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Radiocarbon Dating of Mortars: contamination effects and sample characterisation. The case-study of Andalusian medieval castles (Jaén, Spain)

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Abstract

Since 1960s, mortars have been exploited as a potential material for radiocarbon dating and, despite the fact that this methodology appears very simple in its principles, some measured radiocarbon ages were definitely different from the expected historic ages.

The paper concerns to the characterisation of mortars from three Andalusian castles (Spain) by means of different mineralogical techniques in order to control “contamination effect” that could affect age estimation. Several mixtures of binders and aggregates composed the archaeological mortars; lime-based or gypsum-based binders were distinguished whereas the aggregates varied

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