



Einladung zum Gastvortrag

Dienstag, 08. Juli 2014, 18 Uhr c.t.

Schloss Hohentübingen

Institut für Klassische Archäologie, Raum 165

„Mapping patterns of long-term settlement in Northern Mesopotamia at a large scale“

Prof. Bjoern Menze
Technische Universität München

The landscapes of the Near East show both the first settlements and the longest trajectories of settlement systems. Mounding is a characteristic property of these settlement sites, resulting from millennia of continuing settlement activity at distinguished places. So far, however, this defining feature of ancient settlements has not received much attention, or even been the subject of systematic evaluation. We propose a remote sensing approach for comprehensively mapping the pattern of human settlement at large scale and establish the largest archaeological record for a landscape in Mesopotamia, mapping about 14,000 settlement sites—spanning eight millennia—at 15-m resolution in a 23,000-km² area in northeastern Syria. To map both low- and high-mounded places—the latter of which are often referred to as “tells”—we develop a strategy for detecting anthrosols in time series of multispectral satellite images and measure the volume of settlement sites in a digital elevation model.

Using this volume as a proxy to continued occupation, we find a dependency of the long-term attractiveness of a site on local water availability, but also a strong relation to the relevance within a basin-wide exchange network that we can infer from our record and third millennium B.C. intersite routes visible on the ground until recent times. We believe it is possible to establish a nearly comprehensive map of human settlements in the fluvial plains of northern Mesopotamia and beyond, and site volume may be a key quantity to uncover long-term trends in human settlement activity from such a record.

