



ABSTRACT

Brazilian Statistical Grid – a hybrid approach

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There is a growing interest in the generation of statistical grids due to its stability through time and ease of spatial integration with different data sources. This paper introduces the model proposed to create a statistical grid to Brazil using data from Population Census 2010. The proposed model is hybrid, as it mixes bottom-up or aggregation approach, and top-down or disaggregation approach. This joint methodology is a novelty, and it is suitable to the reality of many countries, whose data's specificity makes necessary the adapting of classical methods. Two regions in the state of Para have been selected as study area to evaluate several disaggregation methods in order to find the best one to mix to aggregation method, regarding the availability of ancillary data, the practicality of implementation and the local data. As the results of both the aggregation and disaggregation methods are available to the study region, it is possible to evaluate the accuracy of the results obtained using the disaggregation methods related to the location and count of the population. The evaluation suggests that each set of conditions leads us to choose a different method based on the purposes we desire to reach. It also suggests that metadata is a very important tool to guide users on data accuracy and methodology details.