



Anniversary
1990 - 2015



EHPS-Net Meeting Working Group 9 - GIS

From Small Area to Grid-based statistics: the integration of historical data and geospatial information

Valencia, 29 March 2016

IVIE

<http://www.ivie.es/en/>

(Instituto Valenciano de Investigaciones Económicas)

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(acceso por C/ Daniel Balaciart, 3 bajo)

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Scientific Summary

Max. 1000 words

Representing census data in a European population grid dataset has become one of the key elements within the European Statistical System. As a result of this interest Eurostat in cooperation with the European Forum for GeoStatistics (EFGS) launched at the beginning of 2010 the project GEOSTAT, to promote grid-based statistics and more generally to work towards the integration of statistical and geospatial information in a common information infrastructure for the EU. Its aim is to develop common guidelines for the collection and production of spatial- and grid-statistics within the European Statistical System. The creation of these grid systems allows the analysis through time of sociodemographic changes independently of regional, province, county or local boundaries transformations. From the point of view of the EHPS network, this new developments could make feasible the integration of historic economic and demographic information with historic and modern geographic information on a common geographical framework with contemporary grid-based statistics. The purpose of this integration is both to enable analysis and visualization. A specific problem in the integration is that the demographic data is individual level longitudinal data whereas the historic maps are only snapshots of the geographic conditions and the change of space within space is very fast and this could be overcome with these new developments. Therefore this workshop will join together scholars working on georeferenced sociodemographic historical data with scholars using grid-based systems and to develop tools for the use of these systems for the analysis of historical population data.

Main purpose

This leads us over to the main purpose of the workshop which is to discuss, compare and develop methods and standards for storage, integration, analyses and visualization of data with multiple spatio-temporal representations using GRID or other small geographical representation systems. These methods are important for a wide range of applications within social science, geography and epidemiology, and are particularly crucial to historical demography.

The first aim is referring to the integration of historic economic and demographic information with historic and modern geographic information. The purpose of this integration is both to enable analysis and visualisation. A specific problem in the integration is that the demographic data is individual level longitudinal data whereas the historic maps are only snapshots of the geographic conditions. In a second stage, a further methodological challenge is to integrate time-dependent context data on macro level with the individual level demographic and geographic data. This will permit analyses of the impact of common exposure, bound by geography, on individual outcomes.

A second aim is the visualisation of demographic and geographic data, especially concerning the problem of their different time representations. This also needs to be discussed from a technological perspective and solutions and methodological choices on how good graphic presentations can be made with the emerging web standards must be compared.

Related to this issue is also the standardisation of storage and distribution of historic demographic information. There has been substantial work and progress internationally during the last years. One mission of the workshop is thus to contribute to the standardization work on integration and distribution of geographic data and historic demographic information.

Abstract

Representing census data in a European population grid dataset has become one of the key elements within the European Statistical System. As a result of this interest Eurostat in cooperation with the European Forum for GeoStatistics (EFGS) launched at the beginning of 2010 the project GEOSTAT, to promote grid-based statistics and more generally to work towards the integration of statistical and geospatial information in a common information infrastructure for the EU. Its aim is to develop common guidelines for the collection and production of spatial- and grid-statistics within the European Statistical System. The creation of these grid systems allows the analysis through time of sociodemographic changes independently of regional, province, county or local boundaries transformations

Schedule

Tuesday, 29 March 2016

- 11.30 – 12.00 *Welcoming coffee*
- 12.00 – 12.10 Welcome by Diego Ramiro, chair WP9 EHPS-Net
- 12.10 – 13.00 Official grid-based Statistics, a new approach to regional Statistics in Andalusia. Iria Enrique (IECA).
- 13.00 – 13.30 Population grids: Bottom-up versus Top-down approaches. Prof. Francisco Goerlich (IVIE)
- 13.30 – 14.30 *Lunch Coffee*
- 14.30 – 15.00 Contextualising behaviour in space and time with gridded and polygonal data – The issue of scale. Dr. Sebastian Kluesner. Max Planck Demographic Research Center
- 15.00 – 15.30 An Atlas of Victorian Fertility Decline: the challenges of mapping demographic change in the 19th century. Dr. Alice Reid. Univ. Cambridge
- 15.30 – 16.00 The Spatial Distribution of childhood infectious diseases in Madrid in Early XXth Century. Dr. Diego Ramiro and Yolanda Casado.

List of proposed speakers/participants

University of Cambridge

Dr. Alice Reid

An Atlas of Victorian Fertility Decline: the challenges of mapping demographic change in the 19th century

Spain:

Spanish National Research Council, Madrid

Dr. Diego Ramiro, Head of Department of Population

Yolanda Casado

The Spatial Distribution of childhood infectious diseases in Madrid in Early XXth Century

Institute of Statistics and Cartography of Andalusia

Iria Enrique

Official grid-based Statistics, a new approach to regional Statistics in Andalusia

IVIE

Prof. Francisco Goerlich

Population grids: Bottom-up versus Top-down approaches

Germany:

Max Planck Demographic Research Center

Dr. Sebastian Kluesner.

Contextualising behaviour in space and time with gridded and polygonal data – The issue of scale

Other participants:

Via Skype:

Canada

Human Environments Analysis Laboratory, Dept. of Geography, University of Western Ontario, Canada

Don Lafreniere,

Vanier Canada Scholar

Adjunct Lecturer & Research Associate