

Transfer function of source and received signal in the case of electromagnetic 3D sounding and its processing method

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A new electromagnetic sounding method EM-ACROSS is proposed by Kumazawa et al. [1998]. The method uses a controlled source electromagnetic wave, and measures the transfer function between source and received signal. We here studied a characteristics of the transfer function: the function is a tensor whose elements have common base functions and different amplitudes; The number of the base functions concerns with a number of reflection or refraction, and amplitudes of them concern with dips and tips of the structure. We suggest a processing method of the function utilizing the results.

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