SEDAC Web Mapping Services

Overview

As rapid advances in Internet technology have enabled the increased use of data over the Internet, a need has arisen in the scientific community for more sophisticated technologies to enable exploring data and visualizing it online through the creation of more complex, customized maps. The NASA Socioeconomic Data and Applications Center (SEDAC) operated by CIESIN addresses this need by publishing most of the SEDAC data via a suite of online mapping services—Web Map Service (WMS), Web Feature Service (WFS), and Web Coverage Service (WCS)—enabling users to integrate, visualize, and analyze SEDAC data layers along with data layers from similar services.

SEDAC Map Services allow users to accomplish a wide variety of functions, ranging from simple visualizations to advanced analysis:

• Visualize data within a mapping tool such as ArcMap
• Render and symbolize map images
• Access up-to-date information generated automatically from geospatial databases
• Overlay SEDAC data with other types of data for an integrated analysis and visualization
• Request SEDAC Map Services to subset and download geospatial data sets
• Develop customized mapping application tools, from simple to advanced

Key Features

The WMS, WFS, and WCS are Open Geospatial Consortium (OGC) standards that enable a simple HTTP interface to request geo-referenced map images and data over the Internet from one or more distributed geospatial data sources.

Access

To view the list of available SEDAC Map Services and Server Capabilities, go to http://bit.ly/1NZJREa. This page also provides examples of how to use SEDAC Web Map Services within mapping tools such as OpenLayers, Esri ArcMap, ArcGIS Online, and Google.

To access the SEDAC Map Viewer to leverage the WMS services, go to http://bit.ly/2hKjm9y.

In addition to WMS, WFS, and WCS, SEDAC data layers are also available through cached services for faster access via other standards such as WMTS, WMS-C, and TMS.