

Special Issue

Climate Change Challenges for Heritage Architecture

Message from the Guest Editors

Climate change is one of the most critical global challenges of our time and could lead, among other things, to the accelerated degradation or loss of cultural heritage. In order to appropriately manage historic buildings, it is important to determine how future changes in the climate will affect the outdoor and, consequently, indoor conditions of built heritage. An evaluation of the potential risks and effects that climate variations exert on heritage buildings over time is pivotal to the development of efficient and sustainable adaptation and mitigation strategies that properly preserve such heritage for future generations. This Special Issue aims to collect recent studies concerning the impact of climate change on the conservation of historic buildings. The focus is not only on the analysis of possible decay effects, but also on methodologies, predictive models and tailored adaptive solutions that aim to mitigate the risks. Therefore, this Special Issue aims to collect scientific contributions that focus on the effect of climate change on heritage buildings; it therefore welcomes studies performed using different approaches/methodologies and case study applications.

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2025)



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Impact Factor 2.3
CiteScore 5.4



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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

Dr. Daniele Contini

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