

Contribution of geophysics to the study of the Gouméré gold mineralization (northeast of Côte d'Ivoire): induced magnetometry and polarization

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In West Africa, Birimian formations generally masked by laterites, are well known for their precious metal content. In the Gouméré region of northeast Côte d'Ivoire, geophysical studies (magnetism and induced polarization) showed the presence of three lithological complexes: granodiorites, mafic formations and a complex of sedimentary and volcano-sedimentary formations. Tectonics are dominated by NS, NE-SW and ENE-WSW oriented faults. Induced polarization (IP) studies revealed that sulphide mineralization is "disseminated" in mafic volcanic formations and granodiorites, and is mostly associated with quartz veins and veins. This militates in favor of a model of "hydrothermal" type mineralization with structural control.

Keywords: Magnetic anomaly, IP anomaly, Birimian, Gouméré