DATA & APPLICATIONS ONLINE

Gridded Population of the World (GPW) version 3

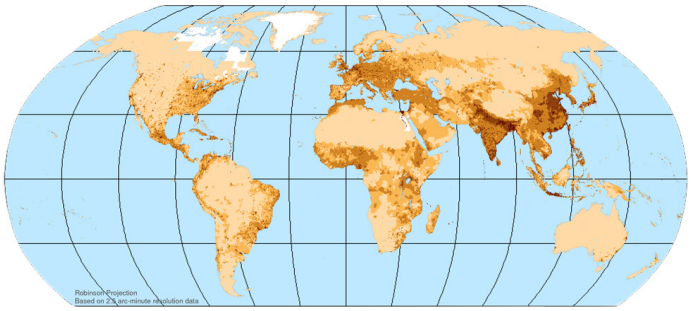
Overview

Gridded Population of the World, version three (GPWv3), is a gridded (raster) data product that renders global population data at the scale and extent required to depict the spatial and temporal relationship of human populations and the environment across the globe. Developed by the Socioeconomic Data and Applications Center in partnership with the International Tropical Agriculture Center, GPWv3 is constructed from national or subnational input units (usually administrative units) of varying resolutions and relies on national statistical office estimates of population.

A new version of GPW, based on the 2010 round of censuses, will be released in 2016. Gridded at much higher resolution—30 arc-second, or ~1 km at the equator—GPWv4 has population estimates for 2000, 2005, 2010, 2015, and 2020. In addition, global grids of sex, age, and urban/rural designation will be released later in 2016.

About the Data

- GPW v3 is a collection of 10 data sets that includes population count and density grids, future estimates of population counts and density, and other data sets with information on boundaries (national, subnational, and administrative) and coastlines
- Population data estimates are provided for 1990, 1995, and 2000, with projections (made in 2004, when GPWv3 was released) through 2015
- Consistent population and population density estimates are referenced to a grid of 2.5 minute X 2.5 minute latitude-longitude quadrilateral cells (~5 km at the equator)



- Grids are available in various GIS-compatible data formats and geographic extents—global, continent (not including Antarctica), and country level
- A collection of nearly 500 GPW maps includes population density and subnational administrative boundary maps at country, continental, and global levels

Data Access

Go to bit.ly/1RF5c70 to download data, maps, and information.

References

Leitzell, K. (2012). Prosperity Shining. *Sensing Our Planet: NASA Earth Science Research Features.* 28-31. https://earthdata.nasa.gov/featured-stories/featured-research/prosperity-shining.

Neumann, B., Vafeidis, A. T., Zimmermann, J., and Nicholls, R. J. (2015). Future coastal population growth and exposure to sea-level rise and coastal flooding—a global assessment. *PLoS ONE* 10(3). e0118571. http://dx.doi.org/10.1371/journal.pone.0118571

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