



Special Session Proposal

Night Light and Satellite Image Indicators of Regional Economic Activity

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Abstract

The rising availability of satellite photos and maps of night light as well as of day images of terrain from satellite or from earth bring new opportunities for regional science. Novel techniques of image processing and image data analysis enable getting new indicators of regional and local development. It applies to agriculture, city sprawl, urbanisation, regional inequalities, as well as to light pollution that impacts inhabitants and nature. This novel source of data, quicker and more detailed than official statistics or survey questionnaires can supplement and expand the existing regional research, in terms of diagnosis and policy setting.

The goal of this special session is to collect research papers on methodology and applications of night light analysis for regional science purposes. The special session welcomes papers that show how these data can be used for regional studies and regional policy. We invite papers comparing the regional and local diagnosis with the use of image data and public statistics data and how the regional policy can benefit from this new source of information.

Keywords and topics for this Special Session include, but are not limited to:

- Light night maps
- Satellite imagery
- Google Street View Photos / OpenStreetPhoto
- Regional diagnosis
- Measures of development
- Tracking of dynamics
- Local and regional policy
- Image data vs. public statistics data
- Image processing
- Image data analysis

Papers can be submitted to *Regional Science Policy & Practice*, special issue on *Night Light and Satellite Image Indicators of Regional Economic Activity*, which is scheduled for publication in 2022.