

# Basic study on improving accuracy in extraction of electromagnetic field waveforms by independent component analysis

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In this report, we will investigate to improve the accuracy of waveform extraction in independent component analysis (ICA). In order to confirm the effectiveness of principal component analysis (PCA), which is a pre-processing for ICA, the result of receiving electromagnetic waves containing a mixture of two components using four-receiving system and performing ICA is presented. The result is compared with the result in a case of two-receiving system for two components to evaluate the accuracy of the extracted waveforms.

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