

PROJECT: MeDiTwin: Mediterranean Digital Twin Network for Understanding Climate Extremes

SCIENTIFIC DIRECTOR: I. Papoutsis

DURATION (MONTHS): 30 months

DEPARTMENT: Department of Topography

FINANCIER: Horizon Europe

DESCRIPTION: MeDiTwin harnesses the global scientific leadership of advanced partners in AI for Earth Observation, emphasizing physics-guided ML, explainable AI, and causality. It prioritizes an extensive capacity-building agenda, aiming to enhance research capacity and elevate the international standing of NTUA's School of Surveying Engineering and Geoinformatics. This collaboration centers on the development and utilization of the proposed Mediterranean Digital Twin (MDT), a research asset that promises to deepen our understanding of Earth's processes, especially in the context of the climate emergency. Our commitment is demonstrated through an innovative research project focused on modeling climate extremes and impacts in the Mediterranean, addressing crucial global challenges related to climate change.