

Geovisualization and Remote Sensing: new perspectives for cultural heritage

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Remote sensing, nowadays, is one of the main technology used in the field of cultural heritage, thanks to its non-invasiveness in a such a delicate subject of study[1]. Thanks to the improvement and creation of new sensors, it is used in many study cases that varies from conservation analysis in monuments[2], frescoes[3], rose-windows[4], wall paintings [5], to archaeological site detection and risk protection[6].

Together with the development of new sensors and new application, many data processing tools and methods have been developed for pattern extraction. Between these, there are some new studies that uses Geovisualization to integrate analysis performed over different types of remote sensed data and to extract useful pattern for cultural heritage applications [3],[7].

Geovisualization is a discipline that exploits the great computer performances available today with the field of geographic information analysis together with the human ability to find visual patterns.

In this contribution we provide an application of geovisualization to two case studies: one is related to an archaological site in Urubamba valley in Peru[8], the second one is in Pompeii. In the first case the Geovisualization based approach allowed to extract features and patterns referable to archaeological proxy indicators, probably linked to the presence of buried remains. In the second case the same provide features related to decay pathologies, facilitating their interpretation for the diagnosis.

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