



Figure 1: new figure and analysis that could be included in a revised version of the manuscript. The first subplot show axial conductivity measurements and fits with homogeneous or piecewise functions. Then several scenarios were tested with either the homogeneous axial conductivity (dark blue) or with more complex function (all other scenarios). The radial conductivity distribution is given in the second subplot, the radial to axial ratio in the third one. The last subplot represents the root total conductance measurements *vs* the fitted conductances obtained using the analytical solutions.