

DATA & APPLICATIONS ONLINE

Land Use

Overview

The NASA Socioeconomic Data and Applications Center (SEDAC) offers a variety of data sets on land use and land cover change. Data and maps are available for download at sedac.ciesin.columbia.edu/theme/land-use.

Selected Data

Global Human Modification of Terrestrial Systems data set is a cumulative measure of terrestrial land modification at a 1 km resolution, using spatially-explicit global data sets with a median year of 2016.

Georeferenced US County-Level Population Projections provides population projection scenarios for all US counties, in five-year intervals 2020–2100, to help understand long-term demographic changes.

Global One-Eighth Degree Urban Land Extent Projection and Base Year Grids by SSP Scenarios are a set of global, spatially explicit urban land scenarios consistent with the Shared Socioeconomic Pathways 2000–2100.

Global Development Potential Indices ranks global land suitability for 13 sectors of renewable energy, fossil fuels, mining, and agriculture, to aid in conservation priority setting.

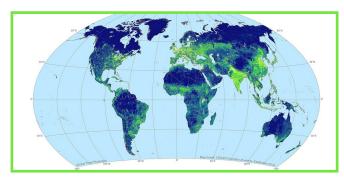
Last of the Wild contains updated Global Human Footprint data sets for 1993 and 2009, using more recent inputs and methodology to measure cumulative human pressure on the environment.

Anthropogenic Biomes of the World describes human-caused changes to the terrestrial biosphere, including agriculture and urbanization. Part of a time series for 1700, 1800, 1900, and 2000.

Global Agricultural Lands shows the proportion of land area used as cropland and pasture, for 2000, by combining MODIS and SPOT Image Vegetation Sensor data with agricultural inventory data.

India Annual Winter Cropped Area utilizes the NASA MODIS Enhanced Vegetation Index for the winter growing season (October–March) for most of India, 2000–2001 to 2015–2016.

Global Pesticide Grids provides comprehensive data



on the 20 most-used pesticide active ingredients, on six dominant crops and four aggregated crop classes, at 5 arc-minute resolution; for the year 2015 and projected to 2020 and 2025.

Global Agricultural Inputs is a collection of data sets on nitrogen and fertilizer application rates to cropland, and on manure's production of Nitrogen (N) and Phosphorous (P) and its presence on land.

Dar es Salaam Land Use and Informal Settlement represents urban land use and consolidation of informal settlements for the years 1982, 1992, 1998, and 2002, in Dar es Salaam, Tanzania.

Global Man-Made Impervious Surface (GMIS) and Global Human Built-up and Settlement Extent (HBASE) are high-resolution companion data sets derived from global 30 m Landsat satellite data for 2010.

Global Roads Open Access combines the best available roads data 1980–2010 by country into a global roads coverage, using the UN Spatial Data Infrastructure Transport v2 as a common data model.

Mapping Resources

Use the **Data Visualization and Access Tool** to view and download GMIS and HBASE data sets by country, tile, shapefile, rectangle or polygon, tutorial included. Explore the **SEDAC Map Viewer** and a wide array of **SEDAC Map Services** to perform visualizations and analysis, from simple to advanced.



Socioeconomic Data and Applications Center (SEDAC)

CIESIN-The Earth Institute at Columbia University Palisades, New York sedac.ciesin.columbia.edu



EOSDIS DAACs

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

To learn more about data and tools available from EOSDIS, go to earthdata.nasa.gov.

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