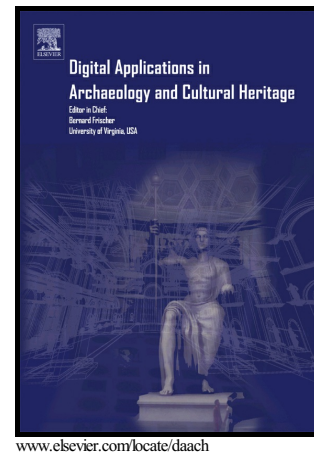


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COMBINING GEOMETRICAL AND RADIOMETRICAL FEATURES IN THE EVALUATION OF ROCK ART PAINTINGS

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Abstract

Rock art painting is one of the most ancient manifestation of Cultural Heritage. Its fragility demands the use of non-destructive methods for the evaluation of engraved or painted signs contained in caves or shelters. However, most of existing approaches involve the exploitation of radiometric information coming from digital images captured by RGB cameras, showing several drawbacks such as: (i) lack of scale; (ii) lack of flexibility and (iii) high user interaction, among others. In order to provide added value to these approaches, this paper describes a methodology able to combine radiometrical and geometrical features captured by different geomatic sensors (multispectral cameras and terrestrial laser scanner), allowing not only the extraction of the painted signs presented, but also evaluating different aspects of great importance in the understanding of rock art (e.g. the presence of topographic accidents that could influence on the painted signs traces or its visibility under different illumination conditions).

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