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NUMERICAL MODELING USAGE IN CLIMATE CHANGE AND SOCIAL IMPACT ASSESSMENT STUDIES: EXAMPLE IN THE ARIAKE SEA AND THE RIVER BASIN

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ABSTRACT

Climate change has long been recognized as a global issue. For future projections, integrated modelling of climate, runoff, river flow, and coastal ocean physics, water quality, and ecosystems is essential. Meanwhile, the outflow of plastic debris, disaster waste, and driftwood generated during floods into marine areas has also become a significant problem, and integrated models are useful for predicting these as well.

This minisymposium aims to introduce cases of integrating these numerical models to comprehensively analyse from river basins to coastal areas and to discuss the challenges involved in such integration.

Regarding a series of research cases targeting the Ariake Sea in Japan and its river basins, I would like to deepen comprehensive understanding by presenting mathematical model studies from upstream to downstream.

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