Gregoriano cadastre (1818-35) from old maps to a GIS of historical landscape data

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Our analysis covered specifically an area located along the “internal Marche ridge” of the Apennines, in the province of Ancona (Marche Region, Italy). The cartographical working-out for our historical analysis has been conduct drawing up maps originating from the nineteenth century Gregoriano Cadastre (Catasto Gregoriano) maps preserved in the State Archive of Rome, which have been reproduced in digital format, georeferenced and vectorialized. With the creation of a database, it has been possible to add to the maps the information gathered from the property registers concerning crop production and socioeconomic variables, in order to set up a Geographical Information System (G.I.S.). The combination of the database with the digitalized maps has allowed to create an univocal relation between each parcel and the related historical data, obtaining an information system which integrally and completely evidences the original cadastre data as a final result. It was also possible to create a three-dimensional model of the historical landscapes which permits to visualize the cultural diversification of that historical period. The integration in Territorial Information System (S.I.T.) of historical information from Gregoriano Cadastre, of socio-economic analyses concerning business changes and in parallel the study of the transformations of territorial framework, showed to be a very important instrument for the area planning, allowing to identify specific planning approaches not only for urban settlement but also for restoration of variety and complexity of agricultural landscape. The work opens further research in various directions, identifying some pilot areas which test new managerial models, foreseeing simulation of management impacts both on business profitability and landscape configuration. The future development of the project is also the upgrade and evolution of the database, followed by the acquisition of data related to the following historical periods. It’ll also allow to improve the three-dimensional model (rendering) of the landscape described in the Gregoriano Cadastre.