



International Journal of Geographical Information Science

Special Issue on

Land Change Modelling: moving beyond projections

Call for papers

A special issue titled “Land Change Modelling: moving beyond projections” has been approved by the Editors and Publisher of the International Journal of GIS. **You are encouraged to submit relevant and high quality manuscripts for this special issue. See details below.**

The special issue will be guest-edited by Martin Paegelow (University of Toulouse II, France), María Teresa Camacho Olmedo (University of Granada, Spain), Jean-François Mas (UNAM, Mexico), Thomas Houet (GEODE – CNRS, France) and Robert Gilmore Pontius Jr. (Clark University, United States).

Creation of land change models requires a wide range of steps, from establishing a conceptual framework to choosing the computer language. All of these decisions have impacts on the simulation output. Modelling has been facilitated by the large availability of models in GIS software, which is sometimes insufficiently documented. Consequently the underlying assumptions are not always apparent to the users. A critical review of the literature shows that it is not easy to judge and to compare models. This special issue will provide insights concerning the assumptions, design, and use of land change models. For example, the assessment of a model’s application depends on many factors including: data quality, the model’s objectives, and its abilities to calculate the quantity of projected changes, to allocate those changes spatially, to integrate the probability of change at a given location, to use dynamic or static drivers, etc.

The objective of this special issue is to examine a wide range of land change simulations in order to clarify models’ assumptions, to allow conscious modelling choices, and to illustrate a variety of modelling solutions. This special issue will review existing modelling approaches and introduce new ones. In this framework, this special issue will focus on the essential components of land change modelling, especially concerning process stationarity, model validation, and model comparison. The papers will not focus on local implications of isolated case studies of land change projections.

We seek papers concerning land change modelling from applied perspectives concerning geography, ecology, planning, and related environmental studies, as well as from technical perspectives concerning process stationarity and model validation that are relevant to the above mentioned features. We are especially interested in special and new ways of conceptualizing, processing, and modelling land change.

Key words and topics for this special issue include, but are not limited to:

- Land change
- Modelling and Simulation objectives
- Prediction versus Projection versus Extrapolation
- Quantity versus Allocation
- Change potential
- Data quality
- Quantification of spatial and temporal instability in land transitions
- Diversity of land change modelling approaches
- Model validation and error analysis
- Model uncertainty
- Landscape pattern
- Stationarity
- Cross-case comparison
- Territorial accessibility
- Pixel-based versus object-orientated modelling
- Impact of categorical versus continuous models
- Implications for planning
- Transparency

A condition of acceptance will be that papers must pass the normal IJGIS double-blind review process. In addition, authors of conditionally accepted papers will be asked to link and cross-reference other papers from the special issue, and these links and cross-references will then be subject to a second review by the guest editors.

The special issue will be about 192 pages. Each paper will be about 20 journal pages. Please refer to the guide for authors of IJGIS journal to prepare this submission (<http://www.tandf.co.uk/journals/authors/tgisauth.asp>). IJGIS offers some free colour pages to all authors.

The deadline for submission of papers is May 31 2012.

When you wish to submit your special issue paper online to the International Journal of GIS <http://mc.manuscriptcentral.com/ijgis>, please choose 'Special Issue Paper' from the Manuscript Types field.

For more information please contact the special issue guest-editor Martin Paegelow, University of Toulouse II, France. Email: paegelow@univ-tlse2.fr

Please spread this call for papers