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## **Contribution of Remote Sensing Radar to analyse fracturing and identify new drilling targets from Oumé license-Côte d'Ivoire**

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Oumé license (PR105) is located in Central West Côte d' Ivoire (West Africa) on the Birimian greenstone belt of Fetekro. In this license, the gold deposit Bonikro was highlighted by survey on soil geochemical anomaly. Around the deposit, within a radius of about 15 km, there is a dozen of targets highlighted by ground geophysics and geochemistry. These targets are currently tested by drilling in order to find any additional resources. That is why this work is find strategic; location of new targets. To achieve this goal, we used another approach which is airborne satellite images; SOR combined with magnetic, gravimetric and radiometric. This study aims also to contribute to the structural knowledge of Oumé -Hiré gold district.

The first step was to use directional filters of Sobel (NS, EW, NE-SW and NW-SE) and Yesou's gradient filter that allowed the image enhancement so the trace of lineaments on screen is used for realizing detailed map of fracturation.

The second step was to establish a relationship between the lineament map and the geochemical signature map. This correlation allowed us to identified four (4) potential targets in the Oumé license.

