



**The 7th Digital Belt and Road Conference**

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# **Abstract Brochure**



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**O09-03: A meta-analysis of Earth Observation and Geomatics for cultural heritage monitoring and documentation**

*AGAPIOU Athos (Cyprus University of Technology, Cyprus)*

**Abstract:** This presentation summarises the findings of a recent meta-analysis of the scientific literature regarding heritage documentation and monitoring using geoinformation approaches and sensors. The analysis was based on scientific literature from published documents. Targeted queries were implemented in the Scopus database to extract the relevant information. Then filtering was applied to the results to limit the analysis of the thematic sub-domains used for heritage documentation and monitoring. These domains include close-range and underwater photogrammetry, Terrestrial Laser Scanner, Unmanned Aerial Vehicles platforms, and satellite observations. In total more than 12,000 documents were further elaborated.

The overall findings are summarized and presented here, providing further insights into the domain. The analysis also identified active institutions in this domain, countries and keywords. The study was finally focused on identifying trends in literature.

Based on the outcomes, it is evident that the scientific landscape related to geomatic technologies for heritage is not static but rather dynamic. Geomatic technologies have been widely populated for cultural heritage applications, while the scientific field is quite broad: from underwater to close range to low altitude and satellite observations. At the same time, the scientific landscape is quite fragmented because of the different sub-domains and expertise needed.

**Key Words:** meta-analysis, literature review, heritage documentation, heritage monitoring, geomatic