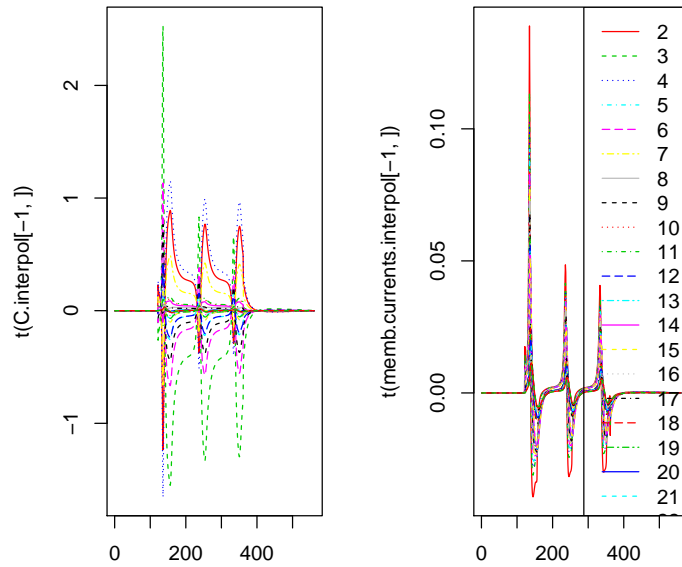
pdf
  2

Simulational setup

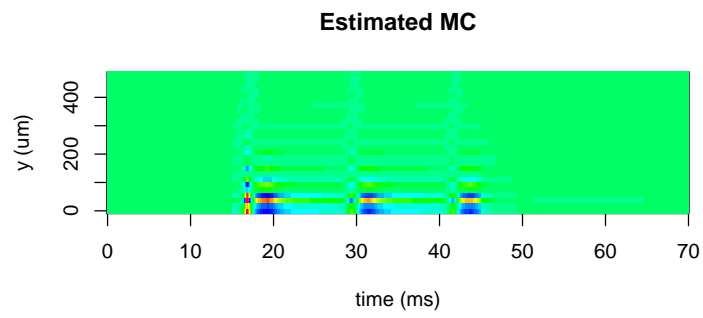**Membrane currents**

Estimated MC

Membrane currents

Estimated MC
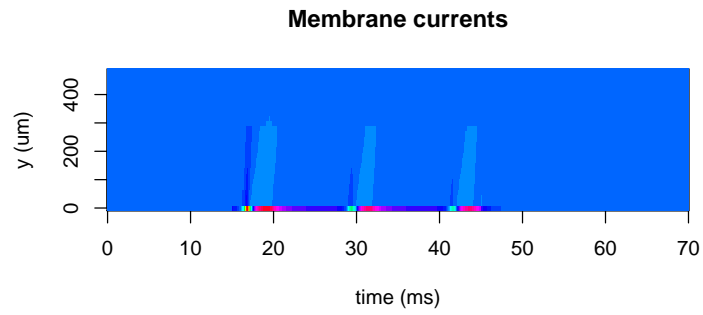
Overall RMSE 0.150206644976077

Overall normalized RMSE 0.0405561194567369

3

RMSE

Normalized RMSE

CSD

CSD
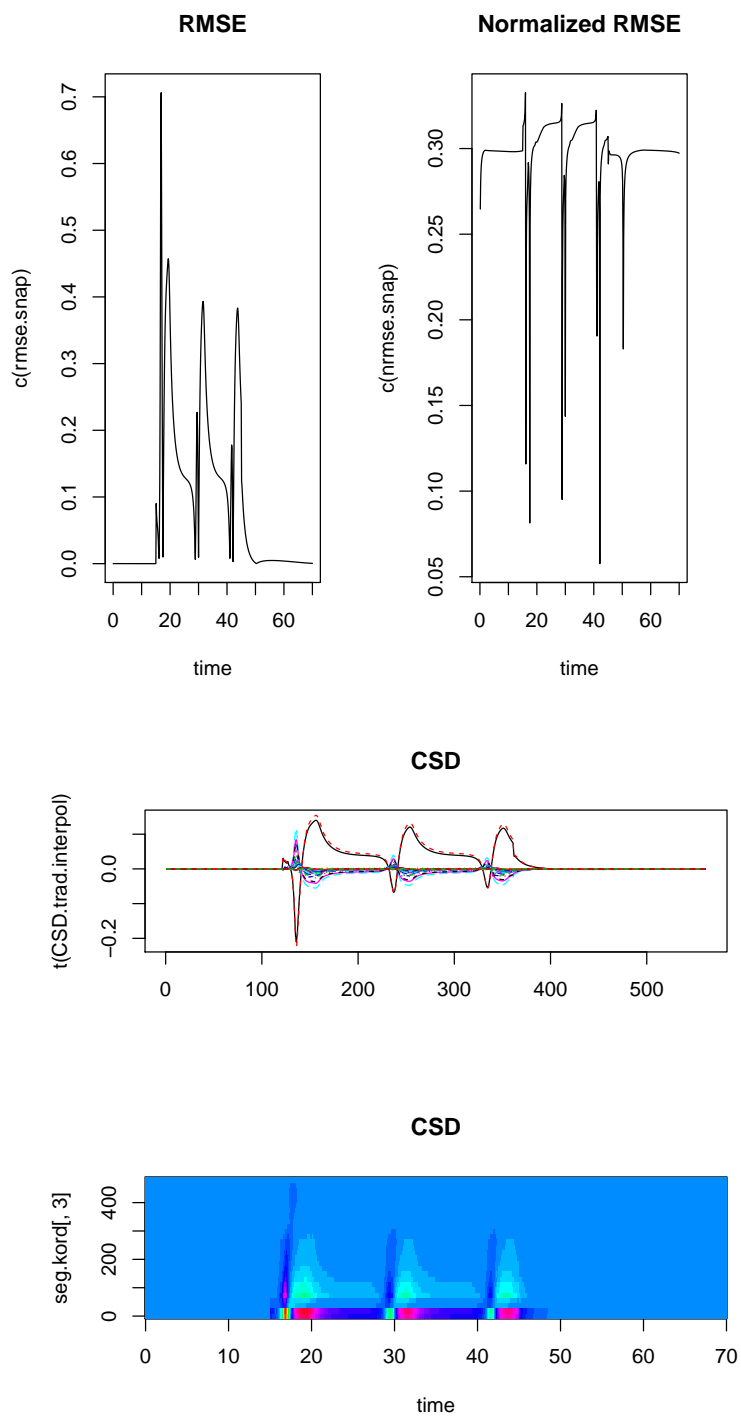
Spatial distribution at spike:

4

Comparison of methods at the peak of the spike
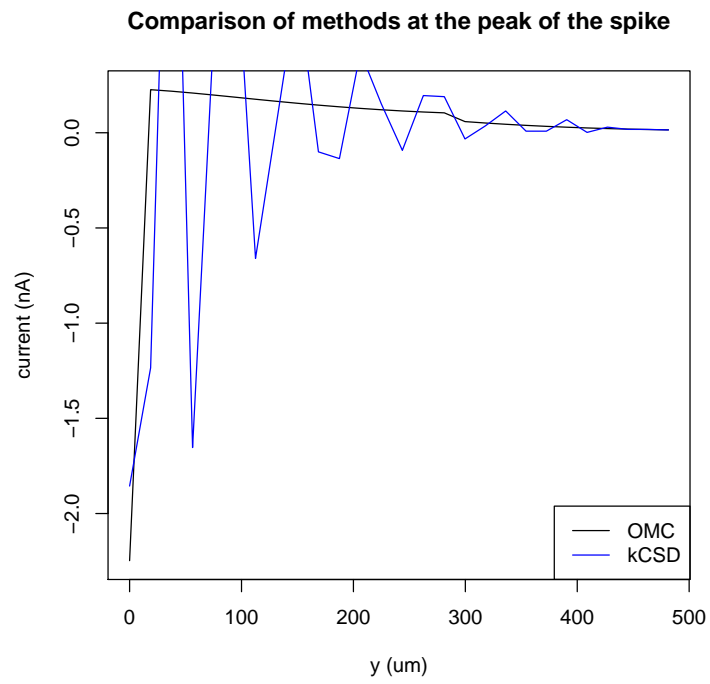
Spike rmse: 0.706216417492308