

Array diagnostics, spatial resolution, and filtering of undesired radiation with the 3D reconstruction algorithm - DTU Orbit (09/11/2017)

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This paper focuses on three important features of the 3D reconstruction algorithm of DIATOOOL: the identification of array elements improper functioning and failure, the obtainable spatial resolution of the reconstructed fields and currents, and the filtering of undesired radiation and scattering to obtain a more accurate measured field. Results obtained by real measured data are presented. Special attention is given to the computational advantages given by the higher-order Method of Moments-based formulation of DIATOOOL. Guidelines on the recommended measurement sampling and measured field truncation for achieving the best possible reconstruction results are also provided.

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