



Working towards integrated environmental models of everywhere: uncertainty, data, and modelling as a learning process.

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The implications of developing integrated environmental models of everywhere are discussed. Such models are demanded by the requirements, for example, of implementing the Water Framework Directive in Europe, but are constrained by the limitations of current understanding and data availability. The possibility of such models raises questions about system design requirements to allow modelling as a learning and data assimilation process in the representation of places. It is suggested that places might be treated as active objects in such a system. Uncertainty in model predictions also poses questions about the value of different types of data in characterising places and constraining predictive uncertainty, but also how best to present the pedigree of such uncertain predictions to users and decision makers.