JRC Dataset

GHS population grid, derived from EUROSTAT census data (2011) and ESM R2016

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 residential population, expressed as the number of people per cell. Resident population from censuses for year 2011 provided by Eurostat were disaggregated from source zones to grid cells, informed by land use and land cover from Corine Land Cover Refined 2006 and by the distribution and density of built-up as mapped in the European Settlement Map 2016 layer.

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How to cite:

Keywords:
ESM, GHSL, Population grid, regional map

Related resources:
- Data access
  GHS_POP_EUROSTAT_EUROPE_R2016A
  GHS resident population grid, derived from Census datasets for 2011 (Eurostat), Corine Land Cover Refined 2006 (CLC06rV2) and European Settlement Map 2016 (ESM 2016). Values are expressed as decimals (Float). The data is published at 100m in LAEA ETRS89 (EPSG:3035). The compressed ZIP file contain TIF files and short documentation.

- Publications
  Towards a 100-m, GHSL-based population grid in Europe

Other resources
- GHSL website, JRC EC
  GHSL Project website
  http://ghsl.jrc.ec.europa.eu/
- ESM 2016, Copernicus LMS
  The Copernicus Land Monitoring Service portal offers the access to the ESM 2016, which has been used to produce the population grid.
  http://land.copernicus.eu/pan-european/GHSL/