

TERRANOVA from the last and current Interglacial periods into the Anthropocene: an Atlas database drawing lessons from ancient land use for future European landscape management

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TERRANOVA is a Marie Skłodowska-Curie Innovative Training Networks (H2020-MSCA-ITN) project (2019-2023) training 15 PhD students in a new learning initiative between Humanities and Science: Mapping past environments and energy regimes, rethinking human-environment interaction and designing land management tools for policy. TERRANOVA will produce an unprecedented atlas with layers of reconstructed and modelled land-use and vegetation dynamics, climate change and mega-fauna history in Europe from the Eemian (Last Interglacial) and the Holocene from the start up until the present day. This paper describes the intermediate results of two years of research into Atlas building. Communication and data exchange, as well as the process of atlas generation workflow, have been undertaken, including examples of datasets from deep history, ancient landscapes, energy regimes and climate scenarios. The atlas database implements state-of-the-art standards for increasing the interoperability of spatiotemporal datasets. It is currently formed by four main data types: Archaeological data, Climate data, Land cover data, and Megafauna (i.e. large mammals) distribution. This paper explores the TERRANOVA research and concludes with listing the next steps to stream the Terranova atlas as a tool for communicating the European history of environmental change, including support for future landscape management policies.