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JGIS > Vol.4 No.1, January 2012

OPEN ACCESS

Using a GIS Tool to Map the Spatial Distribution of Population for 2010 in the State of Mexico, Mexico

PDF (Size: 3954KB) PP. 1-11 DOI: 10.4236/jgis.2012.41001

Author(s)

Roberto Franco-Plata, L. Ricardo Manzano-Solis, Miguel A. Gómez-Albores, José I. Juan-Pérez, Noel B. Pineda-Jaimes, Araceli Martínez-Carrillo

ABSTRACT

The present document describes the experience of using a Geography Information System (GIS) tool to map the spatial distribution of the population of the State of Mexico, Mexico, for 2010. Prior to the development of the experience, different projects, tools and products, which offered cartographic representations of the population, were presented, selecting one that was developed to function in Idrisi Taiga GIS. Likewise, the GIS tool and the process followed to apply it to a case study in the State of Mexico are described. The result is a raster image that shows the distribution of the population on the analyzed state, offering the possibility to identify the zones where the population concentrates and disperses and to produce an opinion from a geographic point of view on what the origin of these distribution patterns is. Among the conclusions from the analysis of results, distinguishable are the applications that the obtained image can have; for instance, the population can be estimated by basins or risk zones by only adding the values of the cells inside these zones. It is also concluded that the degree of detail expressed by the spatial distribution image of the population will depend on several factors, among them the scale and resolution of the input information and the resolution fixed for the output information.

KEYWORDS

Spatial Distribution of the Population; Idrisi Taiga; GIS Tool; State of Mexico

Cite this paper

R. Franco-Plata, L. Manzano-Solis, M. Gómez-Albores, J. Juan-Pérez, N. Pineda-Jaimes and A. Martínez-Carrillo, "Using a GIS Tool to Map the Spatial Distribution of Population for 2010 in the State of Mexico, Mexico," *Journal of Geographic Information System*, Vol. 4 No. 1, 2012, pp. 1-11. doi: 10.4236/jgis.2012.41001.

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