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**ABSTRACT**

## **The Influence of Statistical Inputs on Global Gridded Geospatial Datasets**

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Text (100 – 500 words)

The fidelity and utility of global gridded datasets is a function of the input statistics and geographic data used in their construction. The quality and resolution of census data and robustness of microdata varies greatly from country to country, but in order to complete regional and global scale analyses of geographic data, it is necessary to integrate these inputs into a common schema and grid resolution.

This paper and talk will draw on examples from the production of SEDAC's Gridded Population of the World Version 4 to illustrate the need for high resolution census and cartographic data in order to produce accurate top down population allocations. It will also explore challenges of tying microdata to place to make connections with other spatial data – through coordinates and/or fine-grain administrative units with accompanying boundary data. It will use examples from the Terra Populus project to display the utility of the variable richness of microdata (population characteristics beyond counts and basic demographics), particularly in connection with other spatial data.