

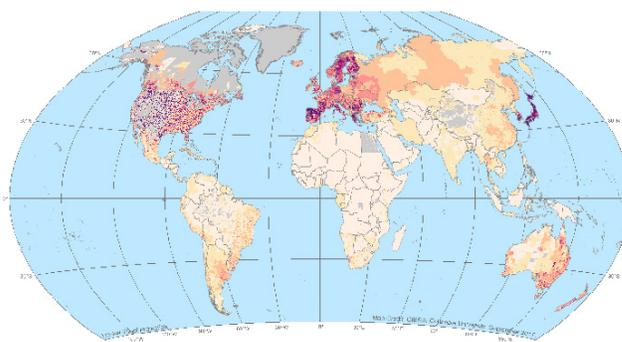


DATA & APPLICATIONS ONLINE

Gridded Population of the World (GPW) Version 4

Overview

The Gridded Population of the World (GPW) is a gridded (raster) data product that facilitates the integration of population data with earth science data, in particular, remote sensing data. The fourth version of GPW is based on the 2010 round of censuses, using population and boundary data from national statistics offices, mapping agencies, and planning agencies around the world. This version contains more input units and is gridded at higher resolution than prior versions. The most recent update, GPWv4.11, provides access to more than 100 interactive map layers through a Web Mapping Service (WMS), facilitating visualization through map tools such as the SEDAC Map Viewer.



- The addition of 78 interactive map layers for population estimates by age and sex categories, for the year 2010

About the Data

- More than 13 million input units, a 31-fold increase over GPWv3
- Much higher resolution—30 arc-second, or ~1 km at the equator
- Population estimates for the years 2000, 2005, 2010, 2015, and 2020
- Updates to the eight original data sets: population counts and population density; UN-adjusted population counts and population density; land area; water area; and data quality indicators
- A new data set on basic demographic characteristics (age and sex), that enables examination of spatial variations in age structure and sex ratios for specific regions of interest
- Grids in GeoTIFF and ASCII (text) at the native 30 arc-second resolution, and four lower resolutions: 2.5 arc-minute, 15 arc-minute, 30 arc-minute, and 1 degree; NetCDF files at all resolutions except 30 arc-second
- A gallery of global maps illustrating population count, density, and data quality; and basic demographic characteristics (age and sex)

Data Access

Go to <http://bit.ly/2hqsm1m> to download data, maps, and information.

References

Doxsey-Whitfield, E., K. MacManus, S.B. Adamo, L. Pistoiesi, J. Squires, O. Borkovska, and S.R. Baptista. (2015). Taking advantage of the improved availability of census data: A first look at the Gridded Population of the World, Version 4. *Papers in Applied Geography*. 1–9. <http://bit.ly/2YsSCQJ>.

Small, C., D. Sousa, G. Yetman, C. Elvidge, and K. MacManus. (2018). Decades of urban growth and development on the Asian megadeltas. *Global and Planetary Change* 165: 62–89. <http://bit.ly/2RTIFuj>.

Messina, J.P., M.U.G. Kraemer, O.J. Brady, D.M. Pigott, F.M. Shearer, D.J. Weiss, N. Golding, et al. (2016). Mapping global environmental suitability for Zika virus. *eLife*, 5, e15272. <https://doi.org/10.7554/eLife.15272.001>.



Socioeconomic Data and Applications Center (SEDAC)
CIESIN-The Earth Institute at Columbia University
Palisades, New York
<http://sedac.ciesin.columbia.edu>



EODIS DAACs
SEDAC is one of twelve NASA Earth Observing System Data and Information System (EODIS) Distributed Active Archive Centers (DAACs)