



Climate Change Impacts to Coastal Hydrodynamics and Vulnerability Assessment

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Message from the Guest Editors

Dear Colleagues,

Coastal areas are highly vulnerable systems threatened by marine flooding and erosion, and the related impacts are expected to increase in the future in view of climate change. Moreover, the vulnerability connected to coastal hazards needs to be continuously investigated to mitigate the risks to human health, economic activities, cultural heritage ecosystem services and the environment.

This Special Issue aims to highlight the recent progress and helps to define the future directions of climate change impacts on coastal processes and vulnerability. Potential topics include, but are not limited, to the following:

1. Statistical methods of the main marine forcings (e.g., wind waves, tides, storm surges) considering the future climate.
2. The analysis of coastal hydrodynamics and nearshore processes (e.g., wave breaking, coastal sediment transport).
3. The modeling of coastal impacts such as dune overwash and breaching, as well as wave overtopping.
4. Coastal vulnerability studies, including the assessment of hazard and risk indexes.
5. Short- and long-term Integrated Coastal Zone Management (e.g., decision-making strategies).
6. The analysis of case studies.





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