## **Session: #1126**

## **Theme & Session Format**

#### Theme:

7. Archaeology of Sustainability through World Crises, Climate Change and War Session format:

Regular session

### **Title & Content**

#### Title:

Prehistoric Tectonics: long-term and short-term impacts in human evolution (during the Holocene)

#### **Content:**

The reconstruction of human-environmental dynamics for determining prehistoric mobility and occupation patterns has developed into one major research field during recent years. Sophisticated theoretical-methodological approaches and increasing geoarchaeological data from different regions and periods describe human dispersal routes, adoptions of specific strategies, and shifts in site occupation in association with paleo-climatological and environmental proxies. Another factor that has significantly impacted our ancient landscapes is tectonic activity, with its associated geological processes, such as volcanism and earthquakes. Plate tectonics have been regarded as drivers of early human evolution (as path makers) and as reasons for both the collapse of the Roman Empire (Vesuvius/Pompeii) and major changes in the modern age (Lisbon, 1755). Tectonic processes directly affect topography and associated microclimatic conditions, hydrology, pedogenesis, fauna, and vegetation. Such changes have opened new worlds, like the Black Sea, but they have also buried old ones, like the Nile Valley and Mediterranean shorelines, and can create new topographic barriers. Tectonic activity creates challenges for human groups. The session, "Prehistoric Tectonics," will evaluate tectonic processes in relation to signs of changes in human development during the Holocene. Subjects of our discussion involve short-term events, such as earthquakes, volcanic eruptions, and their associated tsunamis, as well as long-term tectonic processes that transformed the Pleistocene and Holocene worlds. Indeed, we can describe rather recent transformational processes that have likely caused prominent negative evidence in our archaeological maps, including the absence of Early-Middle Holocene occupation in vast regions between the Iranian plateau and Central Asia and the existence of settlement gaps in Western Europe. A comprehensive and comparative synopsis of prominent cases of tectonic-human dynamics will be one goal of this session. Presentations will therefore discuss tectonic activity in relation to changing dispersal routes and site patterns, to demonstrate how this changed humankind's former well-known world(s).

### **Keywords:**

paleoenvironment, tectonic, human evolution, landscape transformation, holocene Session associated with MERC:

no

Session associated with CIfA:

no

Session associated with SAfA:

nc

**Session associated with CAA:** 

no

**Session associated with DGUF:** 

no

Session associated with other:

# **Organisers**

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