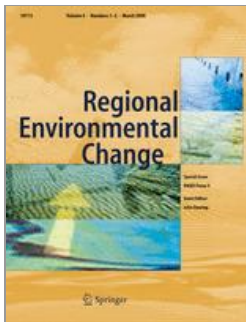


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## A spatially explicit and quantitative vulnerability assessment of ecosystem service change in Europe

### Abstract

Environmental change alters ecosystem functioning and may put the provision of services to human at risk. This paper presents a spatially explicit and quantitative assessment of the corresponding vulnerability for Europe, using a new framework designed to answer multidisciplinary policy relevant questions about the vulnerability of the human-environment system to global change. Scenarios were constructed for a range of possible changes in socio-economic trends, land uses and climate. These scenarios were used as inputs in a range of ecosystem models in order to assess the response of ecosystem function as well as the changes in the services they provide. The framework was used to relate the impacts of changing ecosystem service provision for four sectors in relation to each other, and to combine them with a simple, but generic index for societal adaptive capacity. By allowing analysis of different sectors, regions and development pathways, the vulnerability assessment provides a basis for discussion between stakeholders and policymakers about sustainable management of Europe's natural resources.



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2. Methods
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## Supplementary Material (1)

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