National Aeronautics and Space Administration

DATA & APPLICATIONS ONLINE

Population Estimation Service

Overview

The Population Estimation Service is a Web-based service that lets users of a wide variety of map clients and tools quickly obtain estimates of the number of people residing in specific areas without having to download and analyze large amounts of spatial data.

A user defines an area of interest, then the service returns population totals, land area, quality measures, and basic parametric statistics. These estimates are based on the 2015 gridded population data from version 4 of the Gridded Population of the World (GPW) data set developed by the NASA Socioeconomic Data and Applications Center operated by CIESIN.

Key Features

- Accessible through three standard protocols used by many online map tools and clients:
  —Open Geospatial Consortium (OGC) Web processing service (WPS) standard: for standards-based clients such as uDig
  —Representational State Transfer (REST) interface: for use with lightweight javascript clients
  —Simple Object Access Protocol (SOAP) interface: for example, for users of ArcGIS software from ESRI
- Parametric statistics returned for each supplied polygon include the count (number of grid cells used in the analysis) and the total minimum, maximum, range, mean, and standard deviation of population counts.
- Two measures of data quality are included in the service results: the first measure reflects the precision of the input data, and the second indicates when the requested polygons are too small in area compared with the underlying input data to produce reliable population statistics.

Access

The Population Estimation Service may be accessed through
1-the SEDAC Population Estimator
http://bit.ly/2gtJULt

or

2-the IOS-based mobile application, HazPop
http://apple.co/1W2IGJi.

There you'll also find descriptions for the Web Processing Service (WPS), and REST and SOAP services.

The Population Estimation Service may also be accessed through other online map clients or Geographic Information System (GIS) software packages, if they support spatial queries through one of the three supported protocols.

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

www.nasa.gov

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

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