

DATA & APPLICATIONS ONLINE

Global Rural-Urban Mapping Project (GRUMP)

Overview

Urbanization poses key challenges for sustainable development and environmental management. Improved understanding of urban-rural differences in population distribution can help researchers and policy makers address critical research and policy problems.

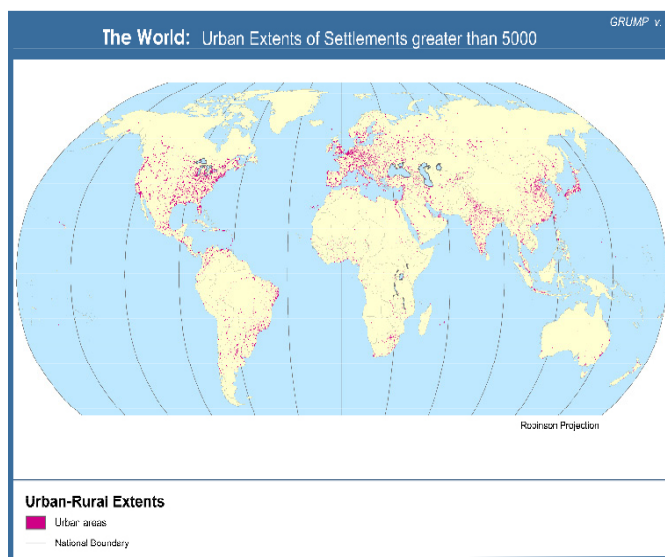
One of SEDAC's latest developments, the Global Rural-Urban Mapping Project (GRUMP), renders the spatial distribution of human populations in a common geo-referenced framework. GRUMP builds on Gridded Population of the World, version 3, (GPW v3), by incorporating urban and rural information derived from satellite data and other sources, encouraging new insights into urban population distribution and the global extents of human settlements.

GRUMP provides globally consistent and spatially explicit human population information and data for use in research, policy making, and communications.

Data

Go to <http://sedac.ciesin.columbia.edu/data/collection/grump-v1> to download data, maps, and information. The central data product, GRUMP, adds urban/rural specification to GPW v3, with a grid cell resolution of 30 arc-seconds. Additional data sets resulting from GRUMP include a 30 arc-second land area grid showing urban areal extents worldwide, and a database of human settlements, their spatial coordinates, and populations.

To learn more go to <http://sedac.ciesin.columbia.edu/data/collection/grump-v1>



Project Highlights

Some examples of how GRUMP has been used in conjunction with other types of data, including remote sensing data:

- to help visualize the distribution of human settlements in low elevation coastal zones (LECZ) around the world
- for the Millennium Ecosystem Assessment, to estimate urban and rural populations residing in different ecosystems throughout the globe
- to render a baseline spatial distribution of malaria
- for a global analysis of the distance of populations to freshwater

