

## Optimizing Protection of Medieval Glass Mosaic

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**Abstract :** The paper deals with experimental estimation of future environmental load on medieval mosaic of Last Judgement on entrance to St. Vitus cathedral on Prague castle. The mosaic suffers from seasonal changes of weather pattern, as well as rains, their acidity, deposition of dust and sooth particles from polluted air and also from freeze-thaw cycles. These phenomena influence state of the mosaic. The mosaic elements, tesserae are mostly made from glass prone to weathering. To estimate future procedure of the best maintenance, relation between various weather scenarios and their effect on the mosaic was investigated. At the same time local method for evaluation of protective coating was developed. Together both methods will contribute to better care for the mosaic and also visitors aesthetical experience.

**Keywords :** environmental load, cultural heritage, glass mosaic, protection

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