JRC Dataset

GHS population grid, derived from GPW4, multitemporal (1975, 1990, 2000, 2015)

Description:

The Global Human Settlement Layer (GHSL) project is supported by European Commission, Joint Research Center and Directorate-General for Regional and Urban Policy. The GHSL produces new global spatial information, evidence-based analytics, and knowledge describing the human presence in the planet. The GHSL relies on the design and implementation of new spatial data mining technologies allowing to process automatically and extract analytics and knowledge from large amount of heterogeneous data including: global, fine-scale satellite image data streams, census data, and crowd sources or volunteering geographic information sources. Spatial data reporting objectively and systematically about the presence of population and built-up infrastructures are necessary for any evidence-based modelling or assessing of i) human and physical exposure to threats as environmental contamination and degradation, natural disasters and conflicts, ii) impact of human activities on ecosystems, and iii) access to resources. This spatial raster dataset depicts the distribution and density of population, expressed as the number of people per cell. Residential population estimates for target years 1975, 1990, 2000 and 2015 provided by CIESIN GPWv4 were disaggregated from census or administrative units to grid cells, informed by the distribution and density of built-up as mapped in the Global Human Settlement Layer (GHSL) global layer per corresponding epoch.

How to cite:

European Commission, Joint Research Centre; Columbia University, Center for International Earth Science Information Network(2015): GHS population grid, derived from GPW4, multitemporal (1975, 1990, 2000, 2015). European Commission, Joint Research Centre (JRC) [Dataset] PID: http://data.europa.eu/89h/jrc-ghsl-ghs_pop_gpw4_globe_r2015a

Keywords:

GHSL, GPW, Population grid, global map

Related resources:

Data access

GHS_POP_GPW4_GLOBE_R2015A

GHS population grid, derived from GPW4, for 1975, 1990, 2000 and 2015. Values are expressed as decimals (Float). The data is published at medium and low resolution (250m and 1km respectively) in World Mollweide (EPSG:54009). The compressed ZIP file contain TIF files and short documentation.

http://cidportal.jrc.ec.europa.eu/ftp/jrc-opendata/GHSL/GHS_POP_GPW4_GLOBE_R2015A/

Publications

Development of new open and free multi-temporal global population grids at 250 m resolution

Carneiro Freire S; Macmanus K; Pesaresi M; Doxsey-Whitfield E; Mills J. Development of new open and free multi-temporal global population grids at 250 m resolution . Geospatial Data in a Changing World; Association of Geographic Information Laboratories in Europe (AGILE) (Organiser). AGILE; 2016. JRC100523

http://publications.jrc.ec.europa.eu/repository/handle/JRC100523

Other resources

GHSL Data Packages. Instructions for data access. V1.0

http://ghsl.jrc.ec.europa.eu/documents/GHSL_data_access.pdf

GHSL website

Project Web site

http://ghsl.jrc.ec.europa.eu/

Additional information:

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Update frequency: None
Language: English
Data theme(s): Regions and cities; Science and technology
EuroVoc domain(s): 36 SCIENCE; 72 GEOGRAPHY
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