

Session 7

Tuesday 18th of May
10 am

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Landscape spatial occupation patterns and resource availability in Nuragic Sardinia (Italy): a glimpse of Bronze Age land use strategies.

Keywords: Bronze Age, digital geoarchaeology, natural resources, settlement patterns

The choices made by populations when settling inside a territory typically follow precise rules dictated by the socio-political needs of the communities, but also by the physical features and resources present in the landscape itself. Survival strategies control much of this decision process. The passage to the Bronze Age from Neolithic cultures has allowed the transition to new land use strategies. The expansion of metallurgy, the development of new farming tools and techniques and the consequent population increase sparked the transition to new ways of occupying the landscape, which in turn required adapting settlement choices to the shift in importance of different resources. The recent developments in digital geoarchaeology allow us to explore the link between settlement networks and physical variables with an improved approach and provide precise information on the subject.

Among Bronze Age cultures, the insular nature of Sardinia (Italy) allowed Nuragic communities to settle the landscape and develop land management strategies without the influence or interference of external populations. We investigated the southwestern portion of the island with an interdisciplinary approach that combines geosciences and spatial statistics tools in order to relate the distribution of Nuragic towers to the main geological and geomorphological features (topographic parameters, morpho-lithological units, soil pH and permeability, ore deposits, water network). Location choices for towers seem to indicate a preference not only for high topographic positions in low-elevation areas, but also for stable geological substrates and low slopes to improve their structural support. The association with water, permeable soils and ore deposits is also visible, implying a great attention of these populations to a careful management of the available resources. Tower concentrations also show a preference for areas easily reachable from coastal sites and the avoidance of rough terrain.

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