

Special Issue

Movable Coastal Structures and Flood Protection

Message from the Guest Editor

The flood protection of many low-lying deltas critically hinges on coastal structures such as storm surge barriers, discharge sluices and pumping stations. With sea level rise and climate change, this dependence will further grow as extreme hydraulic loads will increase in frequency and severity. In the case of operable structures, it is not always the highest extremes that threaten their functioning the most. The combination of a failed operation with a mild extreme or compound event also has the potential to cause hazardous floods. For example, in the case of a severe storm surge that necessitates the closure of a storm surge barrier, the same storm may also cause the mechanical drive system or power supply to malfunction. In the assessment and design of coastal flood protection, it is of utmost importance to also consider compound events and their interaction with operational and structural reliability. Accordingly, this Special Issue seeks to collate a set of studies that help to better understand how compound events may lead to the failure of operable coastal flood protection, as well as those that develop methods to assess associated flood risk.

Guest Editor

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Message from the Editor-in-Chief

Journal of Marine Science and Engineering (JMSE, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

Editor-in-Chief

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