**Characterization of weathering processes of the giant copper deposit of Tizert (Igherm inlier, Anti-Atlas, Morocco)**

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The giant Tizert copper deposit is considered as the largest copper resource in the western part of the Anti-Atlas (Morocco). This site is characterized by Cu mineralization mainly carried by malachite, chalcocite and covellite. The host rocks are mainly carbonates (Formation of Tamjout Dolomite) and sandstones/siltstones (Basal Series) of the Ediacaran/Cambrian boundary. The genesis of this deposit is most likely related to episodes of uplift (last event since 30 Ma), which triggered the exhumation of primary mineralization (chalcopyrite, pyrite, galena, bornite I), generating their oxidation and the precipitation of secondary sulfides, carbonates and Fe-oxihydroxides. The Tizert supergene deposit mainly consists in i) patchwork of laterite rich in Fe-oxihydroxides, ii) saprolite (« green oxide zone ») rich in malachite, and iii) the cementation zone containing secondary sulfides (covellite, chalcocite and bornite II). In addition to copper, Ag enrichment is also observed in weathered rocks. Iron oxihydroxides also have higher contents of Zn, As, Cu and Pb. However, these secondary enrichments are quite low compared to Cu and therefore the Tizert deposit can be considered as homogeneous.