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## **Inversion of TEM data and analysis of the 2D induced magnetic field applied to the aquifers characterization in the Paraná basin, Brazil**

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### **Abstract**

Results of a TEM profile by using the fixed-loop array and an analysis of the induced magnetic field are presented in this work performed in the northwest region of São Paulo State, Brazil, Paraná Basin. The objectives of this research were to map the sedimentary and crystalline aquifers in the area and analyzing the behavior of the magnetic field by observation of magnetic profiles. TEM measurements in the three spatial components were taken to create magnetic profiles of the induced (secondary) magnetic field. The TEM data were acquired using a fixed transmitter loop of 200m x 200m and a 3D coil receiver moving along a profile line of 1000 m.

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