

Sensitivity of EEG Source Analysis to Conductivity Uncertainties

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The variance of head tissue conductivities between patients/subjects leads to considerable uncertainty in the results of electroencephalography (EEG) source analysis. In this study, we expand previous studies determining the sensitivity of EEG source analysis to tissue conductivity uncertainties with an unprecedented spatial resolution in a highly-realistic state-of-the-art head model. We find that the skull conductivity has the by far strongest influence on both EEG forward and inverse solutions for all source positions and depths.