

Planning and Socioeconomic Applications



In 2009 Springer began issuing a series on Geotechnologies and the Environment, edited by Jay D. Gatrell and Ryan R. Jensen, both American university Geographic academics. The series intends to demonstrate how GIS, satellite imagery, GNSS and web-based services are applied by geographers and allied professionals to study real-world problems, with a major focus on human effects on the environment. Up to now four volumes have been released; vol. 1, edited by the series editors, covers planning and socioeconomic applications; vols. 2 and 3, both released in 2010, cover respectively urban hazard and disaster analysis (editors: Pamela S. Showalter and Yongmei Lu) and environmental management (editors: Nancy Hoalst-Pullen, Mark W. Patterson). The newly published (2011) Volume 4, edited by Juliana A. Maantay and Sara McLafferty, is devoted to geospatial analysis and environmental health.

I would like to focus here on Volume 1, which consists of thirteen papers written by 26 authors. This volume demonstrates how divergent are the problems geographers aim to tackle, covering a wide range of scales, from national to county level; the latter being the basic, geographical unit of government in the US. Vol. 1 also shows the indispensability of map data when studying economic developments, determining the suitability of regions for harvesting solar and wind energy, or such intangible issues as inequality.

One type of geo-data used concerns the boundaries of states, counties, three-digit zip codes or other administrative/aerial units to which socio-economic attribute data has been assigned. Also reported is the use of imagery from the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), ground sample distance 15m, used to calculate the Normalised Difference Vegetation Index (NDVI) with the help of Erdas Imagine to assess the relationship between risk and average income in urban areas. Presented are not only research case-studies using geo-data, but also discussions of the role of hyperspectral imagery in solving problems met by urban geographers. Most of the authors, 24 to be precise, are university academics in the US, and the vast majority of case-studies refer to this country. Just one paper originates from outside the US, written by authors attached to the University of Auckland, discussing ecosystems and urban planning in New Zealand. Another paper covers Japan, using core prefectures as aerial units. It is inevitable that a book compiled from a collection of papers will treat subjects twice over. For example, equations belonging to the Geographically Weighted Regression (GWR) given in Chapter 4 are repeated in Chapter 8. The book convincingly demonstrates the increasingly common deployment of GIS in municipality offices and other government settings, as well as in geography research institutions.

I would like to encourage the series editors and publisher to further expand the series.

Gatrell, J.D., Jensen, R.R. (Eds.) Planning and Socioeconomic Applications, 2009, X, 223 p, 84 illus., hardcover, ISBN: 978-1-4020-9641-9, Euro99,95.