

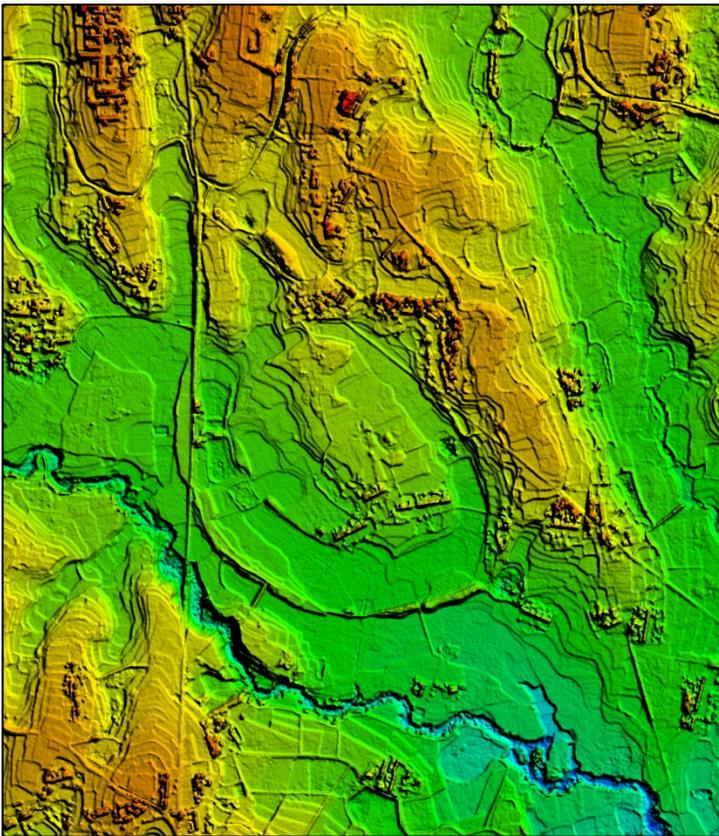


EARLY CHINA SEMINAR
LECTURE SERIES

Water Management in Prehistoric China: A Case Study of the Jiangnan Plain (6000-4000 BP)

Jianguo Liu · Chinese Academy of Social Sciences

Presentation in English; Q&A in English and Chinese



Digital surface model of Chenghe site

December 11, 2020

8:00-10:00pm EST

Seminar Co-Chairs:

Jue Guo, Barnard College, Columbia University

Glenda Chao, Ursinus College

The Jiangnan Plain is located in the middle reach of the Yangtze River in present Hubei Province, China. From 6000 to 4000 BP, communities on the Jiangnan Plain continuously developed and evolved. They came to be known as the Qujialing and Shijiahe cultures in standard Chinese archaeological literature and are commonly considered to have played an important role in the origin and development of Chinese civilization. In this study, I employ satellite remote sensing, low-altitude photography using unmanned aerial vehicle (UAV), 3D reconstruction, and GIS spatial analysis, in combination with results from field archaeological investigations and excavations, to study a cluster of important prehistoric settlements on the Jiangnan Plain. Focusing on man-land relationships, this study hopes to reveal the prehistoric practices of water control and conservation on the Jiangnan Plain. Due to the great variations of precipitation in different seasonal and yearly cycles, the distribution of water resources in the natural environment is extremely uneven on the Jiangnan Plain. In order to be able to live and prosper in such environment, the prehistoric communities must have developed a reasonable amount of knowledge and technologies to transform, control, and utilize water resources that maximized benefits and eliminated disadvantages as much as possible. Prehistoric water management was an important part in the development of agriculture in this region. It was also vital to settlement safety and subsistent stability, which were strong driving forces for sustained population growth, settlement development, social stratification, and continuous evolvment of human civilization.