

Invitation to submit papers for the special issue in
The Danish Journal of Geography

Digital transdisciplinary in the land change science

- Integrating multiple types of digital data

Summary

The ongoing development of digital geo-referred data opens up new opportunities for interlinking different forms of contemporary and historical data in land change studies. This special issue focuses on the potential of the array of new digital data sources to advance the analysis of land use / land cover change.

Description

A key question within geography has been the analysis of land use / land cover change (LULCC) at different temporal and spatial scales. Studies of LULCC have traditionally been conducted on the basis of contemporary and historical geographical data e.g. maps and remote sensed data as well as statistics, field surveys and questionnaires. However, the ongoing development of digital data and the corresponding spatial turn in social science and the humanities opens up new opportunities for interlinking different forms of contemporary and historical data in LULCC studies. This development, which accelerated during the last decade, is characterized by the emergence of new data types as well as new platforms for accessing increasing magnitudes of spatially explicit data, directly related to LULCC processes. Datasets which were previously difficult to access or did not contain spatial references are now available as geo-referenced digital records. Examples include digital archival material, place-related narratives, land parcel information, planning documents, historical maps and aerial photographs. Taking into account the parallel, rapid growth of conventional datasets such as remote sensed data, register data and socioeconomic data, researchers are entering into a new epoch of big data and data intensive methods. In addition, the development of citizen science and Volunteered Geographic Information (VGI) provides opportunities to rapidly produce datasets in coalition with the public. Furthermore, the digital development in other fields such as digital humanities and Geohumanities makes it possible to communicate and exchange data over traditional disciplinary boundaries. Therefore, researchers need to put increased effort into locating, filtering, evaluating and synthesizing datasets, preferably based on precise information on their historical context, in order to expand the domain of data sources used without giving in to errors of interpretation.

These developments provide LULCC research with unprecedented access to data from multiple perspectives on the land use and land cover and create a potential for improved integration of cultural and natural factors in integrative data analysis. On the other hand however, the massive amount of different data available raises a number of challenges, regarding;

1. How to secure reliability and accountability when using data and data categories developed for different purposes and by different institutions at different time periods.
2. How to develop frameworks and research methodologies within LULCC studies bridging the traditional divide between natural science, social sciences and the humanities, i.e. the source paradigms of the datasets being used in increasingly synthetic analyses.
3. How to sample data and formulate theories based on subsets of data in an environment where it is becoming impossible to get an overview of all the data available.
4. How to use new data and digital platforms to communicate LULCC to policy makers and the general public.

This special issue focuses on the potential of the array of new data sources to advance the field of LULCC studies. We welcome papers with an integrative approach to the use of digital data in relation to analysis of LULCC, such as development of methods, presentation of empirical analysis or theory formulated on the basis of multiple data sources as well as integrative digital communication of such studies.

Instructions

- Deadline for submission: 1st of March 2018.
- For submission, please use the journals link on Taylor & Francis: <https://mc.manuscriptcentral.com/rdgs>
- Under *type*, please select special issue
- Please follow instructions to authors on <http://www.tandfonline.com/toc/rdgs20/current>
- Once your paper has been accepted, it is send to layout and final proofing.
- After the final proofing is accepted, your paper will be published online.
- The whole special issue will most likely be published in the 2019 spring edition of The Danish Journal of Geography

Kind regards from guest editors:

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