

# Abstract

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### **Methodologies to Improve Global Population Estimates in Urban and Rural Areas**

**Track:** Modeling

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This paper discusses some of the technical issues involved in the development of a georeferenced population database, including urban extents, currently being developed by CIESIN and partner organizations, using ArcGIS. The database will be available as three separate data products--human settlements database (points), urban extents (polygons) derived from satellite imagery and additional geographic data sources (such as DCW), and urban-rural surface (grid). To produce the urban-rural surfaces, we developed a mass-conserving algorithm that reallocates people into urban areas, within each administrative unit, providing a more accurate representation of the distribution of human population.

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