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## Applicability of the grounded source airborne electromagnetics to coastal areas

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Coastal areas are one of important candidates for geological disposal of high-level radioactive waste in Japan. At the stage of preliminary investigation, airborne geophysical survey is a powerful tool to investigate underground structure. In coastal areas, it is important to know the boundary between fresh water and saline water, which can be estimated by measuring electrical resistivity. As for airborne electromagnetics, conventional frequency-domain type is not suitable for our purpose because it can survey only shallow depth. In order to enhance survey depth, grounded electrical source airborne transient electromagnetics, or GREATEM, was applied to a coastal area where sedimentary rocks prevail. It was found that our result was fairly in good agreement with previous data, and hence our approach is useful as an investigation tool for coastal areas.

Keywords: Airborne electromagnetics, Geological disposal, Coastal area