## Ethnoarchaeological adaptation models of Saharan pastoralism to Holocene climatic catastrophes

Latini Tiziano\*†1,2

 $^1$ Sapienza University of Rome, Piazzale Aldo Moro 5, 00185, Rome, Italy – Italy  $^2$ MiC - Ministry of Culture, Via del Collegio Romano 27, 00186, Rome, Italy – Italy

## Abstract

Climate changes and consequent catastrophes occurred during Holocene in the central Sahara. Saharan human responses mainly depend on water accessibility. Rainfall affects this availability. Central Sahara is a significant context for studying adaptation patterns to ecological conditions and Tuaregs are contemporary witnesses of climate disasters. Their adaptive reactions to catastrophes outline a behavioural framework for past climate crises as well as archaeological sites are privileged archives of dialectical interaction between groups and landscape. Ethnoarchaeological models permit reconstructing human responses to rain phenomenon during catastrophic climate processes. A comparison between the rainfall proxy, Ethnohistory, and Tuareg historical memory allows identifying three catastrophic moments related to water accessibility: Dry Event, Dry Phase, and Dry Period. Holocene climatic catastrophes and Saharan ecology are suitable for investigating adaptations or collapses and Three Dry Moments general model could help to understand Saharan Pastoralism responses to climate changes.

**Keywords:** Tuareg, Climate change, Drought, Holocene, Sahara, Water, Catastrophe, Rainfall, Ethnoarchaeology.

<sup>\*</sup>Speaker

<sup>&</sup>lt;sup>†</sup>Corresponding author: tiziano.latini@uniroma1.it