

0.1 kCSD for Ballstick Modell

Parameters:

Number of electrodes: 10

Number of base functions: 18

Type of base functions: step

Width of base functions: 30 μm

sigma: 0.5

Shift of overlapping of base functions: 27.777777777778 μm

Cell to electrode distance: 30

Units:

Potential [mV]

Current [nA]

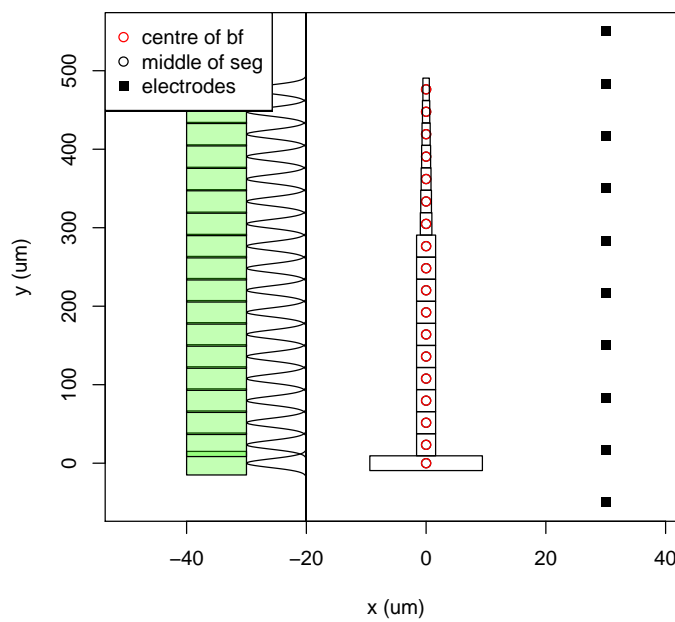
Conductivity [S/m]

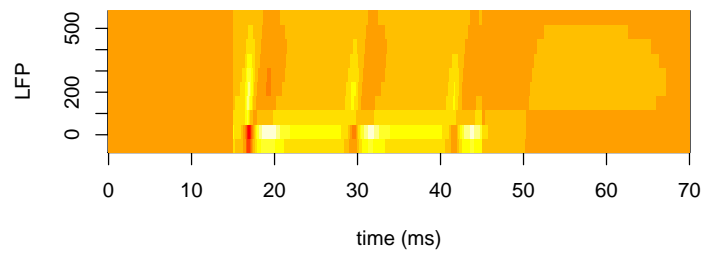
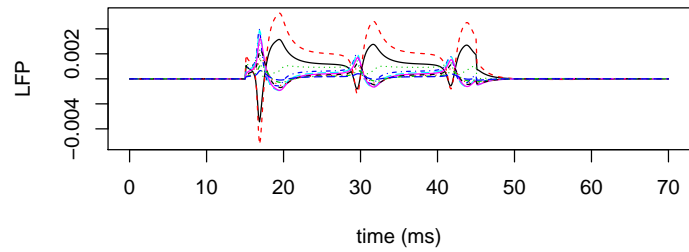
Dimension [μm]

X11cairo

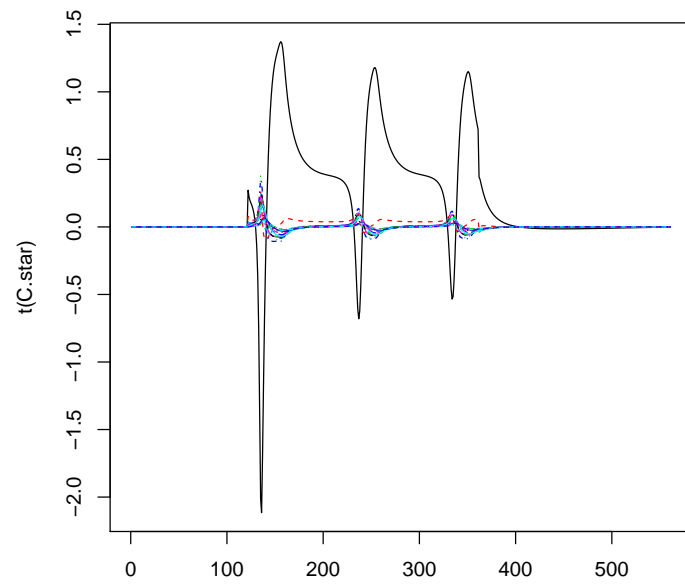
2

Simulational setup



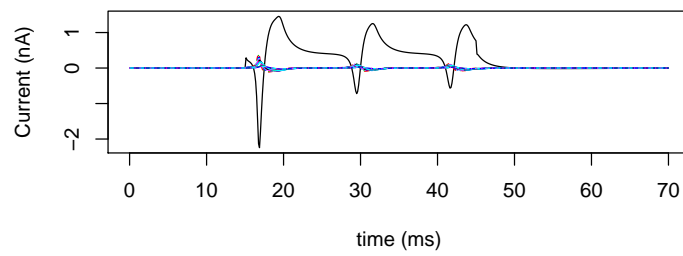


Nem vagyok benne biztos, hogy ez jó... Most kell kiszámolni az adott pontforrásokban a különböző Gaussok amplitúdóját és azokat összeadni, ezt egy mátrixban a legegyszerűbb ábrázolni. A sorok a különböző pontforrásokat jelzik, az oszlopok a különböző Gauss függvényeket, a rácspontokban az amplitúdók

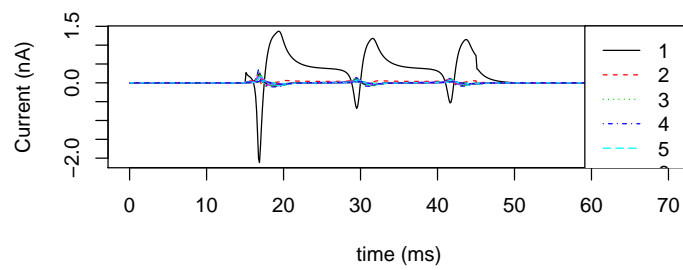


állnak...

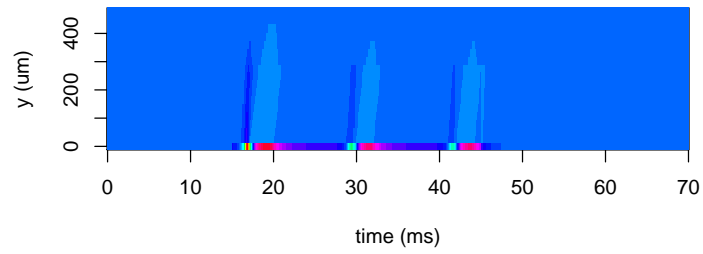
Membrane currents



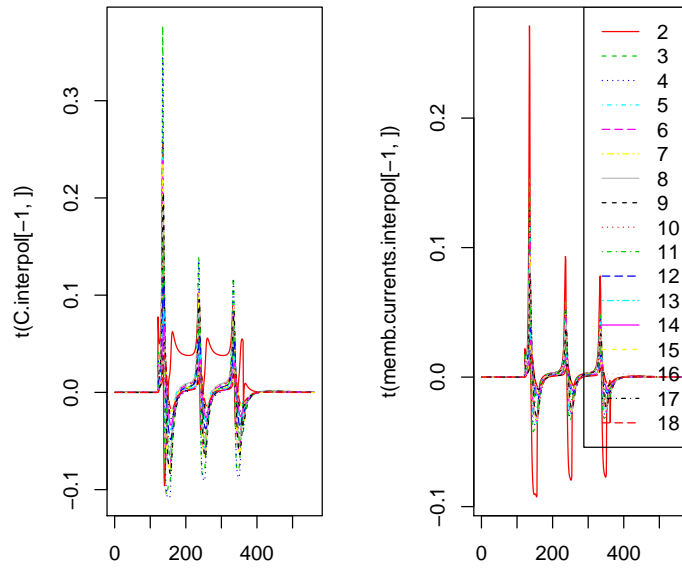
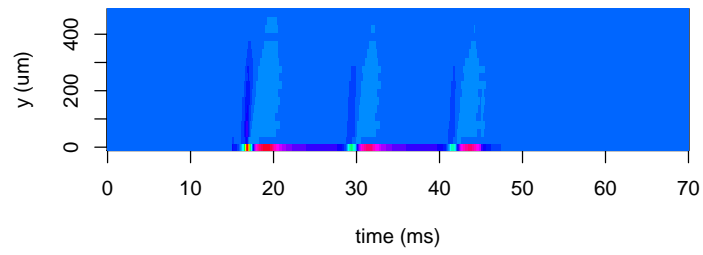
Estimated MC



Membrane currents

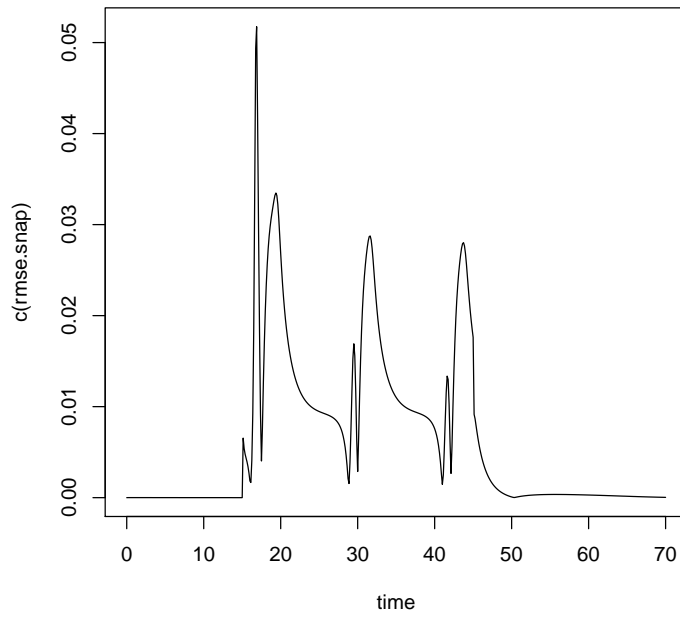


Estimated MC

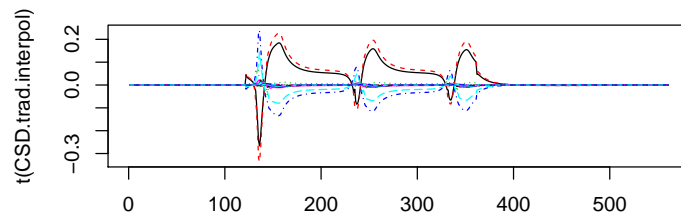


Overall RMSE 0.0110068825671664

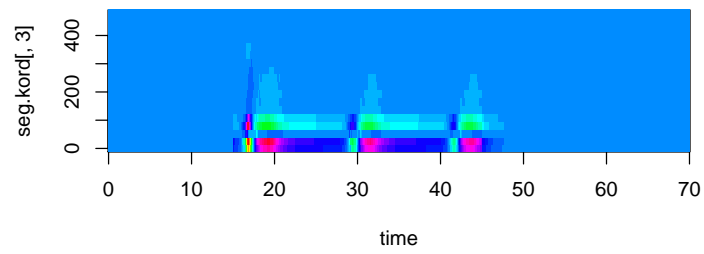
RMSE



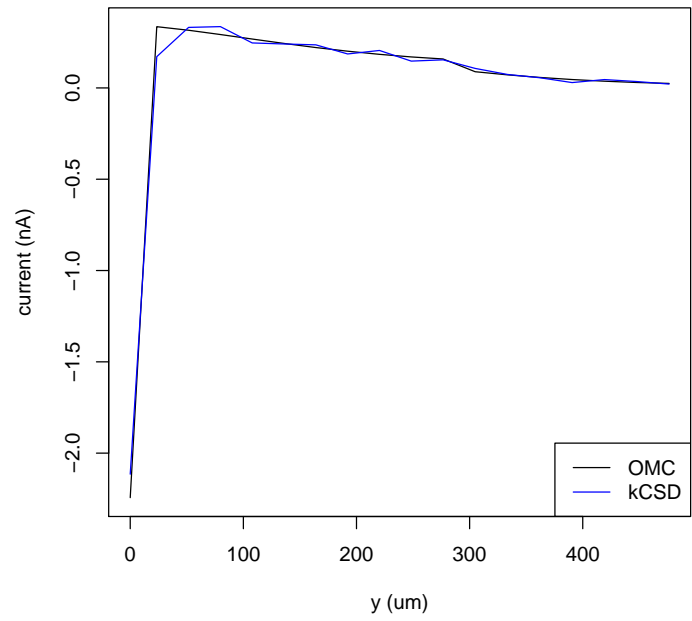
CSD



CSD

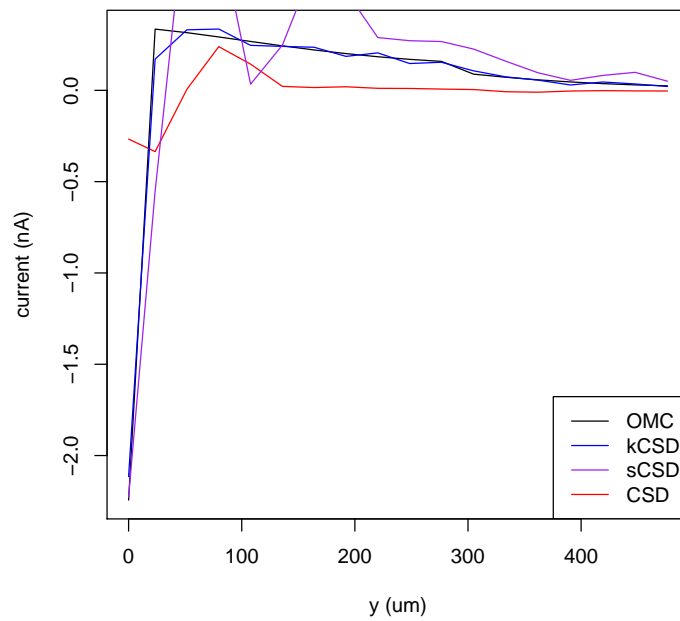


Comparison of methods at the peak of the spike



Spatial distribution at spike:

Comparison of methods at the peak of the spike



Spike rmse: 0.0517455859301027