

FROM GEOMORPHOMETRY TO AGRIMORPHOMETRY?

Ce.Sp.I.I. ACTIVITIES AND POTENTIAL COLLABORATIONS

Giulia Sofia

Chief Scientist

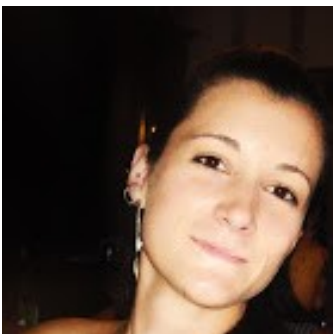
Ce.Sp.I.I. – Email: giulia.sofia@consorzioleb.it

In the context of climate change's profound impact on water management, the imperative of building resilience into agricultural systems over the long term becomes increasingly apparent. Collaborative efforts between local authorities, agricultural and water enterprises, and the research community are essential for making well-informed decisions regarding water management strategies, investments, and mitigating climate-related risks.

Recent technological breakthroughs have enabled the scientific community to explore landscapes at a scale previously unimaginable. It's crucial to showcase how such advancements can bolster the efforts of water managers, accounting for both present conditions and anticipating future climatic shifts alongside concurrent land degradation issues.

In this brief seminar, we aim to highlight several field activities and modeling endeavors, including examples of LiDAR mapping of anthropogenic landscapes, Structure from Motion-Multi View Stereo (SfM-MVS) 3D soil modeling, and climate studies, showcasing how these efforts contribute to advancing our understanding and management of water resources in a changing world.

Ce.Sp.I.I. is a laboratory dedicated to research in water, agronomy, and spatial analysis, with a specific focus on the agri-food and environmental sectors, as well as broader water management concerns. Established as a nexus between local communities, governmental bodies, and academia, its primary goal is to foster dialogue and collaboration. It targets farmers, sector technicians, policymakers, public administrations, reclamation consortia, students, and all stakeholders in the water supply chain; it serves as a forefront platform dedicated to advancing our understanding of agricultural practices.



Dr. Sofia received a B.S. and M.S. in Forestry Science, and Ph.D. (2012) in Water Resources, Soil Conservation & Watershed Management from the University of Padova (Italy). Her area of research is geomorphology and digital terrain analysis, with a special interest in feature extraction from high-resolution topography. Her recent research interest concerns anthropogenic landscapes, incorporating the related human-induced processes.

Ore 11:30 – mercoledì 8 maggio – CNR IRPI – v. Madonna Alta, 126