DATA & APPLICATIONS ONLINE

Health

Overview

The NASA Socioeconomic Data and Applications Center (SEDAC) offers a variety of data sets on health and the environment. Data and maps are available for download at sedac.ciesin.columbia.edu/theme/health.

Selected Data

Daily and Annual PM2.5 Concentrations for the Contiguous US is comprised of a modeled ensemble of predicted daily 1 km resolution grid cell data for 2000–2016, based on satellite data, meteorological and land-use variables, elevation, and other predictors.

G**lobal Annual PM2.5 Grids** consists of annual concentrations of mineral dust- and sea salt-filtered fine particulate matter combining aerosol optical depth (AOD) retrieval from NASA MODIS, MISR, and SeaWiFS satellite instruments, for 1998–2016.

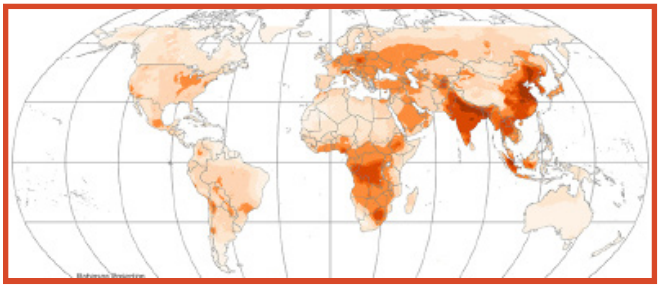
Annual PM2.5 Concentrations for Countries and Urban Areas uses Global Annual PM2.5 Grids and urban extents from the Global Rural-Urban Mapping Project, for 1998–2016. Population-weighted country averages are for 2008–2015.

Global Summer Land Surface Temperature Grids (LSTs) and **Global Urban Heat Island (UHI)** gridded data products represent global summer daytime maximum and nighttime minimum surface temperatures in urban areas. Urban extents are from GRUMP; LSTs are from 2013 MODIS composite data.

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 3-Year Running Mean Ground-Level NO2 Grids represent a series of three-year running mean grids (1996–2012) of ground level NO2 derived from GOME, SCIAMACHY, and GOME-2 satellite retrievals, at 5 arc-minute resolution.

U.S. Social Vulnerability Index (SVI) Grids uses census data for 2000, 2010, 2014, 2016, and 2018, under themes of Socioeconomic, Household Composition/Disability, Minority Status/Language, and



Housing Type/Transportation, to rank communities on vulnerability, for the entire U.S.

Indicators of Coastal Water Quality collection consists of a gridded data set of chlorophyll-a concentrations derived from NASA SeaWiFS satellitemeasurements, to identify trends 1998–2007; a tabular time series; and ancillary data.

Agency for Toxic Substances and Disease Registry (ATSDR) Hazardous Waste Site Polygon Data consists of 2,080 polygons for selected hazardous waste sites considered or in consideration for cleanup on the EPA National Priorities List, compiled 2010.

Mapping Resources

The **Global COVID-19 Viewer** lets users visualize spatially-explicit trends in COVID-19 infection and mortality rates, alongside population-related and location-specific risk factors.

The **Hazards Mapper** visualizes socioeconomic, infrastructure, natural disaster, and environment data and map layers, to analyze potential impacts and exposure.

The **Hazards and Population Mapper (HazPop)** is a free IOS/Android mobile application that can quickly assess diverse disasters and air pollution status in relation to other data; and provide estimates of the total population in proximity to a recent hazard event or other locations.

Use the **SEDAC Map Viewer** to visualize all SEDAC data set map layers, organized by approximately 15 interdisciplinary topics, with an innovative four-window map view option. Also perform simple to advanced visualizations and analysis via **SEDAC Map Services**.

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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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