**Technological behaviors and territory exploitation during the MSA in Eastern Morocco: Sahb el Ghar 1 & 2 open air-sites in chert procurement areas**

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The Middle Stone Age (MSA) in Eastern Morocco is well-known by reference archeological sites as Rhafas, Ifri N’Ammar and Taforalt caves. However, MSA open-air settlement dynamics are practically unknown, due to the lack of systematic excavations and recording of archaeological sites, and only attested by disperse and unstratified lithic scatters or isolated pieces.

During the systematic surveys performed in the Aïn Beni Mathar area in 2017 several stratified localities were discovered. They are located on slopes and exposed surfaces of riverbanks and are associated with a primary chert source area (the Swiwina plain). Two of them, Sahb el Ghar 1 & 2 (SBG1 & SBG2) were excavated during 2018 and 2019 in a surface of 9m2 each one.

In this paper we present the preliminary results of the technological and raw material characterization of the lithic assemblages (ca. 4,200 remains) recovered from the three archaeological levels identified at the SBG 1 & 2 stratified open-air sites. The dominant raw material used is chert (Neogene chalcedony >98% of the total assemblage) with a potential exploitation area of ca. 5-10km2. These sites present homogeneous flake assemblages (including all the stages of the reduction sequence). The knapping strategies are mainly Levallois (recurrent centripetal and preferential flake modalities) and discoidal. Opportunistic knapping strategies and laminar technology have been also documented. Denticulates and scrapers are abundant within the retouched tools assemblages

The first data about these stratified open-air sites in the region will allow us to compare the technological behaviors, the human occupation patterns and the territorial exploitation dynamics between caves and open-air sites. Were *Homo sapiens* living in open-air areas as well as in caves? or Are these locations related to specific activities within their subsistence strategies such as lithic raw materials procurement? Are these occupations complementary to those in caves in the frame of *Homo sapiens* logistic and residential mobility?

In sum, this work will provide a broader perspective of the MSA technological behaviors and the settlement pattern dynamics in Eastern Morocco during the Late Pleistocene.

**Key words:**

Lithic technology, raw materials, open air-sites, territory exploitation, Middle Stone Age, Eastern Morocco