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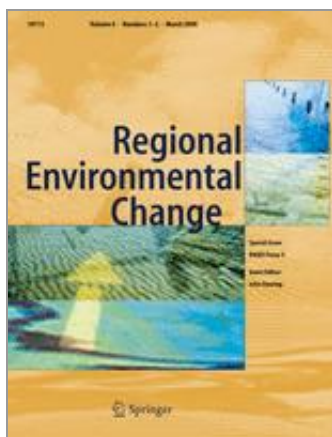
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Regional Environmental Change
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Towards a spatially explicit and quantitative vulnerability assessment of environmental change in Europe

Abstract

Over the next century, society will increasingly be confronted with the impacts of global change (e.g. pollution, land use changes, and climate change). Multiple scenarios provide us with a range of possible changes in socio-economic trends, land uses and climate (i.e. exposure) and allow us to assess the response of ecosystems and changes in the services they provide (i.e. potential impacts). Since vulnerability to global change is less when society is able to adapt, it is important to provide decision makers with tools that will allow them to assess and compare the vulnerability of different sectors and regions to global change, taking into account exposure and sensitivity, as well as adaptive capacity. This paper presents a method that allows quantitative spatial analyses of the vulnerability of the human-environment system on a European scale. It is a first step towards providing stakeholders and policy makers with a spatially explicit portfolio of comparable projections of ecosystem services, providing a basis for discussion on the sustainable management of Europe's natural resources.



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