Recent SEDAC Challenges and Successes

Established Procedures to Assign Digital Object Identifiers (DOIs) to Data

Meeting the Challenge
Recognizing the need to provide persistent unique identifiers that could be included in recommended citations for SEDAC data products and accepted by publishers for references in publications, SEDAC began assigning Digital Object Identifiers (DOIs) to data in 2014 and has assigned more than 240 DOIs to data products that it disseminates.

Accomplishments from DOI Procedures
- Routinely assigning DOIs to data products.
- Using DOIs to link data products to other data, documentation, and published resources.
- DOIs are appearing in references that cite the use of SEDAC data in publications.

Simplified Rights Declarations for Data Products Disseminated

Meeting the Challenge
Recognizing the need for data users from multiple disciplines to understand the rights associated with each data product disseminated, SEDAC began providing simple rights declaration statements that concisely describe the rights for using each data product. SEDAC data originate from diverse sources and some data sets are not in the public domain.

Accomplishments from Simplified Rights Declarations
- Routinely assigning rights declaration statements to data products.
- Clearly stating the rights that are associated with the use of each data product.

Standardized Template for Documentation of Data Products

Meeting the Challenge
Recognizing the need to ensure that data products are described so that users can determine whether the data are appropriate for their purposes, SEDAC has developed a new documentation template to ensure that data products are described in a consistent manner to improve understandability by users and potential users of the data.

Accomplishments from Standardized Documentation Template
- Describing data products in a consistent manner.
- Providing documentation that can be understood by users from various disciplines.

SEDAC Tools and Services Spotlight:
Release of the HazPop Mobile Application and Updated Population Estimation Service

Meeting the Challenge
Recognizing that users need customized data services available through alternative interfaces such as mobile applications, SEDAC has developed a mobile app aimed at users who need better understanding of the population and infrastructure potentially exposed to hazard events. The HazPop app, available for free from Apple’s iTunes store for iOS phones and tablets, provides basic visualization, analysis, and location services functions, including the ability to obtain an estimate of the population residing within a user-specified radius of a hazard event, major dam or reservoir, nuclear power plant, or other point of interest. An Android version is under development.

The HazPop app and the SEDAC Hazards Mapper utilize the Population Estimation Service (PES), which supports spatial queries against SEDAC’s Gridded Population of the World (GPW) dataset, through the open Web Processing Service (WPS) and representational state transfer (REST) specifications. A new version of the PES that accesses version 4 of GPW has just been released.

Accomplishments from SEDAC Tools and Services
- Demonstrating utility of mobile applications and use of location services.
- Supporting open web services that can be accessed via multiple clients.

SEDAC Collection Spotlight:

UN-Adjusted Population Density, 2015: Global


http://sedac.ciesin.columbia.edu/

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